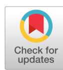

Urban History (2023), 1–19
doi:10.1017/S0963926823000548

CAMBRIDGE UNIVERSITY PRESS

RESEARCH ARTICLE

From flesh to paper: bodily and material transformation in seventeenth-century Copenhagen – a case-study

Peter W. Hansen[1], Jesper Jakobsen[2], Ulrik Langen[3] and Rikke Simonsen[4]

[1]Copenhagen City Archives, Copenhagen, Denmark
[2]Division of Book History, University of Lund, Lund, Sweden
[3]Saxo Institute, University of Copenhagen, Denmark
[4]Museum of Copenhagen, Copenhagen, Denmark
Corresponding author: Ulrik Langen; Email: langen@hum.ku.dk

Abstract

This article investigates the transformation of the body of a female child murderer as she passed through specific spatial configurations in the urban setting of the seventeenth-century capital of Denmark–Norway. By using the case of Gertrud Nielsdatter, we explore the significance of public urban spaces in the bodily and material transformation of a woman from a condemned sinner to an object of scientific wonder. This transformation was facilitated by practices in diverse public spaces – controlled or influenced by government, city, church, as well as academic authorities and stakeholders – such as the city court, the place of execution, the university and, not least, the book shops across Europe selling books containing the print representing internal organs of Gertrud Nielsdatter. The case demonstrates how the physical body of an ordinary – yet outlawed – Copenhagener was repeatedly transformed in interaction with public spaces and the material culture of buildings, fixtures and fittings.

In 1673, Gertrud Nielsdatter was sentenced to death for infanticide in the city court of Copenhagen and decapitated at the public execution site outside the city gates. Immediately after the execution, her body was brought back into the city to the university's anatomy house and dissected by the internationally famous court anatomist Nicolaus Steno (1638–86) under public attention from professors and students. The dissection was described in the notes of a medical student, and subsequently, her body parts were drawn, engraved and printed in a book (Thomas Bartholin (1616–80), *Anatome Quartum Renovata*, Leiden, 1673). Indeed, this was a spectacular and disturbing bodily and material transformation. All this did not happen by itself.

© The Author(s), 2023. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

It was, evidently, carried out by several persons, institutions and authorities practising their personal, institutional and authoritarian power.[1]

Moreover, spaces and places played a decisive role in the process of transporting and transforming Gertrud's body, embedded as it was in ceremonial events and practices linked to specific sites in and outside the city, specifically the town hall, the city court, the place of execution, the anatomy house at the University of Copenhagen, Henrik Gøde's (d. 1676) print shop and the city's bookstalls. These public spaces facilitated a profound transformation of Gertrud from an individual sinner to a wonder of nature. As her body became the subject of anatomical demonstrations performed by Steno, it disintegrated into countless fragments. In this process, Gertrud was transformed into a universal creation of God that would eventually re-emerge on printed paper as a scientific discovery. Since 1673, Gertrud Nielsdatter has been at the intersection between prominence and anonymity. She is famous for being one of only a few humans dissected by Steno during his short stay in Copenhagen from 1672 to 1674. This dissection is well known and described in detail in medical history scholarship, yet, Gertrud has remained anonymous as she has been represented exclusively as a female cadaver. In this way, Gertrud has been objectified by generations of medical professionals and historians – however, it is an objectification which had already begun when she was still alive.[2]

As we will demonstrate in this article, Gertrud Nielsdatter was socially dead from the end of the courtroom process, medically dead by the close of the beheading by the sword, but not necessarily culturally dead as she was transformed into a print culture of elite anatomical knowledge exchange. We argue that the post-mortem journey took away the criminal identity and transformed it into a culture of learning and reason and that the bodily transformation of Gertrud could only occur – and with such a persuasive momentum – because it was a public event taking place in different urban public spaces and was enabled by a number of material culture components connected to the specific sites, in particular public buildings. Also, we argue that Gertrud was increasingly objectified from the day she was imprisoned until her body parts reappeared in print; this progession being not only the work of powerful institutions and agents but just as much a product of her imposed interaction with urban materialities.

Public buildings and objectification

The 'spatial turn' has substantially impacted early modern urban history studies during the last three decades, resulting in various approaches and theoretical definitions.[3] The present study is – like so many others – based on the well-accepted

[1]The inspiration for this article comes from the development of the public history app 'Hidden Copenhagen', which was developed in collaboration between the *PUblic REnaissance: Urban Cultures of Public Space between Early Modern Europe and the Present* and the Centre for Privacy Studies (University of Copenhagen).

[2]Jesper Brandt Andersen claims in his recently published biography of Nicolaus Steno that no information has been preserved to identify the dissected woman. J.B. Andersen, *Niels Stensen. Kongelig Anatom og Fyrstelig Geolog* (Copenhagen, 2021), 766.

[3]Perspectives on various aspects of the spatial turn are discussed in B. Kümin and C. Usborne, 'At home and in the workplace: a historical introduction to the "spatial turn"', *History and Theory*, 52 (2013), 305–18.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

understanding of space as relational and socially constructed.[4] Furthermore, we stress the transformative potential of any given location, place or space of power, whether legal, religious, physical or medical.[5] The transformation of Gertrud Nielsdatter took place in public spaces in which communicative presence and performative events played a significant role. Urban legal practices, as well as scientific exercises, were performed in public spaces constituted and mediated by appearance. In the case of Gertrud Nielsdatter, several spheres of communication were overlapping, the most conspicuous being the entanglement of the performative practice of dissecting in the presence of a limited audience at the anatomy house and the communicative covering of this event – and the scientific results – in the more comprehensive and infinite public space of printed texts. We consider this intersection of spaces relevant to the study of Gertrud Nielsdatter's transformation, as buildings and places like the town hall, the city court, the place of execution, the anatomical theatre and the printing houses and book shops were all public locations with permanent, symbolic, institutional and communicative presence and meaning.[6] As Kate Giles has emphasized, public buildings – and their furnishings, fittings and fixtures – can be explored as a fundamental and distinctive part of early modern material culture and understood alongside other kinds of public spaces such as streets, marketplaces, churches, etc.[7] As government and justice – in the words of Conrad Ottenheym – were 'the epicentre of civic authority' a public building like the town hall (containing both local government and court of justice) played in the case of Gertrud Nielsdatter's transformation.[8]

As Elaine Chalus and Marjo Kaartinen have put it, cities are – in the capacity of being physical entities shaped by topography, time and technology and social and spatial constructs – always gendered and contested spaces. Gender informs the built

[4]As established in commonly referenced works like H. Lefebvre, *La production de l'espace* (Paris, 1974); E. W. Soja, *Postmodern Geographies: The Reassertion of Space in Critical Social Theory* (London, 1989); D. Massey, *For Space* (London, 2005).

[5]Emphasizing this, we have turned to observations on early modern spatiality made by German historian Rudolf Schlögl for inspiration. Schlögl has – as summarized by Beat Kümin and Cornelie Usborne – proposed understanding space as a universal medium, that is, neither as a container nor as an abstract construct, but as the general framework for human exchange in pre-industrial settings. A key idea is to regard the early modern city as an *Anwesenheitsgesellschaft* (society of presence) in which constant observations and communication of city dwellers of all walks of life and social strata constituted a basic condition. Thus, early modern urban public spheres were based on a 'face-to-face' culture of communication combined with the increasing medialization brought about by an emerging print culture. R. Schlögl, 'Politik beobachten. Öffentlichkeit und Medien in der frühen Neuzeit', *Zeitschrift für Historische Forschung*, 35 (2008), 581–616; and R. Schlögl, *Anwesende und Abwesende. Grundriss für eine Gesellschaftsgeschichte der frühen Neuzeit* (Konstanz, 2014), 109–36. A brief introduction to Schlögl's tentative typology can be found in G. Schwerhoff, 'Spaces, places, and the historians: a comment from a German perspective', *History and Theory*, 52 (2013), 430; Kümin and Usborne, 'At home', 316–17; S. Rau, *History, Space, and Place* (London, 2019), 65.

[6]S. Kostof, *The City Shaped. Urban Patterns and Meanings through History* (London, 1991).

[7]K. Giles, 'Public buildings in early modern Europe', in D.R.M. Gaimster, T. Hamling and C. Richardson (eds.), *The Routledge Handbook of Material Culture* (London, 2017), 98–9. Giles takes her cue from Robert Tittler and his analysis of town hall typologies, functions and urban communities. R. Tittler, *Architecture and Power. The Town Hall and the English Urban Community c. 1500–1640* (Oxford, 1991).

[8]K. Ottenheym, 'Introduction', in K. Ottenheym, K. De Jonge and M. Chatenet (eds.), *Public Buildings in Early Modern Europe* (Turnhout 2010), XII.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

environment and shapes the meanings of movement through locations.[9] Especially the aspect of movement is significant to the study of the transformation of the female body of Gertrud Nielsdatter. The relationship between public space, gender and mobility in early modern European cities has been investigated in several studies focusing on street life, public–private distinctions and social order.[10] In this article, we take inspiration from these studies when approaching the theme of involuntary gendered mobility in public space as a specific and heavily repressive and lethal component in the exercise of municipal, legal and medical power. [11] As Gertrud was moved through different zones and locations in (and out of) the city, her body assumed shapes of alternating representations of respectively sinful female sexuality (as she was presented in the courtroom and transported in procession to the scaffold) and motherhood (as was the case when her reproductive organs were exposed during one whole day of the 10 days' long dissection). Even her corpse was heavily gendered as it was dismembered piece by piece in the hands of a male dissector under the anatomical gaze of a male audience in the medically elevated space of the anatomical theatre.[12] So, gendered coercive mobility in public spaces and the materiality of public buildings play a significant role in the objectifying 'body history' of Gertrud Nielsdatter, turning her into an object or even a materiality that as such related to other objects and materialities.[13] Anthropologist David Miller has emphasized this interrelation in his theory of material culture in which he claims that humans shape, and are shaped by, objects.[14]

Copenhagen 1673

The city of Copenhagen (pop. 60,000) provided the spatial framework and the urban material environment for Gertrud's transformations. Copenhagen was surrounded by fortifications that served military and economic purposes and effectively separated the urban space from the surrounding countryside. Within this urban material environment, specific sites and public buildings were linked to religious, scientific and political practices vital to Gertrud's transformations.

---

[9]E. Chalus and M. Kaartinen (eds.), *Gendering Spaces in European Towns, 1500–1914* (London, 2019), 2–4. See also D. Massey, *Space, Place, and Gender* (Minneapolis, MN, 1994). For a discussion on gender, order and urban material environment, see R. Laitinen, *Order, Materiality and Urban Space in the Early Modern Kingdom of Sweden* (Amsterdam, 2017).

[10]Questions of gendered urban spaces and mobility are discussed in D. van den Heuvel, 'Gender in the streets of the premodern city', *Journal of Urban History*, 45 (2019), 693–710; R. Laitinen, 'Home, urban space and gendered practices in mid-seventeenth-century Turku', in D. Simonton (ed.), *The Routledge History Handbook of Gender and the Urban Experience* (London and New York, 2017), 142–52; D. van den Heuvel *et al.*, 'Capturing gendered mobility and street use in the historical city: a new methodological approach', *Cultural and Social History*, 17 (2020), 522–9; B. Pierik, 'From microhistory to patterns of urban mobility: the rhythm of gendered mobility in eighteenth-century Amsterdam', in G. Andersson and J. Stobart (eds.), *Daily Lives and Daily Routines in the Long Eighteenth Century* (New York, 2021), 105–24.

[11]On coercive mobility, see, for example, J. Heinsen, M.B. Jørgensen and M.O. Jørgensen (eds.), *Coercive Geographies. Historicizing Mobility, Labor and Confinement* (Leiden and Boston, MA, 2021).

[12]K. Park, *Secrets of Women. Gender, Generation, and the Origins of Human Dissection* (New York, 2006); F.P. de Ceglia (ed.), *The Body of Evidence. Corpses and Proofs in Early Modern European Medicine* (Leiden and Boston, MA, 2020), 107–90.

[13]M.C. Nussbaum, 'Objectification', *Philosophy and Public Affairs*, 24 (1995), 248–91.

[14]D. Miller, 'Materiality: an introduction', in D. Miller (ed.), *Materiality* (Durham, NC, 2005), 37.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

The city was the capital of the Dual Kingdom of Denmark–Norway, and it was by far the largest – and most explosively growing – of the 62 cities in the kingdom and, indeed, a highly politicized space. In 1660, absolute monarchy was introduced in Denmark-Norway following the crisis of 1658–60, when Sweden had occupied most of Denmark and kept a battle-hardened Copenhagen under siege for two years. Copenhagen was made the residence of the royal family and the court, who stayed at the medieval Copenhagen Castle in the centre of the city. To tighten control of the kingdom, the absolute monarch initiated a considerable concentration of administrative, economic and military power in the capital. Given the recently ended war with Sweden, the capital also needed further protection from attacking enemies, and massive investments were made in fortifications around Copenhagen. The king´s power was displayed with magnificent gates, massive ramparts and deep moats, and a citadel at the sea entrance to the city.

Following the Lutheran Reformation in 1536, Copenhagen had become the Dual Kingdom's undisputed religious and cultural centre. The post-Reformation kings were heads of both the church and the state, and during the seventeenth century, so-called Lutheran Orthodoxy played a vital role as a consolidator of royal power.[15] The university, founded before the Reformation in 1479 (the only one in the kingdom), also played an essential role in consolidating royal power. Although the traditional four faculties of philosophy, law, medicine and theology were established, the university's primary purpose was to train parochial vicars to disseminate Lutheran Orthodoxy and act as the king's mouthpiece in all the parishes of Denmark and Norway.[16] A smaller group of wealthy students studied abroad to educate themselves when the empirical sciences were gaining ground at the University of Copenhagen, and individual scientists – such as the anatomists Thomas Bartholin and Nicolaus Steno – made their mark internationally.

The city's governing body consisted of a royally appointed lord mayor, the city council, which took care of the city's affairs and finances, and an additional council of 32 men with a special right to audiences with the king. Wealthy merchants tended to be chosen as councillors; the king, however, appointed mayors and bailiffs and, ultimately, had decisive influence over the city's administration, especially with the new commissions of the absolute monarchy, which were responsible for everything from street maintenance and traffic regulations to building by-laws and fire services. The legal authority of the city was carried out in the city court (*bytingsretten*), presided over by the town bailiff and covering both civil and criminal cases, and the town hall court (*rådstueretten*), where mayors and councils sat, which dealt mainly with civil cases, especially of a commercial nature. All these city authorities were based in the town hall. So, the physical space of the town hall contained and communicated the legal and administrative practices of the city and the government.

The crime, the prison and the court

The first part of Gertrud Nielsdatter's transformation was a three-step spatial itinerary from the enclosed prison site to the open-air city court and finally ending

[15]B.K. Holm and N.J. Koefoed (eds.), *Lutheran Theology and the Shaping of Society: The Danish Monarchy as Example* (Göttingen, 2018); B. Kornerup and U. Schrøder, *Den Danske Kirkes Historie*, vol. IV (Copenhagen, 1959).

[16]E. Nørr, *Præst og Administrator: Sognepræstens Funktioner i Lokalforvaltningen på Landet fra 1800 til 1841* (Copenhagen, 1981); K. Hermansen, *Kirken, Kongen og Enevælden* (Odense, 2005).

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

her days in the area encircling the place of execution outside the city gates. We hardly know anything about what happened to Gertrud Nielsdatter prior to her conviction and execution. The court register in which all decisions were recorded no longer exists for this period. Clearly, she was sentenced to death for concealment of unlawful pregnancy and subsequent infanticide. The circumstances of the act itself are unknown, and so is the chain of events before her imprisonment; we have no knowledge of the father of the child, the age and occupation of Gertrud, nor do the scarce materials provide any indication as to the participation of witnesses in the case against her. However, a few material traces show evidence of the case's practices and procedures.

Most often, in the case of infanticide, the only physical evidence of the crime was the corpse of the murdered infant. If no confession could be obtained from the mother, the child's physical examination was the single source of information. Examining the woman's body for traces of recent birth and statements of character witnesses were essential in cases against child murderers, thus making the body the most important evidence in the cases.[17] We do not know whether such investigations had been carried out or not in the case against Gertrud, but evidently, the city court must have had enough legal evidence to convict her. Gertrud was most likely sentenced according to the so-called Grand Recess of 1643, in which unlawfully pregnant women were sorted out for specific penal treatment, although it is implicit that deliberate infanticide, in this period, was still formally considered a homicide.[18] On the other hand, the gendering of this type of crime was evident because it was committed right after childbirth by the mother of the child on her own, that is, without the collaboration of the father. In the major penal code Danish Law of 1683, introduced 10 years after the execution of Gertrud, the wording was quite laconic: 'If a Woman murders her Bastard Infant, she shall lose [*sic*] her Head, which shall be fixed on a Pole.'[19]

Infanticide was closely connected to the general criminalization of sexual relations outside marriage and the social consequences applied to unlawful pregnancy.[20] According to a law from 1617, offenders had to pay fines, the men 12 rix-dollars and women 6 rix-dollars, and confess publicly in the church. If perpetrators were unable to pay the whole fine, which was often the case, they had to pay as much as they could and then be punished with imprisonment and flogging.[21]

[17]M.B. Lewis, 'Corpses and confessions: forensic investigation and infanticide in early modern Germany', in Ceglia (ed.), *The Body of Evidence*, 225.

[18]B.G. Nielsen, *Letfærdige Qvindfolk: Fosterdrab og Fødsel i Dølgsmål i Retshistorisk Belysning*, vol. I (Copenhagen, 1980), part 3–6 and 3–7. See also J.B. Netterstrøm, 'Criminalization of homicide in early modern Denmark (16th–17th centuries)', *Scandinavian Journal of History*, 42 (2017), 459–75.

[19]*The Danish Laws: Or, the Code of Christian the Fifth* (London, 1756), 399.

[20]Until the Lutheran Reformation in 1536, marriage, sexuality and morality in Copenhagen were regulated by canon law, while murder was regulated by secular law. After the Reformation, this division of the legal system was abolished, and all legal matters were brought under the jurisdiction of the king. On the one hand, this gave the king great power because he effectively became the supreme judge in both secular and religious matters. On the other hand, it also entailed great responsibility because he was obliged to uphold Christian morals and conduct among his subjects. If he failed in this responsibility and, for example, allowed a child murder to go unpunished, the common perception was that God's wrath could befall the whole kingdom. Epidemics, wars and similar misfortunes could be interpreted as God's punishment for a person like Gertrud Nielsdatter not receiving her deserved punishment. M. Kjær and H. Vogt, *En Dansk Retshistorie fra Middelalder til Grundlov* (Copenhagen, 2020), 105–48 (especially 116–18).

[21]https://denstoredanske.lex.dk/lejerm%C3%A5l, accessed 18 May 2022.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

Being an unwed mother was dishonourable and inevitably led to social stigmatization and isolation, and in her study of crime and women in Holland, Manon van der Heijden points to the fact that the most noticeable aspect of child-murdering women is their desperation and loneliness (and that infanticide was always the last resort).[22] An unmarried woman committing infanticide was the antithesis of the ideal of proper female behaviour, that is, chastity before marriage and fulfilling the maternal role with love and dutifulness afterward.[23] The first element – chastity – was vital in the post-Reformation focus on morality and unacceptable sexual behaviour, which was severely punished. In this respect, the city court had a decisive impact on Gertrud's fate, not only in a strictly legal sense. Ideally, the city court represented the rights and order of citizens. So, with an accusation of infanticide and subsequent trial and verdict in full public view, the culprit was punished by the urban and Christian community she had offended – and even endangered – when committing the crime. When entering the space of the city court, there was still – at least in principle – a chance for her to escape punishment by the dismissal of the case. But when she left the courtroom as a convict, she was already socially executed in public.

We do not know anything about the arrest of Gertrud, but the scarce evidence reveals that she was incarcerated in the city prison located in a building next to the town hall. Records suggest that a child's corpse had been discovered and that the dead child was also brought to the city prison, where it was kept until it was buried. A receipt issued to the bailiff Christian Viborg documents that he and some of his men were paid to provide a coffin and transport Gertrud's dead child from the prison to the Cemetery of the Poor, where the child was buried.[24]

In the city prison, shorter sentences were served (e.g. for debts) and used for prisoners awaiting corporal punishment, death sentences, or extradition to a forced labour sentence. Furthermore, provisional prisoners detained for misconduct and people charged with misdemeanours but awaiting sentencing were held in the basement of the town hall.[25] Gertrud was far from the only woman who awaited

[22]M. van der Heijden, *Women and Crime in Early Modern Holland* (Leiden, 2016), 48–61. According to Heijden, the crimes were always committed by unwed mothers hiding the pregnancy and secretly giving birth, and the social background of the women was also remarkably similar, with the majority of perpetrators being servant girls in their mid- to late twenties. Josephine Billingham challenges the standard concept of the perpetrators as unmarried women committing the crime driven by fear of being shamed and the prospect of difficulties of surviving as unwed mothers due to legal and social practices of the time (16–17). According to Billingham, this frequent 'extrapolation' tends to neglect the possibilities of more actors than the convicted woman being involved in the crime, as well as a number of emotional and cultural aspects revealing a more composed picture. See especially chapter 1 for a discussion on the historiography of infanticide. J. Billingham, *Infanticide in Tudor and Stuart England* (Amsterdam, 2019).

[23]Lewis, 'Corpses and confessions', 225.

[24]The receipt for the costs of the infant's funeral is dated 23 January, while the execution costs were settled on 27 and 28 January, respectively. Therefore, we must assume that the child was buried a few days after the murder, as burials had to take place shortly after death for practical reasons. Thus, Gertrud's death sentence must have been pronounced at Bytinget between 15 Jan. and 27 January. Danish National Archives (DNA), Reviderede regnskaber, Københavnske regnskaber, Byfogedregnskaber m. ekstrakter, antegnelser og bilag, 1673, enclosure nos. 35 and 36: receipts dated 23 and 28 Jan. 1673; Copenhagen City Archives (CCA), Stadskæmneren, Regnskaber, 1673, no. 248; V.A. Secher, 'Bidrag til Københavns rets- og kulturhistorie i Kristian IV.s og Frederik III.s tid 1624–63', *Historiske Meddelelser om København*, 1 (1907–08), 325–6.

[25]O. Nielsen, 'P. Resens Efterretninger om Københavns Rådhuse', *Danske Samlinger for Historie, Topographi, Personal- og Literaturhistorie*, VI (1870–71), 122.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

Figure 1a. The town hall seen from the *Gammeltorv.* It was modernized according to Renaissance ideals with curved dormers and gables and a monumental staircase providing entrance to the municipal functions of the town hall. Peder Hansen Resen and Johan Huusman 1677, Royal Danish Library.

her death sentence and execution in prison. In 1624–63, we know of 14 women incarcerated in the city prison for infanticide before their execution, but there were probably more.[26]

The town hall was located on the southern side of the city's main square, the *Gammeltorv* (Old Square). Since the Middle Ages, the square had been an important centre for trade, official processions and legal actions. The town hall was originally built in 1479, but in 1608–10 King Christian IV converted the medieval structure into an ideal Renaissance building with curved gables and prominent stair towers. At the same time, the king had the area south of the town hall cleared, creating a new square, the *Nytorv* (New Square), so that the new town hall had two facades: one facing north and one facing south. The northern facade faced the *Gammeltorv* and provided the entrance to the municipal functions of the town hall (see Figure 1a), while the judicial functions were relocated to the new southern side facing the *Nytorv* (see Figure 1b).[27] On the *Nytorv*, there was also a scaffold where the executioner could hang, behead and quarter the bodies of the condemned. The place was also used for other forms of performative punishment, such as flogging women convicted of prostitution.[28] This spatial division between the municipal and judicial functions of the town hall can be

[26]Secher, 'Bidrag til Københavns', 292–329, 333–84, 569–98.

[27]CCA, Book no. 9 by Peder Resen, 1681: on Copenhagen's town hall, city court, arrest house, city prison, court of justice, squares, magistrate, town bailiffs, town clerks, under bailiffs, council servants, town constables, town physicians and town chamberlains.

[28]Nielsen, 'P. Resens Efterretninger om Københavns Rådhuse', 97–123.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

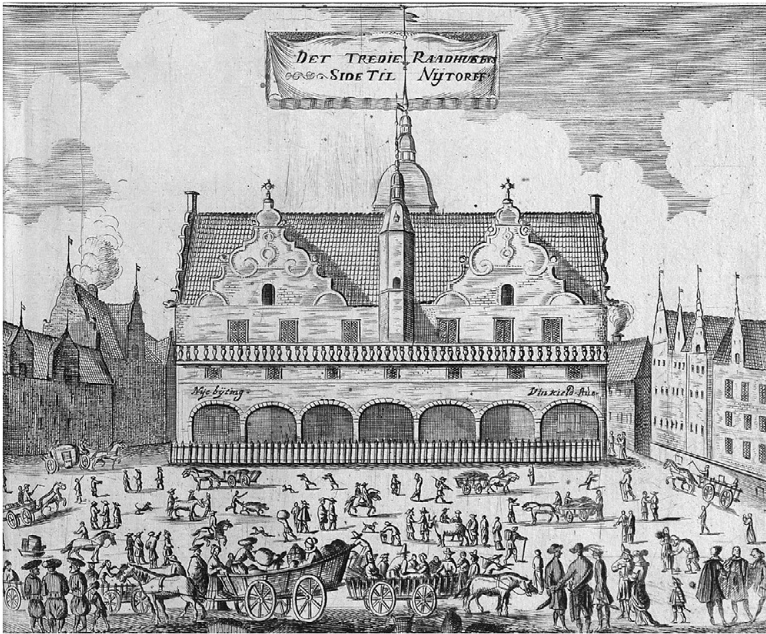

Figure 1b. The town hall's facade facing the *Nytorv* was decorated in Renaissance style with an archway, a balcony and a slender hexagonal stair tower. The city court was located 'under the arches of the balcony', protected from the elements, but still in the open for all to see that justice was served. Peder Hansen Resen and Johan Huusman 1677, Royal Danish Library.

considered as part of a general urban trend towards the separation of roles and had the advantage that law-abiding citizens with an errand at the town hall were no longer forced to use the same entrance and enter the same premises as accused criminals like Gertrud.

According to a description of 1681 by Peder Hansen Resen (1625–88) – a legal historian and lord mayor of Copenhagen 1664–88 – the city court was placed 'under the arches of the balcony' in the west end facing the *Nytorv* in continuation of which a public house was established 'in which those who want to drink a glass of wine by themselves' could digest in comfort. 'Under the arches of the balcony' indicates that the material setting of the city court was somewhat similar to the open *loggia di guistizia* seen on the Dalmatian coast.[29] When entering the semi-open-air city court for her trial, Gertrud faced a courtroom equipped with three benches.[30] On one of

[29]N. Grujic, 'Les loggias communales en Dalmatie aux XVe et XVIe siècles', in Ottenheym, De Jonge and Chatenet (eds.), *Public Buildings in Early Modern Europe*, 53–64. In many German cities, the *Gerichtslaube* was a similar kind of loggia built into the town hall as was the case in Copenhagen.

[30]The medieval tradition of open-air city courts was still honoured in many seventeenth-century cities. At the Amsterdam town hall, an open-air *vierschaar* was used for passing death sentences. In late fifteenth-century Hamburg, cases were tried in an open hall, and in the later town hall a shutter in the roof could open so that death sentences could be passed under an open sky according to tradition. See K. Fremantle, 'The open *vierschaar* of Amsterdam's seventeenth-century town hall as a setting for the city's justice', *Oud Holland*, 77 (1962), 206–27, 229–34; and P. Vlaardingerbroek, 'Dutch town halls and the setting of the *vierschaar*', in Ottenheym, De Jonge and Chatenet (eds.), *Public Buildings in Early Modern Europe*, 105–18.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

them sat the bailiff with his scribe, the city treasurer, the warden of thingmen (*tingsmænd*) and a citizen observer. On either side of the main bench were two benches, each seating six magistrates. The fourth side was open to the square. As the proceedings in the city court were public acts, one can imagine a large audience for the more spectacular cases such as this one.[31] The public building complex of prison, town hall and city court – with its setting of benches, civil servants, the accused person, pens and paper and an aperture towards the public space of the square – constituted a significant material statement of civic authority. Following Miller, one could argue that the individuals present were shaped or objectified as items inter-relating with the powerful materiality of the court.

The execution ground

The punishment for homicide in seventeenth-century Copenhagen was decapitation by the sword instead of by axe, which was seldom used in this period and was only connected with the most severe crimes.[32] In the Danish Law of 1683, the axe was only prescribed in cases of *lèse-majesté*, while thieves were hanged, and persons convicted of witchcraft, incest, sodomy and arson were sentenced to death by burning.[33] Executions were carried out at several places, both inside and outside the city, taking place on stationary scaffolds as well as on execution sites designed for the occasion. The scaffold outside *Vesterport* was characterized by a large brick gallows built in 1622. This brick construction was triangular, with three pillars connected by three crossbeams from which the thieves were hung in iron chains. When the gallows were repaired in 1646, the nightmen had to remove 12 dead bodies, which gives an idea of the scaffold's macabre spectacle. It was here, in the shadow of the bodies of male thieves hanged on the gallows, that Gertrud was to be beheaded.[34]

A few pieces of evidence can shed light on the next step in Gertrud's transformation. The first of these written pieces is a receipt mentioning the payment to a priest for following Gertrud to the scaffold and for the expense of a bottle of wine, which the condemned consumed in prison while the priest was preparing her for death. The second piece of evidence is an entry in the city treasurer's account book mentioning that an officer and a group of musketeers were paid two marks to escort Gertrud Nielsdatter to the place of execution just outside the *Vesterport*.[35] Gertrud was taken to the place of execution in a procession on foot. The priest accompanied her on this last three kilometres walk, escorted by the guard armed with muskets.[36] This

[31]On the Copenhagen city court (*Bytinget*) in the seventeenth century, see H. Jørgensen, *Thi kendes for ret. Studier I de civile københavnske domstoles historie i perioden ca. 1660 til 1919* (Copenhagen, 1980), 1–4.

[32]The punishment of execution by the sword was used in connection with murder, infanticide/clandestine childbirth, aggravated/repeated theft committed by women, robbery, assault on the town guard and rape. Secher, 'Bidrag til Københavns', 569–76.

[33]N.H. Kragh-Nielsen, *Straffet på Livet. Henrettelser i Danmark 1537–1892* (Copenhagen, 2018), 31–52. In the period 1537–1892, there are 171 recorded executions for murder in Copenhagen, of which 31 are executions for infanticide, that is, 'clandestine childbirth and killing of the child', not killing of minors, which has its own category. Between 1650 and 1699, 48 civilian executions (i.e. non-military punishments) were carried out in Copenhagen.

[34]Secher, 'Bidrag til Københavns', 348–84.

[35]CCA, Stadskæmneren, Regnskaber, 1673, no. 248.

[36]*Ibid.* Receipt covering the expenses to gunpowder, bullets and fuses for the guards.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

religiously arranged procession was a common feature in early modern ritualized executions.[37] At the place of execution, the guards formed a circle to make room for the condemned and the executioner and to keep the crowd back. No doubt, many Copenhageners were following the condemned woman, and many gathered around the scaffold to witness the execution. The presence of a substantial military escort was a deliberate measure carried out by the city authorities to prevent public disorder, which was not unusual at these spectacular public events. So, at this point, Gertrud would have had to kneel on a pile of sand and stretch her neck for the executioner. The place of execution was not a public building like the town hall and the city court but a temporary site constituted by the materiality of the scaffold, the beams, the executioner's sword, the pile of sand for the kneeling condemned and, importantly, by the physical presence of audience, priest and guard. Again, one can speak of people and materialities interacting and even objectifying each other as parts of the space of execution site.

The information mentioned above regarding the priest's assistance is written as an endorsement on a receipt for the amount of five rix-dollars paid out to the city executioner for the execution of Gertrud Nielsdatter, 'who had done away with her newborn child'.[38] The expenses paid out to the guardsmen, a priest and the executioner reveal the practice of carrying out the execution of Gertrud Nielsdatter and transferring the woman from one spatial configuration to another. The journey ended here for the many who were beheaded under the gallows outside the west gate.[39]

The executed bodies were treated and objectified in different ways. Those hanged were typically left on the gallows, while some of the beheaded were dismembered and displayed as an extra punishment. The gallows were located on the main road into the city, and passers-by could see what the city and the king did to wrongdoers. The bodies, which often remained on display for years, slowly changed appearance beyond recognition as decay, weather and birds ate away the bodies. In the cases where the display of the body did not form part of the punishment, a determination of the burial place was included in the death sentence. The beheaded could be sentenced to be buried either in consecrated ground (the cemetery) or unconsecrated ground (typically at the place of execution if outside the city) and with or without a coffin. In other words, the method and place of burial were a spatially defined part of the punishment, which condemned the decapitated person either inside or outside the city's Christian community. If buried in the unconsecrated ground, the executed was forever banished from the city's civil and Christian communities.[40] Even if the bodies of the condemned were expelled from the urban community, they were still present in

[37]See for instance classical studies such as P. Spierenburg, *The Spectacle of Suffering: Executions and the Evolution of Repression: From a Preindustrial Metropolis to the European Experience* (Cambridge, 1984); and R. von Dülmen, *Theater des Schrecken: Gerichtspraxis und Strafrituale in der Frühen Neuzeit* (Munich, 1995).

[38]DNA, Reviderede regnskaber, Københavnske regnskaber, Byfogedregnskaber m. ekstrakter, antegnelser og bilag, 1673, 26.

[39]In the period 1624–63, we know of 49 Copenhagen beheadings with swords (24 men and 25 women) while another 12 men were hanged and 2 were burned at the stake. A considerable proportion of the women executed were child murderers, with more than 60% (17 out of 25) sentenced to death for infanticide. Secher, 'Bidrag til Københavns', 370–5. Between 1650 and 1699, 48 civilian executions (i.e. non-military punishments) were carried out in Copenhagen.

[40]*Ibid.*, 575.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

public space when displayed for months or even years on material execution sites – complete with scaffold, gallows, wheels and poles.

The trial had transformed Gertrud from innocent/presumed guilty to guilty and convicted – and thus legally condemned and expelled from the city. The procession through the city gates was a symbolic expulsion from the city, while the execution marks the final expulsion from members of the society of living humans. Gertrud Nielsdatter died on the scaffold, and all that remained was the decapitated body that had housed her allegedly sinful soul. Many beheaded perpetrators were buried in the unconsecrated ground at the place of execution, while others were given the privilege of being buried in consecrated ground. However, as we know, Gertrud's body was destined neither for display nor burial. Her journey and transformation were not yet complete, as her corpse was transferred to the anatomy house at the university. Throughout the early modern period, dissections were routinely imposed on criminals who were condemned of severe crimes. This sort of 'post-mortem punishment' paved the way for the body to become a scientific specimen, after the body had undergone an accelerated process of deterioration in the hands of anatomists.[41]

The anatomy house

Gertrud was not left to deteriorate slowly on the execution site; instead, she was immediately taken back to the city, that is, from the open-air public space of the execution ground to the public building of the anatomy house (*anatomihuset*).[42] The difference between the two spaces was highlighted by the presence of two different kinds of audiences; the mixed – and standing – crowd at the execution ground and the exclusive – and seated – audience in the anatomy house.

The anatomy house was a part of the university's campus facilities located at the heart of Copenhagen, next to the church of Our Lady (*Vor Frue Kirke*). The anatomy house opened in 1644, but in 1673 it was already in a state of disrepair as it had been out of use for over a decade. Subsequently, Gertrud had the dubious and unwitting honour of becoming one of the first human beings to be dissected here for a long

[41]F.P. de Ceglia, 'Corpses, evidence and medical knowledge in the late Middle Ages and the early modern age', in Ceglia (ed.), *The Body of Evidence*, 1–20 (at 17). The practice of condemning certain executed criminals to anatomical dissections continued up through the eighteenth century. See S. Tarlow and E.B. Lowman, *Harnessing the Power of the Criminal Corpse* (Cham, 2018). Elizabeth Hurren has distinguished between legal death, social death and medical death in eighteenth-century Britain. Her point is, that while convicted criminals died a legal and social death when they were hanged, they did not die medically before they reached the dissection table, because people did not always die from hanging, but merely passed out. E. Hurren, *Dissecting the Criminal Corpse. Staging Post-Execution Punishment in Early Modern England* (London, 2016). However, in the case of the execution of Gertrud, this differentiation is redundant, as she was decapitated and thus undoubtedly died on the scaffold.

[42]In recent years, many scholars have engaged with early modern dissections of humans through the concept of the 'anatomical gaze', which refers to the construction of scientific knowledge by opening and examining the human body. See Ceglia (ed.), *The Body of Evidence*, 107–90. On the emergence of human dissection, see e.g. Park, *Secrets of Women.* On the anatomy house and natural history in seventeenth-century Copenhagen, see M. Fink-Jensen, *Fornuften under troens lydighed. naturfilosofi, medicin og teologi i Danmark 1536–1636* (Copenhagen, 2004); H.-O. Loldrup, 'Anatomiske teatre i Europa', in N.W. Bruun and H.-O. Loldrup (eds.), *Anatomihuset i København* (Copenhagen, 2007), 181–272.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

while, so she and Steno were the main attractions of a solemn reopening of the tradition of dissecting humans in the anatomy house.[43]

To enter the building, one would first have to pass through the gates to the university courtyard, which separated the university's buildings from the surrounding city and functioned as a legal and cultural threshold to Copenhagen's academic community. In 1662, Professor Thomas Bartholin published the *Domus Anatomica Hafniensis*, describing the anatomy house's interiors and function.[44] According to Bartholin, it was common practice for the dissector to sell tickets to anatomical demonstrations to control who had access to the event. Bartholin distinguished sharply between the rough crowd of the execution ground and the more sophisticated audience of the anatomy house, as he considered it reasonable that 'boys and the common herd are rightly kept far away from these holy mysteries'.[45]

There was also a small secluded room 'so that the anatomist can store away his instruments, gather himself together in this out-of-the-way corner, and dress properly before a public demonstration'.[46] Indeed, with rooms specially fitted for the preparation of the corpses, a changing room for the dissector and a large hall dedicated to dissecting in front of an audience, anatomical demonstrations bore a close resemblance to religious ceremonies or public acts in performative spaces like churches and theatres with backstage areas, vestries, wardrobe, etc.

A table specifically designed to display the dissection process was placed in the middle of the lecture hall. Bartholin describes the ingenuity of its design, as the dissector was able to turn the table 'to any angle, so that every slightest occurrence to do with the body may be shown to all the viewers'.[47] The table was surrounded by a barrier intended to prevent the dissector and his assistants from getting disturbed by the audience, who sat on four concentric rows of stepped benches arranged as in an amphitheatre. Behind the benches stood a collection of human and animal skeletons; in the centre, the skeletons of a man and a woman were displayed (see Figure 2). According to Bartholin, their names had been Adam and Inger, but the anatomist Simon Paulli (1603–80) renamed the woman Eve and placed a snake between them. They were surrounded by eight skeletons of animals, including a baboon, a porcupine and a swan.[48] Each of the animal skeletons was provided with Latin poems written by Paulli's assistant, Michael Kirstein (1620–78), which addressed the fate of the animals, and, as has been argued by Ivana Bičak, the animals were thus 'offered a compensation for being ripped open by the anatomical knife'.[49] The collection of animal and human skeletons reflected a religious context for scientific dissections. Women, men and animals were all creatures of God, and it was a reminder that the

[43]K. Larsen, *Dødens teater. Lægekunsten i Danmark 1640–1840* (Copenhagen, 2012), 37–42. For a general introduction to anatomical demonstrations in the European Renaissance, see R. French, *Dissection and Vivisection in the European Renaissance* (Aldershot, 1999).

[44]Bartholin's book was originally published in Latin. In this article, we quote from the English translation, published in N.W. Bruun and H.-O. Loldrup (eds.), *The Anatomy House in Copenhagen* (Copenhagen, 2015), 50–125.

[45]*Ibid.*, 79.

[46]*Ibid.*, 55.

[47]*Ibid.*, 57.

[48]*Ibid.*, 59.

[49]I. Bičak, 'Virtual reality of the early modern anatomical poem in Denmark and England', in A.J. DiFuria and W. Melion (eds.), *Ekphrastic Image-Making in Early Modern Europe, 1500–1700* (Leiden and Boston, MA, 2021), 314–31.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

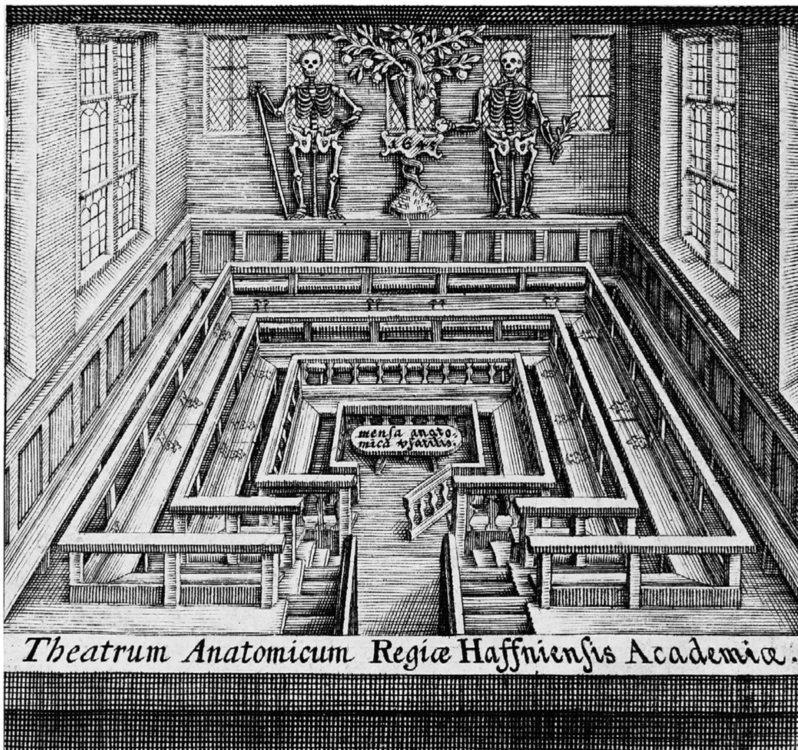

Figure 2. The lecture hall in the anatomy house as seen from the Royal Box, where King Frederik III is known to have attended dissections on several occasions. So could the city's best citizens for a fee. The table in the centre could be turned so that interesting details could be shown to the entire hall. And there were folding benches so you could stand up if there was something you wanted to study more closely. Attributed to Karel van Mander and Albert Haelwegh 1648, Royal Danish Library.

deceased human body was not so different from dead animal bodies. To the profane eye (and nose), dead bodies were nothing but rotting piles of flesh, but in the hands of the skilled dissector, they could provide a glimpse of God's divine order.[50] The decorations, furnishings, fittings and fixtures of this public building – the benches, the table, the barrier and the skeletons (and the human body) – constituted a material ensemble underpinning (and interacting with) the practice and power of the medical elite.

Gertrud's body was not immediately brought to the dissection table. Instead, she was carried through the main gate and into a small room on the right-hand side specially fitted for preparing corpses for anatomical demonstrations. The dissector's assistants would remove Gertrud's clothes, wash and clean her, and finally shave off all hair from her head and body.[51] While Gertrud's body was being prepared, an immaterial preparation for the forthcoming dissection occurred in the lecture hall at

[50]J. Sawday, *The Body Enblazoned* (London and New York, 1995).

[51]*Ibid.*, 117. Allegedly, the bodily hair was removed so that the surgical knives and scalpels would not become blunt.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

2 pm, as Steno gave a lecture establishing a religious context for the upcoming event.[52] The lecture revolved around how studying the body as a divine creation compels love for God and can thus be seen as an event that separated Gertrud's criminal deeds and sinful soul from her material body.[53] He emphasized that the human senses are not to be trusted, as what at first glance appears most unpleasant 'very often conceals objects most pleasant to the senses'.[54] He explained how the dead human body was a horrific 'image of death', but at the same time, it would reveal the wonders of God in the skilled hands of the anatomist.[55] The senses deceived the mind, as the 'filth and stench of the cadavers' kept people away from anatomical demonstrations so that they were left in ignorance of the complexity of the body and its inner organs, which would inevitably lead to the love of its creator. [56] Subsequently, by drawing up the scientific and religious context of the forthcoming event, Steno effectively performed a transformation of Gertrud. Her decapitated corpse was no longer affiliated with the crime of infanticide that the sinful soul initiated, but rather, in the words of Steno, 'bodies do not stink, but crimes do'.[57]

The anatomical demonstration began in the afternoon of Monday, 30 January. It was not unusual that women ended up on the dissection table. However, invitations to public dissections performed by Thomas Bartholin show that women's dissections were associated with particular gendered expectations, both in the male dissector's handling of the body and the all-male audience's gaze. In an invitation to an anatomical demonstration focusing on the female reproductive organs, Thomas Bartholin had announced that he would 'exhibit a naked corpse of the second sex, which he will inspect with chaste eyes and examine with virtuous hands, displaying purely and reverently her breeding ground and the natural vessel for milk for her children'.[58] These allegories alluded to the woman's womb and her mammary glands.[59] In the same invitation, Bartholin also articulated his expectation from the audience and their reactions to the exposure of the female body:

> [H]e [Bartholin] asks those of a suitable age, who have the disposition and knowledge, to view with the same attitude and gaze these Floralia, given the kind leave of a Cato, and request those who can contemplate modestly the lovely, tender naked body of a Venus, paying respect to the cradle of their own births with decency and openness, to appear there with all possible delicacy, but also the confidence of worthy feelings, abundant courtesy and propriety in thought and deed.[60]

[52]The intitial lecture and subsequent dissection of Gertrud Nielsdatter was the peak of Steno's short stay in Copenhagen from 1672 to 1674. Andersen, *Niels Stensen*, 611–77 (especially 638–42); V. Møller-Christensen and A. Gjedde, 'Det medicinske fakultet 1479–1842', in S. Ellehøj *et al.* (eds.), *Københavns Universitet 1479–1979*, vol. VII (Copenhagen, 1979), 1–89 (at 42–3); G. Scherz, 'Biography of Nicolaus Steno', in T. Kardel and P. Maquet (eds.), *Nicolaus Steno* (Heidelberg, Dordrecht, London and New York, 2013), 7–346 (at 292–310).

[53]The present analysis is based on an English translation of Steno's Latin lecture. This translation is published in T. Kardel, *Steno. Life, Science, Philosophy* (Copenhagen, 1994), 113–27.

[54]*Ibid.*, 115.

[55]*Ibid.*, 115.

[56]*Ibid.*, 123.

[57]*Ibid.*, 123.

[58]Bruun and Loldrup (eds.), *The Anatomy House*, 91.

[59]Thomas Bartholin is commonly credited for the discovery of the mammory glands. See J.B. Andersen, *Thomas Bartholin. Lægen og Anatomen. Fra Enhjørninger til Lymfekar* (Copenhagen, 2017), 185–91.

[60]Bruun and Loldrup (eds.), *The Anatomy House*, 91.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

In Bartholin's invitation, the audience present in the lecture hall was expected to devote themselves entirely to the scientific and divine study of the female body and had to suppress any sinful thoughts and desires of a sexual nature aroused by the sight of a naked woman.

The body on the dissecting table at the centre of the anatomical theatre bore little resemblance to the woman who died only the day before. Even people who had known Gertrud well would not have recognized her at first sight. Her head was separated from her body, but the body was also naked and hairless, and the first signs of decay would also have been visible. In other words, she was completely exposed as a medical object or female cadaver (*Cadaveris Feminini*), as she was referred to by Holger Jakobsen, a student of theology and medicine who attended the dissection and recorded the words and actions of Steno in his handwritten notes.[61] From Jakobsen's detailed notes, written in a clinical and professional vocabulary, it becomes clear that Steno followed the standard procedure of Renaissance dissections, as his demonstration started with the easily decomposable internal organs and ended with a demonstration of the muscles. In the afternoon on 30 January, Steno demonstrated the internal organs of the breast and abdomen and how everything was connected and kept in place by membranes, motor fibres and blood vessels. The next day, he demonstrated the digestive system, which Steno compared to 'the alimentary systems of a reindeer recently dissected, a little fox, a monkey, a dormouse, a hen and a ray fish'.[62] Not only was she cut apart, piece by piece, and disposed of, thus making her even less recognizable than before, but her anatomy was also directly compared to animal anatomy and therefore described as a universal creation of God. For the following five days, Steno focused on the head, starting with a demonstration of the brain, followed by the eyes, the nose, the ears and the mouth. He then spent a day going through her reproductive organs before he demonstrated the lymph nodes and, finally, the blood circulation and the muscles. Finally, the last cuts were made on Wednesday, 8 February, and all that was left of Gertrud Nielsdatter was a defaced cadaver.

From body to paper: print shops and bookstalls

Gertrud's body deteriorated entirely during the 10-day-long anatomical demonstrations at the anatomy house, and afterwards, her bones were probably disposed of. However, this disintegration of her body simultaneously paved the way for a new transition. When leaving the performative space of the anatomy house in which the medical demonstration was communicated verbally and by manual practice to the present audience, Gertrud entered the wider communicative sphere of printed text, thus undergoing a significant material transformation from flesh to paper.

Medical knowledge directly related to Gertrud's body was published in print and became available for a larger reading public than the restricted – in terms of number and access – public attending the anatomical demonstration. The first step of the transition into the world of print happened in Copenhagen when Steno's opening lecture was published in a local medical journal (text only). The second step was when

[61]Holger Jakobsen's original handwritten notes are kept at the Royal Library in Copenhagen. A facsimile and a transcribed English translation of the Latin notes are published in Kardel, *Steno*, 128–46. See also Andersen, *Niels Stensen*, 642–8.

[62]Kardel, *Steno*, 133.

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

an anatomical illustration of the blood circulation between the major organs, based on the dissection of Gertrud, was added to an anatomical textbook. On Tuesday, 7 February, Steno supposedly made a drawing showing Gertrud's lymph vessels and blood circulation. This drawing illustrated blood circulation between the inner organs in Thomas Bartholin's *Anatome Quartum Renovata*, printed in Leiden in 1673 (see Figure 3).[63] Bartholin is acknowledged to have discovered the lymphatic system, and the *Anatome Quartum Renovata* was widely circulated during the seventeenth and eighteenth centuries.[64]

Gertrud's now utterly objectified body gained new materiality on paper. Just as Gertrud's transition from individual sinner to wonder of God was spatially linked to the anatomy house in Copenhagen, this transition was spatially related to printing houses, bookstalls, libraries and academic communities throughout urban Europe. The copy of Steno's opening lecture was published in *Acta Medica & Philosophica Hafniensia*, a medical journal edited by the before-mentioned Thomas Bartholin.[65] All contributions to the journal were written in Latin, and it was printed by Henrik Clausen Gøde, who ran a notable printing house in *Løvstræde*, a small alley a few minutes' walk east of the anatomy house. Gøde was a prominent printer who also enjoyed the privileged position of being the official printer of the university.[66] Hence, the recording in print marks the transfer of knowledge obtained from the dissection of Gertrud's body into both local and international communities of natural science. Interestingly, one central point of Steno's lecture, that corpses represent universal creations of God, became further elaborated as it became recontextualized in *Acta Medica*. Steno's opening lecture was printed alongside observations based on animal dissections, just as Gertrud's body had been dissected in the presence of skeletons of a baboon, a porcupine and several birds.

Gertrud's public execution was a major public event, so even learned readers in Copenhagen, who were familiar with Latin, might still, at this point, have been aware of the link between Steno's lecture and the convicted child murderer. However, the execution was not reported in the press, neither are there any traces of it being represented in broadsheet ballads. This link was completely blurred when an accurate graphic depiction based on Gertrud's body was printed in the Dutch city of Leiden, which concluded the transition of Gertrud's physical body to its representation on paper and in anatomical discourse. Following this trajectory, we might say that the convicted child murderer, Gertrud Nielsdatter, had now been completely transformed from the individual body of a woman living in Copenhagen to an exemplar of the universal creation of God recorded as a page in the book of nature.

[63]According to Jesper Brandt Andersen, Steno made a drawing based on the dissection, which later became the basis for an elaborate drawing in Bartholin's *Anatome Quartum Renovata.* J.B. Andersen, 'Da Niels Stensen tog Paris med storm', *Dansk Medicin Historisk Årbog* (2018), 27–70 (at 39). See also V. Maar (ed.), *Nicolai Stenonis Opera Philosophica*, vol. II (Copenhagen, 1910), 346.

[64]R. Porter, *The Greatest Benefit to Mankind. A Medical History of Humanity from Antiquity to the Present* (London, 1999), 219–20; Andersen, *Thomas Bartholin.*

[65]T. Bartholin (ed.), *Acta Medica & Philosophica Hafniensia*, vol. II (Copenhagen, 1673), 359–66.

[66]On Henrik Clausen Gøde, see H. Ilsøe, *Bogtrykkerne i København ca. 1600–1810* (Copenhagen, 1992), 66–9. Throughout the seventeenth century, Copenhagen gradually became established as the undisputed centre of printing in the lands of the Danish kings. This development resulted from a combination of market developments and censorship procedures, as they were required to submit their manuscripts to university-based censors in Copenhagen. See C. Appel, *Læsning og Bogmarked i 1600-tallets Danmark* (Copenhagen, 2001).

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

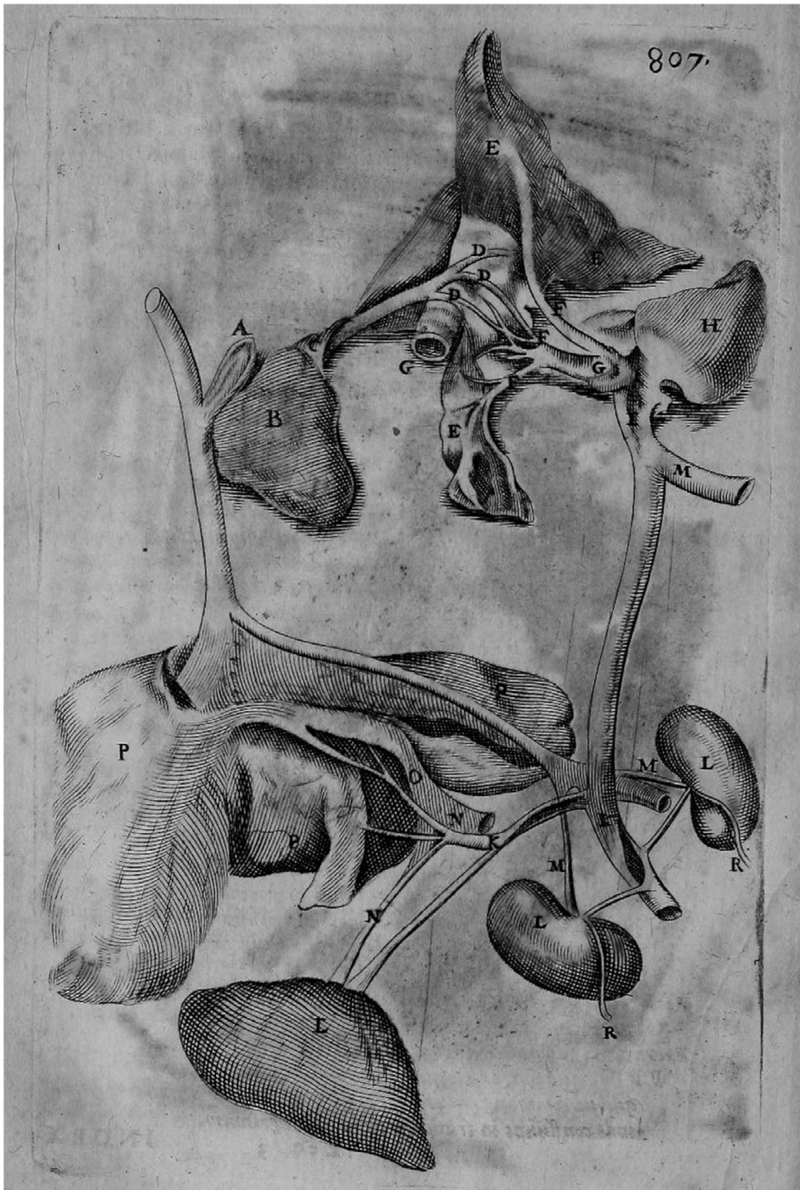

Figure 3. Gertrud Nielsdatter, after completing her material transition from flesh to paper. The image is based on a drawing made by Steno on 7 February 1673 during the dissection of Gertrud Nielsdatter and depicts the blood circulation between the major organs. Printed in Thomas Bartholin's *Anatome Quartum Renovata*, 1673. The above image is from the 1684 edition.

Concluding remarks

Late Renaissance Copenhagen was a complex urban space consisting of many function-divided spaces rooted in legal, religious and scientific practices. The transformation of Gertrud was done by moving her body through different public spaces

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press

and by the material framing of public buildings and sites. The performative spaces – and their constituting materiality – mentioned in this article possessed the ability to profoundly change the materiality of bodies and dissolve individuality in the presence of an audience. Yet, on the other hand, bodies also constituted the urban spaces and materialities they encountered.

Gertrud's bodily transformation was processed by ceremonial events and practices linked to specific permanent, ephemeral and symbolic spaces in the city. These were the town hall, the city court, the place of execution, the anatomy house at the University of Copenhagen, the print shop and the city's bookstalls in Copenhagen and Leiden in an overlapping spatial mosaic, which according to the notions of Rudolph Schlögl would be the complex arrangements of overlapping communicative spaces of different kinds. The performative and public space of the city court framed the legal communication transforming Gertrud from legally innocent to convicted and expelling her from the urban community. This was done in the presence of an audience. The religious procession from confinement to scaffold transported her through the streets and the city gate of *Vesterport* and, thus, crossing the simultaneously symbolic and very concrete threshold between the urban zone of the city to the extra-urban place of execution, where she was literally transformed from a living sinner to an executed body.

When moved from the place of execution back into the city and to the space of the anatomy house of the university, her body became the subject of medical attention communicated by the demonstrations performed by Nicolaus Steno. Before the dissection, she underwent a process of de-individualization in the secluded and non-public space of the preparation room, becoming an object of the gendered anatomical gaze. In the course of this sequential medical practice, Gertrud was transformed into a universal being of God that would eventually re-emerge on the printed page as a scientific fact to be perpetuated through distribution among specialist networks.

Funding statement. The project *PUblic REnaissance: Urban Cultures of Public Space between Early Modern Europe and the Present* is financially supported by the HERA Joint Research Programme (www.heranet.info) which is co-funded by AEI, AHRC, BMBF, CNR, NWO and the European Community, H2020-SC6-CULT-COOP-2017 Understanding Europe – Promoting the European Public and Cultural Space – under grant agreement no. 769478. The research behind this article has been partly funded by The Danish National Research Foundation Centre for Privacy Studies (DNRF 138).

Cite this article: Hansen, P.W., Jakobsen, J., Langen, U. and Simonsen, R. (2023). From flesh to paper: bodily and material transformation in seventeenth-century Copenhagen – a case-study. *Urban History*, 1–19, doi:10.1017/S0963926823000548

https://doi.org/10.1017/S0963926823000548 Published online by Cambridge University Press