Stitching Sanctity and Sculpting Bones

The Materiality of Cologne's 11,000 Holy Virgins and their Textile Skull Reliquaries

Two Volumes

Volume I

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Doctor of Philosophy

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October 2021

Abstract

This thesis investigates the medieval textile skull reliquaries of Cologne's 11,000 Holy Virgins by focusing on their structural, material, and cultural significance. They were supported by and wrapped within layers of textiles, ornamented with material finery, and constructed to expose the forehead bone through an elaborate 'window'. The use of textiles as a primary external material, the exposure of bone, and their monumental displays - that sometimes totalled over 1,000 skulls - mark notable departures from contemporary methods of display. These textile reliquaries originated in Cologne in the thirteenth century, and eventually circulated across different regions of Europe, forming a much wider network. Nevertheless, they have themselves remained at the periphery of, or been completely overlooked in, most studies; this investigation seeks to redress this scholarly lacuna by exploring the reliquaries in detail – externally and internally, physically, thematically, and theoretically. Although most have been re-wrapped in subsequent campaigns, this study concentrates on the earliest compositions. It examines both the external textile layers that wrap the skulls as well as materials within them, uncovering elaborate assemblages of linen, silk, velvet, parchment, and bone fragments among other materials. These are used to challenge and problematize (modern) canonical distinctions between 'relic' and 'reliquary'. Given the frequent construction of 'living' features, consideration is given to the wider context of the head in high medieval medicine and surgery. Here, investigation of images and written accounts of cranial anatomy, especially Albertus Magnus' *De animalibus* that was composed in Cologne, reveal a rich vocabulary, used literally and metaphorically, relating to layered fabrics, weaving, and sewing. For the first time, this study considers these reliquaries in their own right and together with other related objects and textual sources. This also sheds new light on the cult's medieval formation and promotion that establishes this relic phenomenon as integral to Cologne's sanctity.

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Acknowledgments

The success of this thesis hinged on the access to the Virgins' holy heads, sacred objects that are spread across Europe. This, together with a unique orchestration of scholarly and emotional support, enabled me to navigate this journey. I am greatly indebted to all of those who gave generously of their time, resources, and encouragement. This list has been mentally composed many times over, and it is an honour to transfer these thoughts to paper.

My deepest gratitude goes to my supervisors who, individually and collectively, aided the evolution of this project. I want to thank Jane Hawkes for her inspiring insights, steadfast encouragement, tireless editing, and friendship from start to finish. I am grateful for Hanna Vorholt's perceptive comments, inquiries, and resources, together with her willingness to change from advisor to supervisor part way through this project. This study began under the co-supervision of Emanuele Lugli, whose knowledge and multi-disciplinary approach has continued to guide my critical inquiring into all aspects of this endeavour. I am also thankful for Jeanne Nuecherlein's insightful input, which began when she supervised my Master's dissertation and has continued with her participation on my advisory panel.

The University of York provided an enriching and dynamic academic environment, and I am grateful to the many scholars who shaped this project. A special thanks to Christine Williamson, for her astounding command of Medieval Latin, and her tireless efforts to impart a fraction upon me. I am also grateful to Linne Mooney for sharing her vast knowledge of medieval palaeography, which enabled me to better engage with primary sources. This thesis has been generously funded by the University of York's Overseas Research Scholarship, which removed financial concerns about my decision to embark on this journey.

This project involved countless individuals and organizations, and, although there are too many to name individually, some are especially deserving of mention: My sincerest gratitude go to Ulrike Reichert, Dr. Gudrun Strake-Sporbeck, Katharina Sossou, and Dr. Father Janusz Nowiński who each assisted and facilitated the investigation of the Holy Virgins' textile reliquaries and their corresponding sacred spaces on numerous occasions in both Germany and Poland. They continually shared their expertise, personal observations, as well as their published and unpublished works all of which enabled this study to explore new arenas of enquiry.

Further to these, I am grateful to Dr. Klaus Hardering for showing me the old sacristy and reliquary shelves in Cologne Cathedral, and for the (memorable) opening of the Clarenaltar; Monica Paredis-Vroon who presented skull reliquaries inside wooden busts in Aachen's Cathedral Treasury; Dr. Petra Janke and Norbert Orthen each kindly revealed much about the Altenberger Dom and its relics; Dr. Manfred Becker-Herberti for the numerous books and enriching conversations about Cologne's relics; Dr. Frieda Sorber shared her findings from the restoration of Herkenrode skull reliquaries, long before the publication that detailed this project; Father Frank-Norbert Müller and Dr. Anna Pawlik who facilitated access to the sacred objects at the churches of the Holy Virgins and St Kunibert. In addition, Dr. Joachim Oepen, Dr. Winfried Schmitz, Dr. Stefanie Seeberg, Dr. Heinrich Becker, Dr. Winfried Schmitz, Dr. Hans-Walter Stork also demonstrated exceptional kindness that furthered this project. Thank you to the many members of staff who maintain the churches included in this study; a special thanks goes to those at the Archbishop's and city archives in Cologne, the British Library and Boston Spa reading room, the Wellcome Library, and the University of York libraries. I am eternally thankful to the Wittekind family for warmly hosting me during my many trips to Cologne, and especially to Susanne whose vast knowledge of Cologne and its sacred treasures, brought the medieval city to life.

The support and encouragement of my friends and family, near and far, continually sustained this undertaking. I am especially grateful to my husband, Declan, for his unwavering encouragement, grounded counsel, and refreshing humour throughout. A special thanks to Clíona, our daughter, and Rory, our family dog, who – each in their own ways – provided constant reminders of life's little and large joys while also encouraging the balance of the present with the medieval past. Finally, I dedicate this work to my grandma, Jay Perez (1924-2020), who modelled compassion and instilled a deep belief that anything is possible.

Author's Declaration

I, Cher Casey, declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as references.

Part of the analysis of the Clematius Inscription that is found in Chapter 1 is included in a recent publication (16 December 2021): Cher Casey, "Transmitting Sacred Authority through Stone: The Clematius Inscription and Cologne's Cult of the Holy Virgins," in *Transmissions and Translations in Medieval Literary and Material Culture*, ed. Megan Henvey, Amanda Doviak, and Jane Hawkes, vol. 17, Art and Material Culture in Medieval and Renaissance Europe (Leiden: Brill, 2021), 143–59.

Introduction

When first encountering a skull reliquary (C.SMA.1; Figs 1a-k) the eye of a viewer today is perhaps drawn to the glistening gold threads, or maybe it is the 'window' that once exposed the bare bone at the forehead that catches attention. The lower left corner of this particular example, worn with age, further reveals that the skull is enveloped within layers of finely woven linen and coarse plant fibres, and supported internally with a stuffed pouch made of linen. The outermost layer presents rich materials: a delicate silk is draped across the crown of the skull, it is neatly pleated, and tailored around the curved contours; the 'face' is concealed beneath a lavish maroon velvet 'mask' and further ornamented with rows of evenly spaced metal sequins that are secured with neat stitches; and lastly, shimmering gold ribbons bisect the 'mask' and encircle the *fenestella*, the semi-circular opening situated over the forehead.

This reliquary offers one example of the objects under investigation here: the skulls of the Holy Virgins – St Ursula's 11,000 companions who, it was believed, were martyred and buried in Cologne in Late Antiquity and subsequently encased in multiple layers of textiles and adorned with decorative materials. They were then presented as part of monumental displays in Cologne's Cathedral that included over 300 free-standing skulls (Figs 2, 3, 4a-c). These displays originated in Cologne in the late thirteenth century, but the holy heads subsequently came to form part of a complete network of exchange that took place across Europe. The aim of this study is to gain a better understanding of the role of the skull reliquaries within the development and expansion of the cult of the Holy Virgins, and to explore their significance within the cult's textual sources, along with the innovative materials, structural assembly and 'anatomical' characteristics in their fabrication. For the first time, this thesis places the freestanding textile skull reliquaries in the investigative spotlight.¹ Few scholars have previously considered these skulls, and those that have, focus primarily on the wall fixtures, the winged altarpieces, and wooden busts

¹ For further discussion of the distinctions drawn here between the 'freestanding' skulls wrapped in textiles and their counterparts contained within wooden busts, see below pp 198-207.

– the fixtures housing and displaying the skull relics. Thus, Cologne's holy heads have themselves remained at the periphery of, or been completely overlooked in, most studies. My investigation seeks to redress this imbalance by exploring these freestanding skull reliquaries in detail – externally and internally, physically, thematically, and theoretically.²

The origins of the Holy Virgins and the hagiographic narratives associated with them are complex. So, before addressing the reliquaries themselves and setting out the aims and structure of this dissertation in more detail, it is necessary to briefly introduce the previous scholarship concerning St Ursula and her many companions, and introduce the relic phenomenon that both defines this cult – that spans the ninth through seventeenth centuries, retaining its relevance to the present day – and remains central to this study.

Background to the Cult

With 11,000 martyrs, the cult of Cologne's Holy Virgins is the largest in all of Christianity. From the twelfth century, the city claimed the physical evidence – the newly discovered skeletons of the many martyred virgins – in support of the existence of the multitude of martyrs. In 1106, an expansive Roman cemetery west of the Holy Virgins' church and abbey was discovered during the expansion of Cologne's city walls (Figs 5, 6).³ This site was named the *ager Ursulanus* (lit.: the field of Ursula), and over the next century, campaigns to exhume the 'sacred' bodies were carried out with varying degrees of enthusiasm.⁴ In 1155, Archbishop Arnold II ordered the Benedictine Abbey of St Heribert in Deutz, situated on the banks of the Rhine opposite Cologne (Figs 5, 6), to carry out systematic excavations; this campaign, which lasted until 1164, yielded an extraordinary number of skeletons.⁵

⁴ The twelfth century marked the high point for excavations at this site. They are documented during 1106, 1113, 1121, 1155-1164, and 1183, but might have also taken place outside these dates. Frank Günter Zehnder, *Sankt Ursula: Legende, Verehrung, Bilderwelt* (Cologne: Wienand Verlag, 1985), 46.

 ² This study involves the investigation of human remains; these were treated with respect and by following the guidelines of the institutions where they are kept.
 ³ The politics behind the city-wall expansion are discussed in Paul Strait, *Cologne in the Twelfth Century* (Gainesville, FL: University Press of Florida, 1974), 30–31.

⁵ For brief notes on St Heribert's involvement and extensive references to earlier sources, see: Anton Legner, *Kölner Heilige und Heiligtümer. Ein Jarhtausend*

Furthermore, while the cemetery was situated near the Church of the Holy Virgins, in an area called Niederich, it extended beneath the churches of St Kunibert and the Holy Maccabees (Fig. 6), and primarily fell under the jurisdiction of St Kunibert.⁶ The Church of the Holy Virgins, however, claimed ownership over all of the finds, with conflicts arising over those relics that were excavated from within the bounds of neighbouring churches.⁷ Complicating the issue, Abbot Hermann I (1082-1120) of the Benedictine monastery of St Pantaleon supervised the canonesses of the Holy Virgins' abbey, and held a privileged position for obtaining and distributing relics.⁸ From the beginning of the *agar Ursulanus* excavations therefore, it can be deduced that a number of local communities were involved in the campaigns of recovery, no doubt facilitating the dissemination of the relics.

The discovery of the *ager Ursulanus*, together with the subsequent fruitful excavations, the finds of which were authenticated in 1156 by Elisabeth of Schönau, the visionary nun, established Cologne as *Colonia Sancta* – a relic capital that rivalled Rome. Thus, in addition to possessing an incomparable number of sacred remains, the city was promoted as a place in which to 'harvest your own' relics – albeit only with the Virgins' blessings. This sentiment is captured in the account of St Norbert's visit in 1121, during which he handpicked sacred bones from the *ager Ursulanus* for his community in Xanten.⁹ In 1180, French monks from Grandmont were gifted numerous relics that included some from the church of St Heribert as well as that of the Holy Virgins. It was even claimed that the deacon of the Church of the Holy Apostles put his hand into a shrine of the Holy Virgins and retrieved for

europäischer Reliquienkultur (Cologne: Greven Verlag, 2003), 263; Zehnder, Sankt Ursula, 46.

⁶ For St Kunibert's early involvements, see Wilhelm Levison, "Das Werden der Ursula-Legende," *Bonner Jahrbücher. Jahrbücher des Vereins von Altertumsfreuden im Rheinlande* 132 (1927): 109.

⁷ Gertrud Wegener, *Geschichte des Stiftes St. Ursula in Köln*, Veröffentlichungen des Kölnischen Geschichtsvereins e.V. 31 (Cologne: H. Wamber, 1971), 54; for discussion of St Kunibert and the Holy Maacabees, respectively, see: Legner, *Kölner Heilige*, 54, 223-224.

⁸ Record of the supervision is noted in: Wegener, *St. Ursula in Köln*, 52; for the suggestion of St Pantaleon's privileged access to these relics, see fn. 14 in: Joan A. Holladay, "Relics, Reliquaries, and Religious Women: Visualizing the Holy Virgins of Cologne," *Studies in Iconography* 18 (1997): 106.

⁹ Levison includes the Latin transcription of this account from the Vita Norberti, twelfth century (SS.XII, 682) in: "Ursula-Legende," 110.

them a large bone, as well as giving them two complete bodies that had just been taken from the ground and not yet washed.¹⁰ Cologne's reputation as relic capital persisted into the thirteenth century. In the 1220s, discussion between a monk and novice cited in Caesarius of Heisterbach's *Dialogus miraculorum*, stipulated that "bones of the eleven thousand blessed virgins are found everywhere in the streets and gardens of the city of Cologne."¹¹ Although the novice wondered if foreign bones may have been mixed among these finds, the passage promotes a tantalizing image of the municipality saturated by sacred remains.

Addressing the novice's concern, the monk recounted a miraculous story from the monastery of Altenberg where a horse bone is cast out of a collection of Holy Virgins' relics having been identified by its foul smell thus affirming the authenticity and exclusivity of the other relics. He went on to state that the site housed an impressive collection of a "thousand bodies" (mille corpora).¹² However many relics the Cistercian abbey of Altenberg in fact possessed, it is clear that it was one of the cult's largest storehouses and distribution centres during the twelfth and thirteenth centuries. The monastery had received sizeable deliveries directly from St Heribert, and also shared an affiliation with the Church of St Kunibert that likely offered additional - and continued - access to relics. According to the much later chronicle of 1517, written by the then abbot, Heinrich Rouffer, the monastery was furnished with large quantities of Holy Virgins' relics in 1182, 1278, and 1327.¹³ Petra Janke has hypothesized that it possessed relics as early as the mid-twelfth century,¹⁴ a period that notably coincides with the works of Elisabeth of Schönau and Theodoricus, the custos, of Deutz. Altenberg certainly remained central to the cult's propagation by furnishing its sister abbeys with large relic collections; among

¹⁰ Legner, *Kölner Heilige*, 218–23, esp. 222; For a detailed discussion of the monks' account, see: Karl Corsten, "Eine Reise französischer Mönche nach Köln, Bonn und Siegburg im Jahr 1181," *Annalen des Historischen Vereins für den Niederrhein* 116, no. 1 (1930): 29–60.

¹¹ "Cum in stratis et hortis civitatis Coloniae beatarum virginum undecim millium passim ossa reperiantur," Ch. LXXXVIII. Joseph Strange, *Caesarii Heisterbacensis. Dialogus miraculorum.*, vol. II (Cologne: J.M. Heberle, 1851), 156; trans.: Scott and Swinton Bland, *The Dialogue on Miracles*, 91.

¹² Ibid., II:156, Ch. LXXXVIII; trans.: author.

 ¹³ Petra Janke, "Dat werde leve hiltom." Zur Verehrung der Heiligen und ihrer Reliquien am Altenberger Dom, Studien zur Geschichte, Kunst und Kultur der Zisterzienser 29 (Berlin: Lukas Verlag, 2009), 41.
 ¹⁴ Ibid., 45.

other sites, these included the order's eastward expansion in Lenko, Obra, and Ląd (modern-day Poland), Mariental (Lower Saxony), Zinna (Brandenberg), and Haina (Hessen).¹⁵

The Scholarship

Many scholars have undertaken the task of untangling the history of this cult – including the periods both before and after the discovery of the *ager Ursulanus*. The first, and still one of the most substantive of these investigations is attributed to Cologne's local Jesuit, Hermann Crombach, who composed *S. Ursula vindicate* (1647) in the wake of the Counter Reformation.¹⁶ Together with two other contemporary publications, this formed part of a wider cult revival.¹⁷ In 1858, the Bollandist Victor de Buck compiled the cult's historic accounts for inclusion in the *Acta Sanctorum*.¹⁸ Johann Hubert Kessel (1863),¹⁹ Albert Gereon Stein, priest at Church of Holy Virgins (1874-1888),²⁰ and Joseph Klinkenberg (1889-1892)²¹ also published

¹⁵ For a thorough overview of the Cistercian network stemming from Altenberg, see: Petra Janke, "Die Tochterklöster von Altenberg," *Altenberger Blätter* 49 (2010): 6– 56; for an emphasis on those sister cloisters in Poland, see: Andrzej Marek Wyrwa, "Die 'kölnischen Klöster' der Altenberger Linie in Großpolen: die Frage der nationalen Exklusivität der Zisterzienserabteien in Lekno-Wągrowiec (Lekno-Wongrowitz), Ląd (Lond) und Obra," *Analecta Cisterciensia* 54, no. 1/2 (2002): 186– 216.

¹⁶ Hermann Crombach, Vita et martyriums S. Ursulae et sociarum undecim millium virginum: Vindiciae Ursulanae (Cologne: Hermanni Mylii Birchmanni, 1647).
¹⁷ Paul de Barry, La devotion à la glorieuse Saincte Ursule, la toute aymable mere des Ursulines (Lyon, n.p., 1645); A. Valentiennes, La gloire de s. Vrsule divisee en deux parties: La premiere contient l'histoire & martyre des onze mille vierges, avec quelques considerations la dessus. La deuxieme est en abregé de la vie d'aucunes filles de s. Vrsula, signalées en sainteté. Recueille par un pere de la Companie de Jesus (Paris: Jean Boucher, 1656).

 ¹⁸ Victor de Buck, "De S. Ursula et undecim milibus sociarum virginum et martyrum Coloniae Agrippinae," in *Acta Sanctorum*, (Brussels) XI (Octobris 1858), 73–303.
 ¹⁹ Johann Humbert Kessel, *St. Ursula und ihre Gesellschaft. Eine kritisch-historische Monographie* (Cologne, 1863).

²⁰ Albert Gereon Stein, "Die heilige Ursula und ihre Gesellschaft," *Annalen des Historischen Vereins für den Niederrhein* 26/27 (1874): 116–22; "Das Kloster und spätere adelige Damenstift an der Kirche der heiligen 11,000 Jungfrauen zu Köln," *Annalen des Historischen Vereins für den Niederrhein* 31 (1877): 45–111; *Die heilige Ursula und ihre Gesellschaft: ein kirchenhistorischer Versuch* (Cologne: Bachem, 1879); *The Church of Saint Ursula and Her Companions in Cologne: Its Memorials, Monuments and Curiosities* (Cologne: A. Seche, 1882); *Die Pfarre Zur Heiligen Ursula in Köln* (Cologne: Bachem,1888).

comprehensive investigations of the cult. In the twentieth century, Wilhelm Levison published his extensive article, "Das Werden der Ursula-Legende" (1927), in which he meticulously analysed primary sources together with the earlier scholarship on the cult.²² This owes much to his assessment of the convoluted, and often contradictory earlier scholarship.

Indeed, so comprehensive was his work that few scholars have addressed the subject further, choosing instead to explore more specialized aspects of the topic. For example, together with considering the textual development, Guy de Tervarent complied a chronological and geographic record of the cult's spread together with its visual materials;²³ Frank Günter Zehnder (1985) embarked upon a similar approach, but cast a wider, and more critical and comprehensive net;²⁴ Gernot Nürnberger's archaeological consideration of the cult's titular church has presented an account of the architectural layers that reside beneath the foundation of the current structure, while also exploring the site's historic excavations.²⁵ To complement these, Gertrud Wegener's analysis of the cult's titular church and its associated cloister in Cologne, provided contextual information regarding the religious community of high-status women associated with the site.²⁶

The most recent scholarship on the cult is wide-ranging, as evidenced by the multi-disciplinary approach taken at the international conference "St Ursula and the 11,000 Holy Virgins" held in Carmarthen in 2013; topics ranged from the development of medieval liturgical offices, Hildegard of Bingen's antiphons, Hungarian altarpieces, and medieval legends originating in Scandinavia, Iceland, Wales, and England.²⁷ The cult continues to intrigue.

²¹ Klinkenberg, Joseph, "Studien zur Geschichte der Kölner Märterinnen," *Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande* 88 (1889): 79-95; 89 (1890): 105-134; 93 (1892): 130-179.

²² Levison, "Ursula-Legende."

²³ Guy de Tervarent, La Légende de Sainte Ursule dans la littérature et l'art du moyen âge, 2 vols. (Paris: Les Éditions G. van Oest, 1931).

²⁴ Zehnder, Sankt Ursula.

²⁵ Gernot Nürnberger, "Die Ausgrabungen in St. Ursula zu Köln" (doctoral thesis, Rheinishchen Friedrich-Wilhelms-Universität, Bonn, 2002).

²⁶ Wegener, *St. Ursula in Köln*.

²⁷ For more details, see the conference proceedings: Jane Cartwright, ed., *The Cult of St Ursula and the 11,000 Virgins* (Cardiff: University of Wales Press, 2016).

Despite this, while the importance of relics within the Holy Virgins' cult has been widely acknowledged, few scholars have articulated this in any depth. It is the Virgins' wooden busts (Figs 7-8), which contain a wrapped skull, that have largely eclipsed the freestanding textile skull reliquaries in the eye of the scholarly community. Oskar Karpa's extensive study, one of the earliest on the busts, was primarily concerned with categorizing them stylistically and chronologically.²⁸ Following this, Ulrike Bergmann investigated the numerous busts in the collection of the Schnütgen Museum²⁹ and those belonging to St Kunibert³⁰, which are both located in Cologne. The results of this study, together with those conducted by Anette Schommers,³¹ have been useful in further systematic categorization of the objects, as have been Regina Urbanek's restoration-based examinations of the busts associated with the Golden Chamber.³² Following an art-historical and socioreligious approach, Joan Holladay argued the busts were created for and operated within the wider and more complex female religious framework of the Beguines of medieval Cologne.³³ Despite their cultural significance, Cynthia Hahn speculates these were an "economizing mode" of display in her recent publication, The *Reliquary Effect.*³⁴ She notes Cologne's "embarrassment of relic riches", their ability to multiply, and describes the relic displays in the Church of the Holy Virgins, yet the ever-abundant textile wrapped skulls are not mentioned.35

²⁸ Oscar Karpa, *Kölnische Reliquienbüsten der gotischen Zeit aus dem Ursulakreis*, vol.
1, Rheinische Verein für Denkmalpflege und Heimatschutz 27 (Düsseldorf: Druck und Verlag L. Schwann, 1934).

²⁹ Ulrike Bergmann, "Kölner Bilderschnitzwerkstätten vom 11. bis zum ausgehenden 14. Jahrhundert," in *Schnütgen-Museum. Die Holzskulpturen des Mittelalters (1000-1400)*, Schnütgen-Musuem (Cologne: Schnütgen Museum, 1989), 19–63.

³⁰ Ulrike Bergmann, "Die gotischen Reliquienbüsten in St. Kunibert," in *Colonia Romanica*, vol. VII (1992), 131–46.

³¹ Annette Schommers, *Rheinische Reliquiare. Goldschmiedearbeiten und Reliquienszinierungen des 17. und 18. Jahrhunderts* (Rheinbach-Merzbach: CMZ-Verlag, 1993).

³² Regina Urbanek, *Die Goldene Kammer von St. Ursula in Köln: zu Gestalt und Ausstattung vom Mittelalter bis zum Barock* (Worms: Wernersche Verlagsgesellschaft, 2010).

³³ Holladay, "Visualizing the Holy Virgins."

³⁴ Cynthia Hahn, *The Reliquary Effect: Enshrining the Sacred Object* (Chicago: Reaktion Books, 2017), 84.

³⁵ Ibid., 84–85.

In 2010, Scott Montgomery explored the "absolute centrality of relics" within the cult, setting out to investigate its "physical, ossific core", by (re)focusing on the bust reliquaries, and drawing attention to altarpieces and hagiographic imagery.³⁶ His book presents a useful account of the cult's history and reiterating the Virgins' collective sanctity. In his investigations of the cult's relics, however, the abundant 'freestanding' skulls are not considered in any detail. Rather, he repeatedly praises the busts because they "literally flesh-out the presence of the saint, providing a surrogate visage for the relics contained therein;"³⁷ the skull reliquaries are thus cast as inferior, providing no further flesh to the bones of the cult. Their juxtaposition to the busts is briefly acknowledged, but according to Montgomery they relied on the wooden busts' "visualizing nature … to encourage the recomposition of the skulls".³⁸ Their apparent superiority is further explained by his assertion that "obviously, with so many heads and other relics, not all could be kept in reliquary busts, and indeed only a small percentage was actually encased in such lavish figurated reliquaries".³⁹

Most recently, Sophia Lahti considered the Holy Virgins' relics as part of her doctoral thesis on medieval reliquaries in the Nordic Countries.⁴⁰ Her substantial investigation of head relics contextualizes the Holy Virgins' wooden busts and wrapped skulls, both of which she deems "secondary reliquaries".⁴¹ In this study, Lahti divides "objects containing relics into two groups: (i) primary reliquaries, made for the purpose of containing, protecting, and representing relics and (ii) secondary reliquaries, meaning sculptures or other sculpted objects complemented

³⁶ Scott Montgomery, *St. Ursula and the Eleven Thousand Virgins of Cologne - Relics, Reliquaries, and the Visual Culture of Group Sanctity in Late Medieval Europe* (Bern: Peter Lang, 2010), 4.

³⁷ Ibid., 60.

³⁸ Ibid., 79.

³⁹ Ibid., 78.

⁴⁰ Sophia Lahti, "Silver Arms and Silk Heads, Medieval Reliquaries in the Nordic Countries" (doctoral thesis, Åbo Akademi University, Turku, 2019).

⁴¹ For substantive discussion of the Holy Virgins' cult and relics, see pp. 253-261. For comparisons with the embroidered skull reliquary in Turku, see pp. 294-314. The Turku skull has recently been investigated and compared to the Holy Virgins skulls. Aki Arponen, Heli Maijanen, and Visa Immonen, "From Bones to Sacred Artefact: The Late Medieval Skull Relic of Turku Cathedral, Finland," *Temenos* 54, no. 2 (2018): esp., 168-169. In an upcoming publication, Aki Arponen explores the bones of this relic and he asserts there is not a connection between its structure and those belonging to the Holy Virgins of Cologne. Pers. comm. email, 13 October 2021.

with relics."⁴² This problematic categorization perpetuates the established scholarly perceptions of reliquaries that have impacted studies thus far, especially those of the textile skull reliquaries. When focusing on the Virgins' textile skulls specifically, she draws attention to their unique features, especially the use of fabric. In these discussions, however, silk is the only material considered, while the more common use of linen and velvet is not acknowledged. Further issues arise when the skulls are collectively mis-dated to the sixteenth century, and two wrapped skulls from the Schnütgen Museum are labelled "less professionally made" reliquaries.⁴³ Although notable for addressing the textile reliquaries, this work perpetuates their 'inferiority'.

Such sentiments are echoed in the busts' more public appearances: they have gained notable attention through their permanent displays in museums where they are frequently exhibited as isolated objects separated from the once-neighbouring skull reliquaries with which they were traditionally displayed; the wrapped skulls are meanwhile kept exclusively within the archives, otherwise concealed from view, or have long since disappeared. This practice is most apparent at the Schnütgen Museum (Fig. 9), the Church of St Kunibert (Fig. 10), and the treasury of the Church of the Holy Virgins (Figs 11-12), but extends further afield to the Cloisters Museum in New York (Fig. 13). The busts also featured prominently in the exhibition Treasures of Heaven – Saints, Relics and Devotion in Medieval Europe, displayed at both the British Museum, London, and The Metropolitan Museum of Art, New York in 2011, with one bust even gracing the cover of the catalogue (Fig. 14). Previously, a bust from the same collection was similarly featured in the exhibition Set in Stone: *The Face in Medieval Sculpture* (2006-2007),⁴⁴ also held at the Metropolitan Museum of Art. Local, relic-focused exhibitions including Ornamenta Ecclesiae (1985) and Rhein und Maas (1972), both held at the Schnütgen Museum, not only neglected to display the textile skull reliquaries - or photos of them - it failed even to mention them. Most recently, these objects were also excluded from the 2014 exhibition, Veil and Adornment: Medieval Textiles and the Cult of Relics, held at the Abegg-Stiftung, Riggisberg, Switzerland. In each case, the textile reliquaries have

⁴² Lahti, "Silver Arms," 183.

⁴³ Ibid., 473.

⁴⁴ Charles T. Little, ed., *Set in Stone: The Face in Medieval Sculpture* (New York: Metropolitan Museum of Art, 2006).

been notable by their absence, while the busts have featured, by comparison, in centre stage.

Although the German ecclesiast, theologian, and art scholar, Franz Bock (1823-1899), did not regard Cologne's textile reliquaries worthy of artistic merit, he nevertheless drew attention to their existence. In his two-volume study on the medieval textiles within sacred contexts (1871),⁴⁵ he considered the material covers of relics, or *involucra reliquianan*, and so marks a rare (and early) scholarly acknowledgment. While he comments on the many textile crania in "head-shaped containers" (kopfförmigen Einfassungen), the visibility of the forehead, and the various materials – embroidery, silk, velvet, pearls, and metal threads – he, nevertheless, considers them cude/artless (kunstlos) and inferior to sculptural and metal reliquaries.⁴⁶ Prior to this, Bock also published an extensive catalogue of the sacred objects in Cologne's treasuries (1858), wherein he detailed the reliquaries at the Church of the Holy Virgins.⁴⁷ Although he does not mention the many hundreds of wrapped skulls at this site – likely foretelling the opinion he articulates in his later work – his account provides useful descriptions of the lesser-known sacred vessels at the cult's titular church.

This work is followed by Joseph Braun's wide-ranging study of Christian reliquaries (1940), where he mentions two textile head reliquaries from the church of Weißenburg, Bavaria.⁴⁸ In the closing paragraph of his chapter on figural (head) reliquaries, he explained these objects were not head reliquaries as such, but rather independent head–like replicas.⁴⁹ He describes them as spherical containers,

⁴⁵ Franz Bock, Geschichte der liturgischen Gewänder des Mittelalters: oder Entstehung und Entwicklung der kirchlichen Ornate und Paramente in Rücksicht auf Stoff, Gewebe, Farbe, Zeichnung, Schnitt und rituelle Bedeutung, vol. 3 Die Paramentik des Altares und des Chores im Mittelalter (Bonn: Cohen, 1871).
⁴⁶ Ibid., 160–61.

⁴⁷ Franz Bock, Das heilige Köln: Beschreibung der mittelalterlichen Kunstschätze in seinen Kirchen und Sakristeien, aus dem Bereiche des Goldschmiedegewerkes und der Paramentik auf Wunsch des Vorstandes des christlichen Kuntstvereins der Erzdöcese Köln (Leipzig: Weigel, 1858).

⁴⁸ Joseph Braun, *Die Reliquiare des christlichen Kultes und ihre Entwicklung* (Freiburg im Breisgau: Herder & Co., 1940), 416.

⁴⁹ "Nicht zwar ein Kopfreliquiar, jedoch ersichtlich eine freie Nachbildung eines solchen sind zwei kopfartige, mit Seidenstoff überzogene, mit einem Kränzchen aus Posamentierarbeit geschmückte und auf einem Kissen befestigte kugelige Reliquienbehälter mit großer, runder, mit Glas verschlossener, das Gesicht

covered in silk, decorated with a small wreath, and positioned on a pillow. He additionally notes that the glass-enclosed opening on the front of the container displays the faces. Although these present notable similarities with those of the Holy Virgins, they are not identified as such. In this brief account, Braun portrays them as isolated curiosities, and does not suggest comparisons with the many hundreds of similar objects located across Europe. However, his liminal categorization – an "independent head-like replica" that is related to, but that does not precisely qualify as a head reliquary – indeed signposts some of the key conceptual issues addressed in this thesis.

The rigorous studies of these objects undertaken by Anton Legner, art historian and former director of the Schnütgen Museum, presents the most notable exception.⁵⁰ In his detailed investigations of Cologne's monumental relic shelves, he considered the skulls as a key factor that motivated the construction of the large wall fixtures and winged altarpieces that featured these and other relics. He focused on the earliest known example, the three Cathedral shelves dated to the late twelfth century. Not only did he consider the Holy Virgins' relics within the city's history, he also shed light on the textiles used to wrap the cathedral's skulls. Legner is also the only scholar who has considered the display and decoration of the Holy Virgins' skulls in Cologne, to date.⁵¹ To explore these, Legner recreated an imaginary pilgrimage around the medieval churches, and meticulously highlighted the extant and destroyed displays featuring textile-wrapped skulls. Of all the city's religious interiors, the Virgins' titular church is foremost in his analysis. Although he does not always cite his sources, the inclusion of several historic accounts, dating from the late medieval through the baroque periods, shed light on church interiors that were saturated with skull reliquaries, many of which have been lost and destroyed.

⁵⁰ Anton Legner, "Reliquenpräsenz und Wanddekoration," in Die Jesuitenkirche St. Mariae Himmelfahrt in Köln (Beitragäe zu den Bau- und Kunstdenkmälern im Rheinland), ed. Udo Mainzer, vol. 28 (Düsseldorf: Pädagogisher Verlag Schwann-Bagel, GmbH, 1982), 269–96; "Kölnische Hagiophilie. Die Domreliquienschränke und ihre Nachfolgeschaft in Kölner Kirchen," Kölner Domblatt 51 (1986): 195–274; Reliquien in Kunst und Kult: zwischen Antike und Aufklärung (Darmstadt: Wissenschaftliche Buchgesellschaft, 1995); Kölner Heilige. ⁵¹ Among Legner's many publications, see especially: "Reliquenpräsenz und Wanddekoration."

darstellender Öffnung an der Vorderseite, die sich in der Stadtkirche zu Weißenburg im Mittlefranken erhalten haben." Ibid., 416.

Legner discusses subsidiary relic collections, such as those found in the churches of the Holy Maccabees and Mary's Assumption. He concludes with an account of the many displays of skull relics situated in religious institutions across Europe, alluding to the extensive networks within which these skulls circulated. Although Legner's studies are paramount for the further investigation of Cologne's textile skull reliquaries, his statements often reveal the long-standing bias: despite being well aware of the number of textile reliquaries, he nevertheless claimed the busts as being not only the most common, but also the most worthy/dignified (*würdige*) containers for Cologne's martyrs.⁵²

The scholarly tide appears to be turning, as evidenced by the work of Dr Gudrun Strake-Sporbeck (co-founder of the Institut für Historische Textilien Köln), who in 2016, analysed the eight remaining of the original 582 medieval textile reliquaries that had been displayed in the Church of St Gereon.⁵³ Although these were believed to be the skulls of the Theban Legion soldiers, long associated with the Holy Virgins, they similarly formed part of the collective displays presented on St Gereon's six monumental wall shelves from 1315 (Figs 15-16), and were also being incorporated within medieval and early modern wooden bust reliquaries (Figs 17-19). Much of Strake-Sporbeck's focus lies in the analysis of the skull reliquaries' material components, in particular the historic textiles. Her study has revealed that the technical and material constructions of these reliquaries present notable similarities to those belonging to the Holy Virgins.

Further to this, since 1994, Ulrike Reichert has undertaken a large-scale, systematic restoration of the Holy Virgins' fabric reliquaries found in the Golden Chamber and the chancel niches.⁵⁴ This project, commissioned by the Church of St Ursula (the Holy Virgins), targets textile restoration, preservation, and conservation; thus, while Reichert's work was not intended to study the skulls and their wrappings *per se*, her extensive work has yielded a wealth of information, much of which is foundational to this study. Her unpublished records extensively document

⁵² Legner, *Kölner Heilige*, 68.

⁵³ Gudrun Strake-Sporbeck, "Et aliorum plurimorum sanctorum reliquie, Textile Ausstattung und Reliquienfassung im Stift St. Gereon," in *Colonia Romanica*, vol. XXXI (2016), 97–112, esp. 98. These skulls were among the few to survive the air raids of the Second World War.

⁵⁴ The restoration of the Holy Virgins' skull reliquaries was suspended in 2016 due to funding difficulties. Ulrike Reichert, pers. comm. email, 6 January 2021.

each skull, including the materials, visible layers, method of wrapping, and any structural peculiarities. Reichert has also previously restored numerous textile skull reliquaries of the Holy Virgins from sites elsewhere, such as St Mary's Assumption (Cologne) and St Jacobus (Widdersdorf, Cologne).⁵⁵ Through this, and the restoration of many other textiles found within reliquaries, especially those belonging to St Severin,⁵⁶ she has gained a unique understanding of the construction and ornamentation of sacred objects across Cologne itself and farther afield.

Outside Cologne, two other projects have investigated the Holy Virgins' skull reliquaries that were acquired from the cult's epicentre during the high medieval period and which therefore provide important comparanda here. One, which investigated 48 skulls from the Cistercian collection of Herkenrode Abbey, in Kuringen, Belgium, was conducted in 2008-2009 at the Royal Institute for Cultural Heritage (KIK-IRPA) in Brussels, under the direction of Fanny Van Cleven and Frieda Sorber.⁵⁷ This multi-disciplinary project incorporated reliquary conservation, structural and decorative material analysis, radiocarbon dating of both bones and decorations, together with a technical study of dyes, fabrics, threads, parchment, and paper. In addition to a detailed surface examination of the reliquaries, six were selected for x-ray analysis; this enabled the textiles below the surface to be examined while leaving the external layers in place. The technique also exposed the concealed contents of an internal structural support and a pouch occupying the area

⁵⁵ Ibid.

⁵⁶ Ulrike Reichert and Annamarie Stauffer, "Die Textilien aus dem Schrein des heiligen Evergislus," in *Colonia Romanica*, vol. XXXI (2016), 117–31; Sabine Schrenk and Ulrike Reichert, "Die Textilien aus dem hölzernen Schrein in St. Severin," in *Der hl. Severin von Köln: Verehrung und Legende*, ed. Joachim Oepen et al. (Siegburg: Verlag Franz Schmitt, 2011), 215–69.

⁵⁷ The project findings were described and summarized in the recent publication edited by Fanny Van Cleven, Jeroen Reyniers, and Anton Ervynck, *Met maagdelijke blik: de reliekenschat van Herkenrode doorgelicht*, Scientia artis 17 (Brussel: Koninklijk Instituut voor het Kunstpatrimonium, 2019). The project additionally produced an online database with detailed inventories and images for each skull reliquary; see: http://balat.kikirpa.be/herkenrode/index.html (last accessed 21 October 2021). Findings from this project were presented by Franny Van Cleven at the Relics@the Lab international workshop at the Royal Institute of Cultural Heritage, Brussels (Oct 2016). It was also published as part of the workshop proceedings in Franny Van Cleven et al., "The Relic Treasure of Herkenrode, an Online Data Base.," in *Relics @ the Lab. An Analytical Approach to the Study of Relics,* Interdisciplinary Studies in Ancient Culture and Religion 20 (Leuven, 2018), 205– 12. The findings have been extremely useful in this study.

within the skull. Based on the findings, and in particular, the discovery of silks and embroidery at the most internal decorative layer, Sorber concluded that these skulls were originally assembled and decorated in Cologne.⁵⁸

The second in-depth study, initiated by and carried out under the direction of Dr Father Janusz Nowiński, involved analysis of the 55 skulls situated in the former Cistercian abbey of Lad, Poland. This project, also intent on understanding the internal textile layers of the reliquaries, carefully removed (and preserved) from four reliquaries, three fabric covers dating to the nineteenth, sixteenth and thirteenth centuries respectively.⁵⁹ The stripping back of these layers revealed the skull relics, as well as the various materials and structural methods used to construct the reliquaries. When the project concluded, a selection of these reliquaries and their associated materials was displayed at the Royal Castle in Warsaw in 2014, thus marking the first exhibition of Holy Virgins' skull reliquaries (Fig. 20).⁶⁰ In Nowiński's 2015 publication, he contextualized these objects within the medieval fabric of the abbey together with its wider network; he also further explored the material findings of the study, especially the thirteenth-century textile covers that he believes originated in Cologne or Altenberg.⁶¹ As part of his investigation of the visual media within the Cistercian Order, Nowiński explores the Holy Virgins' skull reliquaries and their corresponding displays in sites including Lad, Olwia, Łenko, Obra, and Pelplin.⁶² Further to situating these objects within a wider visual and religious network, his work sheds important light on these marginalised sites.

Textile reliquaries additionally feature in an article by Reinhard Karrenbrock, which seeks to reconstruct the missing fifteenth-century altarpiece

⁵⁸ Frieda Sorber, "Holy Virgins' Textile Reliquaries (Herkenrode)," pers. comm. email 29 November 2016.

 ⁵⁹ Janusz Nowiński, "Prezentacja tkaniny herbowej z Ladu z XIII w. oraz thanin dekorujacych relikwie glów Towarzyszek św. Urszuli w Zamku Królewskim w Warszawie," *Builetyn Historii Sztuki* 2 (2014): 303–10.
 ⁶⁰ Ibid.

⁶¹ Janusz Nowiński and Przemysław Mrozowski, "Tkanina herbowa z Lądu i zespół trzynastowiecznych tkanin dekorujących relikwie Undecim Milium Virginum w ołtarzu św. Urszuli w Lądzie," in *Lenda medii aevi. Średniowieczne zabytki dawnego opactwa w Lądzie – nowe odkrycia, najnowsze badania* (Warsaw: Towarzystwo Naukowe Franciszka Salezego, 2015), 64–87.

⁶² Janusz Nowiński, Ars cisterciensis (Warsaw: New Media Concept, 2016), 235–57.

from the Cistercian cloister in Marienfeld (Fig. 21).⁶³ This once displayed several sculptures and 40 ornamented skulls belonging to Cologne's martyred virgins, 37 of which are now situated within an ornate baroque altar at the same site. Four of these were displayed in the Cistercian exhibition held at the LVR-Landesmuseum in Bonn in 2017-2018 (Figs 22-23)⁶⁴ – notably the second exhibition of the Holy Virgins' skulls, but the first in the Rhineland. Although Karrenbrock does not go beyond the surface layers, he extensively investigates the skulls' varied material ornamentation, much of which can be dated to the twelfth and thirteenth centuries. He also explores viable connections with textile fragments found in Cologne and nearby sites, and thus also considers aspects of the material network associated with these skulls. By exhibiting some of the oldest materials, the Marienfeld reliquaries, along with those from Herkenrode and Lad, present particularly notable comparisons – materially and structurally – for the skulls still in Cologne. They suggest that the skulls were first decorated within or near to Cologne and that, as the cult's titular city, it was responsible for creating a standardized scheme of decoration. This suggests the possible existence of a network of visual display associated with the Holy Virgins that might have united the religious institutions in possession of these objects, near and far, with the city of the Virgins' passion.

The most recent study of the Virgins' skull reliquaries outside Cologne, completed by Annemarie Stauffer, considers 45 holy heads and three anthropomorphic reliquary figures from the Cistercian sacristy of Munsterkerk in Roermond, in the modern-day Netherlands.⁶⁵ In 2002, these were uncovered in an altar that had been bricked up, possibly during the Counter-Reformation or the Napoleonic invasions. Although some textiles were identified as dating between the

⁶⁵ Annemarie Stauffer, "Ein außerordentlicher Reliquienfund und seine Geschichte," in *De Munsterabdij van Roermond: een ontdekkingstocht door achthonderd jaar geschiedenis van een vrouwenklooster* (Zwolle, Netherlands: WBooks, 2020), 222– 37; for the study on the three relic montages, see: Frances Bartzog-Busch,

⁶³ Reinhard Karrenbrock, "Heilige Häupter in textilier Zier. Das Spätgotische Hochaltarretabel der Zisterzienser-Kloster Kirche Marienfeld und sein verlorener Reliquienschrein," Westfalen – Hefte für Geschichte, Kunst und Volkskunde 85/86 (2007/2008): 263–300, 298-299 for a digital reconstruction of the altarpiece.
⁶⁴ Exhibition catalogue: Hanne Griessmann, Die Zisterzienser: Das Europa der Klöster (Darmstadt: Konrad Theiss Verlag, 2017).

[&]quot;Anthropomorphe Reliquienmontagen aus der Münsterkirche Roermond - einem ehemaligen Zisterzienserinnenkloster," *Cistercienser Chronik* 127 (2020): 171–94.

thirteenth and fifteenth centuries, the majority of these skulls received new covers in 1600. Stauffer addresses the materiality of these reliquaries, together with their form and presentation within the context of their early modern religious setting. She speculates about their liturgical use and presentation within the church, and suggests comparisons with Marienfeld altar, as put forth by Karrenbrock.

The network of Cologne's skull relics has, on its part, attracted some scholarly attention. In addition to Legner's far-reaching investigations, Karrenbrock also meticulously explored the medieval and early modern translation of relics throughout the Rhineland and Westphalia. His results underscore the geographic concentration of skulls in monasteries near Cologne, particularly those belonging to the Cistercian and Benedictine orders. The distribution of skull relics was also explored in Stephan-Maaser's work on the medieval transport of the relics from Cologne to areas in modern-day Belgium, yet in this study, the skulls' material ornamentation received only minimal attention.⁶⁶ Finally, Rose Marie San Juan and Urte Krass have explored the Holy Virgins' skull relics as nomadic agents in the Jesuit's missions in South America and Asia, and thus revealing their continued biographies in places far beyond Cologne.⁶⁷

The Question of Relics and Reliquaries

Perhaps one of the causes of the lack of scholarly engagement with the Holy Virgins' textile skull reliquaries is the fact that they occupy a unique position in the history

⁶⁶ Reinhild Stephan-Maaser, "Jungfrauen auf Reisen. Reliquienhandel und Translationen entlang der Strecke Brügge - Novgorod," in *Transit Brügge -Novgorod. Eine Straße der europäischen Geschichte*, ed. Ferdinand Seibt, Ulrich Borsdorf, and Heinrich Theodor Grütter (Bottrop and Essesn: Pomp Verlag, 1997), 216–23. In addition, Andrew Sears' forthcoming doctoral thesis "Economies of the Sacred: St Ursula's Reliquaries and the Making of the Market" will address the craft history of the cult's reliquaries: the gilt châsses, wooden busts, and textile skull reliquaries from Herkenrode, Roermond, and Marienfeld, exploring a variety of materials and addressing the cult's presence in areas beyond Cologne (pers. comm. email, 12 September 2021.)

⁶⁷ Rose Marie San Juan, "Virgin Skulls: The Travels of St. Ursula's Companions in the New World," in *The Nomadic Object: The Challenge of World for Early Modern Religious Art*, ed. Christine Göttler and Mia Mochizuki vol. 53, Intersections (Boston, MA: Brill, 2018), 406–29; Urte Krass, "Naked Bones, Empty Caskets, and a Faceless Bust: Christian Relics and Reliquaries between Europe and Asia during Early Modern Globalisation," in Göttler and Mochizuki *The Nomadic Object: The Challenge of World for Early Modern Religious Art*, 369–405.

of relics and reliquaries. Apart from the incorporation of skull and textile in their fabrication without additional encasing, one of their most notable features is the incorporation of the *fenestella*, the 'window' that exposed the bare forehead. During the high medieval period, sacred matter was customarily concealed within wooden or metal shrines, and thus prohibiting devotees from direct visual access. In Cologne, beginning in the late twelfth century, small numbers of reliquaries incorporated (re)movable parts or transparent rock crystal, both of which permitted 'mediated' visibility/viewing experiences. In this way, the open display of bones – and in large numbers – found in the Holy Virgins' reliquaries radically departed from the customs of high medieval reliquaries. Many scholars, such a Cynthia Hahn and Christoph Dietrich, have explored the importance of sight and the visibility of relics,⁶⁸ yet the Holy Virgins' skull reliquaries, until now, have not been considered in this discussion.

The unusual use of fabric and textile as primary materials is another key feature that defines the Virgins' skull reliquaries, and one that distinguishes them from other contemporary reliquaries. There is a long-standing tradition of wrapping sacred bodies within precious textiles, yet these were commonly concealed within shrines or sarcophagi; the numerous studies carried out on reliquaries in Cologne, reveal this tradition was also popular in Cologne's many shrines.⁶⁹ Situating textiles on the outside of the Holy Virgins' reliquaries effectively inverts the traditional arrangement of sacred remains; that is to say, the textiles that were customarily concealed within a shrine were promoted to form the primary external material and ornamentation, effectively enshrining the relic – the skulls. In this role they serve to both display and honour the saintly bodies, encouraging the veneration of the relics within.

As noted, exploring the external and internal structure of these reliquaries is of equal importance in this study. The majority of these holy heads were constructed with complete fabric covers, and this tradition was repeated in later

⁶⁸ Cynthia Hahn, "Seeing and Believing: The Construction of Sanctity in Early-Medieval Saints' Shrines," *Speculum* 72, no. 4 (1997): 1079–1106; Hahn, *The Reliquary Effect*; Christof L. Dietrichs, *Vom Glauben zum Sehen: die Sichtbarkeit der Reliquie im Reliquiar: ein Beitrag zur Geschichte des Sehens* (Berlin: Weissensee, 2001).

⁶⁹ Annemarie Stauffer, ed., *Colonia Romanica*, vol. XXXI (2016).

campaigns. While this inhibited access to the original medieval layers and the internal composition, in some cases, the external textiles were worn with age or were manually removed, thus exposing the interior compositions. In these situations, the textile reliquaries were revealed to form complex arrangements involving not only textiles, linen, and other materials, but also the bones themselves. When a cranium was fractured or damaged, the (textile) materials could be employed to support and even fabricate the bones, providing structural integrity.

This became apparent on my first visit to Ulrike Reichert's restoration workshop in Cologne, when she explained and presented many reliquaries that did not envelop complete skulls. These were instead highly manipulated objects whose materials – together with bones – were arranged to (re-)construct a 'whole' skull. Of the many structural modifications observed, the positioning of bone within the *fenestella* –thus replicating a forehead – was particularly prevalent. This early discovery both inspired a deeper consideration of the forehead and its significance within the cult and its reliquary constructions, while also raising the question of the role played by this body part within various aspects of medieval culture.

Investigating beneath the surface also revealed the creative – and indeed interchangeable – relationship between bone and fabric. In some cases, much of the 'skull' was in fact constructed from textiles that were folded, wrapped, and otherwise manually shaped to emulate the head. Arranged in this way, these problematize the canonical distinction between 'relic' and 'reliquary', and thus challenge and invite exploration beyond the limits of terminology.⁷⁰ With this in mind, a crucial aim of this study remains avoiding the consideration of these objects and their associated materials as fitting neatly within these defined categories. In the absence of more precise terminology, however, 'relic' (pertaining to the bones, or materials intended to fulfil the role of bones) and 'reliquary' (referring to the fabric and other materials surrounding and supporting bones) will be used to differentiate between the various components. Similarly, the terms 'skull' and 'holy head' will be used to describe both complete cranial remains and those that have been considerably re-constructed.

⁷⁰ Cynthia Hahn, "What Do Reliquaries Do for Relics?," *Numen* 57 (2010): 284–316; Massimo Leone, "Wrapping Transcendence: The Semiotics of Reliquaries," *Signs and Society* 2, no. 21 (2014): 49–83.

The Question of the Head

A full exploration of these reliquaries thus enables a more balanced comparison with the wooden busts, the creation of which has been studied as a unique contribution to medieval reliquaries.⁷¹ These sacred objects were habitually displayed within close proximity to one another, and thus comparisons between the two methods of display – exposed physical bone and a 'fleshed out' creation of the human form – invites further investigation of authenticity, corporality, and sacred presence.

The abundance of skull relics speaks to the primacy of this particular body part for the cult of the Holy Virgins. Their exposed 'forehead', together with the incorporation of 'living' features – such as a nose, cheekbones, and a chin – and their elaborate re-constructions, emphasize a particularly anatomical engagement with the human head. This, in turn, invites consideration of them as participants within the contemporary expansion of medical culture. The time between the late eleventh and the late thirteenth centuries – precisely when Cologne's many skull relics were discovered, assembled, translated, and displayed – is a period defined by an exponential interest in and engagement with medical literature, procedures, and education.⁷² Several cultural factors contributed to this movement; there was a

⁷¹ See above, pp 39-42.

⁷² Medieval medicine and surgery have attracted considerable scholarly interest; a few key works were instrumental in this study. For comprehensive overviews, see: Nancy G. Siraisi, Medieval & Early Renaissance Medicine: An Introduction to Knowledge and Practice (Chicago, IL: University of Chicago Press, 1990); Katharine Park, "Medicine and Society in Medieval Europe, 500-1500," in *Medicine in Society:* Historical Essays, ed. Andrew Wear (Cambridge: Cambridge University Press, 1992), 59–90; for the development of literary sources, especially pertaining to medieval universities: Cornelius O'Boyle, The Art of Medicine: Medical Teaching at the University of Paris, 1250-1400, Education and Society in the Middle Ages and Renaissance 9 (Leiden: Brill, 1998); Gerald J. Grudzen, Medical Theory about the Body and the Soul in the Middle Ages: The First Western Medical Curriculum at Monte Cassino (Lewiston, NY; Lampeter: Edwin Mellen Press, 2007). For studies in surgery and surgical developments: Michael McVaugh, The Rational Surgery of the Middle Ages, Micrologus' Library 15 (Florence: SISMEL, 2006); Nancy G. Siraisi, Taddeo *Alderotti and His Pupils: Two Generations of Italian Medical Learning* (Princeton, NJ: Princeton University Press, 1981). The translation of several medieval surgical treatises into English facilitated access to these texts. Their introductory chapters were also valuable for understanding these individual surgeons and their collective role within medieval surgery. Leonard D. Rosenman, The Surgery of Lanfranchi of Milan: A Modern English Translation (Philadelphia, PA: Xlibris Corp., 2003); Leonard

resurgence in the translation, transcription and circulation of ancient Greco-Roman and medieval Arabic scholarship; topics such as anatomy, physiology, and natural philosophy became more widely discussed and copied; medicine and surgery were introduced within the curriculum of newly founded academic institutions, and as a result these became increasingly intellectual professions. Independently and collectively, these developments elevated the study of human anatomy and physiology, and drew attention to visualizing and describing the body, particularly the head.

Differing from modern practices, the realms of religion and medicine shared a close and multifaceted relationship in medieval Europe. The involvement of institutions and figures that influenced contemporary medical literature – especially pertaining to cranial anatomy – were ultimately related through the aegis of the monastic communities across Europe. Special consideration is here given to the Benedictine and Dominican orders, as both of these were closely involved with the Holy Virgins' relics, especially during the twelfth and thirteenth centuries. Analysis of the sacred settings where the spiritual, practical, and intellectual practices intersected, and of specialist literature and medical treatments – particularly in medieval Cologne – sheds important light on the context within which the Holy Virgins' skulls emerged.

Many notable scholars engaged with the complexity of cranial anatomy and physiology, and Albertus Magnus (Albert the Great, *c*. 1200-1280) is key among these. His comprehensive compendium, *De animalibus* (*c*. 1256-1264), explores core concepts pertinent to high medieval cranial composition, and was likely written while in Cologne. As an active participant in Cologne's religious and intellectual circles throughout his long and prolific lifetime, consideration of his work is helpful for establishing these concepts within the city during the thirteenth century.

D. Rosenman, *The Surgery of William of Saliceto: Written in 1275* (Philadelphia, PA: Xlibris Corp., 2002); Teodorico Borgognoni, *The Surgery of Theodoric ca. A.D. 1267*, trans. Eldridge Campbell and James Colton, History of Medicine Series 12 (New York: Appleton-Century-Crofts, 1955); Henri de Mondeville et al., *The Surgery of Master Henry de Mondeville: Written from 1306 to 1320* (Philadelphia, Pa.: Xlibris Corp., 2003); Jan Yperman et al., *The Surgery of Master Jehan Yperman (1260?-1330?)* (Philadelphia, PA: Xlibris Corp., 2002). For a consideration of less traditional anatomical access: Katharine Park, "The Life of the Corpse: Dissection and Division in Late Medieval Europe," *Journal of the History of Medicine and Allied Sciences* 50 (1995): 111–32.

Albertus explains that the cranium, like an onion, is an elaborate system of layers around the brain; each element was composed specifically in relation to their respective functions within the cranial structure. Among these, descriptions of specific anatomical elements, including the meninges surrounding the brain and the *rete mirabile*, embrace inventive and evocative terminology that pertain to cloth, threads, and weaving. The pervasive use of such language suggests intellectual associations between the cranium and various elements of fabric and cloth making. These thus present stimulating parallels to both the layered structure and the materiality of the Holy Virgins' skulls, and might illuminate further the untraditional use of fabric for the structural support and ornamentation of these holy heads.

In addition to medical works and encyclopaedias, the literary genre of surgical treatises also developed during the high medieval period. Not only do these evidence the simultaneous emergence of surgeons, alongside physicians, from manual practitioners to educated professionals, the accounts of cranial anatomy and treatments are particularly notable. The discussion of head injuries, typically ordered according to their depth and severity, capture the intricacy and descriptive language associated with the perceptions of anatomical layers. Thus, the intriguing comparisons between the surgeon's professional objectives, treatment of ailing and injured heads, and the materiality of surgical operations with the structural and material assemblage of the Virgins' skull relics are further explored.

Investigating Skull Reliquaries

To address and attempt to rectify the scholarly imbalance, the central part of my study focuses on understanding the materials and structural composition of the earliest underlying textile layers. To best achieve this objective, a three-fold approach has been undertaken here. Fundamental was the first-hand examinations of the skull reliquaries, which provided the opportunity to closely inspect and photograph them. Second, was an extended period of consultation with those who have worked closely and are familiar with their materials and construction. Finally, secondary studies of skull reliquaries, predominantly outside Cologne, supplemented this primary research. Considering these objects, together with those still within Cologne, enables this study to cast a wide geographic net, taking account of materials from Aachen, Marienfeld, Roermond Abbey (Netherlands), Herkenrode

Abbey (Belgium), Ląd Abbey (Poland), and Olwia Cathedral (Poland). This approach has facilitated greater 'access' to and consideration of the original material, and this in turn has allowed for more extensive observations and comparisons to be made.

Many factors both enabled and limited the primary analysis that was conducted in this study. First-hand investigations were carried out for all of the German (Cologne, Aachen, and Marienfeld) and Polish material (Lad and Oliwa). For those associated with the Golden Chamber (Church of the Holy Virgins, Cologne), textile restorer, Ulrike Reichert, selected reliquaries that display older material. These, together with others wrapped within newer covers were presented for examination in Reichert's workshop. Their delicate and often compromised condition limited the majority of the investigations to the surface layer; some examples, however, revealed internal layers and structural components that were particularly helpful for this study. Elements of finery were examined under a magnifying glass and the technical composition, possible origins, and probable dates of textiles were explored in consultation with Reichert. The dating of the textiles and other decorations, as given in Table 1 and discussed in chapter 2, derive from Reichert's assesments conducted during my analysis. Her observations of reassembled bones were fundamental to furthering the consideration of structural, sacred, and medical significance to these manipulations, which are explored in greater detail in chapter 2 and 3. Collectively, Reichert's extensive experience restoring these objects, together with reliquaries and sacred textiles from other collections, facilitated rich discoveries and in-depth understanding of these objects to develop.

Similar approaches were undertaken when investigating the skull reliquaries in the Schnütgen Museum archives (Cologne) with textile conservator, Katharina Sossou; the Church of St Gereon (Cologne) with textile restorer, Gudrun Strake-Sporbeck; the Aachen Cathedral Treasury with Monica Paredis Vroon (textile conservator) and Stephanie Seeberg (art historian); and those from the altar of the Holy Virgins in Ląd Abbey (Poland) with Father Janusz Nowiński (art historian). The analysis of the skull reliquaries at Oliwa Cathedral (Poland) was coordinated by Father Nowiski, but conducted in the presence of cathedral staff. These visits enabled a wealth of new discoveries, yet I relied heavily on the information provided by the experts who oversaw my investigations. Information included the

approximate dates of textiles and other materials, and for identifying other media and respective re-wrappings that were carried out over several centuries, which is given in Table 1 and explored further in chapter 2.

The four skull reliquaries associated with the Marienfeld collection were seen behind glass while on display in the exhibition of Cistercian works at the LVR-Landesmuseum, Bonn (2016-2017). The technical analysis of material from these two sites, although viewed in person, was supplemented by secondary sources. The numerous skull reliquaries originally from the collections of Herkenrode Abbey (Belgium), were extensively documented during the restoration carried out through KIK-IRPA (Brussels); consultation of the online restoration records and my correspondence with Frieda Sorber, a closely involved textile conserver, provided much of the material and structural information presented here. Similarly, the technical analysis of the skull reliquaries and anthropomorphic relic-montages found in Roermond (Netherlands) were informed by secondary sources produced following their recent discovery.

As outlined, this project largely benefitted from the 'open' access granted by numerous specialists from several sites; other notable factors, however, limited, and in some cases prevented the investigation of skull reliquaries and their corresponding displays. The most prominent of these factors are the many losses incurred throughout the course of history, that include fires, the Reformation, Napoleonic invasions, and most recently the air raids of the Second World War. In this study, the Golden Chamber and the Holy Virgins' altar in Ląd Abbey are the only sites retaining skull reliquaries *in situ*, although both arrangements date to the seventeenth century. Another exception is the late-thirteenth century monumental relic shelves that were originally placed within Cologne Cathedral. Although still housing many reliquaries, these were subject to Alexander Schnütgen's nineteenthcentury 'restoration' campaigns, during which the earliest layers were removed, cut, sold for profit, and replaced with contemporary wrappings.

Although this was an exceptional instance of destruction and loss, the majority of Holy Virgins' skull reliquaries have nevertheless received new fabric covers throughout the centuries. These were wrapped around the earliest underlying arrangements, and so additionally obstruct, and often entirely prohibit access to this material. Focus instead was directed towards finding and examining

examples in which outer layers were worn or damaged in ways that exposed older material. Notable exempla came from Ląd Abbey, where newer covers were removed (and preserved) as part of recent conservation. Here, not only were the skulls' 'decorative' biography revealed, these were instrumental for understanding the complexity of the earliest constructions.

Other isssues arose when considering the placement of skull reliquaries within wooden busts; with the exception of the two skull reliquaries in the Aachen Cathedral Treasury, no busts containing their wrapped skulls were located. Some of the remaining reliquaries from St Gereon (Cologne) were previously situated within busts that are now located in the church sacristy, but these arrangements have since been deconstructed. As such, this study focused on those in Aachen alongside historic photographs capturing skulls within busts that have (presumably) since been separated.

This study benefitted greatly from on-site visits, during which extensive consultations with these experts occurred; their well-versed understanding of the materials and structural composition of these objects – especially that pertaining to the array of incorporated textiles – offered valuable insights and assisted in determining speculative dates for the materials and arrangements. It bears mentioning, hoever, that these objects are notably difficult to date; approximate dates are typically related to the dating of the associated textiles and ornamentation. This method is problematic and not always accurate, and so the estimated dates stated in Table 1, are generally not included in the text unless more precisely identified.

Structure of this Study

To address these multivalent objects here, Chapter 1 re-traces and investigates the cult's circuitous path involving alterations and manipulations by many hands; it centres on that which occurred between the tenth and twelfth centuries – a period crucial to the cult's origins and early developments. By limiting discussion to this window of time, focus can be placed on the cult's foundation and the themes that become essential when analysing the primary sacred objects pertinent to this study: the textile-wrapped skull reliquaries. Here, the exploration of key material objects together with textual sources forges an alternative line of inquiry that redresses the

cult's medieval formation and promotion. The individual and collective analysis of a stone inscription, grave-markers, hagiographic texts, sacred soil, visionary accounts, and visual representations tease out core elements such as the cult's credibility and synergetic relationship with Cologne. Re-framed within this context, it is possible to more securely situate the freestanding skull reliquaries within the cult.

Chapter 2 begins by exploring the displays within which the skulls featured, together with a physical examination of their structural and material elements. As far as possible, the internal compositions are investigated alongside the tactic of structural and ornamental layering. Of all these materials, the ubiquitous integration of linen invites particular consideration of its material and religious significance. The *fenestella*, which exposes but also frames the 'forehead', is considered as a viewing construct and as an innovative feature, especially when compared with the other contemporary reliquaries that limited and completely concealed sacred bones. Investigations beneath the surface furthermore reveal the extent of structural manipulations that involved bones and other materials in order to re-construct the shape of a skull. The frequent repositioning of bone to stand in as the forehead leads to a deeper consideration of this part of the body. The chapter closes by comparing these skull reliquaries and the 'famed' wooden busts.

Chapter 3 builds upon the material and structural aspects of these textile reliquaries – both within the wider intellectual, and more specifically, medical developments. Here, the anatomical perceptions of the head are explored more fully alongside the textual transmission and translation of medical literature. Religious communities, and indeed individuals, were deeply involved in these medical developments; much of the specialized scholarship was housed, translated, and circulated through these networks – especially the Benedictines and Dominicans. Prior to the foundation of Cologne's university medical program (1388) the records of the city's medicine and medical practices are here pieced together. The anatomical construction of the human head as expressed in medieval scholarship, and most notably here, in *De animalibus* by Albertus Magnus, is examined in comparison with the Holy Virgins' reliquaries. It is precisely their unique features – the role of cloth, their layered composition, featuring of the forehead – that illuminate notable comparisons. The chapter concludes by examining the concept of

the Holy Virgins' sacred anatomy by comparing the restoration and reconstruction of their injured bodies to the work carried out by medieval surgeons.

Much of the material examined in the chapters here is given its first critical and in-depth consideration, and the individual chapters are arranged in a way that allows for a multifaceted consideration of the Holy Virgins' skull reliquaries. The dissertation, therefore, presents an engagement with this material that will hopefully both inspire and assist future studies.

Chapter 1

Divine Orchestration: Reframing the Early Visual Objects and Textual Accounts that Formed and Promoted the Virgins' Cult

1.1 Introduction

As outlined, this chapter explores the textual and visual origins of the Holy Virgins' cult, and in contrast to previous studies, the cult's material objects are central to this investigation. Special consideration is given to situating, and so establishing, the virgin martyrs within Cologne - both historically and physically. The chapter opens with a study of the oldest textual reference to the cult, the Clematius Inscription (dating as early as the mid-fourth century). With these foundations it is possible here to explore the stone's authority and its potency as a transmitter of sacred 'information' during the medieval period. It will be argued that it amassed power through a myriad of factors including: its textual content and composition; the materiality of etched stone; and its physical relationship to its natural and built environment. The words of the inscription were, furthermore, incorporated into two of the cult's key texts, including the Sermo in Natali SS. Virginum XI Millium (922), and the *Deutzer Codex* (mid-twelfth century). These strategic appropriations, which have yet to be considered in detail, will be explored here as employing the stone's authority to authenticate and legitimize the Holy Virgins during particularly fractious periods when the cult's survival was threatened. Re-considering the stone from this perspective elevates it beyond simply an early textual source and sheds new light on its multifaceted role within the cult and its development.

The Clematius Inscription additionally serves as a starting point for the investigation of later hagiographic texts: *Sermo in Natali SS. Virginum XI Millium* (922), *Passio I* (969-976), and *Passio II* (c. 1100). These are routinely mentioned and briefly discussed in scholarly works as foundational building blocks of the Virgins' cult. These are, of course, essential to understanding their hagiographic developments in the tenth and eleventh centuries, but investigating how they individually and collectively stabilized the cult in the period preceding the discovery of the *ager Ursulanus*, and the cult's subsequent wide-spread veneration is equally important. The manner in which the texts established the relics as central elements

of veneration before the archaeological excavations, is crucial to the formation of the cult. Therefore, the ways in which these texts engage with the Virgins' martyrdom and their relics are of particular interest – as are other seemingly marginal narrative elements, such as Cologne and its citizens, which emerge here as essential to constructing the Virgins' hagiography.

The cult's sacred materials will be further highlighted by exploring the phenomenon of the stone tituli that, along with the hoards of bones, were unearthed in the ager Ursulanus. Pertinent to this study is the particularly active and meticulous phase of excavation that occurred between 1155-1164 under the supervision of Thiodericus, a custos from St Heribert Abbey, Deutz, when inscribed grave tituli were allegedly discovered mixed among the skeletons. Following this, the finds underwent a year-long authentication process involving Elisabeth of Schönau, a visionary Benedictine nun. She experienced a series of encounters with numerous members of Ursula's group during which the relic finds were revealed and deemed genuine; her visions, documented in Liber Revelationum Elisabeth de *Sarco Exercitu Virginum Coloniensium* (1156), were widely circulated. At the end of the excavation period, Thiodericus compiled a list of the *tituli* and documented his personal account of witnessing their excavation. These were documented within the now-lost *Deutzer Codex* (c. 1164). Although the discovery and validity of these inscriptions has since been questioned, it is the medieval process through which these objects were authenticated and adopted as sacred material within the cult that is of interest here, where the investigation of two figures - Elisabeth of Schönau and Thiodericus – provides the focus of enquiry.

Discussion of this also involves the exploration of another form of compelling 'evidence' within the cult: visionary encounters. Elisabeth of Schönau's visions of the Virgins and other saints, and her widely-circulated book, *Liber Revelationum*, have been explored elsewhere, but the impact of other notable visionary figures – Clematius, Ursula, and Helmdrude – that predate Elisabeth has yet to be explored. These figures and the contents of their visionary encounters, together with those of Elisabeth of Schönau, reveal intriguing methods of generating and validating information that ultimately promoted the Virgins' cult.

To complement these textual foundations, two of the earliest-known visual representations of the Holy Virgins' cult are also considered: a pair of engraved

bonze bowls displaying the martyrs' hagiographic narrative (eleventh/twelfth century), and a manuscript illustration of St Ursula and the Holy Virgins (*c*. 1140). As the cult's first-known visual material, they might be briefly mentioned, yet iconography has dominated scholarly engagement; although such analysis is useful, it ultimately inhibits a more engaged exploration. Here, therefore, this integral material will be re-considered, in light of the broader re-framing of the Virgins' cult, by exploring both what is seen and that which can be revealed.

1.2 Inscribing Foundations: The Clematius Stone⁷³

The Clematius Inscription, mounted within the chancel of the Holy Virgins' church (Figs 1.1-1.5), holds great importance within the martyrs' cult, and has attracted the attention of scholars from the seventeenth century onwards, among whom the primary concern was to date it, and so situate the Holy Virgins within early Rhineland Christianity.⁷⁴ Today the stone is largely dated to the late fourth or early fifth century and so hailed by some as the oldest text associated with Cologne's famed saints.⁷⁵ Since the late thirteenth century, the piece has been mounted just above eye level within the south choir wall of the church (Figs 1.2,1.3).⁷⁶ Situated between two pilasters, it reads:

⁷³ For further discussion, see Cher Casey, "Transmitting Sacred Authority through Stone: The Clematius Inscription and Cologne's Cult of the Holy Virgins," in *Transmissions and Translations in Medieval Literary and Material Culture*, ed. Megan Henvey, Amanda Doviak, and Jane Hawkes, vol. 17, Art and Material Culture in Medieval and Renaissance Europe (Leiden: Brill, 2021), 143–59.

⁷⁴ Joseph Kremer includes a comprehensive synopsis of the scholarly debates surrounding the Clematius Inscription in: "Studien zum frühen Christentum in Niedergermanien" (doctoral thesis, Rheinischen Friedrich-Wilhelms-Universität, Bonn, 1993), 153–84.

⁷⁵ Joseph Klinkenberg, "Studien zur Geschichte der Kölner Märterinnen," Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande 88 (1889): 79-95; 89 (1890): 105–13; Levison, "Ursula-Legende," 3; E.A. Stückelberg, "Die Clematianische Inschrift eine Fälschung," Basler Zeitschrift für Geschichte und Altertumskunde 20 (1922): 368–71. Here Stückelberg suggests that the stone was a twelfth-century forgery used to authenticate the Holy Virgins. Most scholars dispute this theory and accept that the stone dates to late antiquity.

⁷⁶ In 1886 the inscription was re-set (in the same place) to be flush with the wall surface, having previously been inset, although it is unclear how deep it sat during the period under consideration. Winfried Schmitz, "Zur Ursprung Der Ursulalegende: Die Inschrift Des Clematis," in *Quellen Zur Geschichte Der Stadt Köln* -

Frequently admonished by prophetic visions of flames and by virtue of the most majestic heavenly martyred virgins, the illustrious man, Clematius, coming from the East, in fulfilment of a vow, restored this basilica on his land from the foundation up. If anyone, moreover, deposits the body of anyone other than the virgins in this majestic basilica, built on the site where the holy virgins shed their blood in the name of Christ, he should know that he will be punished by the eternal fires of Tartarus.⁷⁷

The inscription thus presents a chiastic construction with parallel phrasing. The verse opens and closes with mentions of fire, first as elements of visions that urged Clematius to construct the church, then as a punishment to those who dishonour the Virgins. Martyrdom is also situated in mirroring positions within the text, initially to identify the Virgins as martyrs followed by the corporal reality of their deaths: the blood that saturated the earth below. The middle of the text focuses on Clematius' construction of the church, within which the epigraph is displayed. This structure is mentioned again as the physical marker and commemorative donation for the Virgins' sacrifice. Viewers are warned against mixing 'foreign' bones with those of the martyrs; this statement also identified the presence of the sacred relics at this site – the mention of which is the inscription's cradled core. This harrowing threat is juxtaposed to the devotional acts carried out by Clematius.

The epigraph thus provides a surprising amount of information. It introduces Clematius, a foreigner from the "orient" (*orientis*) who commissioned the reconstruction of the Holy Virgins' basilica situated on his property. Confirmed as the existence of an earlier church on the same site that was similarly dedicated to the

Antike Und Mittelalter von Den Anfängen Bis 1396/97, 1 (Cologne: J.P. Bachem, 1999), 58.

⁷⁷ "Divinis flammeis visionib(us) frequenter admonit(us) et virtutis magnae maiiestatis martyrii caelestium virgin(um) imminentium ex partib(us) orientis exsibitus pro voto Clematius v(ir) c(larissimus) de proprio in loco suo hanc basilicam voto quod debebat a fundamentis restituit. Si quis autem super tantam maiiestatem huiius basilicae, ubi sanctae virgines pro nominee ·XPI· sanguinem suum fuderunt, corpus alicuiius deposuerit exceptis virginib(us), sciat sempiternis tartari ignib(us) puniendum"; trans.: author. Christine Williamson's assistance in analysing the content and peculiarities of this passage is greatly appreciated (10.10.17).

martyrs, the land beneath the church is acknowledged as marking the location of the group's mass martyrdom. The second half of the text emphasizes the cult's exclusivity, and establishes that contamination of these sacred relics with less holy bones is a punishable offense. As such, the stone can be understood as serving multiple functions: it documents the building's construction, commemorates the patron, signposts the Virgins' martyrdom, and instructs on proper veneration.

1.2.a Contextualizing the Stone

The earliest mention of the inscription is preserved in the *Sermo in Natali (SS Virginum XI Millium)*, a festal sermon delivered on 21 October 922.⁷⁸ Mid-way through the address, when speaking about the martyred women, the author calls attention to the epigraph: "their memorials are preserved over there, carved/engraved in stone(s)".⁷⁹ He then states that he feels "the words ought to be included [in this sermon]"⁸⁰ and proceeds to read the first two phrases of the inscription, concluding with the words "from the foundation up". The text invoked is found on the extant epigraph, confirming that the stone, or possibly an earlier one with the same text, existed in 922. It is significant that the author did not paraphrase the inscription. Instead, he quoted it, word for word for the congregation, and by doing so evoked the potency of these 'ancient' words. Reading the content activated the text, imbued the Virgins' narrative with authority, and made it relevant to the contemporary audience. This oral rendition (preserved in written form) further duplicates the content of the stone, making it available to a wider readership.

The sermon suggests that the Clematius Inscription was not fully understood by contemporary devotees; this might have been a rhetorical device used by the sermon-giver to emphasise his points. The author states that "the truth must be stated briefly, investigators have not been very diligent in discovering the true sense

⁷⁸ Chapter 6-7 of sermon; for Latin, see Klinkenberg, "Kölner Märterinnen, 1890,"
121–22. Acta Santctorum vol. 9, October 21 (1869), 154-157; trans.: Pamela
Sheingorn and Marcelle Thiébaux, *The Passion of Saint Ursula; and The Sermon on the Birthday of Saint Ursula*, 2nd ed., Peregrina Translations Series (Toronto, Ontario: Peregrina Publishing, 1996), 49–51 [hereafter: Sheingorn and Thiébaux, *Saint Ursula*]. The *Sermo* will be explored in greater detail below in section 1.3.a.
⁷⁹ "Cuius monumenta lapidibus istic servantur incisa". Klinkenberg, "Kölner Märterinnen, 1890", 121; trans.: author.

⁸⁰ "quae et huic operi verbis eisdem putavimus inserenda". Ibid.; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 50.

of this inscription, and therefore an elucidation of its whole meaning has remained obscure until now."⁸¹ The stone is acknowledged as a sacred artefact (according to the author), and yet additional explanation was seemingly required. The sermon proceeds to clarify confusion surrounding Clematius' origins and set the record straight: it was he, and not the Virgins who originated from the east. As a wealthy foreigner, Clematius offered the cult an additional gift: promoting the martyrs in areas outside Cologne. As the sermon explains: "Not only did he increase the veneration owed to the most precious bodies in their own proper place, but he also conferred great fame upon them in the foreign provinces from which he came, on account of his journeying back and forth".82 The sermon thus establishes Clematius as a wise man from the East, implicitly paralleling him with the Magi, who, also of elevated status and eastern origins, symbolized both significant witnesses and promoters within the Christian tradition. Clematius is additionally underscored as an active devotee who, having constructed the church in Cologne, spread word of the martyred women far and wide. When discussing veneration of the Holy Virgins outside Cologne, primarily in their homeland of Britain, the Sermo asserted that:

Indeed, in the midst of the most consistent evidence, they had fixed inscriptions [*signorum*] for the monuments which in several places distinguished these saints, saints who are at the same time honoured and celebrated through their relics.⁸³

This tradition – memorializing the martyrs with inscriptions, as initiated on a grand scale by Clematius – is said to have been replicated in areas far beyond Cologne. Set

⁸¹ "Quod quia breviter designari veritas ipsa poscebat, quosdam minus diligenter intendentes sensus eius verus et ad sententiae totius solutionem omnimodis aptus hucusque latebat". Klinkenberg, "Kölner Märterinnen, 1890", 121; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 50.

⁸² "qui non solum in loco proprio pretiosorum corporum venerationem debitam redintegravit et auxit, verum etiam in exteras provincias, unde venerat et per quas inter fecerat famam tantam eundo et redeundo perduxit". Klinkenberg, "Kölner Märterinnen, 1890", 121; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 50.
⁸³ "Horum etiam medii convenientissimis hoc ipsum adstruunt signorum indiciis; apud quos pleraque loca sanctis his cernunter honorata simul et illustrata reliquiis". Klinkenberg, "Kölner Märterinnen, 1890", 122; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 52.

in this light, Clematius emerges as an essential figure credited with rebuilding and fortifying the cult's foundations: architecturally and geographically.

1.2.b The Materiality of Engraved Stone

The sermon also demonstrates that the Clematius Inscription provided textual and material proof of the Virgins' existence and martyrdom. Stating that "their memorials are preserved over there, carved/engraved in stone(s)",⁸⁴ the sermon explicitly calls attention to the epigraph's materiality as the ideal medium for preserving the Virgins' memory. The engraved stone is a visible 'document', which embodied exceptional durability and permanence; the medium of the epigraph was employed precisely to serve as the authoritative method of record keeping and preservation. Indeed inscribed stones embodied a privileged status as both an artefact and a textual account – a cultural tradition that experienced particular prestige in ancient Rome and in cities throughout its empire, including Cologne.⁸⁵

In this context, the Clematius Stone presents one example of exceptional craftsmanship; the notable depth of the incised letters, their uniformity, the even space-up of the words and lines, straight rows and immaculate alignment present a highly polished 'document' (Figs 1.1a-c). An epigraph of this accomplishment required a lengthy planning process and the involvement of skilled hands. Compositions similar in nature to the Clematius Inscription were usually the products of collective efforts by several individuals; the words and phrases were carefully selected, edited, and organized to fit the size and function of the cut and dressed stone. Only after completing these extensive preparatory steps would the incising of the letters begin. This labour-intensive process required specialised skills and was thus only entrusted to *scriptor titulorum* – a highly-trained stonemason.⁸⁶ Such attentive planning and preparation ensured that the resulting inscriptions were not simply viewed as documentary records but that they also embodied aesthetic value.⁸⁷ The act of carving words into stone elevated and activated the

⁸⁵ Alison Cooley, *The Afterlife of Inscriptions: Reusing, Rediscovering, Reinventing & Revitalizing Ancient Inscriptions*, Bulletin of the Institute of Classical Studies.
 Supplement 75 (Institute of Classical Studies, 2000), 1–9.

⁸⁴ See above, fn. 80.

 ⁸⁶ L. J. F. Keppie, *Understanding Roman Inscriptions* (London: Batsford, 1991), 13–15.
 ⁸⁷ Ibid., 12.

content; the lengthy process of preparing and creating an epigraph expressed the message's authority. Finally, mounting the stone within a wall ensured its content would be accessible for generations to come.

When compared with other contemporary inscriptions, the Clematius Inscription in Cologne gains agency both within the Virgins' cult and also as a participant in the larger visual and material culture of early Christian and medieval Europe. As demonstrated by Levison, the textual content of the Clematius Stone displays words and phrases similar to other 'official' Rhineland inscriptions, both ancient and medieval.⁸⁸ His findings identify this object as a local product, one that compositionally drew from and conformed to existing inscriptions, but might also have served as a model for future works. Within the larger framework, the cultural tradition of epigraphs, particularly those marking sites associated with martyrs, stems directly from early Christian Rome. One notable, and possibly near contemporary example, is the Damasus Inscription now placed in the southwestern access staircase to the basilica of Sant' Agnese Fuori le Mura (Saint Agnes Outside the Walls) in Rome (Fig. 1.6a-b). This epigraph, one of several commissioned by Pope Damasus, who reigned from 366 to 384, recounts the miraculous events of the martyrdom of St Agnes – a young virgin of twelve or thirteen, who was publically executed under Diocletian's orders (c. 305). Although larger in size than the Clematius Stone, this epigraph was similarly executed with exceptional craftsmanship, a visual symbol that expresses the lofty prestige and cost with which it was created. The thick, deeply incised Roman capitals are ornamented with flared serifs (Fig. 1.6b). Together with the black pigment set into the incisions, which notably parallels evidence of red paint used to highlight the Clematius Inscription, this epigraph is both highly legible and visually impressive.

In addition to their shared visual similarities, these two epigraphs are united in marking the sacred sites associated with virgin martyrs. The basilica of Sant' Agnese was constructed over the burial place of the martyr, necessitating the excavation of the hillside containing the subterranean network of catacombs.⁸⁹ In much the same way that this site fuses the sacred burial ground with architecture

⁸⁸ Levison, "Ursula-Legende," 11–21.

⁸⁹ Richard Krautheimer, *Rome: Profile of a City, 312-1308* (Princeton University Press, 2000), 25–30.

(all of which are recorded in Damasus' stone), so too does the Clematius Stone mark a structure that was intrinsically and physically linked with the sacred soil below.

1.2.c Locating the Clematius Inscription

Alongside the medium of the Clematius Inscription, its location within the church is also a feature worthy of investigation. Following the expansion of the church in the late thirteenth century, the stone has been mounted on the south wall of the choir beneath the eleventh glazed window (Fig. 1.3). Its prior location within the church is unknown. Nevertheless, the *Sermo's* author expressed familiarity with the stone and its contents, and even referenced it as being "over there" (*istic*),⁹⁰ indicating that it occupied an area possibly within view of the speaker, thus suggesting that it might have stood in a location similar to that which it currently occupies.

Today, the stone is situated within the chancel, occupying a position close to the altar and the liturgical proceedings (Fig. 1.7). It thus shares the same sacred space as the stained glass, paintings, and wall decorations, as well as the shrines and relics.⁹¹ From the thirteenth century onwards, those permitted to occupy this space – the clergy, female canons, and possibly pilgrims circulating the high altar⁹² – were therefore granted visual access to the stone as well as physical proximity to the Holy Virgins themselves whose relics were encased within the altar, wall niches, and in - between the choir's double walls. The inscription's position on the south wall additionally made the stone visible to the resident nuns who would have occupied the north gallery during mass (Fig. 1.7).⁹³ This location successfully situates the stone as an active force within its sacred environment: it bears witness to the proceedings that take place therein and continually presents its potent message to those within the space.

⁹² Klaus Militzer, "The Church of St Ursula in Cologne: Inscriptions and Excavations," in Cartwight, *The Cult of St Ursula*, 30–31; regarding access to the chancel, see: Clemens Kosch, *Kölns Romanische Kirchen, Architektur und Liturgie im Hochmittelalter*, 2nd ed. (Schnell & Steiner, 2005), 80.
⁹³ Militzer, "Inscriptions and Excavations," 20.

⁹³ Militzer, "Inscriptions and Excavations," 30.

⁹⁰ For Latin, see: Klinkenberg, "Kölner Märterinnen, 1890," 121.

⁹¹ Scott Montgomery considers the relationship between relics and stained glass at this church in *"Sacra Conversatione*: Dialogues between Reliquaries and Windows," *Journal of Glass Studies* 56 (2014): 253–70.

The stone is, furthermore, architecturally framed by a thin engaged column to the left and a large cluster column to the right (Figs 1.1c, 1.2, 1.3). It is set with precision between these two structural agents, suggesting that its dimensions were taken into account when constructing this part of the building; yet considering this particular measurement was replicated as the size of each bay within the chancel, it is possible that the stone played a larger role in determining the space's standard of measurement. This object, which celebrates the 'ancient' renovated church, but was also believed to have originated during its construction, might have thus been seen as an active consultant in the expansion of the medieval church. In this regard, it is possible that the first church renovations, carried out by Clematius, were believed to have a continued symbolic importance within the architectural construct of the later medieval and contemporary, post-war reconstruction.⁹⁴

As demonstrated by its location, display, and engagement with neighbouring elements, the stone can thus be understood as claiming multiple avenues of agency. Further investigation of its placement and legibility, however, reveal a notably more restricted viewing experience. Although it presents a clear Roman script that reveals traces of red paint, several factors complicate the visual engagement and the actual viewing experience. The epigraph occupies an elevated setting on the wall, approximately 2 feet (61 cm) above eye-level, which requires viewers to stand within close proximity to read it (Fig. 1.2). Moreover, the thick column to the right of the stone presents a physical barrier obstructing the stone's visibility from those outside the chancel – namely, those in the nave. The ideal reading experience would have required viewers to stand directly in front of the stone and raise their eyes. These factors indicate that not everyone, even within this restricted space, was intended to experience a 'satisfying' interaction with the inscription. The presence of the stone within the chancel might therefore have served a symbolic role – as a well-known object that offered the potential for accessibility and authentication.

In this respect, the Clematius Inscription stands as a compelling object within the cult, and its powerful message and authoritative medium memorialize Cologne's Holy Virgins and the man responsible for resurrecting their following. Its words

⁹⁴ The symbolic importance of measurements in medieval architecture, especially the significance of copies of sacred structures, is considered by Richard Krautheimer, "Introduction to an 'Iconography of Mediaeval Architecture," *Journal of the Warburg and Courtauld Institutes* 5 (1942): 1–33, esp. 12-13.

activate the presence of the Virgins, their martyrdom, and the successive veneration of them at this particular site. The stone simultaneously validates the 'historical' aspects of the cult and activates the Holy Virgins' presence within the contemporary sacred space. It serves as a tangible object, a relic from the past that collapsed temporal gaps between the Virgins' martyrdom, the church's earlier reconstruction, and present viewers. It emphasizes the significance of location, place, and space with an all-encompassing and dynamic effect. It is therefore not surprising that from the tenth century onwards, the inscription became a central object associated with the cult. It secured a primary reference point and was to be repeatedly quoted and paraphrased within numerous subsequent narrative accounts of the Virgins' martyrdom.⁹⁵

1.3 Developing the Virgins' Narrative through Textual Multiplicities

Following the Clematius Inscriptions, the cult is not textually referenced until the ninth century: Ursurds' *Martyrlogy* (875);⁹⁶ additions to a manuscript of Bede's *Martyrlogy* (late-ninth century);⁹⁷ the life of St Kunibert (second half of ninth century);⁹⁸ a charter (867); *annals* (881); a calendar (second half of ninth century); and two liturgical texts from Cologne (ninth century) and Corvey (827-40). As meticulously explored by Kristin Hoefener, the textual accounts of the cult – and its various protagonists – become more frequent from the tenth century onwards, ⁹⁹ and emerged primarily from terminologies and references to geographic areas and shared religious communities associated with the cult. Although analysis of the cult's early veneration by means of these sources reveals many inconsistencies during the tenth and eleventh centuries, it is shown nevertheless to have emerged as a distinct and established entity deeply rooted within Cologne.

⁹⁵ See below, sections 1.3.a and 1.5.

⁹⁶ Acta Sanctorum iunii VII, p. 613; as cited in: Kristen Hoefener, "From Pinnosa to St Ursula – The Development of the Cult of Cologne's Virgins in Medieval Liturgical Offices," in Cartwright, *The Cult of St Ursula*, 64.

⁹⁷ Würzburg, Universitätsbibliothek. MS. theol. fol. 50; cited: ibid.

⁹⁸ Bollandists, *Bibliotheca Hagiographica Latina Antiquae et Mediae Aetatis* (Brussels, 1898) no. 2014-17, cited: Hoefener, 63.

⁹⁹ Ibid., 61–91. The tables on pages 63-76 are helpful in charting the cult's textual evolution.

1.3.a The Spoken Word: Sermo in Natali SS. Virginum XI Millium

The *Sermo in Natali* (922), which exists in four manuscripts today, offers not only the earliest mention of the Clematius Inscription, but also provides the first detailed hagiographic account of the Virgins.¹⁰⁰ It is generally accepted that the sermon was delivered to the resident nuns of the Holy Virgins' Church on their feast day (21 October) in 922.¹⁰¹ Earlier that same year, Hermann I, archbishop of Cologne, ordered a group of Benedictine nuns from Gerresheim (near Düsseldorf) to relocate to a cloister adjacent to the cult's titular church in Cologne.¹⁰² The church was presumably unoccupied following the Viking attacks of 881-882, which had caused the resident male clerics to flee.¹⁰³ The sermon, therefore, marked the first celebration of the feast day in which the cult's church was re-inhabited, following a long period of abandonment. Given this, the sermon can be seen as addressing the nuns in their role as the new 'caretakers' of the city's prized martyrs.

The author states that he is providing information regarding the death and burial of the Virgins to the best of his ability. He outlines their historic veneration, including the role played by Clematius, and praises the Virgins' purity and steadfast bond with Christ, highlighting their sanctity through Christological and biblical parallels. Yet, although the text celebrates the local martyrs, it also reveals a sizeable void in narrative details, a gap between what was known and what remained

¹⁰⁰ For Latin, see: Klinkenberg, "Kölner Märterinnen, 1890," 118–24. *Acta Sanctorum*, Oct. IX, vol. 9, p. 154-157; *Bibliotheca Hagiographica Latina Antiquae et Mediae Aetatis*, Nr. 8426; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 45-54. A list of the medieval manuscripts is found in Levison, "Ursula-Legende", 47 and 95. These include: 1) Munich, Bayerische Staatsbibliothek, Cod. Clm 18897, Tegernsee, the twelfth century. 2) Brussels, Bibliothèque royale de Belgique, MS 9810-14 (3229), St Laurentius in Lüttich, Belgium, twelfth century. 3) Brussels, Bollandistenbibliothek 5 [no class mark], Grimberg, twelfth century. 4) Munich, Bayerische Staatsbibliothek, Cod. Clm 22244, Windberg, twelfth century.

¹⁰¹ Levison, "Ursula-Legende," 46–48; it is also noted that the title of this sermon changed from *virgins Colonienses* to a later version of *undecim milia virginum*. Klinkenberg, "Kölner Märterinnen, 1890," 124.

¹⁰² Wegener, *St. Ursula in Köln*, 40–41; the church was referred to as: "monasterium sanctaurm virginum extra muros Coloniae erectum ad laudationem Dei et s. Mariae ac ipsarum XI milium virginum". This is first documented by Albert Gereon Stein in "Die heilige Ursula und ihre Gesellschaft," Annalen des historischen Vereins für den Niederrhein (26/27) 1874, p. 334. For earlier records of this name, see: Montgomery, *St. Ursula*, 48.

¹⁰³ John M. Jeep, *Medieval Germany: An Encyclopedia* (Florence: Routledge, Taylor & Francis Group, Garland Science, 2001), 220–21.

unknown, for as the author disclosed: "we know nothing about them except for what is most splendid",¹⁰⁴ their "early lives and their experiences in the middle life are not known to us".¹⁰⁵ With frustration, he inquires: "why weren't the deeds and rewards of this heavenly band recorded from the beginning, that they might at last be transmitted quite clearly and without embellishment to the ears of posterity?"¹⁰⁶ These candid observations about the absence of a written account and the dangers of oral translations justified his fragmented narrative, and the invading barbarians¹⁰⁷ are invoked as preventing the transfer of textual sources:

It was because of this tribulation that the memory of the same holy virgins – after the torch of the Church which guarded their sacred bodies – faded first from the lips and eventually from the hearts of a people who had long been so pious.¹⁰⁸

Here, the author not only describes a particularly difficult period for the cult's veneration and explains the absence of accurate information regarding the Virgins, he also notably underscores the bond between the martyred women and the sacred space within which they were venerated; the destruction of the church – the sacred space that housed the Virgins' bodies – ultimately threatened the cult's survival.

Despite the notable 'historical' gaps incurred by extreme circumstances, the author obligingly acknowledged Cologne's community for sustaining

¹⁰⁴ "nullum enim in eis nisi maximum scimus". Klinkenberg, "Kölner Märterinnen, 1890," 119; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 45.

¹⁰⁵ "quod earum conversatio vel prima vel media nobis nota non est". Klinkenberg,
"Kölner Märterinnen, 1890," 119; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 45.
¹⁰⁶ "Nam cur caelestis huius exercitus a principio gesta simul et proelia non scriberentur, ut sic demum purius et lucidius ad aures posteritatis

transmitterentur". Klinkenberg, "Kölner Märterinnen, 1890," 120; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 49.

¹⁰⁷ These 'barbarians' are likely referring to the Franks, who repeatedly attacked the city in the fourth and fifth centuries. For a concise history of Cologne during Frankish rule, see: Strait, *Cologne*, 4–7.

¹⁰⁸ "Per quam etiam hoc factum est, ut earundem sanctarum virginum memoria post incensam sanctorum corporum custodem ecclesiam paulatim ab ore primum, deinde ab ipso pectore religiosi dudum populi laberetur". Klinkenberg, "Kölner Märterinnen, 1890," 121; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 49. Destruction of the church may refer to the Viking attacks (881-82) when many parts of the city were burned.

commemoration. He declared that the martyrs had "always been preserved on the lips of our countrymen – who are most tenacious in memory – and what is frequently spoken of in pious gatherings."¹⁰⁹ Even after the physical damage caused by external forces, Cologne's people kept the memory of the Virgins alive. When written sources failed, spoken and auditory measures ensured survival of the martyrs' narrative. Oral history is reliant on communal efforts – both public and domestic. Storytelling, which evoked the presence of the saints, served to unify generations of local people. This (spoken) sermon, delivered within a "pious gathering" (*servatum religiosis*), was thus self-referential. It too was effective in relaying knowledge about the Virgins to the congregation, and was therefore situated at the forefront of this perpetual chain.

While the sermon reiterated this steadfast generational bond, and in so doing, situated Cologne's citizens at the heart of the cult's veneration, the author nevertheless prioritises text over the spoken word, for "through the efforts of our ancestors, a certain amount of information about the Holy Virgins was handed down [*perducta*] to us that was neither very extensive nor very detailed, but open to many interpretations."¹¹⁰ While verbal transmission facilitated the preservation of the Virgins' hagiography it also contributed to the fluctuations in the narrative details. Perhaps in defence, the author made a notable effort to enforce the credibility of spoken words by undermining other written sources that were composed "on the basis of surmise or opinion, and no authority has ever opposed them".¹¹¹ Walking the narrow line between the credible and the unsubstantiated, he was yet keen to assert that the validity of the Virgins' cult should not be discredited by its apparent lack of textual accounts: once captured in the form of the sermon – a written and spoken *Latin* text – the martyrs' story would be immune to future misinterpretation, manipulation, and/or fabrication. The sermon thus marks a turning point in the

¹⁰⁹ "quod in ore nostratum tenaci memoria semper omnino diligentissime servatum religiosis frequenter colloquiis volvitur, credibile etiam et aut verum aut veri simillimum non negatur". Klinkenberg, "Kölner Märterinnen, 1890," 120; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 48.

¹¹⁰ "Ad nos ergo maiorum nostrorum studio de sanctis his virginibus ea sunt tantum perducta, quae maxima neque singularia fuerunt, sed multiplicia". Klinkenberg,
"Kölner Märterinnen, 1890," 119; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 47.
¹¹¹ "Denique plurima per opinionis coniecturam probantur esse conscripta, quibus tamen nulla unquam auctoritas refragata est". Klinkenberg, "Kölner Märterinnen, 1890," 120; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 48.

narrative; it honoured the 'historic' oral tradition while simultaneously utilizing the authority associated with Latin textual documentation. It catered to the contemporary generation of the faithful who were familiar with the ecclesiastic genre of Latin sermons, both updating the cult's relevance and reactivating its significance in tenth-century Cologne through a medium both spoken and written.

As a Latin document, the *Sermo in Natali* presents many of the defining hagiographic elements found in later textual sources, namely *Passio I* (*c*. 976) and *Passio II* (*c*. 1100), which in turn served as the reference point for Elisabeth of Schönau's accounts (1156), and finally for the widely-circulated *Legenda aurea* (*c*. 1260s). These include: a large group of women under the direction of a specified leader, all of whom originated in England and met their deaths in Cologne, and the most prominent recurring motif, the size of that group. By the early tenth century, the *Sermo* conveys that the Holy Virgins had acquired a (notable) headcount that numbered "many thousands" (*tot milia*),¹¹² but "less than twelve thousand" (*minus quam XII milia*).¹¹³ The "blessed and sacred choir of virgins, most perfect in merit, incomparable in number"¹¹⁴ was a group of "unique multitude" (*sola multituda*). ¹¹⁵ Although they fail to provide a specific number, these passages convey excitement about the group's extraordinary size. At this stage, it constituted a number that had expanded beyond eleven, but was not fixed as the canonical 11,000 until the midtenth century in *Passio I.*¹¹⁶ In addition to reiterating the group's impressive size, the

¹¹² Klinkenberg, "Kölner Märterinnen, 1890," 124; trans.: author.

¹¹³ Klinkenberg, "Kölner Märterinnen, 1890," 119; trans.: author. Klinkenberg explains why he believes that this part of the text might have impacted the cult's final headcount of 11,000 on 124-25.

¹¹⁴ "O beatus et sacer ille virginum chorus, perfectissimus merito, nullis numero comparandus". Klinkenberg, "Kölner Märterinnen, 1890," 120; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 48.

¹¹⁵ Klinkenberg, "Kölner Märterinnen, 1890," 120; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 48.

¹¹⁶ Hoefener identifies the Hereford Calendar (late-ninth century) as documenting the Holy Virgins' church as "sanctarumque virginum XI milia in Colonia civitate", "Liturgical Offices," 67; Montgomery identifies a late ninth-century missal from the Damenstift in Essen that cites "santarumque virginum XI milia" on the Virgins' feast day, *St. Ursula*, 11; Klinkenberg believed the Wichfrids document (941), which refers to the Virgins' church as "XI milium sanctarum virginum ecclesia", as the first to specifying the group's size. It is likely that the group was already associated with being quite large, possibly 11,000, in the decades directly predating the *Sermo*, which likely influenced the author to include references to many thousands of

Sermo also underscores its excusive female constituency: "who could ever believe that such a throng of women – not to mention Virgins alone – would have gathered together without being joined by the other sex!"¹¹⁷ This feature was not challenged until the mid-twelfth century when the *ager Ursulanus* excavations exposed male bones and associated funerary markers, clarification of which became Elisabeth of Schönau's primary task.¹¹⁸

Unlike the later *vitae*, which record the presence of Ursula, the group leader was identified in *Sermo in Natali* as Pinnosa: "They called her Winnosa, while we call her Pinnosa."¹¹⁹ This name had been associated with the cult from the ninth century, being listed in Cologne's litany.¹²⁰ Pinnosa was recorded alongside other named females, including Brittola, Martha, Saula, Sambatia, Saturnia, Georgia, and Palladia. Yet in the *Sermo*, Pinnosa was elevated as the group's leader. She is described as an "illustrious woman said to be the daughter of an eminent king of the British people."¹²¹ This passage falls at the end of the sermon and appears more anecdotal than celebratory; given that most of the text focuses on celebrating the group's totality without naming Pinnosa, her role as leader appears to be almost insignificant. Directly following her invocation, the group as a whole is elevated:

¹¹⁸ See below, sections 1.5 and 1.6.1.

virgins. Following the *Sermo*, yet predating *Passio I* (*c.* 970) the cult is frequently referred to as having 11,000 virgins. Klinkenberg, "Kölner Märterinnen,1892," 140. From this point forward this number is fixed to the cult, as cited in Hoefener, "Liturgical Offices", 67-69.

¹¹⁷ "Nam quis unquam omnium mulierum, non dicimus tantum modo virginum, multitudinem tantem sine sexus alterius intermixtione crederet convenisse?" Klinkenberg, "Kölner Märterinnen, 1890," 119; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 46.

¹¹⁹ "ab illis Winnosa, a nostris Pinnosa nuncupata," Klinkenberg, "Kölner Märterinnen, 1890," 123; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 53. Friedrich Schubel is the first scholar to attribute this spelling adaptation to be the result of a paleographic misinterpretation: the Anglo-Saxon rune wynn (P) being understood to indicate the letter p. He also suggests Winnosa was inspired by the Welsh St Winnoc. See: 66-70 for rune discussion and 70-80 for Winnoc hypothesis, "Die Heilige Pinnosa," *Anglia: Zeitscrift für englische Philologie* 65 (1941).
¹²⁰ For a list of early texts naming Pinnosa, see: Hoefener, "Liturgical Offices," 71–72.
¹²¹ "Inter quas inclita et insignis fuisse asseveratur regis Britannorum filia".

Klinkenberg, "Kölner Märterinnen, 1890," 123; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 53. Klinkenberg considers the mention of a "British princess" to indicate that the story likely linked with British/Welsh legends - also on the grounds of the large group size, see, 131.

"We recognise them all, for we have been instructed by the most persistent trials in virtue and piety of all of them – even if we know very few by name."¹²² This brief mention of the leader reflects the group's strong associations as a cohesive entity at this time – a defining feature that remained constant even after Ursula was identified as the cult leader in the late tenth century.¹²³

As noted, the *Sermo in Natali* was transcribed and incorporated into four codices from the twelfth to the fourteenth centuries, reflecting its currency for a considerable passage of time after its initial composition.¹²⁴ The duplications testify to its continued power and significance within the cult – regardless of the elaborate *vitas* that would follow. Yet, in each of these four manuscripts, the *Sermo* was placed directly before or after *Passio II*, in one case preceding both *Passio II* and Elisabeth of Schönau's *Liber Revelationum*. It evidently functioned as an 'ancient' textual source of the cult – the origins of which reached far beyond living memory. Together with the *Passio II* and Elisabeth's visions, it documented the development in the Holy Virgins' narrative and devotional following over the centuries, and in doing so simultaneously validated and strengthened the cult's authenticity.

With the sermon committed to writing, and its subsequent manuscript circulation, the textual void acknowledged by the author was filled. Indeed, the core elements of the sermon were provided by the Clematius Inscription.¹²⁵ The group of women, from a foreign land, were martyred in Cologne, implying that the *Sermo*'s author can be seen as elaborating upon an admixture of established written 'facts' and traditions transmitted orally, which then came to be regarded as a canonical document associated with the cult.

¹²² "Quarum paucissimas nomine, omnes virtute et pietate experimentis assiduis edocti cognovimus". Ibid., 123; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 54.
¹²³ For more on the significance of the change of names within the cult together with the return to a collective sanctity, see: Scott Montgomery, "What's in a Name? Navigating Nomenclature in the Cult of St Ursula and the Eleven Thousand Virgins," in Cartwright, *The Cult of St Ursula*, 11–28.

¹²⁴ See fn. 101.

¹²⁵ Klinkenberg draws connections between British legends involving large groups of traveling soldiers and saints in: "Kölner Märterinnen, 1890," 129–34, esp. 130.

1.3.b Complex Beginnings: Passio I

The Holy Virgins' first expanded hagiographic account, Passio I (969-976),¹²⁶ survives in six manuscripts dating from the eleventh to seventeenth century,¹²⁷ and it is known by its opening words "Fuit tempore". The composition of the Sermo in Natali and Passio I are separated by approximately fifty years. This vita was carefully structured with an introduction, narrative, and an account of the martyrdom. In the introduction, the author identified himself as Herric, a monk in the Flemish monastery of St Bertin in the diocese of Thérouanne. He dedicated the text to Gero, Archbishop of Cologne (r. 969-976), but credits the nuns of the Holy Virgins' Convent in Cologne as the literary patrons.¹²⁸ He records that they had preserved the Virgins' story for the past forty years: since the decade following the composition of the Sermo in Natali. According to Herric, the story arrived in Cologne by way of Count Hoolf, a German emissary to England, who had heard the story from Archbishop Dunstan of Canterbury (r. 859-878).¹²⁹ Transmitted in this way across a great geographic distance, from a credible, imperially connected archbishop to a trustworthy Herric, this version of the narrative bridged the 'gaps' between the Sermo in Natali, and the later Passio II.

¹²⁶ Levison, "Ursula-Legende," 142–55. To the best of my knowledge this passion has not been translated into any other language. Levison summarized, in German, the original Latin text: 60-61.

¹²⁷ Ibid., 140–41; for updated study with minor corrections, see: Hoefener, "Liturgical Offices," 64 The manuscripts are: 1) Munich, Bayerische Staatsbibliothek, Clm 642, eleventh century; 2) Châlons-sur-Marne 57, eleventh century, Passio partially present in codex (now missing); 3) Brussels, Bibliothèque royale de Belgique, MS. 831-834, fourteenth century; 4) Paris Bibliothèque National de France, MS lat. 2289, fifteenth century; 5) Trier, Stadtbibliothek 1376, seventeenth century; 6) Brussels, Bibliothèque royale de Belgique, 8917, seventeenth century. ¹²⁸ Transcription of the Latin prologue can be found in: Levison, "Ursula-Legende," 142–45.

¹²⁹ Levison discussed the probability that Canterbury's archbishop in question was likely Dunstan (959-978). Among other factors, Dunstan requested to be ordained archbishop on the Holy Virgins' feast day, which was a Wednesday. Ordinations usually occurred on Sundays and this request was seen to demonstrate a bond between Dunstan and the Holy Virgins, see: Ibid., 68–73.

1.3.b.i Pinnosa and Ursula; Essen and Cologne

Of primary importance in Herric's account is the introduction of Ursula as the new leader, likely elevated to this role following the translation of Pinnosa's body from Cologne to Essen's *Damenstift* in the mid-tenth century.¹³⁰ On 28 February, of an unspecified year, Cologne gifted Pinnosa's relics to the cloister.¹³¹ It has been suggested that the translation occurred around 947 under the direction of the new abbess, Hathwig (947-966);¹³² the cloister church had burnt down in 946, thus necessitating the need for new relics. The abbey's imperial status and particularly strong ties with the Ottonian dynasty would have certainly warranted prestigious relics such as those of Pinnosa,¹³³ yet relocating this primary relic outside Cologne equally justified the creation of a new, and moreover, local cult figurehead.

Essen lies approximately 65 kilometres north of Cologne, and in the tenth century it fell within Cologne's ecclesiastic territory, albeit at the periphery. Despite Cologne's geographic significance within the narrative, the loss of Pinnosa's body threatened to weaken the primacy of the city. Its promotion of Ursula to cult leader can therefore be explained as the city's attempt to maintain custodianship of the cult, and to situate the relics at the core of their narrative. It is thus also plausible that *Passio I*, the cult's first codified *vita*, emerged during this period of the cult's weakness. A chronicle that reiterated Cologne's centrality within the cult would have undoubtedly strengthened the local spiritual community and ensured that the city remained the cult's epicentre.

Before this period, the name Ursula bore no association to the Holy Virgins; it has been suggested that her designation as cult leader was inspired by the tenthcentury discovery of a fifth/sixth-century inscription that identified an Ursula as an

¹³⁰ For the first to associate the role of relics in the change of leadership from Pinossa to Ursula, see: Tervarent, *La légende*, 15–16. Discussion of relics in this account is also found in: Montgomery, *St. Ursula*, 13–14.

¹³¹ Translation of relics found in Düsseldorf Landesbibliothek (MSS D1, D2, and D4), as noted in Levison, "Ursula-Legende," 83.

¹³² Ibid., 83–84.

¹³³ On the imperial status of the Essen abbey, see further: Hoefener, "Liturgical Offices," 78. This abbey has the earliest-known liturgical manuscript with an office for the Holy Virgins.

"innocent virgin" (*innocis virgo*) (Fig. 1.8), albeit eight years old.¹³⁴ Interestingly, Pinnosa was not erased from the newly-composed legend; instead she maintained a role: as Ursula's 'right-hand consultant'. In this regard, the cult acknowledged Pinnosa while introducing Ursula as the new devotional figurehead.

Abbess Hathwig is also believed to be the patron of Pinnosa's vita, completed in 970 (following her death on 18 July 966).¹³⁵ The dedication page from this nowlost codex survives through a late seventeenth-century sketch (Fig. 1.9). In the centre, Mary is seated on a bench-throne within a mandorla, holding a cross-staff and flanked by two staff-bearing angels. Below are three female figures: Hathwig to the right, Pinnosa kneeling in the centre offering a book, likely her vita, to the Virgin, and to the left a female saint standing on a hill looking towards the Virgin. In this image, Pinnosa's centrality demonstrates that she held a prominent sacred status in Essen following her translation. Pinnosa's vita was composed at about the same time as *Passio I*, with Levison convincingly arguing that *Passio I* was composed precisely in 970.¹³⁶ If both texts were coeval, it is likely that they were created in direct response to one another. Perhaps the religious community in Essen intended to maintain Pinnosa's prestige within the cult, but were perceived to be elevating her beyond that of Cologne's virgins; in which case Passio I, which celebrates Ursula, can be considered a textual response. Although the texts are contemporary creations, the nuns in Cologne had – according to Herric – been in possession of Ursula's story for forty years, which thus predated, and so undermined, Essen's acquisition.

Levison has suggested another possible connection between the two sites: the phrase "radiant leader of the white-clad assembly" (*candida lacteoli coetus antistes*), which was inscribed on Hathwig's grave-marker, was also used to describe

¹³⁴ Levison, "Ursula-Legende," 36–37; Winfried Schmitz, "Die Spätantiken und Frühmittelalterlichen Grabinschriften in Köln (4.-7. Jahrhundert n. Chr.)," *Kölner Jahrbuch* 28 (1995): 711.

¹³⁵ For earlier studies, see Klaus Gereon Beuckers' *Die Ezzonen und ihre Stiftungen: eine Untersuchung zur Stiftungstätigkeit im 11. Jahrhundert* (Münster: LIT Verlag, 1993), 107.

¹³⁶ Levison linked Archbishop Gero's dedication of the new church in Gerresheim in 970 with the composition date of *Passio I* (it was from this town/possibly convent that the nuns were taken and relocated in Cologne in 922 with the primary responsibility to guard the Holy Virgins' relics); see: "Ursula-Legende," 60.

Ursula in chapter 8 of *Passio I.*¹³⁷ It has been documented that a copy of the epigraph was preserved in a manuscript in St Bertin, Herric's monastery.¹³⁸ The exact replication of this unique phrase has led Levison to speculate that Herric was closely involved with and connected to the ecclesiastic communities of Essen and Cologne, making him well-informed regarding the composition of both Pinnosa and Ursula's *vitae*.¹³⁹

Despite Ursula's promotion to group leader and Cologne's reassertion of its central role in the Holy Virgins' narrative, Pinnosa continued to flourish as a celebrated patron under Theophanu, the Ottonian abbess of the cloisters in Essen and Gerresheim (1039-58). She commissioned a silver shrine for the saint (now missing),¹⁴⁰ and a sumptuously gilded gospel-book cover (Fig. 1.10) that features a scheme similar to that on the cover of Hathwig's *vita*, although here, Pinnosa is depicted to the far left and the abbess kneels to offer the book to the enthroned Virgin; like the figure of St Walburga on the right, Pinnosa leans towards the Virgin, her arms outstretched.¹⁴¹ The female saints are identified through inscriptions running along the edges of the trapezoidal area. The fact that these works were commissioned in quick succession following the translation of Pinnosa's relics demonstrates the involvement of the Essen community in her cult, established through associations with the Holy Virgins in Cologne.

1.3.b.ii Passio I: Contents and Composition

Passio I consists of eighteen chapters that focus on Ursula's background, her leadership role within the cult, as well as the details of the group's pilgrimage and

¹³⁷ The transcription of the gravestone is found, ibid., 80–81; on 87 Levison draws comparisons with *Passio I*.

¹³⁸ Ibid., 88–89.

¹³⁹ Ibid., 78–87. Levison's discussion also incorporates connections with Cologne's archbishop, Bruno (953-965).

¹⁴⁰ Beuckers, *Ezzonen*, 113; Daniela Kaufmann confirmed the shrine's missing status and that it has not been traceable since the seventeenth century. The shrine was documented in the *Liber Ordinarius* of Essen (*c*. 1390) and a treasury record (1502) mentions a "capsa altaris s. Crucis" known to have housed Pinnosa's remains; pers. comm. email, 15 November 2017.

¹⁴¹ Walburga was an eighth-century saint, also from England, where she spent 26 years in a nunnery. She journeyed to Germany with her missionary family and transcribed her brother's vita, documenting her trip to the Holy Land. David Farmer, "Walburga," in *Oxford Dictionary of Saints* (Oxford: University Press, 1997).

their martyrdom. It articulates and clarifies the narrative details that were circulating (orally and textually) at the time, making them key to the cult's story from this point forward. Considering the Passio's importance, it is worth outlining its contents briefly: it opens with a description of Ursula as a devout virgin who had pledged her life to Christ, but whose beauty is noticed by a powerful pagan king who sought to arrange a marriage between her and his son. Aware that refusing the offer would result in bloodshed, Ursula agreed on the condition of a three-year marriage deferral, during which time she urged her fiancé to convert to Christianity and was granted leave to make a pilgrimage to Rome. To accompany her, she summoned eleven leaders, each of whom would command one ship carrying 1,000 women, thus generating the sum of the canonical headcount of 11,000 virgins. These women carried out nautical exercises and, as the wedding drew nearer, God delivered winds that propelled them to Tiel, in today's Netherlands. After a day and night in this harbour town, the women purchased provisions and began their pilgrimage to Rome.¹⁴² They stopped in Cologne, where Ursula had a visionary encounter with an angel who revealed the group's fate: they would reach Rome and during their return journey, would meet their deaths in Cologne. The promise of an eternal union with Christ was cause for much celebration, and the women proceeded south along the Rhine to Basel where they docked and continued to Rome on foot. Following the prescribed activities of pilgrims in Rome, they visited the graves of the apostles and saints throughout the city. Returning along the same route the women found Cologne under attack by the Huns, and as prophesized, were slaughtered. Unaware of their martyrdom, Ursula wandered from her ship onto the land where her beauty caught the attention of the barbarian leader. When she denied his advances, she was fatally shot by an arrow. The army then prepared to plunder the ships but saw eleven legions miraculously armed by the Virgins they had just slain. They fled and

¹⁴² Levison, "Ursula-Legende," 76. Tiel, in the modern day Netherlands, was a royal residence before 900 and marked an important trading centre that surpassed Cologne before Cologne rose to economic power in the twelfth century. It is situated at the mouth of the Amsterdam/Rhine connection. Levison points out that this detail would have situated the narrative in a familiar, and thus believable, area.

the citizens of Cologne were saved from further attack. The townspeople then collected and buried the Virgins' corpses.¹⁴³

While the *Sermo in Natali* had documented that the Virgins were martyred sometime during the persecutions ordered by the Roman Emperors Diocletian (*r*. 284-305) and Maximian (*r*. 285-305), *Passio I* presented a notable change of identity in Cologne's invading army: Romans became Huns. This likely reflects contemporary cultural associations with the Huns: the Benedictine nuns of Gerresheim were relocated in Cologne due to the threat of the Magyars, often linked with Hungarians, and thus associated (inaccurately) with the Huns. Although this 'historic' attack is not documented, passing blame to the Huns indicated that the newly resident nuns and Holy Virgins shared persecutors.¹⁴⁴

The chronicle concludes with the account of a visionary encounter between a nun, Helmdrude, and one of the Holy Virgins, Cordula, who confessed to the nun to having avoided the group martyrdom by hiding aboard ship overnight;¹⁴⁵ recovering her courage she voluntarily faced martyrdom the following morning, and was rewarded with the crown of martyrdom, joining her virgin companions in heaven. Cordula explained that her death was independent from the mass martyrdom, and as such, she requested a separate celebration to honour her martyrdom on 22 October, the day following the Holy Virgins' feast day. Helmdrude was a tenth-century visionary nun from the Neuenheerse Convent in Heerse, Saxony, who died before *Passio I* was composed,¹⁴⁶ yet many nuns who personally knew Helmdrude were alive for consultation in the mid-tenth century, which would have further authenticated this visionary account.

The text of *Passio I* was completed in the "dark style" (*dunklen Stils*), a notably challenging literary style by which the composition presented a puzzling, entangled word order introducing complicated parenthetical insertions and

¹⁴³ The involvement of the citizens with the martyrs' bodies will be further discussed below, see section 1.4.

¹⁴⁴ Montgomery, *St. Ursula*, 48–49.

¹⁴⁵ Levison notes there is a contrast in styles between the Passion and the final section of Helmdrude's vision, while arguing that both texts were completed by the same author. "Ursula-Legende," 61. See further, section 1.3.c.

¹⁴⁶ Her death is documented in a martyrologium composed between 1341-1383. Ibid., 62; for a transcription, see: Jul. Evelt, "Necrologium Herisiense," *Zeitschrift für vaterländische Geschichte und Altertumskunde*, 2, 36 (1878): 35–36.

dependent clauses.¹⁴⁷ This created a rhythmic pattern within sentences as well as within parts of sentences demonstrating a sophisticated example of contemporary Ottonian literature produced in the Rhineland. In his analysis, Levison noted that the text demonstrates literary similarities with works by earlier authors, including Virgil, Horace, Ovid, Martianus Capella, Prudentius, and Boethius. These particular textual references and the compositional complexity, indicative of Ottonian patronage,¹⁴⁸ highlight the *Passio* author's learning and familiarity with late antique Latin sources. The style also likely implies that the text was intended for an elite and educated readership. As stated in its preface, the *Passio* was dedicated to the archbishop, but created at the request of the nuns at the Holy Virgins' convent; they were the keepers of the Virgins' story but required the assistance of Herric, an educated scribe, to formulate it as a Latin *vita*.

In contrast to the *Sermo in Natali*, which lacked detailed elements, Herric's *Passio* thus presents a descriptive, well-articulated hagiographic account complete with specifics that filled the lacunae exposed by the sermon: names, locations, character descriptions, and reasoned justifications. *Fuit tempore* built upon the *Sermo's* foundations to effectively create the core of the Holy Virgins' narrative, announcing Ursula as the group's leader, and introducing Cordula through Helmdrude's vision. In this way, it served as the primary source of the martyrs' second Passio, *Regnante Domino*.

1.3.c Refining Matters: Passio II

Like Herric's *Passio*, this *vita* is known by its opening words, "*Regnante Domino*"; it is widely agreed that it was created shortly before 1100, with Levison arguing that it might have been composed in the late tenth century.¹⁴⁹ This account, a revision of *Fuit tempore*, was notably more popular and it exists in over one hundred medieval

¹⁴⁷ Levison, "Ursula-Legende," 76–78.

¹⁴⁸ Sheingorn and Thiébaux, Saint Ursula, 8.

¹⁴⁹ Levison, 'Ursula-Legende', 97–99. Here, he speculated *Passio I*'s creation date to range between the late tenth century and the late twelfth century. He also argues that Sigebert of Gembloux's discussion of Ursula and the Holy Virgins in his *Chronicon sive Chronographia* (c. 1105) inspired the composition of *Passio II*. Considering this he concludes a certain amount of time needed to pass for the contents of the passion to infiltrate Sigebert's circle.

manuscripts,¹⁵⁰ of which thirty date to the twelfth century, demonstrating its rapid circulation following its composition. The *Passio* was certainly popular within the Rhineland, but it also reached a geographically wider readership, including (modern-day) Central and Southern Germany, and extending westwards into the Netherlands, Belgium, France, and Britain, and eastwards to Italy, Poland, and Czechoslovakia.¹⁵¹

Regnante Domino reiterated the core narrative elements of the first *Passio*, including the number of 11,000 virgins who originated in Britain, Ursula as the designated leader, and the whole group martyred by the Huns in Cologne. Divided into twenty-two chapters, it is structurally modelled on *Fuit tempore*; the narrative unfolds within paralleling chapters until chapter sixteen, which was expanded and divided into two sections. Here, the aftermath of the martyrdom is developed to expand on their defeat of the invading Huns in such a way as to portray a closer, more embedded identification of the Holy Virgins as patrons of Cologne.

Although both *passiones* share key narrative elements and structural layouts, they differ greatly in their prose style. While *Fuit tempore* was composed in highly complex prose, the difficulty of which likely limited its readership, *Regnante Domino* is written in a simplified style with an expanded storyline and more descriptive detail.¹⁵² Elements such as the womens' elite status and the act of pilgrimage were elaborated upon, probably reflecting the increase in noblewomen undertaking

- 2) 10 *Regnante Domino* accounts either before or directly following Elisabeth of Schönau's *Liber Revelationum* (1 also included the *Sermo in Natali*).
- 3) 4 Regnante Domino accounts together with the nova edition Passionis
- 4) 3 *Regnante Domino* accounts together with the Revelations of 1183 (*Bibliotheca Hagiographica Latina Antiquae et Mediae Aetatis*, Nr. 8433) (1 of
- these MS also included Elisabeth's *Revlationum*).

¹⁵¹ Sheingorn and Thiébaux, *Saint Ursula*, 9.

¹⁵⁰ For a list of these manuscripts, see: ibid., 91–96. These range in date from the eleventh/twelfth to the fifteenth centuries. Levison noted that the medieval accounts greatly outnumbered the printed copies of the *Passio*, which total only four and first appear in the fifteenth century. According to his records, inclusion of *Passio II* can be organized in the following categories:

^{1) 69} *Regnante Domino* accounts standing alone (one manuscript contained two copies of *Passio II*].

^{5) 11} accounts of shortened versions of *Regnante Domino* (3 with copies of *Sermo*).

¹⁵² For a comparative analysis between the prose of *Passio I* and *Passio II*, see: Levison, "Ursula-Legende," 98–100.

pilgrimages during the tenth century.¹⁵³ The expanded nature of this text and its wide geographic distribution suggest that, collectively, these compositional and thematic changes underpinned its success.

1.4 Unifying Cult and Location: Ground, City, Citizens

When considering the wide circulation of these textual sources, it is important to investigate the relationship between the Holy Virgins and the *civitate Colonia*; as will be argued here, this was a deeply entwined bond that took shape and was strengthened over several centuries. Investigating this key aspect of the cult sheds light on the recurrent themes of locality, people, 'history', and the materiality of martyrdom that collectively anchor the narrative in Cologne. From the ninth century (following the Clematius Inscription), textual references linked the female martyrs to the city;¹⁵⁴ the association was further solidified through the wide circulation of the *vitae* and the onset of relic translations in the eleventh and twelfth centuries. In the *passiones* Cologne was predestined to be the site of the Virgins' death; during Ursula's first stay in the city, she was visited by an angel who prophesised:

you shall return again to this place [Cologne] in peace with the whole number of your companions. Here, I say to you, eternal rest has been predestined for you by God forever and ever. Here you will sleep in peace.¹⁵⁵

This emphatically identifies Cologne as the location for the Virgins' 'historic' martyrdom, burial, and eternal resting place, the fulfilment of which could further legitimize the city's role within the Virgins' narrative.

This association was a source of pride in medieval Cologne, as declared in the *Sermo's* opening passage:

¹⁵³ Sheingorn and Thiébaux, *Saint Ursula*, 9.

¹⁵⁴ Hoefener notes that Cologne appeared most frequently in text produced outside of the local region, "Liturgical Offices," 70–71.

¹⁵⁵ "integro comitum tuarum numero iterum huc reverteris in pace. Hic ergo vobis a deo requies in saeculum saeculi praedestinata est; hic in pace pausabitis". Klinkenberg, "Kölner Märterinnen, 1892," 158; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 25.

On this day we should both treasure and revere the armies of the Holy Virgins of Cologne. We say Cologne, for it is more appropriate to identify them with the city where they were born to life everlasting than with the place where they were born to confront mortality.¹⁵⁶

Here, the union of city and 'resident' martyrs is underscored; the city's deep and dynamic relationship with the Virgins is delineated, and through their martyrdom and subsequent protection of the city these women of foreign origins gained sacred citizenship in Cologne:

By rising up against the cruelty of the Roman officers, they saluted this land of Colonia Agrippina. They were not merely like guests who are passing through. Here they were crowned with the victory of martyrdom, they honoured Cologne as their own, and here they remain through the outpouring of their own sainted blood. And they have brought to us, by means of their precious bodies, such great protection that many thousands are able to beg worthily as suppliants for the mercy of relief from our Redeemer.¹⁵⁷

The author underscores the primacy of Cologne (*Agrippinae Coloniae*) as the site of the Virgins' death and their first miraculous intervention. More specifically, the land/ground (*terram*) of Cologne is invoked, situating the 'historic' account geographically and physically within the local landscape, here/in this place (*hic*), reiterated twice. The martyred women defend the city and later bestow their protection upon the inhabitants. These are elective acts carried out by the Virgins,

¹⁵⁶ "Sanctarum Coloniensium virginum agmina – inde eas enim rectius cognominamus, ubi vitae instantis quam ubi mortis futurae diem habuere natalitium – nobis hodie sunt non minus admiranda quam veneranda". Klinkenberg, "Kölner Märterinnen, 1890," 118; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 45.
¹⁵⁷ "quod occurrente lictorum immanitate hanc Agrippinae Coloniae terram non ut hospitam solum modo praetereundo salutaverunt, sed hic martyrii victoria coronatae eam ut propriam effusione sancti sui sanguinis manendo decoraverunt nobisque in pretiosis suis corporibus tantum contulerunt patrocinii, quantum tot milia digne supplicantibus possunt impetrare remedii aupd misericordiam nostri redemptoris". Klinkenberg, "Kölner Märterinnen, 1890," 124; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 54.

and so underscore Cologne's worthiness. The city can also be seen as gaining agency within the story; it is no passive narrative backdrop, but rather an active participant in a reciprocal relationship with its sacred 'residents'.

In addition to highlighting the city, the *Sermo*, with its reiteration of *hic*, likely referenced the specific site (or intended location) of the sermon: the Church of the Holy Virgins. As first stated in the Clematius Inscription, the church is "the site where the holy virgins shed their blood" (ubi sanctae virgins ... sanguinem suum *fuderunt*),¹⁵⁸ which happened to be situated on land belonging to Clematius ["his land" (loco suo)]. Situating the church on the site of the martyrdom demarcated the place as sacred and created a powerful connection between devotees and the past event. The veneration of sacred sites was a tradition that began in Jerusalem in the fourth century and quickly followed in Rome.¹⁵⁹ The belief that such sites embodied an enduring sanctity that often intensified over time can also be traced back to earlier beliefs.¹⁶⁰ In Cologne, the site of the Virgins' church was holy because of its association with the 'historic' event together with the sacred remains of the mass martyrdom. A similar occurrence can be observed at the Church of St Gereon, less than a kilometre from the site of the Virgins' martyrdom, and was erected above the reputed site where the Theban Legion – an army of 300 men – was slain.¹⁶¹ Together with the Church of St Severin, which was not linked with a martyrdom, per se, but was built over expansive Roman burial grounds (Fig. 5), the city offered topographical parallels to Christian sites in Rome.¹⁶² While each site retained their sanctified agency, the entire city of Cologne emerged as sacred and thus appealed to pilgrims far and wide.¹⁶³

¹⁵⁹ R.A. Markus, "How on Earth Could a Place Become Holy? Origins of the Christian Idea of Holy Places," *Journal of Early Christinan Studies* 2 (1994): 257–71.
 ¹⁶⁰ For a detailed discussion of the relationship between sacred bodies and their graves in early Christian traditions, see: Peter Brown, *The Cult of Saints. Its Rise and*

Function in Latin Christianity (Chicago: University of Chicago, 1981), 1–22. ¹⁶¹ Hugo Borger, *Die Abbilder des Himmels in Köln: Kölner Kirchenbauten als Quelle zur Siedlungsgeschichte des Mittelalters*, vol. 1 (Cologne: Köln Greven, 1979), 123–41, 229–34.

¹⁵⁸ See fn. 78 for complete inscription; trans.: author.

¹⁶² Ibid., 1:89–94.

¹⁶³ See Peter W.L. Walker, *Holy City, Holy Places?: Christian Attitudes to Jerusalem and the Holy Land in the Fourth Century*, Oxford Early Christian Studies (Oxford: Clarendon, 1990), 325–30.

Although the importance of the 'historic' martyrdoms is notable at both the Holy Virgins' and St Gereon's churches, additional sanctity was gained from the physical remains of the deaths: sacred blood and bodies. The presence of the Virgins' blood was highlighted by both the Clematius Inscription and the *Sermo*; both accounts underscore the abundance of blood, while the *Sermo* supplies a visceral description of the "outpouring of their sacred blood" (*effusione sancti sui sanguinis*), which would have saturated the ground and thus amplified the site's sacred value.

Together with the Virgins' blood, the site was most famously associated with another treasure of martyrdom: the many dismembered bodies. The Clematius Inscription, which warned against mixing 'foreign' bones with those of the Virgins, also identified the presence of the martyrs' bodies at the site, and further legitimized the translation of their sacred remains into the church. As promoted here and by the vitae, this was the only site believed to contain the bodies of the Holy Virgins situated in graves and sarcophagi – until the twelfth century (Fig. 1.11).¹⁶⁴ The evidence for medieval and early modern archaeological excavations beneath the church suggests a continued yearning to discover more corporal relics.¹⁶⁵ After multiple bodies were unearthed nearby at the *ager Ursulanus* in the twelfth century, the relics assumed a more visible presence within the church.¹⁶⁶ Their omnipotent visibility certainly would have evoked the memory of the Virgins' martyrdom at this site as well as their triumph over death and their intercessory powers. The relics additionally supplied the city with immense pride; Passio II explains how, "just as may be seen there today, the most holy relics of the martyrs rested in peace to the eternal glory of Cologne."¹⁶⁷ Here, the Virgins' sanctity, embodied by their relics, extends beyond the site of their martyrdom to honour the entire city and its residents.

¹⁶⁴ Levison, "Ursula-Legende," 107–8.

¹⁶⁵ Borger, *Abbilder des Himmels*, 1:227. For an account of medieval and modern archaeological excavations, see: Nürnberger, "Die Ausgrabungen," 10–18; Schmitz, "Grabinschriften in Köln," 706–7; Joseph Kremer, "Studien zum frühen Christentum in Niedergermanien", 294.

¹⁶⁶ See below, pp. 135-142.

¹⁶⁷ "brevique tempore, sicut hodie illic est cernere, sanctissimae virginum reliquiae ad aeternam Coloniensium gloriam pausaverunt in pace". Klinkenberg, "Kölner Märterinnen, 1892," 161; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 31.

The relationship between Cologne's citizens and the sacred relics is a noteworthy element of the Virgins' narrative, and in fact, in the aftermath of the mass martyrdom Cologne's residents emerged as central figures within the hagiographic narrative; as captured in *Passio II* the townspeople played an important role as guardians of the relics, since they

found unburied corpses of the virgins on the bare ground ... [and] some gathered up the scattered and lacerated limbs of the martyrs, some covered them with clothing, some dug the earth, others placed bodies in sarcophagi.¹⁶⁸

These accounts affirm and promote the presence of the Virgins' relics, but they also reveal the residents as the first cult devotees and relic handlers. In addition to collecting, cleaning, and burying the sacred bodies, the citizens

spared neither private nor public expense. They busied themselves, each one, undertaking the task not only with the duty of humanity, but with the zeal of the most humble veneration.¹⁶⁹

Here, the people unified and attended to the maimed bodies, honoured the women with burials appropriate to their sacred status, and simultaneously ensured the city's future as a relic capital. The *Sermo* additionally credits the residents with preserving the Virgins' narrative through oral tradition and their "tenacious memory" (*tenaci memoria*).¹⁷⁰ Together, the textual sources cast the citizens of Cologne as integral to the cult's survival, historical devotion, and its future reputation. The Holy Virgins' church is a site marked through its association with

¹⁶⁸ "quaram nuda forsitan corpora tantum potuissent … pro se quisque satagentes alii dilaniata disiectaque martyrum membra congerunt, alii vestibus cooperiunt, alii terram effodiunt, alii sarcophagis imponunt". Klinkenberg, "Kölner Märterinnen, 1892," 160, 161; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 30, 31.

¹⁶⁹ "quasi deum in humanis corporibus venerantes non privatis, non publicis sumptibus pepercerunt, dum non modo humanitatis officio, verum humillimae venerationis studio". Klinkenberg, "Kölner Märterinnen, 1892," 160–61; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 31.

¹⁷⁰ Klinkenberg, "Kölner Märterinnen, 1890," 120.

generations of communal devotion and with the physical remnants of the 'historical'.

Cologne was, therefore, staged as the site of this epic martyrdom; the numerous textual accounts reiterate the city's purposeful and divinely sanctioned role within the narrative. It becomes clear that the saints and their eternal resting site share a reciprocal and multifaceted union. As discussed above, this bond was textually reiterated throughout the cult's hagiographic accounts; the divine custodianship becomes more fully manifest when the Virgins' remains are abundandly displayed throughout the city's religious institutions.¹⁷¹

1.5 Cemented in Stone: Establishing and Promoting the Tituli

Although the group had long been established as totalling 11,000, the cult lacked sufficient corporal relics to support this number. The remains recovered from the *ager Ursulanus* beginning in 1106 presented an ideal opportunity to fill this void. During the excavations subsequently carried out between 1155-1164, which were overseen by the Benedictine monastery of Deutz, tituli – stone inscriptions marking the graves of the deceased – were also uncovered.¹⁷² This exciting evidence, however, backfired when *tituli* inscribed with male names were found among the remains. From the cult's earliest origins the Virgins had been deemed a female-only cohort; the discovery of male names thus sparked scepticism that gravely threatened the cult's legitimacy. By the time the grave-markers were discovered, the corporeal relics had already been widely distributed across Europe – primarily through Benedictine networks.¹⁷³ Much, therefore, was at stake when the cult's legitimacy came under scrutiny. Although the *tituli* threw the entire question of the sanctity of the relics into question, they themselves were transformed from archaeological objects to sacred remains, largely at the hands of two key figures: the visionary nun Elisabeth of Schönau and the excavation supervisor, Thiodericus.

¹⁷¹ See further, section 2.3.

¹⁷² Winfried Schmitz and Erkhard Wirbelauer, "Auf antiken Spuren? Theoderich, das Benediktinerkloster in Köln-Deutz und die Legende der heiligen Ursula," *Colonia Romanica - St Andreas und St Cäcilien*, vol. XIV (1999): 67–76; the involvement of Deutz in the relic excavations and *tituli* discoveries is briefly mentioned by Montgomery in *St. Ursula*, 19–21.

¹⁷³ Zehnder, *Sankt Ursula*, 93.

Their respective characters and individual methods of authentication are, therefore, of primary consideration to this discussion.

Before investigating them, however, it is necessary to consider further how the power and the dangers presented by the *tituli* compelled Elisabeth and Thiodericus to establish and defend their sanctity. Like authenticae - labels or documents enclosed within a saint's tomb or reliquary that authenticate the contents - tituli identify the body with which they were buried. In this case, however, they did more than simply identify; to use Julia Smith's terminology, they provided the "detail and verisimilitude" that transformed the Virgins into historic figures.¹⁷⁴ They also functioned as *brandia*, or secondary relics, which would have been seen as having amassed sacred power because of their prolonged proximity to, and contact with, the holy bodies. Like corporal relics, the stone *tituli* presented the cult with potentially significant physical 'evidence' that both strengthened and endorsed the martyred women. Yet the 'authority' ascribed to the tituli differed from that of the relics in that they labelled the bones, and so supplied textual 'evidence' of the identity of the relics. They revealed the names of the martyrs who had remained unknown for centuries. By offering an "essential link between saint and substance",¹⁷⁵ the *tituli* presented a new form of sacred material, an unbroken chain that joined twelfth-century Cologne with its 'ancient' sacred past.¹⁷⁶ Considering the vast number of anonymous female martyrs whose bodies remained unaccounted for, the cult promoters needed these *tituli* to be recognised as sacred in order to match the group's large headcount. Given that the Holy Virgins had long been established as a female group, however, the possibility of male members threatened to contradict the cult's hagiographic texts. Evidence of this nature had

¹⁷⁴ Julia M. H. Smith's investigation of early medieval *authenticae* illuminates the cultural practices of relic labeling and relic-making; similar practices persisted in the high middle ages, so supplying helpful comparanda to the Holy Virgins' relics and their *tituli*; see: "The Remains of the Saints: The Evidence of Early Medieval Relic Collections," *Early Medieval Europe* 28, no. 3 (2020): 388–424, here, 424. ¹⁷⁵ Ibid., 391.

¹⁷⁶ Christopher Wood investigated the complexity of cultural constructions that aimed to link past and present, of which labelling, re-labelling, and mis-labelling played a significant role. Although he focuses primarily on the German Renaissance, he sheds light on established traditions that appear during the periods under consideration here. See: *Forgery, Replica, Fiction: Temporalities of German Renaissance Art* (Chicago: University of Chicago Press, 2008).

the potential to destroy the cult's credibility and, by extension, reflect negatively on Cologne's sacred reputation.

Despite the 'recovery' of the *tituli* and the proximity of the cemetery to the church, the presence of the bones unearthed in the *ager Ursulanus* were insufficient in themselves to be identified as the remains of the Holy Virgins; additional verification was required. It was Elisabeth of Schönau who resolved this issue, setting out the sensitive nature of the issue with complete transparency, noting that even the Abbot Gerlach of Deutz "was very suspicious that the discoverers of the holy bodies might have craftily had those titles inscribed for profit."¹⁷⁷

Authenticating relics in the medieval period was a common process; indeed, it was recorded that newly acquired relics of the Holy Virgins were subject to trial by cold water.¹⁷⁸ Although methods of authentication varied, all successful certifications required proof: intrinsic and/or extrinsic.¹⁷⁹ Intrinsic, the superior of the two, was considered to involve saintly intervention – typically a miracle or visionary encounter. Here, the degree of success hinged on the reputation of the figure's experience and report of the incident, and, perhaps most importantly, required public acceptance. Extrinsic evidence, on the other hand, constituted external material – *authenticae*, or in this case *tituli* – that identified the saints.¹⁸⁰ In order for the *tituli* to serve as external evidence, they themselves required credible authentication.

1.5.a Divine Endorsement: Elisabeth of Schönau

It was to Elisabeth of Schönau that the challenging task of situating the gravemarkers and their male proponents within the cult fell. When sent to her the relics

¹⁷⁷ "Habebat quippe suspicionem de inventoribus sanctorum corporum, ne forte lucrandi causa titulos illos dolose conscribi fecissent". F.W.E Roth, *Die Visionen der hl. Elisabeth und die Schriften der Aebte Ekbert und Emecho von Schönau, Nach den Originalen Handschriften herausgegeben* (Brünn: Studien aus dem Benedicktiner und Cistercienser-Orden, 1884), 124–25; trans.: Anne L. Clark, *Elisabeth of Schönau: The Complete Works*, The Classics of Western Spirituality (New York: Paulist Press, 2000), 215 [hereafter: Clark, *Complete Works*].

¹⁷⁸ For translation and authentication of the Holy Virgins' relics, and additional sources, see: Legner, *Kölner Heilige*, 316–18.

¹⁷⁹ Patrick J. Geary, *Living with the Dead in the Middle Ages* (Ithaca, NY: Cornell University Press, 1994), 204–7.

¹⁸⁰ Ibid., 203–4.

and *tituli* from the *ager Ursulanus* miraculously prompted visionary encounters between Elisabeth and several members of the Holy Virgins' group. These meetings, which ultimately explained the presence of men among the womens' remains and established the origins and authenticity of the inscriptions, were documented, with the help of her brother Ekbert, in the *Liber Revelationum Elisabeth de Sarco Exercitu Virginum Coloniensium* (1156).¹⁸¹ Preserved in over seventy manuscripts, this text is the most circulated account of Elisabeth's visions and testifies to the wide-ranging impact of her encounters.¹⁸²

It records how Elisabeth's encounters with the Holy Virgins began when she received several *tituli* and two skeletons of the female martyrs from Abbot Gerlach of Deutz. Over the course of a year Elisabeth experienced a succession of visions involving her trusted angelic guide and numerous sacred figures associated with the Holy Virgins' group, including Verena, Caesarius, and eventually Ursula – as well as others unrelated to the cult: Andrew and Nicholas, for example, who appeared on their feast days. Together these meetings not only provided lengthy and detailed justifications for the presence of the male bones and associated *tituli*, but Elisabeth also added considerable narrative details to those already established by the *vitae*, and in so doing generated new hagiographic material.

Much of what is 'known' about the inscriptions derives from Elisabeth's visionary accounts since none of the excavated *tituli* have survived.¹⁸³ During an early encounter with Verena, one of the martyred virgins whose remains had been sent from Deutz for verification, Elisabeth enquired about an engraving revealing

¹⁸² For a list of Elisabeth's manuscripts, see: Kurt Köster, "Elisabeth von Schönau: Werk und Wirkung im Spiegel der mittelalterlichen handschriftlichen Überlieferung," Archiv für Mittelrheinische Kirchengeschichte 3 (1951): 243–315; Kurt Köster, "Das Visionäre Werk Elisabeths von Schönau," Archiv für Mittelrheinische Kirchengeschichte 4 (1952): 79–119; to Köster's list, Clark added five manuscripts and removed one. Anne L. Clark, "Elisabeth of Schönau," in Medieval Holy Women in the Christian Tradition c. 1100-c. 1500, ed. Alastair Minnis and Rosalynn Voaden (Turnhout: Brepols Publishers, 2010), 388; see also, Barbara Newman's preface in: Clark, *Complete Works*, xi.

¹⁸¹ Latin text: Roth, *Visionen*, 123–38; trans.: Clark, *Complete Works*, 213-233; for more on Ekbert's role within Elisabeth's visionary works, see: Anne L. Clark, *Elisabeth of Schönau: A Twelfth-Century Visionary* (Philadelphia: University of Pennsylvania Press, 1992), 50–67.

¹⁸³ Prof. Dr. Winfred Schmitz (University of Bonn) confirmed the absence of *tituli*, despite recent archaeological excavations carried out in Cologne-Deutz: pers. comm. email, 21 July 2017. See further below, section 1.5.b.

the name James that lacked additional explanatory text. Verena was able to inform Elisabeth that it belonged to Archbishop James of Antioch, friend of Pope Cyriacus and uncle of some of the Holy Virgins, and further identified him as the creator of the *tituli*. After being welcomed into Ursula's holy entourage in Rome, Verena explained how James:

diligently strove to learn the names of our sisters. When most of us had been killed, he inscribed the stones for our bodies. But before he was able to complete this, he was caught doing this by the impious ones and slain in our midst. This is why some of us are found with inscriptions, others without. In the hour of his passion, when he was yet to be given his deathblow, he made one request of his assailants, that his death could be delayed till he could inscribe his own name on a stone. This was granted to him.¹⁸⁴

According to this account the grave-markers were created at the moment of the Virgins' martyrdom. Employing the authority and memorializing power of stone inscriptions, James had endeavoured to record the names of his deceased companions, before he too was slain and accompanied them to heaven. On a symbolic level, he can be credited with the first act of veneration of the deceased Virgins, honouring them with funerary inscriptions, which centuries later, resurrected their individual identities. As an educated, devout, high-ranking ecclesiast with familial connections to the Holy Virgins, James was also established as an official group member who shared the martyrs' fate. He was thus a credible eyewitness, and his *tituli* could be considered relics on two accounts: commemorative documentation of the Virgins and *brandae* buried with the bodies for centuries.

¹⁸⁴ "magnam diligentiam adhibuerat, ut sciret nomina sororum nostrarum, atque ea ex magna parte cum interempte fuissemus, lapidibus inscripta corporibus nostris adhibuit. Sed antequam hoc perficere potuisset, deprehensus est ab impiis in hoc opere, et trucidatus est in medio nostri. Hinc est, quod quedam ex nostris titulate inveniunter, quedam autem non. In ipsa autem hora passionis sue, cum iam feriendus esset, hoc solum a percussoribus postulavit, ut tantum differretur passio eius, quousque sui ipsius nomen lapidi posset inscribere; et concessum est ei". Roth, *Visionen*, 127; trans.: Clark (2000), 218.

Given the problematic presence of *tituli* and men among the bones this issue was (unsurprisingly) the first to be confronted in Elisabeth's treatise. Following her initial encounter with Verena, however, Elisabeth also met the saint's cousin, Caesarius – the day after the relics arrived in Schönau. When she enquired about *his* position and martyrdom, he was able to tell her that:

I was a soldier in the world, the son of the maternal aunt of the sacred virgin to whom I am now joined (Verena). She was very beloved to me and therefore when she left the country, I accompanied her. She strengthened me to undergo martyrdom and I, seeing her steadfastness in agony, suffered together with her. Our bones were for a long time separated, and now the Lord has granted that they should be brought together.¹⁸⁵

This testimony fortuitously provided the personal account of a male member of the group, explaining his presence among the virgins. It was his love and family connection that inspired him to follow his cousin. Indeed, it was the excavations of their bones and their subsequent shipment to Schönau that had resulted in their long-awaited reunion. Elisabeth was quick to reflect that: "these words threw me into grave doubt. Indeed, like others who read the history of the British Virgins, I thought that the blessed society made their pilgrimage without the escort of men".¹⁸⁶ Here Elisabeth introduced the communal voice of doubt that weighed heavily on many, especially Abbot Gerlach.

Furthermore, she was also able to explain how some men were appointed to assist the women leaving Britan while others were able to join the group along the pilgrimage route – including the most impressive male member, the nineteenth

¹⁸⁵ "Miles fui in seculo, filius matertere huius sacre virginis, cui nunc adiunctus sum. Dilecta valde mihi erat, ideoque cum egrederetur de terra sua, comitatus sum eam. Ipsa vero ad martirium suscipiendum me confortavit, et ego videns constantiam eius in passione, simul cum ea passus sum. Fuerunt autem longo tempore ossa nostra ab invicem separata, et nunc impetravimus a domino, ut sic coniungerentur". Roth, *Visionen*, 124; trans.: Clark, *Complete Works*, 214-215.

¹⁸⁶ "Hoc igitur sermone in magnam dubitationem adducta sum. Existimabam enim, quemadmodum opinantur cuncti, qui legunt historiam Brittannicarum virginum, quod absque virorum comitatu peregrinata fuerit illa beata sodalitas". Roth, *Visionen*, 124; trans.: Clark, *Complete Works*, 215.

pontiff, Cyriacus, whose papacy lacked any record. Elisabeth's visions revealed that he welcomed the group to Rome, and then, so overcome by the Virgins' piety, abdicated his divinely appointed post to follow the women north. Bishop Maurisus, son of a count from England, and uncle of two of the virgins also joined the group in Rome; Pantalus, bishop of Basel, joined slightly earlier, whereas Bishop Foilanus of Lucca and Bishop Simplicius of Ravenna met them in Cologne on their return to the city. Others such as Bishop Marculus of Greece experienced visions of the Virgins and travelled great distances to join them, echoing Clematius' journey.

These prestigious men, having joined the group of their own volition, were able to share in their martyrdom. Their esteemed earthly titles – both religious and imperial – amplified the divine construct of the group. Verena explained that "all the bishops journeying with us had their lodgings separate from us but on Sundays they would come into our midst, strengthening us with the divine word and communion of the Lord's sacrament."¹⁸⁷ Bishop Maurisus baptised those members of the group still requiring the sacrament, both purifying individuals, and enhancing the group's sacredness. The men also demonstrated unwavering faith and a steadfast willingness in their decision to follow the Virgins, despite many being aware of their eventual fate. It was therefore explained to Elisabeth that their bodies, buried alongside the woman, were being exposed for the first time since their death. Their praiseworthy behaviour modelled an ideal piety for the twelfth-century community, especially for those harbouring scepticism about the cult's relics.

From a practical perspective, Elisabeth's visions presented solutions to the numerous issues of identification raised by the archaeological finds. Once revealed to Elisabeth, these men no longer threatened the validity of the female group; on the contrary they enhanced its prestige. Lacking verification of the 'facts', Elisabeth's visions not only explained the lacunae, but also provided new hagiographic material, which came to be incorporated into Jacobus Varagine's *Legenda aurea* (*c.* 1260); the

¹⁸⁷ "Cuncti episcopi, qui in itinere nobiscum fuerunt, segregatas a nobis mansiones habebant, sed in diebus dominicis in medium nostri venire solebant, confortantes nos divino sermone, et dominici sacramenti communione". Roth, *Visionen*, 128; trans.: Clark *Complete Works*, 219.

presence of men, and especially the elite ecclesiastics identified by Elisabeth, became integral to the textual accounts and visual representations of the Virgins.¹⁸⁸

1.5.b The Pragmatic Approach: Thiodericus of Deutz

The archaeological finds that Elisabeth was able to elucidate with such clarity had been discovered, categorized, and documented by Thiodericus. His account, the now-lost *Deutzer Codex* (c. 1164),¹⁸⁹ differs from Elisabeth's visionary encounters in that Thiodericus offered a first-hand description of the sacred material as it was being excavated, followed by a formal list of the *tituli*; the existence of this record might well suggest a continued need to verify the *ager Ursulanus* material in a way other than divine visions. The lack of *tituli*, together with the 'credibility' of visions as evidence, has led most scholars to consider the situation as a whole to be a carefully crafted scheme; Levison states that the history of Cologne's martyrs were

¹⁸⁸ For a thorough analysis of imagery associated with the Holy Virgins, see: Zehnder, *Sankt Ursula*.

¹⁸⁹ Thiodericus' account formed one of four parts in the codex, which comprised of a record of deaths from the Deutz Abbey, a fraternity list, a chronicle of the abbots, and an account and list of the *ager Ursulanus tituli*. For a complete transcription, see: Hermann Crombach, Vita et martyriums S. Ursulae et sociarum undecim millium virginum: Vindiciae Ursulanae (Cologne: Hermanni Mylii Birchmanni, 1647), 489-94. The codex was stored in Marienstatt Cloister during the Second World War; it disappeared in 1947 during its redistribution to the Rheinische Landesmuseum in Bonn. Mid-nineteenth photographs of the miniatures and dedication verses are held in the Rheinischen Bildarchiv (Platten-Nr. 13052-13056). For a concise history of this codex, see: Schmitz and Wirbelauer, "Auf antiken Spuren?," 72-74; for a more thorough account, see: Monica Sinderhauf, Die Abtei Deutz und ihre innere Erneuerung: Klostergeschichte im Spiegel des verschollenen Codex Thioderici, Veröffentlichungen des Kölnischen Geschichtsvereins e.V. 39 (Vierow bei Greifswald: SH-Verlag, 1996). This is particularly helpful for understanding the complexity of the manuscript's recent history and disappearance, pp. 262-276; Thiodericus' account is critically investigated by Levison, "Ursula-Legende," 110–15; for notes regarding this transcription, see: Franz Xaver Kraus, "Notizen aus und über den Codex Theodorici aus der Abtei Deutz," Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande 41 (1866): 43–49. Schmitz and Wirbelauter believe Crombach composed his list of names directly from Thioderichs' Codex. Schmitz located one of Crombach's papers embedded in fol. 50 of the codex. Successive renderings of this material can be found in Buck's Acta Santorum Octobris IX (Brussels, 1858), 86, 243-245. See also: Oswald Holder-Egger, "Theoderich von Deutz Catalogus pontificum Romanorum," in Monumenta Germaniae Historica Scriptores (MGH SS), XIV, 1883, 560–77.

fancifully created by these forged inscriptions.¹⁹⁰ This study, however, reframes this 'evidence' within the 'creative' development of the Virgins' cult by investigating Thiodericus' archaeological account and his position within the abbey together with a critical analysis of the existence, or possible re-creation, of the stone *tituli*.

Thiodericus' eyewitness account and transcriptions, *Revelationes titulorum vel nominum sanctorum martirum et sanctarum virginum*, was situated within the final of four sections of the Deutzer Codex. The report opens with a (retrospective) list of religious leaders up to 1155 when the excavations first began. These included: the Holy Roman Emperor, Frederick Barbarossa; Pope Adrian IV; Rainald von Dassel, Cologne's Archbishop and the Emperor's archchancellor; and concludes with Gerlach, the abbot of Deutz. This was a formulaic dating convention and enabled the introduction to read as an official chronicle.¹⁹¹ To educated readers accustomed to similar documents, it communicated established dates and places, and so legitimated the excavations and authenticated the finds.

After establishing this textual credibility, Thiodericus states that the *tituli* were excavated alongside the sacred bodies in the *ager Ursulanus*. He testifies that, together with others, "we saw the translation with our own eyes and from the mound we dug up the body and gravestone with our own hands".¹⁹² Emphasis is placed on Thiodericus' physical extraction of bodies and *tituli*; his confirmation relied on the senses: touch and sight. Like Elisabeth's personal encounters with the Virgins, he harnessed the authority of an eyewitness account, and here created a chain of evidence. Notably, he emphasized that his experience was shared, and although he does not identify the individuals, it is implied that a cross-examination would yield corroborating testimonies.

The credibility of a statement is directly related to that of its source. It is, therefore, relevant to consider the figure of Thiodericus and the way he is represented within the codex as a means of better understanding the weight of his words. Although some modern scholars have deemed Thiodericus a sacristan¹⁹³ he

¹⁹⁰ Levison, "Ursula-Legende," 114.

¹⁹¹ Schmitz and Wirbelauer, "Auf antiken Spuren?," 68.

¹⁹² "cunctorum viventium oculis nostri tranferri vidimus et quorum insuper corpora vel titulos et tumulis manibus nostris eruimus". Buck, "De S. Ursula," 242; trans.: author.

¹⁹³ Montgomery, *St. Ursula*, 20.

is, in fact, identified as a *custos* in the codex. While a sacristan was responsible for the sacristy and its contents, a *custos* served as the guardian of all the abbey's treasures: gems, jewellery, chalices, crosiers, and, most importantly for this study, relics and reliquaries.¹⁹⁴ Thiodericus was, therefore, a high-ranking figure familiar with the appearance and care of liturgical, sacred, and valuable material; it is highly likely that the testament from such a figure would have been considered credible.

When investigating the contents of the Deutzer Codex, the opening miniatures (Figs 1.12, 1.13) offer additional evidence to support the perception of Thiodericus and his possible involvement with the creation of the manuscript. The codex opens with two images: to the right, St Heribert, the abbey's patron sits enthroned, surrounded by six monks; opposite, Thiodericus kneels before the enthroned figures of Mary and the Christ Child. Closer analysis of this image suggests several visual constructs were employed to express Thiodericus' status. Not only is he singled out from the other monks, his is also identified by his own titulus, THIODERIC CVSTOS, which is incorporated into the architecture of the virgin's throne (Fig. 1.13b). The title is, furthermore, situated directly above Thiodericus, such that his tonsured head overlaps with the letters D and E of his name. He holds another *titulus* that addresses Mary, the queen of Heaven, and begs for her to remember him.¹⁹⁵ Like Heribert opposite, the Marian image employed a hierarchy of scale to differentiate between the heavenly and the earthly. Yet, within this Thiodericus is nevertheless visually accentuated. Typical of Hodegetria imagery, Mary is positioned, forward-facing, holding the child in her left hand. Here, however, instead of gesturing towards Christ with her right hand as is typical of this iconography, she apparently directs a gesture of blessing towards Thiodericus positioned beneath her hand. Additional iconographic 'oddities' and stylistic differences noted by Sinderhauf, led her to hypothesize that Thiodericus was closely involved with the production of this image, and might have even been the hand that executed it.196

An opening image of this nature often included the portrait of the author, but it could also function as the dedication page; in both cases it would likely be the

¹⁹⁴ Sinderhauf, *Die Abtei Deutz*, 45.

 ¹⁹⁵ "O regina poli queso memento mei". Ibid., 182; trans.: author.
 ¹⁹⁶ Ibid., 181–83.

abbot, not the *custos*, who was depicted before the virgin or patron saint. It could be argued that the ambiguity, which allows Theodoric to be both donor and author, is deliberate. The notable absence of an abbot on this page might indicate that Thiodericus served as the temporary regent in 1146, a period of unrest within the abbey when there was no appointed abbot: perhaps when the miniature was created.¹⁹⁷ By this time, Thiodericus had already achieved high status within the monastic community, a position he presumably maintained until his death in *c*. 1164 – the same year the codex was reviewed and completed. It is, therefore, plausible that Thiodericus was actively involved with the manuscript's final layout and binding – the folios of which appear to have been created over the course of at least two decades.¹⁹⁸

With this in mind, it is also highly likely that Thiodericus exerted some control over the way in which he was visually and textually represented within the codex. It is perhaps from this perspective that Thiodericus' testimony of the *ager Ursulanus* excavation is best considered. His elevated role within the abbey and particularly his privileged engagement with relics, identify him as a character of upstanding morals, unlikely to fabricate information relating to sacred remains.

Consideration of Thiodericus' testimony and character thus facilitates an alternate investigation of the *tituli* record and the 'credibility' of the two known fragments. In 'his' codex the inscriptions are divided into four categories: the male martyrs of the group found during Gerlach's abbacy (1146-55); the male martyrs that also included members of the Theban Legion, found during Hartbern's abbacy (1160-69); the Holy Virgins also uncovered during Gerlach's term; and those found under Hartbern.¹⁹⁹ Next to each name the status and type of the martyr was provided; a brief description of notable figures followed on subsequent pages.²⁰⁰ In all four sections the highest-ranking members appear first and are followed, in

¹⁹⁷ Ibid., 58.

¹⁹⁸ The lists are found on fols 50-53v; Sinderhauf outlines the entire manuscript contents on 33-38. Part of Sinderhauf's speculation exists because a retrospective work is based on the overall tone of the codex, which is celebratory rather than critical; see, 63-64. ¹⁹⁹ Ibid., 248.

²⁰⁰ Ibid.

hierarchically, rather than marking the chronological order in which they were excavated.

Such members, both male and female, certainly enhanced the group's collective prestige and, by extension, their sanctity; yet as a retrospective composition, it is worth considering the way in which the list notably deviates from the long-standing veneration of Cologne's *female* virgin martyrs to prioritize the new *male* members. Situating the men at the top of the list, at the very opening of Thiodericus' account, certainly confronts the conflict created by the presence of male bones; yet such ordering also reveals a gender bias. In effect the high-ranking men usurped the Holy Virgins who had, until this period, received the highest regard. Many of those identified held impressive ecclesiastic positions (from which women were barred), including a pope, an archbishop, bishops, cardinals, and chancellors; the evidence for female secular rulers, such as queens and a princess, only partially counter-balance the notably skewed gender scales.

There exist only photographs of two of Thiodericus' 205 recorded *tituli*; these name two women, Ursu-maria (Fig. 1.14) and Albina (Fig. 1.15), both of whom Thiodericus identified as Holy Virgins; they were re-discovered during the 1933 archaeological excavations of Deutz Kastell, the original site of Deutz Abbey and the *oratorio* of the Virgin Mary.²⁰¹ The subsequent archaeological excavation at the Church of the Holy Virgins and St Heribert Church (1942-43),²⁰² now the Schnütgen Museum, revealed further fragmentary inscriptions, which may also have been associated with Thiodericus' excavations. Aside from these few examples, however, none of the 205 *tituli* documented by Thiodericus have been identified. Furthermore, apart from Thiodericus' and Elisabeth's accounts, there are no other known medieval references to the *tituli*. These absences raise questions about both the medieval use of the *tituli* (or lack thereof) and their eventual fate. This requires critical examination of whether they existed in the first place and the purpose of the texts that purport to record them.

²⁰¹ Schmitz and Wirbelauer, "Auf antiken Spuren?," 69.

²⁰² The Second World War air raids of the Holy Virgins' church (1942, 1943/45) provided access to the area under the church, and extensive archaeological excavations ensued. See further: Schmitz, "Grabinschriften in Köln". For a brief account of the bombings that affected the Church of the Holy Virgins, see Wegener, *St. Ursula in Köln*, 59.

The photographs of the two fragmentary *tituli* have been subject to considerable scholarly analysis, and determined to be neither Roman nor early medieval, but rather as originating in the twelfth century.²⁰³ This indicates that at least some of the *tituli* 'discovered' by Thiodericus in the *ager Ursulanus* were not in fact extracted from the burial grounds. They have thus been dismissed by a number of scholars as nothing more than twelfth-century forgeries; Levison considers the entire scheme of Thiodericus and the *tituli* be a single great deception.²⁰⁴ Such dismissals, however, neglect investigation of *why* the *tituli* were created in the twelfth century; upon closer consideration it is clear that these objects provide intriguing evidence for the calculated replication, manipulation, and appropriation of sacred material.

Instead of being cast as either genuine grave-markers or forgeries, it is plausible that these tituli occupy a middle ground. As speculated by Schmitz and Wirbelauer, extant ancient grave-stones might have inspired the new tituli, indicating that objects may well have been discovered by Thiodericus and his team.²⁰⁵ If stemming from the Roman period of Cologne's history, it is highly likely that the funerary markers uncovered in 1155 were indeed fragmented upon discovery. Several of the names presented in Thiodericus' list are similar, but not identical, to known names from the fourth to eighth centuries;²⁰⁶ it therefore appears that the twelfth-century list could well present the contemporary vulgate form of older names with phonetic alterations. While this confirms the names as medieval imitations, it also suggests that Thiodericus' list attempted to generate a complete record by 'updating' the ancient inscriptions for a modern readership. In the interest of preserving and promoting the purported names of Cologne's martyrs, Thiodericus might have improvised on spelling to literally fill in the blanks left by the ancient fragments. If this was the case, it remains unclear if this would have effected the sacred nature and/or classified the *tituli* as counterfeit.

These issues are highlighted by the Ursu-maria inscription (Fig. 1.14), which along with other inscriptions reveal interesting parallels to Thiodericus' codex. The

²⁰³ Schmitz and Wirbelauer, "Auf antiken Spuren?," 69.

²⁰⁴ As noted here, see Levison p. III; Clark, *Twelfth-Century Visionary*, 156.

²⁰⁵ Schmitz and Wirbelauer, "Auf antiken Spuren?," 72.

²⁰⁶ Listing male names first and female names below was common for late antique and early medieval burial practices; ibid., 72.

Ursu-maria *titulus* preserves a relatively complete text: S(an)c(t)a Ursuma/ria v(irgo) filia Ab/arisi du/cis. This identifies a woman as a daughter of Duke Abarisi, almost mirroring one of Thiodericus' entries: "*Item titulus: Sancta Ursumaria virgo filia Ararisi ducis*".²⁰⁷ When comparing the manuscript list and the inscription fragment a spelling discrepancy is notable in the duke's name (B and R). Schmitz's onomastic study, however, revealed that, between the ninth and eleventh centuries, names with "Abar-" were more frequently documented in the Germanic tradition than "Arar-". He therefore argues that the presence of "Araris" in Thiodericus' list identifies the name more closely with the Roman tradition,²⁰⁸ thus possibly presenting a more believable case that the *tituli* were indeed of an ancient Roman origin instead of being simply twelfth-century fabrications.

The St Albina's inscription (Fig. 1.15), with its crude and deeply carved letters and ruling lines, presents a portion of longer script that originally named the woman and identified her as one of the Holy Virgins.²⁰⁹ This stone is particularly important because this woman was identified as such: a figure with the same name appeared before Elisabeth of Schönau to confirm her identity: "I am called Albina" (*ego Albina vocata sum*).²¹⁰ Interestingly, *Liber Revelationum* records that Albina's remains arrived in Schönau along with two other skeletons that lacked *tituli*; the saints' identities were revealed through Elisabeth's conversation with Albina. It is thus plausible that this inscription refers to the Albina of Elisabeth's vision. If this is the case, there might be a larger collaborative scheme at play – between physical inscriptions and sacred encounters as well as between Deutz/Cologne and Schönau – all in the interest of authenticating the Holy Virgins' remains.²¹¹

If Thiodericus' manuscript list does indeed document the engraved *tituli* it raises the question: was it not sufficient to document the martyrs' names by pen and parchment? This situation, which hinged on the presentation of 'authentic evidence', seemingly necessitated the production of new grave-markers posing as ancient relics; they highlight the importance of physical objects, and in particular, stone. The

²⁰⁷ Schmitz, "Grabinschriften in Köln," 766.

²⁰⁸ Ibid.

²⁰⁹ [S. Albina Britannica,] [una ex undecim,] [quar [um quaelibet] [mille v[irgines ad] du[xit], as documented in: ibid., 764–65.

²¹⁰ Roth, *Visionen*, 131; trans.: Clark, *Complete Works*, 222.

²¹¹ Albina is also the name of a Holy Virgin whose remains were collected by the Gandmont monks in 1181. See further, p. 166.

act of engraving new *tituli* with 'updated' names demonstrates the intentional manipulation of sacred material. This is significant because it consciously and deliberately re-activated and re-memorialized the Virgins and their male companions. Rather than being blasphemous, however, fabricating these 'counterfeit' *tituli* can be viewed as a pious act. It furnished the cult with many new names, which in turn facilitated a closer relationship between contemporary devotees and the Holy Virgins.

Thiodericus concluded his document by quoting the complete text of the Clematius Inscription. His account, bookended by an official introduction and the commanding inscription, thus claimed authority from powerful men both past and present. When concluding with the cult's prized inscription, it is here suggested that Thiodericus evoked the culturally-ascribed authority associated with stone inscriptions, and transferred the stone's revered importance within the cult to the account of the *tituli*. Like the 'truth' carved into the celebrated epigraph, the stone *tituli* conveyed ancient 'information' and drew attention to the medium of stone with its innate power of preservation. Thiodericus' codex then transferred the *tituli* inscriptions – whether complete, fragmented, or re-incised – from stone to parchment. This presented a more 'convenient' method of preservation and circulation, but also reconstructed convincing material in a socially consolidated and organized arrangement.

Among other messages, the Clematius Stone warns of the eternal hellfire awaiting those who mix foreign bones with of those of the Holy Virgins. Perhaps the same punishment could await someone who mixes other foreign/false objects with the cult. Nevertheless, Thiodericus brazenly confronts the possible dangers and presents the contents of the grave-stone as authentic. Abiding by the law outlined by Clematius, he offers his personal eyewitness testimony to verify the authenticity of the *tituli*. From start to finish, Thiodericus is visually and textually highlighted as a person of significance, and is thus presented as a credible source. He might thus be understood as emulating Clematius' piety by 'revealing' and documenting new information pertaining to the Holy Virgins. Like the refurbished church built over the site of martyrdom, Thiodericus' account could fortify the cult and honour the saints. Following his impressive and steadfast conclusion, Thiodericus notes the location of the relics of the Holy Virgins and male martyrs within the church of Deutz: many were enclosed within a chest that was situated at the high altar, and the most precious were safeguarded inside the crypt.²¹² Thus positioned, the sacred bones can be understood as Thiodericus' final element of 'proof' within this narrative. It is, however, noteworthy that despite the carefully composed contents of the preceding account, there is no mention of the whereabouts of the *tituli* within the church.

1.6 Encountering the Divine: Visions and Visionaries

Given the numerous 'historic' and material inconsistencies challenging the cult of Cologne's Holy Virgins, it is perhaps not surprising that visionary experiences emerged as a prominent and reoccurring theme. Medieval visionary encounters between mortals and the divine served as a popular platform through which the inexplicable was both revealed and explained.²¹³ Within the Holy Virgins' cult it is the role of two notable twelfth-century visionaries, Elisabeth of Schönau and Hildegard of Bingen, that has attracted the most scholarly attention.²¹⁴ The significance of visions predating Elisabeth and Hildegard, however, has not yet been addressed in any depth. Closer investigation of these reveals that they played a significant role in shaping the cult in the period leading up to the twelfth century. As

²¹² "sanctorum pignora … quorum media fere pars principali altari quedam uero arcis iuxta idem altare positis cetera quoque scriniolis in cripta dispositis inclusa tenetur". Sinderhauf, *Die Abtei Deutz*, 249, see fn. 383. Christine Williamson kindly assisted in clarifying part of this translation.

²¹³ The study of medieval visions is a vast, multi-disciplinary topic; the following sources were very helpful for gaining a firm understanding of visions and for supplying a wide range of sources for further research. Barbara Newman, "What Did It Mean to Say 'I Saw'? The Clash between Theory and Practice in Medieval Visionary Culture," *Speculum* 80 (2005): 1–43; Suzannah Biernoff, *Sight and Embodiment in the Middle Ages* (Basingstoke: Palgrave Macmillan, 2002); Peter Dinzelbacher, "Zur Interpretation erlebnismystischer Texte des Mittelalters," *Zeitschrift für deutsches Altertum und deutsche Literatur* 117, no. 1 (1988): 1–23.

²¹⁴ For Elisabeth of Schönau, see: Roth, *Visionen*; Clark, *Twelfth-Century Visionary*; Köster, "Elisabeth von Schönau: Werk und Wirkung"; Köster, "Das Visionäre Werk Elisabeths von Schönau". For Hildegard of Bingen, see Barbara Newman, *Voice of the Living Light: Hildegard of Bingen and Her World* (Berkeley: University of California Press, 1998); Sabina Flanagan, *Hildegard of Bingen, 1098-1179: A Visionary Life.*, 2nd ed. (London New York: Routledge, 1991); Barbara Newman, "Hildegard of Bingen: Visions and Validation," *Church History* 54, no. 2 (1985): 163–75.

we have seen, visionary experiences functioned as a medium of communication, a way for sacred 'information' to infiltrate the Virgins' ever-evolving narrative. They facilitated explanation of key elements: prophecy, veneration, and relic discovery. The subjective nature of the experiences facilitated a variety of 'messages' to serve the cult in different ways, but universal to the accounts is the importance of the senses, particularly seeing, speaking, and hearing. These were utilized to repeatedly emphasise the tangibility of the sacred, and so create a viable channel through which to contact the realms beyond.

Visionary encounters first emerge in the Clematius Inscription, the cult's oldest textual reference, when it declared that Clematius was prompted by numerous "visions of flames" (flammeis visionibus).²¹⁵ It was due to these that he then journeyed to Cologne and restored the Virgins' church, thus instituting the cult's initial devotional act following the barbarians' destruction of the first church. These visions, although not described in detail, were nevertheless instrumental in prompting Clematius' actions and engendering the subsequent veneration of the Virgins. The textual documentation of an 'ancient' visionary would have been understood as confirming the cult's credibility and simultaneously justifying all subsequent acts of devotion. It is not surprising, therefore, that the visionary aspect of Clematius was underscored in the later hagiographic texts; the Sermo in Natali (922) candidly quoted the opening phrase of the inscription, and on two more occasions, it referred to Clematius' "abundant visions" (crebris visionum).²¹⁶ The inscription, quoted in its entirety in Passio I, paraphrased in Passio II, and quoted again in Thiodericus' account continued to confirm both Clematius as a visionary and his divinely inspired acts in the emerging hagiographic tradition.²¹⁷ The textual sources additionally reiterated that he experienced these divine encounters long after the Virgins' martyrdom and in a distant eastern location. Because of these visions, Clematius, the chosen one, overcame the lengthy passage of time and his

²¹⁵ For the full Latin text, see fn. 78.

²¹⁶ Klinkenberg, "Kölner Märterinnen, 1890," 121; trans.: author. Two additional mentions of Clematius' visions are found in chapter 6 and 7.

²¹⁷ "divinitus frequenter admonitus et quasi legatione sanctarum virginum". Klinkenberg, "Kölner Märterinnen, 1892," 161. Found in chapter 17 in *Passio I* and chapter 18 in *Passio II*.

geographic separation to restore the Virgins' cult; the survival of the cult is therefore indebted to him, as a visionary figure.

1.6.a Ursula and Helmdrude

Following in the footsteps of Clematius, *Passio I* introduced two new visionary figures: Ursula, the cult's (new) leader, and Helmdrude, the tenth-century nun, both key narrative components within the *vitae*. They emerged when the Virgins' narrative was becoming more complex – when visions had become the only means for explaining much of the information preserved in the hagiographic narratives. Complementing their central role within the evolving literary tradition, their revelations also impacted the visual and devotional practices within the cult.

As articulated in *Passio I*, Ursula received two revelations, the first immediately following her unwanted engagement. That night a divine messenger suddenly appeared before her, and revealed the course of her life as well as the great number of her followers.²¹⁸ Early within the narrative Ursula's "*divina revelatione*" ²¹⁹ thus identified her as divinely elected; her ability to commune with the sacred underscored her own sanctity and explained her role as designated leader. Her second vision coincided with the Virgins' arrival in Cologne on their journey to Rome: she "saw in her sleep an angelic man"²²⁰ who repeated the prophecy of her fate, but this time specified Cologne as the site of martyrdom. Although the two revelations were related, the interaction between Ursula and the messenger differed significantly. In the first encounter, Ursula obtains the information "through a vision granted by divine revelation" (*per visionem divina revelatione*);²²¹ the messenger was not specified. In the second revelation the divine emissary assumed the physical presence of a man who exuded the "radiance and authority of an angel" (*angelicae claritatis et auctoritatis virum*).²²² He entered the

²¹⁸ *Passio I*, ch. 5, 11.

²¹⁹ Klinkenberg, "Kölner Märterinnen, 1892," 156. Found in chapter 5 of both *passiones*; trans.: author.

²²⁰ "vidit in sommis angelicae clariatis et auctoritatis virum". Ibid., 158; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 25.

²²¹ Klinkenberg, "Kölner Märterinnen, 1892," 156; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 19.

²²² Klinkenberg, "Kölner Märterinnen, 1892," 158; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 25.

earthly realm with immediacy, the disruption of which terrified Ursula. This physical presence, established through sight (*videre*) and sudden movement, intensifies this encounter and the message it relayed. It enabled Ursula, along with the reader, to experience the almost tangible elements of the vision. The spontaneity of this vision is in fact a leitmotif of visionary encounters, and conveys Ursula's exclusive agency and additionally authenticates her divine experience.²²³

In addition to the importance of the sense of sight, the angel's monologue, delivered verbally and received aurally, also emphasised the auditory senses; his direct form of address amplified the message's gravity, and its effect on Ursula was considerable. She was imbued with a new confidence: she "doubted nothing about an oracle of such great authority ... she called together her band of young women [virgins] and poured into their ears all that she herself had seen and heard".²²⁴ Taking on the role of visionary, she then assumes the role of messenger. Ursula utilized the complementary nature of seeing (*videre*) and hearing (*audire*) in order to give voice to the prophecy.

As noted, Helmdrude was introduced as a key visionary figure in *Passio I*; here, it is worth mentioning that relics of Saturnina (one of the original eleven named virgins) had been delivered to Helmdrude's convent, likely in the tenth century.²²⁵ Comparable to the relics of Pinnosa that were gifted to Essen, the translation of Saturnina's relics to Neuenheerse marked a notable acquisition and were the probable catalyst for Helmdrude's vision.²²⁶ The record of this encounter is positioned at the end of the *Passio* and concluded with a divine interaction between the nun and Cordula,²²⁷ who appeared before Helmdrude to reveal the conditions of her own (delayed) martyrdom; Helmdrude was thus tasked as Cordula's

²²³ Newman, "Theory and Practice," 3–5.

²²⁴ "Ursula nihil de tantae auctoritatis oraculo ambigens mox ... convocata virginum contione quae audierat et viderat in omnium auribus exposuit". Klinkenberg,
"Kölner Märterinnen, 1892," 158; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 26.
²²⁵ Named in Ursuard's Martyrology (875). Her presence in the group is also mentioned in: Levison, "Ursula-Legende," 62.

²²⁶ Cordula's relics were uncovered in Cologne during the late thirteenth century, possibly in 1278. Ibid., 63, fn. 3; this event seems to have been (later?) associated with Albertus Magnus. Buck, "De S. Ursula," 581, 585. For more about Albertus' involvement with the Holy Virgins' cult, see below, pp. 228.

²²⁷ Passio I, ch. 18-19; Passio II, ch. 19-22.

spokesperson, and following circulation of *Passio I*, Cordula's feast was established on 22 October.²²⁸

In an encounter analogous to Ursula's second vision with the angel, Cordula spontaneously appeared as a physical being. Her earthly manifestation disrupted the space and frightened Helmdrude. Like Ursula, the nun encountered the saint through both divine and physical sight: she saw the virgin "marvellously attired beyond all human skill, and she wore on her head a crown interwoven with lilies and roses".²²⁹ Helmdrude's vision additionally incorporates another element of seeing: reading. When she inquired about the Holy Virgin's name, Cordula

commanded the virgin to gaze upon her forehead that Helmdrude might know for herself, without any doubt, the name she would find inscribed there. Helmdrude complied. She saw and read the separate syllables and discovered what was distantly written there: Cordula.²³⁰

The vision then promptly concludes with the articulation of Cordula's name, indicating that no further information was necessary to verify the revelation.

Important here is the way this encounter underscores observation and textual interpretation as two distinct aspects of sight – as two types of visible evidence. The divine figure instructs the nun to first look at her forehead. Here, Sheingorn and Thiébaux have translated *intueri* as gazing, yet this word can also indicate deep consideration, contemplation, or admiration.²³¹ Cordula might thus be understood to be demanding the more focused and intentional gaze befitting a

²²⁸ Georg Zilliken, "Der Kölner Festkalender. Seine Entwicklung und seine Verwendung zu Urkundendatierungen. Ein Beitrag zur Heortologie und Chronologie des Mittelalters," *Bonner Jahrbücher: Jahrbücher des Vereins von Altertumsfreuden im Rheinlande* 119 (1910): 109, fn. 2.

²²⁹ "Erat enim virgo dei ultra omne artificium hominis vestita mirifice coronamque liliis rosisque alternantibus intertextam gestans in capite". Klinkenberg, "Kölner Märterinnen, 1892," 162; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 33. *Passio I*, ch. 19; *Passio II*, ch. 20.

²³⁰ "Cumque illa de nomine eius requireret, iussa est a virgine frontem eius intueri, ut hoc sibi nomen indubitanter sciret, quod illic exaratum inveniret. Paruit illa, vidit et legit discretisque syllabis, 'Cordula' distincte scriptum invenit". Klinkenberg, "Kölner Märterinnen, 1892," 162; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 34.
²³¹ "Intueor," in *Collins Latin Dictionary & Grammar* (Glasgow: Harper Collins, 2016), 114.

visionary; Helmdrude then saw (*vidit*) and read (*leget*) the written word – the virgin's name inscribed on her forehead – which had the power to eradicate any doubt the nun might have had. Like Ursula's vision, this encounter was documented by words on parchment; when held in readers' hands – and read – the material nature of the words in the manuscript would further reinforce the validity of these divine revelations. As experienced by Clematius, Ursula, and Helmdrude, these divine encounters all equated external modes of seeing with internalized revelations. It can thus be postulated that these dual modes of seeing are reiterated as key elements of understanding, integrating, and then sharing the divine messages.

Building upon the sensory importance of sight, it is clear that Helmdrude's revelation also embraced the authority of auditory reception as well as speech. Not only did she visually encounter the saint, she heard her sacred declarations – "*know* that I was one of the sacred number of virgins of Cologne"²³² – in a manner that offered alternative and complementary confirmation and facilitated her knowledge and wisdom unprecedented in the earlier visions. Helmdrude verbally engaged in a two-way conversation with Cordula; she was an active participant who voiced her response. After hearing the virgin's declaration, she asked for proof of her identity. Unlike Ursula, who silently received the prophecy, Helmdrude's method of participatory enquiry further deepened the engagement between saint and visionary.

Passio II included an additional chapter following the account of Helmdrude's vision. Together with confirming the appropriate day to celebrate Cordula's feast, the vision also revealed what might be understood as contemporary issues. As an historic figure from the recent past, Helmdrude differed from her mythologized visionary predecessors: her visions were susceptible to scepticism as well as dismissal. The *Passio* helpfully declares that "Helmdrude's vision should not be considered by anyone to have lesser authority, nor should it seem that she had been

²³² "Tum illa, Noveris, inquit, me unam ex sacro Coloniensium virginum numero fuisse" (italics used here for emphasis). Klinkenberg, "Kölner Märterinnen, 1892,"
162; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 34.

deluded in a mocking dream,"²³³ thus reiterating the power of visions as a sacred communication that differed from 'common' dreams. In fact, the loftiest of (medieval) vision genre were those of (biblical) revelation or prophecy.²³⁴ Unsurprisingly, the author immediately instructs the reader to engage their minds, to "recall to memory" (*revocet ad memoriam*)²³⁵ a series of biblical figures who also experienced visions while sleeping,²³⁶ in effect, presenting the reader with convincing biblical comparisons taken from the entirety of Christian history – the Old and New Testament - in an effort to validate Helmdrude's vision. Presented within this context, Helmdrude was situated as the most recent figure in a clearly delineated and Christian legacy of visionaries, taking her place (appropriately) within their elevated company.

In some manuscripts, another paragraph follows the passage of Helmdrude's vision. It opens by asking:

why are these declarations necessary when the handmaid of God, to whom this revelation was shown, was so renowned in her life, and of such saintly conduct that she herself had to be considered as the most certain testimony of truth?²³⁷

This not only testified to the status of Helmdrude's vision in the context of patriarchs, prophets, and apostles, it also provided a reasonable transition to supply background information regarding her life, burial, and posthumous miracles – in turn placing her explicitly within a sacred community for all eternity. In a manner unnecessary for Clematius or Ursula, the historic nun's sanctity is rendered unquestionable. The text confirms that many within the local community witnessed

²³³ "Sed ne cui visio haec quasi minus auctoritatis ludificante somno dubia habere videatur". Klinkenberg, "Kölner Märterinnen, 1892," 162; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 34.

²³⁴ Newman, Barbara, "Theory and Practice," 8.

²³⁵ Klinkenberg, "Kölner Märterinnen, 1892," 162; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 35.

²³⁶ The list consisted of Abraham, Jacob, Joseph, Gideon, Daniel, the Magi, as well as Peter and Paul.

²³⁷ Final paragraph of Chapter 21 appears in Brussels MS 7984 and is transcribed in the *Acta Santorum*; however it does not appear in Munich Staatsbibliothek MS. Lat. 18897, as noted in: Sheingorn and Thiébaux, *Saint Ursula*, 39.

her sanctity, and after death, this status was confirmed through documented miracles occurring at her tomb. Among the most frequent was, interestingly, the restoration of sight. It might thus be understood that her gift of visionary sight, demonstrated through her encounter with Cordula, enabled Helmdrude to restore earthly vision to the faithful. Together, Clematius, Ursula, and Helmdrude promoted visionary experiences within the cult's textual history, collectively underscoring sight as an essential element of (constructing) belief.

In addition to these figures, St Kunibert, the *agar Ursulanus* excavators, and Norbert of Xanten also emerged as participants in the discoveries and veneration of the Holy Virgins' relics. According to the mid-ninth-century *Vitae Cuniberti*,²³⁸ Cologne's illustrious bishop (619 or 623 - 663) discovered a virgin's body (*ad cuiusdam virginis sepulchrum*),²³⁹ which was later assumed, in a fifteenth-century version of the *vita*, to be that of Ursula.²⁴⁰ According to the original legend, Kunibert discovered the virgin when a white dove landed on his head and directed him to a grave that revealed the body.²⁴¹ This *vita* was not completed until the mid-ninth century, and given that veneration of the Virgins was first documented from the eighth century, this 'discovery' clearly benefitted from some historical manipulation. This text assigns a more 'ancient' origin to the cult, a tactic that would have strengthened its validity and importance. In addition, the divinely inspired visionary encounter fabricated a bond between an historical bishop and the virgin martyrs, and thus retroactively incorporated the saints into Cologne's early ecclesiastical history.

In the twelfth century, the visionary encounters associated with the cult relate almost exclusively to relics. Of primary concern was the vision that occurred directly following the 1106 discovery of the *ager Ursulanus*. Until this time, relics of the Virgins were known only to derive from the ground beneath the Church of the Holy Virgins.²⁴² It is not surprising that a visionary encounter emerged to serve as confirmation: while digging the foundation for the new city wall a group of citizens

²³⁸ Bibliotheca Hagiographica Latina Antiquae et Mediae Aetatis, 303–4.
²³⁹ Levison, "Ursula-Legende," 37.

²⁴⁰ Latin text: Nürnberger, "Die Ausgrabungen," 146; Wegener, *St. Ursula in Köln*, 32.
²⁴¹ For an in-depth analysis of this vision and how it might describe the Holy Virgins' earliest church construction, see Nürnberger, "Die Ausgrabungen," 146–48.
²⁴² Klinkenberg, "Kölner Märterinnen, 1892," 173.

came upon human remains. Suddenly two beautiful women appeared and notified the workers that they were removing sacred soil. When the men asked the women to identify themselves, the figures responded that they belonged to the group of 11,000 Virgins who are buried on this site. They urged the citizens to notify the bishop and then quickly disappeared.²⁴³ Other visions included that of Norbert of Xanten, the founder of the Premonstratensian Order, in 1121. Prompted by his night vision that revealed the resting place of the Holy Virgins' bodies, Norbert travelled to Cologne and indeed collected relics.²⁴⁴ Together these accounts, which depend repeatedly on *visible* proof and *oral* confirmation, verified that the bones belonged to the Holy Virgins. The 'discovery' of *tituli* at the site a few decades later, however, suggests that in this case additional 'proof' was required.

1.6.b Elisabeth of Schönau and her Liber Revelationum

It is within this context that the work of Elisabeth of Schönau (1128/29-1164/65) is best viewed: as establishing her intentions as part of a process of 'historic', sacred, and political motivations informing the status of the cult. As noted, and established in the scholarship, Elisabeth was instrumental in recording discrepancies between the archaeological finds and the accepted hagiographic tradition of a female group of virgins through the power of her visions. Further investigation, however, reveals how she was, in effect, continuing the cult's centuries-old tradition of visionary normalization. Her accounts, like Helmdrude's, were not posthumous and involved sacred encounters with members of the Virgins' expanded group and other saints. Important here is the influential nature of these visions and the (continued) recurrent reliance on sensory interactions with the divine. Examination of the composition of these visions and their strategic tactics, which assisted in expanding the Virgins' narrative, situates Elisabeth firmly within the company of visionaries associated with Cologne's virgin martyrs, interweaving her into the Virgins' historic and textual 'vitae'.

²⁴³ Levison provides a partial transcription of the visionary encounter in "Ursula-Legende," 109. For complete Latin text see: "Trium Coloniensium Virginum in Monasterium Walciodorense Ad Mosam," *Analecta Bollandiana* 11 (1892): 125–35.
²⁴⁴ Levison includes the Latin transcription of this account from the *Vita Norberti*, ch. 12 (SS.XII, 682), 110.

Elisabeth spent most of her thirty-six years within the double (male and female) Benedictine monastery in Schönau, which she entered at the age of twelve, taking her final vows six years later. Her visionary experiences began when she was twenty-three and continued until her death in 1164/65.²⁴⁵ She produced six books, which comprise both records of her visions and correspondence with ecclesiastics and political figures. Her early collection of visions, Libri Visionum Primus, Secundus, and to a lesser extent Tertius, has been described as a "visionary diary" (das *visionäre Tagebuch*)²⁴⁶ because they documented Elisabeth's personal and emotional responses to her experiences. They also reveal that most of her visions, as is seen in her later work, especially Liber Revelationum, were influenced by the liturgical calendar;²⁴⁷ a saint's feast day often determined the protagonist of Elisabeth's ecstatic trances. Following her 'diaries', the Liber Viarum Dei was composed as a handbook for spiritual guidance. Its focus on diverse paths to a virtuous life deflected attention away from Elisabeth's personal experiences and towards universal spiritual lessons.²⁴⁸ Her two final visionary treatises, much shorter in length, investigated individual topics of contemporary debates: the corporal assumption of the Virgin Mary and the newly discovered relics from the ager Ursulanus. This latter treatise, the Liber Revelationum, circulated both independently and as part of Elisabeth's larger visionary collections.²⁴⁹ Her final work formed a collection of letters and concluded with De Obitu, Ekbert's detailed account of his sister's death.

From these texts it is well-established that Elisabeth's visionary mentor was Hildegard of Bingen, whom she visited at her cloister in Rupertsberg in 1156 and with whom she exchanged letters regarding their roles as female visionaries between 1152 and 1157 – a period that notably overlaps with the creation of *Liber*

²⁴⁵ For a good introduction to Elisabeth's visions and textual accounts see: Clark, *Twelfth-Century Visionary*; Barbara Newman's preface in: Clark, *Complete Works*, 1–37; Köster, "Das Visionäre Werk Elisabeths von Schönau"; for Latin, see: Roth, *Visionen*; trans.: Clark, *Complete Works*.

²⁴⁶ Kurt Köster used (and likely introduced this term) as noted in: Clark, *Twelfth-Century Visionary*, 31.

²⁴⁷ Clark, *Complete Works*, 31–34.

²⁴⁸ Clark believes Ekbert's new and active role in transcribing Elisabeth's visions also factored as part of this notable change in style. Other changes in writing style are also considered in Clark, *Twelfth-Century Visionary*, 7–13, 15–16.
²⁴⁹ Clark, *Complete Works*, 20.

Revelationum.²⁵⁰ During her visit to Rupertsberg, it is likely that Elisabeth accessed Hildegard's comprehensive visionary text, Scivas, which scholars have noted shares many similarities with Elisabeth's Liber Viarum Dei.²⁵¹ Conversely, Hildegard also experienced visionary encounters with the Holy Virgins, which were composed as allegorical antiphons that honoured the martyrs.²⁵² Although difficult to date, William Flynn's recent studies indicate that these compositions post-date Elisabeth's Liber Revelationum;²⁵³ Hildegard's antiphons, dedicated to Ursula and her virgin consorts, are generally accepted as having been created to serve a devotional or liturgical function within the confines of the Cloister Rupertsberg. Although Hildegard's composition eventually reached other monasteries, the intent of these antiphons differed from Elisabeth's treatise, which is further distinguished from the account of Hildegard's visions, and indeed other contemporary visionaries; Elisabeth's visions, on the other hand, occurred in response to specific requests to authenticate the Hoy Virgins' relics. This is transparently declared in the preface to her Liber Revelationum, when she admits that "although I was very resistant, certain men of good repute pressed me with their demand to investigate these things at

²⁵⁰ Dyan Elliott and Kathryn Kerby-Fulton, "Self-Image and the Visionary Role in Two Letters from the Correspondance of Elisabeth of Schönau and Hildegard of Bingen," in *On Pilgrimge - The Best of Vox Benedictina 1984-1993*, ed. Margot H. King, 11 (Toronto: Peregrina, 1994): 535–48.

²⁵¹ Ibid., 536.

²⁵² William Flynn recently explored the complex relationship between Hildegard and the Holy Virgins. Of particular note is the possible role the cult played in Hildegard's personal visions together with the nun's musical compositions dedicated to St Ursula and Cologne's martyred virgins. "Hildegard (1098-1179) and the Virgin Martyrs of Cologne," in Cartwright, The Cult of St Ursula, 93-118; William T. Flynn, "Reading Hildegard of Bingen's Antiphons for the 11,000 Virgins of Cologne: Rhetorical Ductus and Liturgical Rubrics," Nottingham Medieval Studies 56 (2012): 171–89; William T. Flynn, Tove Leigh-Choate, and Margot Fassler, "Hildegard as Musical Hagiographer: Englebeg, Stiftsbibliothek Ms. 103 and Her Songs for Saints Disibod and Ursula," in A Companion to Hildegard of Bingen -*European History and Culture Books*, ed. Debra Stoudt, George Ferzoco, and Beverly Kienzle 45 (Leiden: Brill, 2013), 192–220; for Latin text and English translations of songs dedicated to St Ursula and her Holy Virgins, see: Saint Hildegard, Symphonia: A Critical Edition of the Symphonia Armonie Celestium Revelationum [Symphony of the Harmony of Celestial Revelations] (Ithaca, NY: Cornell University Press, 1988). ²⁵³ Flynn, "Hildegard (1098-1179) and the Virgin Martyrs of Cologne," 101–2.

length and they do not allow me to be silent."²⁵⁴ Not only was she encouraged to commune with the sacred, her 'advisors' required her to publicise her experiences. It is in this respect that consideration of Hildegard's experiences shed further light on Elisabeth's visionary corpus.

In addition to the ways in which Elisabeth's visions normalized the male companions within the cult, important here is the analysis of the multisensory qualities of these visions. As with Ursula and Helmdrude, sight, hearing, and speaking all featured as key components in Elisabeth's encounters, and, as with Ursula and Helmdrude, sight was given pride of place. When speaking about the relics being sent from Deutz to Schönau, Elisabeth stated:

Before I heard anything about her arrival, I received from the Lord a testimony about her sanctity. I went into a trance and ... saw ... a very bright flame in the shape of a sphere. An extraordinarily handsome angel proceeded it, carrying a smoking thurible in one hand and a burning candle in the other.²⁵⁵

This divine "testimony" (*testimonium*) reiterates the understanding that Elisabeth was filling the privileged role as the recipient but also the messenger of these revelations. The passage provides a description, not of a saint assuming physical form before her, but rather, of a procession led by an angel.²⁵⁶ Indeed her ability to see and describe in detail that which is happening outside her immediate environs – either in real life or in the sacred realm – is a constant theme throughout her accounts. Here the potency of sight is underscored, which, in this case, does not rely

²⁵⁴ "De his enim me silere non permittunt quidam bone opinionis viri, qui ad hec investiganda diutina me postulatione multum renitentem compulerunt". Roth, *Visionen*, 123; trans.: Clark, *Complete Works*, 213.

²⁵⁵ "quicquam audissem, testimonium sanctitatis eius tale accepi a domino ... et vidi ... quasi flammam candidissimam habentem formam globi, quam antecedebat angelus speciosus nimis, habens in manu una thuribulum fumigans, in altera vero candelam ardentem". Roth, *Visionen*, 124; trans.: Clark, *Complete Works*, 214.
²⁵⁶ Elisabeth's description of the relics' arrival in Schönau mirrors the visual spectacle of translations in *translatio* texts. See further, Mary Marshall Campbell, "Sanctity and Identity: The Authentication of the Ursuline Relics and Legal Discourse in Elisabeth von Schönau's Liber Revelationum," *Journal of Medieval Religious Cultures* 38, no. 2 (2012): 161.

on spoken word as in many of her encounters. Yet in describing the presence of a smoking thurible and a burning candle, Elisabeth evoked yet another sense: smell.

Often the acts of seeing, speaking, and hearing were involved in close proximity. These three senses, powerful in their own right, gained enhanced potency when combined to work in tandem. This multisensory approach is evident throughout Elisabeth's encounters; she sees the saints who appear before her (*apparuit mihi*)²⁵⁷ and she engages in a verbal exchange with them that involves speaking and listening. These meetings, therefore, not only reveal a large amount of new information about the cult, they also construct a tangible experience that invites readers to participate alongside Elisabeth. When first meeting Verena, the saint confirmed that, "my name is as you have *heard*. It was almost *written* otherwise by mistake."²⁵⁸ Here Verena vouches for auditory reception due to the potential errors presented in the written sources viewed by readers.

The issue arising between that which is seen and heard versus 'information' gained from reading is a theme that, as noted, surfaces on a few occasions in this treatise. Elisabeth did not immediately accept everything revealed to her in her visions; when she became confused by the revelation of male group members, she pinpoints her misgivings stemming from a conflict between her visions – seeing and conversing with saints – and that which was preserved in the martyrs' textual history – a source accessed through reading. As discussed, following Caesarius' explanation, Elisabeth admitted that "these words threw me into grave doubt. Indeed, like others who *read* the history of the British virgins, I thought that the blessed society made their pilgrimage without the escort of any men."²⁵⁹ In an effort to fully understand this new information, on another occasion, Elisabeth "juxtaposed what she [the saint] had said with what is read in the history of the

²⁵⁷ Roth, Visionen, 124.

²⁵⁸ "Ita est nomen meum, ut audistis. Pene tamen per errorem aliter scribi debuerat, sed ipsa ego scribentem prohibui" (italics used here for emphasis). Roth, *Visionen*; trans.: Clark, *Complete Works*, 214.

²⁵⁹ "Hoc igitur sermone in magnam dubitationem adducta sum. Existimabam einm, quemadmodum opinantur cuncti qui legunt historiam Brittannicarum virginu, quod absque virorum comitatu peregrinata fuerit illa beata sodalitas". Roth, *Visionen*; trans.: Clark, *Complete Works* 215. Italics used here for emphasis.

virgins,"²⁶⁰ likely referring to the widely-circulated *Passio II*. In these accounts, the physical presence of the saint and their divine message retain superiority over reading.

Her text thus reveals the potential of visions to convey sacred information that was otherwise inaccessible. The ways in which these visions incorporated and relied upon speaking, hearing, and seeing are fundamental to establishing 'evidence' for a convincing argument. Like Helmdrude asking Cordula to confirm her identity, Elisabeth's visions functioned as an arena in which she could pose questions and the saints could provide answers.²⁶¹ Indeed, the interrogative nature of her encounters has been linked to the emergence of cross-examination in twelfth-century legal proceedings, which further enhances their persuasive (authoritative) tactics.²⁶² In addition, the text is directly related to medieval trials by the creation of Elisabeth as an eyewitness; her treatise is composed in the first person, similar to a sworn testimony and it recounts ample details, the staggering clarity of which could only be obtainable through first-hand experience.²⁶³ It can thus be understood that Thiodericus of Deutz's eyewitness account at the *ager Ursulanus* (recorded in 1164), followed in Elisabeth's testimonial footsteps.

On the one hand, therefore, the visions recorded in the *Liber Revelationum* reflect an increasingly dependent literate culture; on the other hand, they provide a record of verbal interactions between the saints and Elisabeth. Her goal of authenticating relics was achieved through providing a witness to the inherently sacred nature of the objects rather than by a process of reasoned argumentation.²⁶⁴ Her visionary accounts were detailed and revealed new 'information' about Ursula's cohort: the names, status, and familial connection of the members. She expanded the narrative and diversified the participants, and in doing so breathed new life into the cult. Equipped with Elisabeth's sacred authentication, this new (textual) information

²⁶⁰ "Post hec obieci dictis eius illud, quod in historia ipsarum legitur, videlicet quod cum esset beata Ursula ... cum associatis sibi virginibus". Roth, *Visionen*, 126; trans.: Clark, *Complete Works*, 216.

²⁶¹ Sarah M. Spalding, "Elisabeth of Schönau: Visions and Female Intellectual Culture of the High Middle Ages" (doctoral thesis, The Catholic University of America, Washington D.C. 2013), 71–72.

²⁶² Campbell, "Sanctity and Identity," 168–72.

²⁶³ Ibid., 176–78.

²⁶⁴ Clark, *Twelfth-Century Visionary*, 39.

confirmed the Virgins' existence, verified and explained the presence of men among the women, and enabled mass circulation of the relics. As such, the *Liber Revelationum* exposes the strategic construction of sacred material within the Virgins' cult. Unsurprisingly, her account left a direct and lasting impact on the cult as well as the literature that followed in the late twelfth century.

1.7 Visual Hagiography: The Virgins in Art

In addition to engaging the auditory and visual senses through text, the Holy Virgins' epic narrative and extraordinary group size lent themselves to artistic representations, as is well evidenced in the wide range of visual media associated with the cult.²⁶⁵ Many of these works were created in Cologne, and were associated with prominent artists such as Stefan Lochner (*c*. 1410-1451),²⁶⁶ while others were made farther afield – most notably Hans Memling's narrative shrine in Bruges (1489)²⁶⁷ and Vittore Carpaccio's Ursula cycle in Venice (1490-1500).²⁶⁸ There are relatively few visual examples – in Cologne or elsewhere – extant prior to the thirteenth century, however; the largest body of images date to the fourteenth and fifteenth centuries, in response, so it has been argued, to the popularity of *Passio II* and the *Liber Revelationum*,²⁶⁹ and certainly in connection with the wide circulation of relics. Scholarly interest has correspondingly focused on material created during the early modern period, and those by renowned artists. Despite the variety and quantity of textual compositions dating from the tenth to twelfth centuries,²⁷⁰ in all

Montgomery, St. Ursula, 131-34.

²⁶⁵ The breadth of the cult's visual material is addressed by Zehnder, *Sankt Ursula*.
²⁶⁶ Wolfgang Schmid, "Stefan Lochners 'Altar der Stadtpatrone' zur Geschichte eines Kommunalen Denkmals im Heiligen Köln," *Wallraf-Richartz-Jahrbuch* 58 (1997):
257–84; Montgomery, *St. Ursula*, 121–22; Legner, *Kölner Heilige*, 124–25.
²⁶⁷ Jeanne Nuechterlein, "Hans Memling's St Ursula Shrine: The Subject as Object of Pilgrimage," in *Art and Architecture of Late Medieval Pilgrimage in Northern Europe and the British Isles: Texts*, ed. edited by Sarah Blick and Rita Tekippe, vol. 104, Studies in Medieval and Reformation Traditions (Leiden: Brill, 2005), 51–75;

²⁶⁸ Ines Kehl, Vittore Carpaccios Ursulalegendenzyklus der Scuola di Sant'Orsola in Venedig: eine venezianische Illusion, Manuskripte zur Kunstwissenschaft in der Wernerschen Verlagsgesellschaft 36 (Worms: Wernersche Verlagsgesellschaft, 1992); Montgomery, St. Ursula, 151–64; Patricia Fortini Brown, Venetian Narrative Painting in the Age of Carpaccio. (New Haven; London: Yale University Press, 1988), 178–91.

²⁶⁹ Zehnder, *Sankt Ursula*, 118.

²⁷⁰ See above, section 1.3.

likelihood there was, nevertheless, a disproportionate amount of visual media, that was created during the cult's formative centuries, but this material has since been lost or is otherwise unknown.

To redress the balance of scholarly inquiry into this aspect of the cult, it is worth here considering further the two earliest-known images associated with the cult that have survived: a pair of eleventh-/twelfth-century engraved bronze bowls (Figs 1.16a-c, 1.17a-m), and a Calendar illustration from Zwiefalten Abbey (Figs 1.18a-b) dated to *c*. 1162. Although scholars have discussed these, attention has been limited to their iconography. Thus, in order to shed more light on the cult's medieval material culture, these images will be reconsidered here to situate them within the cult's wider visual corpus. In short, the relationships between imagery and the established textual accounts will form the focus of the enquiry, as well as the depiction of visionary encounters, the articulation of the bond between saints and site, and the importance of the Virgins' relics.

1.7.a A Multitude of Virgins: The Bronze Bowls

The bronze bowls, today divided between Baltimore and Aachen (Figs 1.16a-c, 1.17a-m), were made as a pair and together present the earliest-known depictions of the Virgins' narrative.²⁷¹ They illustrate a comprehensive hagiographic account, in accordance with the *passiones*, which begins with Ursula's engagement and concludes with the group's martyrdom in Cologne and Helmdrude's vision. The story is divided into scenes across an 8cm-high band on the bowls' interior walls. Each bowl presents six narrative instalments separated by large columns surmounted by elaborate capitals and draped with decorative textiles knotted around the shaft. Latin text, situated above each scene, supplies abbreviated identifying captions. Located on the interior base of each bowl is an 'iconic' image:

²⁷¹ The different way the letter A was inscribed on each bowl led Charles Beard to suggest they might be part of separate pairs or that the complete cycle included four bowls. See, "A 'St. Ursula' Bowl in the Possession of Capt. E.G. Reidy," *Connoisseur*, LXXXIII (February 1929), 89. Aldenkirchen first identified the bowls as the earliest-known representations of the Holy Virgins and provided the first detailed visual analysis. Heinrich Joseph Aldenkirchen, "Drei liturgische Schüsseln des Mittelalters," *Jahrbücher des Vereinsvon Altertumsfreunden im Rheinlande* 75 (1883): 53–61. It has been speculated that the bowls served a liturgical function, but their exact use remains unknown.

on one, Ursula enthroned, and on the other, the Virgins before the Heavenly Jerusalem. This arrangement required considerable planning in order to yield a satisfying viewing experience. The absence of men from the various scenes indicates that they were probably created before the popularization of Elisabeth's visionary accounts (mid-twelfth century).²⁷² As such, they offer a valuable opportunity to explore the visual articulation of the Holy Virgins' narrative prior to the alterations caused by Elisabeth's visions.

The 'Baltimore' bowl (Figs 1.16a-c) depicts the first half of the narrative, beginning with Ursula's engagement and concluding with the Virgins setting off on their pilgrimage aboard ships; the layout of the second 'Aachen' bowl (Figs 1.17a-m) focuses primarily on their martyrdom and subsequent veneration in Cologne. This bowl is therefore of particular interest in illustrating the relationship between the martyrs and their 'resident' city.²⁷³ The first scene shows the women in three ships rowing towards the walled city of Cologne (Figs 1.17b-c). They are neatly arranged within the vessels, their bodies overlapping while their heads face the fortified city. The dense arrangement of the figures conveys their numbers – arguably the cult's most impressive feature. This scene does not feature a noticeable leader, perhaps expressing the group's collective identity rather than promoting its leader, Ursula.

Moving clockwise, the next scene depicts an army, likely the Huns, attacking Cologne (Figs 17d-e). The soldiers, clad in matching armour and bearing shields, spears, and a rock (?) besiege the city from all sides. This dynamic depiction highlights the violence of the (foreign) attack, anticipating the Virgins' bloody massacre in the city; although the architecture does not highlight any particular structure within Cologne, the text above clearly identifies it as *colonia*.²⁷⁴

In the following scene (Figs 1.17f-g) the prince of the Huns, enthroned and crowned, gestures his approval of the slaughter. He raises one finger and gazes at an archer who has shot a woman, presumably Ursula, through the throat and prepares

²⁷² Male consorts are a frequent visual element of the Virgins' narrative following the circulation of the *Liber Revelationum*. Zehnder, *Sankt Ursula*, 126; Peter Jezler, *Himmel, Hölle, Fegefeuer: das Jenseits im Mittelalter: eine Ausstellung des Schweizerischen Landesmuseums in Zusammenarbeit mit dem Schnütgen-Museum und der Mittelalterabteilung des Wallraf-Richartz-Museums der Stadt Köln*, 4th ed. (Zürich: Verlag Neue Zürcher Zeitung, 1994).

²⁷³ See above, section 1.4.

²⁷⁴ "indole defessa gemit hoste colonia pressa". Zehnder, *Sankt Ursula*, 125.

to release a second arrow. This swift and violent act, silencing the virgin and ending her life, is witnessed by six unarmoured men who stand behind the prince. In addition to the archer, two more soldiers carry out the communal death sentences; one grabs a woman's hand and slashes her with a sword while the other tramples a virgin's head and plunges his spear into the pile of martyred bodies below, which submerges him from the waist down. The scene makes viscerally visible the violence of the martyrdom as it was expressed in *Passio II*:

Just like wolves descending upon a sheepfold, they slew that infinite multitude with inhumane crudity. Slaughtering all the young women in their path with bestial frenzy, the henchmen of death made their way to St Ursula.²⁷⁵

When she refuses the prince's flattery and advances, "he pronounced the sentence of death" and Ursula, "pierced through by the shot of an arrow, sank upon the noble heap of her followers like a heavenly pearl".²⁷⁶ Although it is unclear if Ursula will inded collapse on top of her martyred companions in the image, her body leans forward in the direction of the women on the ground. The episode, prophesised in Ursula's vision and mentioned in the Clematius Inscription, the *Sermo*, and the *vitae*, is here brought to life with dramatic force. It captures the climactic death of one virgin and references the many other women who were slain.

The brutality of the scene also draws attention to what the *Sermo* described as "the outpouring of their [the virgins'] sacred blood" (*effusione sancti sui sanguinis*),²⁷⁷ which saturated the earth below. Together with the plethora of bodies, which were to be buried locally, the blood, as noted, intrinsically fused place and cult; it is this spiritual union that is initiated in the following scene (Figs 1.17h-i)

²⁷⁶ "mortis dictavit … regina sancta Ursula ictu sagittae transverberata super nobilem comitum acervum velut caeleste margaritum corruit". Klinkenberg, "Kölner Märterinnen, 1892;" trans.: Sheingorn and Thiébaux, *Saint Ursula*, 28.
²⁷⁷ Klinkenberg, "Kölner Märterinnen, 1890," 124; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 54.

²⁷⁵ "et quasi lupi in ovilia agnorum irruptione facta infinitam illam multitudinem inhumana crudelitate peremerunt. Cumque beluina illa rabies ad sanctam Ursulam iugulando pervenisset, satellites mortis admirabili pulcritudine eius conspecta manum animumque represserunt". Klinkenberg, "Kölner Märterinnen, 1892," 159; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 27.

where the haloed martyrs burst forth from a heavenly cloud and retaliate against the Hun's army. Here the Virgins pledge allegiance to the land/earth of Cologne (*Agrippinae Coloniae terram*),²⁷⁸ effectively establishing their civic locality and securing their eternal residency within Cologne.

Reflecting this, the fifth scene (Figs 1.17j-k) illustrates the townspeople erecting the martyrs' church and translating their relics, further solidifying the cult's relationship to the people and their locality. Two cross-bearing individuals and a group of tonsured ecclesiasts (indicating the presence of the clergy) witness these pious acts. Recalling the words inscribed on the Clematius Stone - that this church was "built on the site where the holy virgins spilled their blood" (ubi sanctae virgines pro nominee XPI sanguinem suum fuderunt)²⁷⁹ – situates this scene within Cologne's landscape and reiterates the presence of the Virgins' bodies at this site. In the foreground two robed figures stand above two sarcophagai containing the martyrs; they lean forward appearing to lay down or adjust the shrouded corpse. The Virgins' heads are elevated and the tombs seems to disappear into the partially constructed basilica – their eventual destination. This action further links the womens' relics with their titular church prior to the discovery of the agar Ursulanus. The third figure in this group, holding a bowl and a slightly curved object – possibly a body part wrapped in textiles – presumably assists with the dressing and burial of the relics.. This scene makes visible the citizens' involvement with the relics after the martyrdom, their pious activities reiterating the presence of the Virgins' sacred remains within Cologne. The Sermo and both passiones include passages that detailed the citizens' physical engagement with the bodies: "some gathered up the scattered and lacerated limbs of the martyrs, some covered them with clothing, some dug the earth, others placed bodies in sarcophagi";²⁸⁰ the efforts required by these acts of devotion are made clear within the image: physical exertion, communal cooperation, and the arduous task of engineering the church. It is here explicitly noted that the relics were wrapped in clothing (vestibus cooperiunt), suggesting a long-standing association of the Virgins' relics and fabrics. As previously established, the townspeople were the first to discover, decorate, and bury them in a

²⁷⁸ Klinkenberg, "Kölner Märterinnen, 1890," 124; trans.: author.
²⁷⁹ For complete text of Clematius Stone, see fn. 78.

²⁸⁰ See above, fn. 169.

manner appropriate for saints, and thus filled the role of protectors of the Virgins. Finally, the construction of the church is illustrated by three figures at work on a partially constructed edifice at the right of the scene. Collectively, these communal acts emphasise the citizens' immediate devotion to and veneration of the Virgins. The images additionally creatively capture Cologne's sacred and 'ancient' past, one that predated (re)construction of Clematius' church, a building generally shrouded in mystery (according to the *Sermo*).

Importantly, for this discussion, the bowls also illustrate two of the cult's important visionary encounters: Ursula's prophetic dream and Cordula appearing before Helmdrude. Visually, therefore, the bowls express the importance of the visions within the cult's history. Ursula's dream, on the 'Baltimore' bowl, is situated between the Virgins' arrival into and their departure from Cologne (Fig. 1.16c). The women are depicted asleep, reclining in their boats. Ursula faces in the opposite direction to her consorts, and is additionally singled out by her crosshatched pillow. As in the illustration of the Virgins defending Cologne, an angel energetically descends from heaven in a billowing cloud. He blesses her with his right hand and holds what appears to be a scroll in his left. Within the bowls' imagery, this is one of the few narrative scenes that focuses on Ursula as the leader of the Holy Virgins. The same architecture found in this scene is replicated in the 'Aachen' bowl – where the Huns attack the city and martyr the Virgins – articulating a visual link between the two instalments.

The Virgins' hagiographic visual narrative concludes with Helmdrude's vision of Cordula (Figs 1.17l-m). As noted, this event occurred in the tenth century within the Neuenheerse convent and is thus separated, temporally and geographically, from the lives and deaths of the Virgins.²⁸¹ Here, Cordula appears before Helmdrude in her sleep. The nun reclines in her bed, neatly tucked under her blankets; her head, covered in her veil, is propped up, gazing at the saint. Cordula, clothed in an elaborate robe and headpiece, relays her message to Helmdrude. With her right hand she indicates towards Helmdrude's forehead, and touches to her own forehead with her left. The gestures make a clear connection with the emphasis placed upon sight and forehead as a significant area of display, which is textually expressed within the visionary accounts. Unlike the written account first captured in

²⁸¹ See above, section 1.6.a.

Passio I, however, Cordula is not explicitly identified with her name inscribed on her forehead, and the caption above, which states she is a member of the cohort (*hec se consorti docet accessisse cohort*), is notably vague. This probably indicates the written record and subsequent circulation of this event after Helmdrude's vision had established the encounter as integral to the Virgins' narrative and appropriate feast day. In this way, the image does not require explicit labelling. Furthermore, it supports the fluid relationship between text and image from an early stage of the cult's documented history. Perhaps more importantly, it reveals the power of imagery to tease out key aspects of the narrative, such as those referring to spiritual and physical sight.

1.7.b Bodiless Heads: Zwiefalten Calendar Page

The other early cult image considered here is an October Calendar page (Figs 1.18ab)²⁸² preserved in a manuscript created in the Benedictine cloister of Zwiefalten, in southern Germany – a notable distance from Cologne. This illustration is almost certainly linked to the presence of the Virgins' relics in the cloister. As part of the Benedictine network, it received relics in 1103,²⁸³ and two more bodies in 1145²⁸⁴ – the first of these predates the *agar Ursulanus* discovery when the translation of relics was far less frequent. Such acquisitions would have undoubtedly facilitated a (spiritual) bond between the community and cult's host city, thus justifying the inclusion of these powerful patrons within its Calendar of holy days.²⁸⁵

The Holy Virgins' image occupies the lower half of the page with St Gereon and the Theban Legion in the upper half (Fig. 1.18b).²⁸⁶ Ursula is centrally enthroned and framed within two concentric circles populated by heads of the virgin martyrs. She displays wounds in both the abdomen and shoulder that were

²⁸² Stuttgart, Württembergische Landesbibliothek, cod. hist. fol. 415, fol. 69v. The image is discussed in: Legner, *Kölner Heilige*, 316; Zehnder, *Sankt Ursula*, 122, 124– 25; Montgomery, *St. Ursula*, 117; Joseph Giesen, "Ikonographische Seltsamkeiten," *Jahrbuch des Kölnischen Geschichtsvereins* 29–30 (1957): 161–65; Karl Löffler, *Schwäbische Buchmalerei in romanischer Zeit* (Augsburg: Dr Benno Filser Verlag, 1928), 54.

²⁸³ First mentioned in: Tervarent, *La légende*, 36; as cited in: Zehnder, *Sankt Ursula*, 93.

²⁸⁴ Buck, "De S. Ursula," 240–42.

²⁸⁵ Most recently: Hoefener, "Liturgical Offices," 81–82.

²⁸⁶ Kremer, "Studien zum frühen Christentum in Niedergermanien," 201–28.

presumably inflicted by the weapon-wielding soldiers flanking her, and so representing the martyrdom. Ursula wears a white robe and veil, and gestures to the left, raising her hands in the *orans* (prayer) position. A neighbouring inscription, "Ursula queen with the eleven thousand virgins" (*Ursula regina cum XI milibus virginibus*), identifies her as of regal status (although she does not wear a crown). Unlike her companions, she is depicted full-length and slightly larger, reflecting her promotion to group leader initiated by *Passio* I and repeated thereafter.

The 11,000 Virgins are here represented by forty-nine bodiless heads shrouded in alternating red and white habits. The inner circle displays twenty-five neatly organized, tightly arranged heads that slightly overlap one another. Ursula's head, emphasized as larger, also occupies this circular frame. This unified ring of heads – one half facing to the right and the other half to the left – encircle the cult's leader. The twenty-four heads in the exterior circle are less crowded and arranged in pairs that face each other. Together with Ursula, one other woman is visually signalled out as significant; located at the top of the outer circle, she faces forward, gazes outwards, and displays a cloth with a cross that covers her forehead. Her neighbours turn inwards to frame her, further signifying her importance. This figure is unidentified but likely presents either Pinnosa or Cordula,²⁸⁷ both of whom would have been promoted through oral retellings together with textual copies of the *Sermo* and the *passiones*. Here, the multitude of veiled heads articulates the collective nature of the cult, yet the group's fate is substituted by Ursula's martyrdom; her spilled blood represents that of all the Virgins.

As already established, both versions of the *Passio* document that Ursula died from an arrow wound. At the moment of her death, on the bronze bowl (Fig. 1.17fg), Ursula is shot by an arrow through her throat. It is uncertain if this was a fatal piercing, as the archer prepares to release a second arrow. In the Calendar image, however, Ursula sits facing the archer that has released four arrows: one lodged within her abdomen or womb, two exiting the roundel after possibly grazing her shoulder, and one heading towards her left wrist or head. The soldier prepares to release another arrow, which touches the forehead of one of the virgins. The *passiones* do not specify the location of Ursula's wounds: *Passio I* states the pagan prince ordered her to be swiftly punished by death inflicted by a (shot) arrow

²⁸⁷ Zehnder, *Sankt Ursula*, 125.

(sagittal mulcutata perniciter jussa mori),²⁸⁸ while Passio II documents that she was struck with the shot of an arrow (ictu sagittae transverberata).²⁸⁹ Both versions convey that Ursula was martyred by an arrow wound, yet neither specify the location of the fatal shot. In the Zwiefalten image, the projected location of the fourth arrow is Ursula's wrist, head, or possibly her throat, as distinct from the bowl where she is clearly pierced through the throat. These differences suggest diverse contemporary interpretations of the martyrdom, which might have varied regionally; it is an ambiguity that was clarified in Elisabeth of Schönau's final vision. When asked about her death, Ursula responds: "I was struck by the shot of an arrow in my heart,"²⁹⁰ thus offering yet another body part, one that differs from those represented in either the manuscript or the bowl. It was a narrative detail that would be repeated in the Legenda aurea, which, together with the widely-circulated Liber Revelationum, publicised Ursula's cause of ultimate death as involving a pierced heart. This, furthermore, came to dominate iconographic representations of Ursula from the thirteenth century onwards. These early depictions, therefore, reveal fluid interpretations of the martyrdom before all was clarified by Elisabeth of Schönau.

In addition to the details of Ursula's death, the ways in which the Virgins are represented, especially in the eleventh and twelfth centuries, is particularly important here. From the earliest visual examples, the definitive large group size is visually accentuated, being underscored in all the cult's textual references, beginning with the Clematius Stone. On the bowls, the Virgins are neatly arranged within their ships, their overlapping bodies and heads indicating that a sizeable group inhabits each vessel. In the manuscript illustration the women are depicted as bodiless heads; yet, despite this anatomical reduction, they are unmistakably alive and present. Their enlarged eyes are wide open and alert and their alternating positions suggest engagement between them. The central virgin, who faces outwards, brings the viewer into the action, including them as living witness to the violence inflicted upon their leader, while simultaneously conveying their eternal heavenly existence.

²⁸⁸ *Passio I*, cited in: Levison, "Ursula-Legende," 16; trans.: author.

²⁸⁹ Klinkenberg, "Kölner Märterinnen, 1892," 159; trans.: author.

²⁹⁰ "ego autem ictu sagitte in corde meo percussa sum". Roth, *Visionen*, 134; trans.: Clark, *Complete Works*, 227.

The Holy Virgins' remarkable 'living' presence exhibited in this way is contrasted with the Theban soldiers, pictured above, whose lifeless heads float in a central caldron (Fig. 18a). Here, the male figures maintain an earthly presence in their headless trunks that gesture, interact with one another, and violently expel blood from their necks. Gereon, at the top of the outer ring, holds his unresponsive head, and so presents a compelling counterpart to Ursula who is conscious and still among the living; despite her wounds she actively acknowledges her attacker. Pictured together, this page visualizes Cologne's notable patron saints and underscores its exceptional sacred history. The mass grave of the Theban Legion, who, like their female counterparts were martyred in the city, was discovered near the Church of St Gereon - situated in close proximity to the agar Ursulanus and the Virgins' titular church. The relics of the male soldiers also contributed to Cologne's sacred reputation, and these circulated, albeit in fewer numbers, often together with bones of the Holy Virgins. Pictured in this way, this calendar page visually accentuates both Cologne's abundant relics and blood-soaked soil upon which the city is build.

1.8 Summary

The visual imagery associated with the cult offers a rich and varied means of considering contemporary perceptions, including those associated with the textual accounts. Yet, it also reveals creative interpretations that deviate from hagiographic texts. Perhaps it is in this vein that the emerging cult of the Holy Virgins is best understood – as following and simultaneously falling outside established hagiographic traditions. Although the cult came to be established as a group of epic proportions who underwent an impressive journey that concluded with their dramatic martyrdom in Cologne, it was not immune from confusion, scepticism, and doubt. As has been demonstrated, these periods of flux generated strategic interventions in order to reconcile a series of issues: the group's existence and inconceivable size; establishing and maintaining Cologne's centrality; addressing first the lack of relics, then the authentications of the hoard of bones from the *ager Ursulanus*; and finally, justification of the presence of men within the cult. It was, thus, an accumulative project – a series of solutions to various problems as they arose – that unfolded over the course of the tenth through to the twelfth century.

This cult is not alone in its aspiration to unite the sacred with a "concretized form";²⁹¹ it is, however, notable for the sheer scale and innovation of these efforts. As the largest Christian cult, the 'effective' authentication of Cologne's martyred Virgins required the inventive participation of many individuals who together ensured that the cult was well established and that it maintained its legitimacy. At its very heart lies the material evidence – an 'ancient' stone, marking the site of the bloody martyrdom, the weaving together of textual sources, and finally, the Virgins' sacred bodies identified by grave-markers – that eventually ensured the cult flourished for centuries to come.

²⁹¹ Smith, "The Remains of the Saints," 423.

Chapter 2

Sacred Bones and Costly Textiles: Investigating the Textile 'Skull' Reliquaries of Cologne's Holy Virgins

2.1. Introduction

With the origins of the cult clarified, its foundations established, and with the visual emphasis placed on the Virgins' dismembered heads in the Zwiefalten image (ostensibly to highlight the group's impressive size), it is possible to turn now to consider the cult's most prized relics: the Virgins' skulls. Once authenticated, the extraordinary number of sacred bones excavated from the *ager Ursulanus* flooded the medieval relic market starting in the twelfth century. Of the many possible skeletal remains, the cranium quickly became established as the most revered body part. This ultimately reflects the active and evolving phenomenon of medieval relic dismemberment and circulation, within which these skulls forge new and powerful expressions. In the centuries to follow, these sacred objects, wrapped and ornamented with textiles and other precious materials, saturated religious institutions – both in Cologne and also across Europe. In this way, the skull reliquaries not only became the cult's most recognizable visual evidence, but also introduced new methods of viewing and displaying sacred material.

This chapter investigates these sacred objects in detail, including their materials, structural compositions, physical manipulation, and their innovative display of sacred matter. These dismembered skulls, many of which are cranial reconstructions, demonstrate pertinent connections to the medieval paradoxes of fragmentation and 'wholeness' as well as life and death. In addition to the assemblage of various bones to make a skull, these objects have received many 'treatments' over the centuries. It is, therefore, important to note some of historic campaigns and other factors that impact the thorough investigation of their original medieval arrangements.

After establishing the wider framework, it will then be possible to delve into the formations of the wrapped skull reliquaries, including both the structural and ornamental elements. Here, the various techniques and materials employed to cover and support the skulls will be considered. Upon closer inspection, the objects

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perceived as skulls demonstrate significant manipulation – of both bones and textiles. Further investigation below the surface of the fabrics reveals an interest in the forehead and a notable desire to present a 'complete' and anatomically 'correct' skull. Some of these 'skulls' are not in fact complete cranial remains; rather, they have been artfully constructed, mediated, and manipulated to provide the external illusion of a human head. Furthermore, some reliquaries have been constructed to display facial features – the nose, cheekbones, and chin – all of which suggest that a living person resides behind the fabric mask. These discoveries demand discussions of authenticity, anatomical wholeness, and the desire to convey the 'living' presence of a saint.

Textiles played a key role in this structural makeup, and a close analysis of these – linen in particular – reveals significance derived from biblical, liturgical, and secular contexts with which the materials are associated. The skulls and their form-fitting and 'revealing' compositions were preserved and replicated with each new cover, and thus present intriguing examples of layering and multiplying sacred material. With the provocative relationship between textile and bone, it is worth reiterating that these objects significantly challenge the distinction between relic and reliquary, the definitions for which have been set out by modern scholarship.²⁹² Here, differences in their structural and decorative composition are highlighted, explored, and analysed.

These objects also present a significant point of departure from the concept of contemporary medieval reliquaries; instead of gold and gem-encrusted shrines, or even wooden busts, these holy heads utilize textiles and costly fabrics – traditionally reserved for wrapping bodies (or body parts) inside the metal (or wooden) containers – as the primary decorative media for enveloping, containing, decorating, and displaying the skulls. They additionally exposed bare bone when it was customary to conceal or partially obstruct the visibility of sacred remains. Thus, the importance of sight, raised in the textual and visual accounts of the cult, will be further explored here, but in relation to relic presentation and veneration. With

²⁹² See particularly, Cynthia Hahn, *Strange Beauty: Origins and Issues in the Making of Medieval Reliquaries 400- circa 1204* (Philadelphia, PA: Penn State University Press, 2012), 8–10.

these issues established, the textile skull reliquaries will be addressed in the light of the Holy Virgins' sculptural wooden busts.

2.2 Pars Pro Toto: Infinite Permeation and the Emergence of Skull Relics

Before turning to consider the textile skull reliquaries in greater detail, it is useful to outline the perceptions of and practices pertaining to sacred bodies in the high medieval period. In this way, light will be shed on the importance of the Virgins' bones, and the ways in which they precipitated an unprecedented phenomenon of relic displays that featured wrapped skulls. In Christian practice, the posthumous treatment of sacred bodies has fluctuated over the centuries, yet corporeal dismemberment remained omnipresent; whether directly following death, as part of the martyrdom, or centuries later as a result of cult activities, the separating of body parts fuelled relic circulation within Christian circles, especially in the high medieval period.²⁹³ The practice is intrinsically related to the belief that holy figures were fully present within their bodily remains; relics became their surrogate presence on earth, and this forged a desirable portal between Heaven and earth that permitted devotees to access saints and God.²⁹⁴

When exploring these concepts within the Holy Virgins' cult, Montgomery explains that relics served as the "tangible manifestation of the saints' continuing power and presence on earth" and also as the "palpable, sensory connection to the saints."²⁹⁵ Relics were, furthermore, perceived as activated agents – living, breathing, interactive material that maintained earthly cognition and sensory capabilities. The continued existence of a saint within their bones served an important aspect for devotees visiting relics; as if conversing with a living person, they were 'seen' by the saint and their prayers were 'heard'.²⁹⁶ This remained the

²⁹³ Medieval circulation of relics is a large and comprehensive subject. See, e.g., Geary, *Living with the Dead in the Middle Ages*, 194–218; Patrick J. Geary, *Furta Sacra: Thefts of Relics in the Central Middle Ages*, Rev. ed., Princeton Paperbacks (Princeton, NJ: Princeton University Press, 1990).

²⁹⁴ On these topics, Peter Brown's *The Cult of Saints*, see esp. 1-22, remains foundational; see also, Caroline Walker Bynum, *Fragmentation and Redemption: Essays on Gender and the Human Body in Medieval Religion* (New York: Zone Books, 1991), 105–8, 200–201; Caroline Walker Bynum, *The Resurrection of the Body in Western Christianity 200-1336* (New York: Columbia University Press, 1995).
²⁹⁵ Montgomery, *St. Ursula*, 59.

²⁹⁶ Hahn, *Strange Beauty*, 123.

case regardless of whether their skeleton was intact or fragmented;²⁹⁷ in fact, the principle of *pars pro toto* (a part representing the whole) implied that a strand of hair maintained an equal potency to an entire body.²⁹⁸ Instead of diffusing the saint's potency, fragmentation gave "the body increased action and power in the world".²⁹⁹

The Holy Virgins' cult – with its exponentially large numbers of relics – meant that these attitudes ultimately permitted an almost infinite permeation of sacred material across vast geographic areas. Their unity and "corporate cohesion" have been argued to be their "principal and most profound identity";³⁰⁰ this, furthermore, implied that a relic fragment contained not only the presence of that individual virgin, but also the entire cohort. Representing another manifestation of *pars pro toto*, this feature in turn would have undoubtedly increased the sacred potency of these relics – despite the seemingly never-ending supply.

The practice of translating the Virgins' relics began centuries before the discovery of the *agar Ursulanus*, albeit on a smaller scale; the *Sermo in Natali* (922) stated that devotees had "fixed inscriptions for the monuments which in several places distinguish these saints, saints who are at the same time honoured and celebrated through their relics."³⁰¹ This highlights the cult's longstanding practice of relic veneration beyond Cologne, while earlier passages confirm the veneration of

²⁹⁸ On the phenomenon of medieval bodily fragmentation, see especially: Bynum, *Fragmentation and Redemption*, 11–13, 265–97; Bynum, *Christian Materiality : An Essay on Religion in Late Medieval Europe*, 2nd ed. (New York: London: Zone Books, 2011), 177–94; Bynum, *The Resurrection of the Body*, 105–8; Cynthia Hahn, "The Voices of the Saints: Speaking Reliquaries," *Gesta* 36, no. 1 (1997): 21; Leone, "Wrapping Transcendence," 53; See also, Kevin Trainor, "Introduction: Pars pro Toto: On Comparing Relic Practices," *Numen* 57, no. 3 (2010): 267–83; although not exclusively examining treatment of the sacred body, Katherine Park's "The Life of the Corpse" was particularly helpful in understanding bodily dismemberment of different corpses and for highlighting regional differences between northern and

²⁹⁷ This is discussed in many sources, yet a helpful explanation can be found in: Dietrichs, *Vom Glauben zum Sehen*, 150–57.

southern Europe. ²⁹⁹ Hahn, "Speaking Reliquaries," 21.

³⁰⁰ The Holy Virgins' group identity remains a central aspect of Montgomery's book. For an introduction to this core concept, see: *St. Ursula*, 2–3.

³⁰¹ "hoc ips um adstruunt signorum indiciis; apud quos pleraque loca sanctis his cernuntur honorata simul et illustrata reliquiis". Joseph Klinkenberg, "Kölner Märterinnen,1890," 122; trans.: Sheingorn and Thiébaux, *Saint Ursula*, 52.

relics within the city.³⁰² It also emphasises the practice of pairing bodily remains and inscriptions (*signorum*) to preserve the memory (*memoria*) of the Virgins, and so presents a precursor to Elisabeth's visions and Thiodericus' 'discoveries'.

The bodies excavated from the *agar Ursulanus* served as a catalyst for the prolific circulation of cult relics, which were established first and foremost within their titular city. Additional twelfth-century accounts of sacred relic-collecting missions, such as those of Norbert of Xanten (1121)³⁰³ and the Grandmont monks (1181),³⁰⁴ testify to the abundance of sacred material in the city. These document monks travelling to Cologne and collecting relics from various religious institutions, but also directly from the ground. Such accounts promoted the city as a place to 'harvest-your-own' relics, which would have undoubtedly generated excitement among the faithful.

The practice of translating the Virgins' relics beyond Cologne was also expressed in Caesarius of Heisterbach's *Dialogus miraculorum* (*c.* 1220) when the novice inquired if the "Holy Virgins were pleased that their bodies should be thus distributed through different provinces". To this the monk replied that "they think it right to show themselves for this purpose that their memory may be held in honour in many places".³⁰⁵ Echoing the sentiments of the *Sermo in Natali*, this passage underscores the Virgins' approval for the circulation and veneration of their bodies in areas far from Cologne. These (unnamed) sites, together with Neuenheerse, Zwiefalten, Xanten, and Grandmont offered spiritual, physical, and temporal links: Heaven and earth were joined, the sacredness of Cologne was fused with the distant

³⁰² The saturation of Holy Virgins' relics in Cologne is addressed by Legner, see especially *Kölner Heilige*, 1–266. The textual and visual relationship between the Holy Virgins and Cologne is here explored in sections 1.4 and 1.7.a.
³⁰³ In addition to discovering the body of St Gereon who led the Theban Legion, he also returned to Xanten with the body of a Holy Virgin and two containers filled with Holy Virgins' bone fragments, together with those of other saints. Ibid., 34–37.
³⁰⁴ For Latin, see: "Itinerarium Fratrum Grandimont," in *Patrologiae cursus completus: sive Bibliotheca universalis* (Lyon: J. P. Migne, 1855), 1221–34; *Bibliotheca Hagiographica Latina Antiquae et Mediae Aetatis*, Nr. 8447; the primary reference for the monks' account is Corsten, "Eine Reise französischer Mönche." Corsten provides a German translation, see 45-60; copies of this translation are found in: Legner, *Kölner Heilige*, 40–45; and "Kölnische Hagiophilie," 218–23.
³⁰⁵ "placetne sacris illis virginibus quod sic earum corpora per diversas provincias dividunter? ... Ad hoc enim se ostendere dignantur, ut in multis locis earum memoria habeatur" Ch. LXXXVI. Strange, *Dialogus miraculorum*, II: 154.

location, and the Virgins' triumphant deaths became activated for contemporary devotees.

The mid-twelfth century marked a notable shift in the presentation of relics from chest, sarcophagus, and house-shaped reliquaries to the so-called "speaking reliquaries" (*redende Reliquiare*) – that is, figural reliquaries.³⁰⁶ Although the physical shape of these containers has been seen to reflect their religious function, and not necessarily the body-part enshrined, they nevertheless draw attention to the practice of (saintly) fragmentation. This gradual movement indicates wider discussions concerning resurrection, (in)corruptibility, and the corporality of saintly bodies, which collectively cast attention on individual body parts.³⁰⁷

While the concept of *pars pro toto* suggests, in principle, equality among relics, by the turn of the thirteenth century within the Holy Virgins' cult, the head relics appear to surpass the long-lauded skeletons as the most prized body-part. Prior to the twelfth century, the cult's hagiographic texts do not highlight the importance of the Virgins' heads and none of the sources claim that they were beheaded. Instead, this anatomical preference is likely connected with a wider cultural veneration of body-parts – especially the head – that developed in the twelfth and thirteenth centuries.³⁰⁸ For example, at the end of their journey, the Grandmont monks returned from Cologne with five bodies and two heads;³⁰⁹ much of the monks' textual account details the past history of two heads and their acquisitions.

In the thirteenth century, Caesarius of Heisterbach further explained how a Cistercian monk was sent to Cologne to retrieve heads (*capita*) of the Holy Virgins; once at his monastery, the monk washed these skulls in wine then kissed them. That

³⁰⁷ See, especially: Bynum, *The Resurrection of the Body*, esp. 200-12.
³⁰⁸ Julia M.H. Smith, "Relics: An Evolving Tradition in Latin Christianity," in *Saints and Sacred Matter: The Cult of Relics in Byzantium and Beyond*, ed Cynthia Hahn and Holger A. Klein (Routledge, Taylor & Francis Group, 2015), 57; Esther Cohen, "The Meaning of the Head in High Medieval Culture," in *Disembodied Heads in Medieval and Early Modern Culture*, ed. Barbara Baert, Anita Traninger, and Catrien Santing (Leiden: Brill, 2013), 60–76; body and head relics are respectively considered by Legner, during the medieval through the baroque periods, with particular attention paid to Holy Virgins' relics, *Kunst und Kult*, 278–315.
³⁰⁹ Legner, *Kölner Heilige*, 220.

³⁰⁶ This term is first introduced by: Joseph Braun, *Die Reliquiare des christlichen Kultes und ihre Entwicklung*, 1940.

night the monk had a vision where a virgin appeared and declared: "yesterday when you washed my head, you kissed me in a very gentle way; I now pay you back with the same courtesy".³¹⁰ Not only does this account confirm the practice of amassing the Virgins' skull relics, it also draws attention to their sacred potency. Caesarius furthermore accounted for one thousand bodies (mille dicuntur esse corpora)³¹¹ of the Holy Virgins being kept in Altenberg, the Cistercian monastery that housed and distributed large collections of the Virgins' relics during the late twelfth and thirteenth centuries.³¹² It was later documented that the same monastery had amassed between 1000 and 1200 heads during three main relic translations in 1162, 1182, and 1260.³¹³ Although Caesarius specifies bodies (corpora), it is possible some of these were conflated with the large amount of heads. In the thirteenth century, many of these relics were sent to the Order's newly founded 'sister' monasteries in Poland; this included fifty-five skulls being sent to Lad, the largest of the translations.³¹⁴ Other prominent collections include: 167 heads at the Cistercian monastery of Kamp/Niederrhein;³¹⁵ 130 heads were associated with the Benedictine abbey of Sint-Truiden (Belgium), which like Altenberg, further circulated these within nearby Benedictine sites, including Herkenrode;³¹⁶ and

³¹⁰ "Heri quando caput meum lavisti, tam amicabiliter me deosculatus es; ego tibi modo vicem rependam"; Ch. LXXXVIII, Strange, *Dialogus miraculorum*, II: 155; trans.: Scott/Swinton Bland, *Dialogue*, 90.

³¹¹ Ch. LXXXVIII, Strange, *Dialogus miraculorum*, II:156.

³¹² Janke, "Dat werde leve hiltom", 41–46.

³¹³ Norbert Orthen documents 1200 head relics in "Der Hintergrund der Legende von den Gebeinen der 11,000 Jungfrauen in Altenberg," in *Ursulinen in Köln 1639-1989: Festschrift zum 75 jährigen Bestehen der katholischen Pfarrgemeinde am Altenberger Dom*, ed Norbert Orthen and Angelika Schmitz, (Cologne: Ursulinenschule, 1989), 76; Zehnder accounts for over 1000 heads: *Sankt Ursula*:

Legende, Verehrung, Bilderwelt (Cologne: Wienand Verlag, 1985), 89.

³¹⁴ For references, see: Nowiński, *Ars cisterciensis*, 254–57; Janusz Nowiński,
"Cystersi propagatorami kultu relikwii Świętej Urszuli i jej Towarzyszek (Undecim Milium Virginum) – wybrane przykłady," *Saeculum Christianum. Pismo Historyczne* 21 (2014): 61–72; Janke, "Die Tochterklöster von Altenberg."
³¹⁵ Zehnder, *Sankt Ursula*, 89.

³¹⁶ For the skull relics of St Truiden, and especially Herkenrode, see: Philippe Geroge et al., "Een abdij en haar reliken: de historische context," in *Met maagdelijke blik, De reliekenschat van Herkenrode doorgelicht*, ed. Fanny Van Cleven, Jeroen Reyniers, and Anton Ervynck (Brussels: Koninklijk Instituut voor het Kunstpatrimonium, 2019), 21–35.

Marienfeld received 40 skulls that eventually featured in the gothic altarpiece.³¹⁷ These highlight some of the many notable skull collections outside Cologne during the high and late medieval periods.³¹⁸

It comes as no surprise, however, that the largest of such collections were housed in Cologne's religious institutions, specifically the cult's titular church; until the Second World War, it claimed to have an astounding 1800 skulls.³¹⁹ Other notable collections were found in Cologne cathedral and the churches of St Kunibert and the Holy Maccabees.³²⁰

2.3 Displaying the Multitude of Heads

The design of the skull reliquaries might have originated as early as the early thirteenth century (and will be further explored in detail below), and it seems that the monumental wall fixtures, and indeed the wooden busts, were created at this point in time in response to the astounding number of wrapped skulls;³²¹ these ushered in innovative methods for displaying sacred remains, or, as Legner phrased it, "Heiligendeposita".³²² Following the three fixtures made for Cologne Cathedral around 1280, together with open niches in the Church of the Holy Virgins, other large wall fixtures, altarpieces, and wooden busts were all specifically designed to exhibit textile wrapped skulls. These exaggerated displays propagated an image of the Virgins as a mighty group, defined by their collective sanctity, that would have presented a unique and thrilling devotional experience. Understanding these innovative presentations contextualize the holy heads within their spatial and architectural environments. Given that much has been written on these, a summary of what is known will be considered here with a more critical consideration of how skull religuaries featured within the display cases. In this way, new light will be shed on the individual objects and how textiles were intimately connected with the displays – including those that no longer exist.

³¹⁷ Karrenbrock, "Heilige Häupter," 269.

³¹⁸ Karrenbrock, "Heilige Häupter"; Zehnder, *Sankt Ursula*, 89–90.

³¹⁹ Zehnder, *Sankt Ursula*, 89.

³²⁰ See further: Karrenbrock, "Heilige Häupter," 272.

³²¹ See further below, section 2.12.

³²² Legner, *Kunst und Kult*, 168–69.

The cathedral's three large cabinets (Figs 4a-c) present 280 individual architectural niches evenly arranged in rows and columns; each was designed to feature an ornamented skull framed within a gothic arch. Below, the praedella was filled with various bones, also believed to belong to the Holy Virgins and their cohort (Fig. 3). These displays were accessible to the select clergy permitted into this space. Legner hypothesized that the fixtures were originally commissioned for the cathedral sacristy (Figs 2.1-2.4); their measurements precisely match the sacristy walls, and their tracery reflects, in microcosm, the sacristy's architectural and painted ornamentation.³²³ Interestingly, however, it also matches that found in the choir triforum, suggesting that the cabinets might have also created a visual link between the sacristy³²⁴ (where sacramental preparations take place) and the choir (where the sacrament is enacted). Legner further argued that the fixtures were developed from reliquary cabinets and that there might have been a subsequent connection between them and the winged altarpieces that followed the earliest creation of the shelves.³²⁵ The increasing visibility of these relics remains central to his arguments. By at least the mid-nineteenth century, however, the cathedral's cabinets had been moved to the south transept - an area of the cathedral more physically accessible to most of the lay population (Fig. 2).³²⁶ Ironically, today they reside within the cathedral treasury, available only to those who pay the admission fee. This final location, however, has situated the skulls in a position analogous to their (presumed) original placement within the sacristy in terms of its (limited) access. Of the many skull displays documented in medieval Cologne, these are the only ones that exist in their original form. Together with those in the Holy Virgins' church, other notable assemblages were found in churches of St Kunibert and the (now-destroyed) Holy Maccabees and St Heribert (Deutz); these were complemented by those belonging to the Theban Legion situated in St Gereon (Figs 15, 16).

While it was believed that every sacred site within Cologne possessed relics of the female martyrs, the cult's titular church fittingly housed the largest collection

³²³ Legner, "Kölnische Hagiophilie," 201.

³²⁴ Legner, *Kölner Heilige*, 198.

³²⁵ Legner, "Kölnische Hagiophilie," 195–274, esp. 196-217.

³²⁶ Legner, *Kölner Heilige*, 100.

of the Holy Virgins' skulls – possibly 2000 displayed in the choir alone³²⁷ – many of which were in full sight of the congregation (Figs 2.5-2.9);³²⁸ the abundance of sacred bones was, furthermore, physically incorporated in the church's walls and capitals:³²⁹ the space within the choir's double walls was filled with relics discovered in the ager Ursulanus (Figs 2.10, 2.11).³³⁰ Such architectural incorporation of sacred remains created a heightened experience within the church: devotees were completely enveloped by relics, seen and unseen. In fact, the hidden placement of bones within the walls converts the structure into a supra reliquary, in which the entire church is a shrine for the Virgins' remains.³³¹ It was the chancel, however, that became the space notable for its abundant display of relics; in addition to the open niches, there were three elaborate metal house and barrelvault shaped shrines containing the remains of Ursula, Aetherius (her fiancé) and Hippolytus, which were completed around 1170 (Figs 2.6, 2.7, 2.12). These were the church's most precious relics, and were therefore protected by a series of structural enclosures: metal religuaries situated within wooden house-shaped frames secured behind a metal grille.³³² These sat atop columns and the glittering altar, which created a space that offered close contact with the bodies above.³³³ Collectively, these arrangements of relics (those visible and those contained within shrines, niches and the double walls), together with the Clematius Stone (the 'ancient' textual reminder of the site's historic martyrdom) created a space of exceptional sanctity.

The church interior was indeed perceived to be a space that was saturated with relics; in 1510, when describing the relic displays in the chancel and nave, Philippe de Vigneulles stated that:

³²⁷ Varying totals of skull relics in this space have been suggested (1,400 in 1656; 1,028 in 1853). While numbers vary, these accounts do speak to the high volume of holy heads concentrated within the choir space. For more discussion, see: Legner, ibid., 202–6.

³²⁸ Schommers, *Rheinische Reliquiare*, 221.

³²⁹ Legner, *Kölner Heilige*, 200–223.

³³⁰ Ulrike Reichert, pers. comm. conversation, July 2013 and August 2016, Also noted briefly by Montgomery: *St. Ursula*, 52.

³³¹ Ibid.

³³² Legner, *Kölner Heilige*, 208.

³³³ Militzer, "Inscriptions and Excavations". It is still unclear who was permitted in this area. Although this layout invites speculation that pilgrims circumambulated the high altar relics, no evidence supports this claim.

there is a Holy Virgin's head laying in every opening. Thereby, all sides of the church, up to the vaults are covered with relics. One could also see the heads of other virgins, more than three thousand in number, at the walls of the church and with other countless relics.³³⁴

Although this is an early modern account, it nevertheless conveys the awe-inspiring spectacle when visiting the cult's titular church. Further to these collections, hundreds of wrapped skull relics were positioned in the large gothic shelves that stood on the north and west side of the Marienkapelle in the south transept (Figs 2.13, 2.14). Situated here, these would have been the first visible to pilgrims entering the church from the south portal, successfully shaping the immediate impact; this might well have been the view that inspired de Vigneulles' account.

Many of the relic displays at this site, however, have changed or been destroyed since their initial construction, and this inevitably complicates the modern understanding of how the relics operated within the space. One of the most notable 'alterations' occurred in the 1640s, when the Jesuits replaced the medieval *camera aurea* with the Golden Chamber (Figs 2.15-2.20) and, in the process, erased evidence of the earlier displays.³³⁵ Despite the new arrangement and gold acanthus ornamentation, however, this space retains the largest quantity of skull reliquaries in the church, and thus might convey some essence of the *camera aurea*. Following this, the church was partially destroyed in the 1942 air raids, the choir and south transept, which by then housed the relic niches and monumental shelving, suffered the most severe damage, while the Golden Chamber remained intact.³³⁶ Despite such 'disruption' to and destruction of the earlier displays and their relics, travel accounts, as noted, from the sixteenth and seventeenth centuries provide insightful

³³⁴ "in jeder Öffnung liegt einer heiligen Jungfrau Haupt. So sind alle Seiten der Kirche bis hinauf zum Gewölbe mit Reliquien bedeckt. Auch konnte man anderer Jungfrauen Häupter mehr denn dreitausend an der Zahl an den Wänden der Kirche und andere unzählige Reliquien sehen". Legner, *Kölner Heilige*, 202.
³³⁵ For an overview, see: Urbanek, *Die Goldene Kammer*, 13–25; Schommers, *Rheinische Reliquiare*, 221–35.

³³⁶ For thorough documentation of the damage and reconstruction of the church, see: Ulrich Krings and Otmar Schwab, *Köln, die romanischen Kirchen: Zerstörung und Wiederherstellung*, Stadtspuren, Denkmäler in Köln; 2 vols (Cologne: Bachem, 2007), 660–701.

descriptions of the pre-Baroque, possibly medieval, arrangements.³³⁷ Notable among these is that by Thomas Coyrat, an English traveller who visited the church in 1608:

The bones of these virginall Martyrs are ... distributed into divers places of the Church. For as soone as I entred it, I observed them first in that part of the church which is without the body, where on three sides of the same part of the Church, their bones lie in great heaps together. Under them are placed their skuls, all which are covered over with a sleight kind of covering. But in the bodie of the Church I observed a farre greater multitude of the mortifying objects ... and their skuls with like coverings are laid under them ... At one end of the Church there is a certaine frame made in the forme of a cupboord that containeth their skuls onely, that are covered with coverings like to the rest before mentioned, which I saw through a frame of glasse that is placed before them. Againe all the upper parte of the quire round about are filled with their bones, the skuls being placed under them whereof most have blacke taffata cases that are distinguished ... At the west end of the Church I saw a certaine secrete roome with an yron dore and strong barres to it, wherein are kept many religious and ancient reliques, which are shewed but upon some speciall festivall daves.338

Coyrat's eyewitness account attests not only to the sheer multitude of the relics at the cult's titular church, but also to the importance of the skulls among them. He confirms that – with their fabric coverings – they were both visible and separated from the other relics. He was attentive to the location and varying methods of display within the church, and although he did not value the relics' sacred currency, his account nevertheless speaks to their notable impact and omnipresence within the structure.

³³⁷ For more about these early modern accounts, see: Legner, *Kölner Heilige*, 214–21; Urbanek, *Die Goldene Kammer*, 26–27.

³³⁸ Thomas Coryat, *Coryat's Crudities*, vol. 2 (Glasglow: James MacLehose and Sons, 1905), 337–38.

Additionally, Coyrat's mention of the "secrete roome" presumably identifies the *camera aurea*, thought to have been located in the southwest corner of the vestibule (Figs 1.4, 1.5).³³⁹ Beyond its location, little concrete information is known regarding the size, function, or exhibition of relics there. A mass was held in the space in 1550, which indicates that, at that time, it contained an altar, and so would have functioned as more than an area of display.³⁴⁰ The door leading into the Baroque Golden Chamber (Fig. 2.21), with its notable metalwork and extensive lock system, dates to the second half of the fourteenth century. It is, in fact, believed to be the original door to the *camera aurea*, and so stands as a significant remnant, and it might be the very door mentioned by Coyrat.³⁴¹

The relic displays of St Gereon and St Kunibert were also destroyed during the air raids of May 1942.³⁴² The monumental wall-shelves of St Gereon, which dated to the thirteenth and fourteenth centuries, previously housed 582 individually wrapped skulls above the choir stalls in the north and south walls of the choir (Fig. 16). Other shelves were also mounted below the clerestory of the central decagon (Fig. 15), in the area that Legner designated the *Reliquienzonen*.³⁴³ Although these shelves were created to house the holy heads of the Theban Legion, they nevertheless provide useful contemporary comparanda for the cathedral shelves and other fixtures around the city. Among these are the two late-gothic reliquary shelves found in St Kunibert's that once hung from the walls of the Heimann'sche Chapel situated on the south side of the west transept (Figs 2.22-2.23).³⁴⁴ Here, the skulls were artfully arranged with other ornamented bones and bust reliquaries, all framed within the ornate gothic tracery of the shelving fixtures.

Both the Benedictine Church of the Holy Maccabees and the monastery of St Heribert also claimed possession of large collections of Holy Virgins' relics during

³⁴⁰ Schommers, *Rheinische Reliquiare*, 223.

³³⁹ Schommers was the first to suggest the medieval placement of the *camera aurea* in the southwest corner of the church. *Rheinische Reliquiare*, 226; her research laid the foundation for many subsequent studies, including the most current; see further: Urbanek, *Die Goldene Kammer*, 26–36.

³⁴¹ Urbanek, *Die Goldene Kammer*, 29.

³⁴² For more about the war damage at St Gereon and St Kunibert and their subsequent reconstruction, see: Krings and Schwab, *Die romanischen Kirchen*, 190–287; 288–349.

³⁴³ Legner, *Kunst und Kult*, 154–71.

³⁴⁴ Legner, "Kölnische Hagiophilie," 238.

the medieval period. These claims seem credible given the Holy Maccabee's fortuitous placement over the *ager Ursulanus* and St Heribert's management of the relic excavations (Fig. 5); unfortunately, neither site remains. While the Holy Maccabees claimed possession of more Holy Virgins' relics than the cult's titular church,³⁴⁵ its medieval relic displays (presumably) vanished when the church was destroyed by fire in 1462. The early sixteenth-century reconstruction, likely inspired by the medieval fixtures, displayed on its walls a notable quantity of Holy Virgins' relics that included skulls, other bones, and even entire skeletons.³⁴⁶ Some of the holy heads and busts from this site have been translated to the collection on display in St Kunibert (Fig. 10). The monastery of St Heribert was partially destroyed in the fourteenth and sixteenth centuries;³⁴⁷ dissolved during the Napoleonic invasions; and almost completely destroyed in the 1942 air raids. Although a modern reconstruction of the church exists today, none of the relics – or their fixtures – are accounted for.

During the fourteenth and fifteenth centuries the wrapped skull relics also became integral features within large winged altarpieces, both as freestanding objects and as housed inside wooden bust reliquaries. These have been much studied, and need only be mentioned to highlight the presence of the Virgins' skulls. The *Clarenaltar* of 1347, for example (Figs 2.24a-d), presents twelve wooden busts and a now-empty *praedella* that might have contained wrapped skulls. Now featured in Cologne Cathedral, this was originally created for the Poor Clares' abbey in Cologne.³⁴⁸ Three years later the Cistercian monastery of Marienstatt commissioned

³⁴⁵ Legner, *Kölner Heilige*, 224–26. This competition eventually involved Helias Mertz who convinced Erasmus to compose *Virginis et martyris comparatio* (1536) which favoured the Holy Maccabees.

 ³⁴⁶ Ibid., 223-236. For discussion of the early modern relic displays, see pp. 229-30.
 ³⁴⁷ Ibid., 263–66.

³⁴⁸ One of the most thorough considerations of this complex object remains Mary Em Kirn's "The St. Clare Altarpiece: A Re-Evaluation of a Fourteenth Century Double Transformation Altar from Cologne" (doctoral thesis, Florida State University, Tallahassee, FL, 1980); Montgomery examines this altarpiece in terms of its wooden busts, liturgical uses, and significance within the female spiritual community of the Poor Clares. He also provides the most updated bibliography on these topics. *St. Ursula*, 83–98; Legner considers this as part of his "evolutionary" exploration of the displays of the Holy Virgins' relics. Included in his analysis are similar altarpieces including those originally associated with Altenberg abbey (1350), Coesfelder (1380), and Heisterbach abbey (1448) in "Kölnische Hagiophilie," 203–16.

a nearly identical altarpiece that presented twelve wooden busts and retains thirteen wrapped skulls in the *praedella* (Figs 2.25a-c).³⁴⁹ A similar example was found at Marienfeld, another Cistercian site, commissioned nearly a century later (Fig. 21).³⁵⁰

Cologne possessed and distributed an unprecedented quantity of relics and the arrangements made their displays seem to have been undertaken in direct response to that abundance. These examples (although fragmented and dispersed), together with others in sites such as Xanten, Herkenrode (Beligium), Ląd, Pelplin, and Obra (Poland) bear witness to the city's unique contribution to the treatment of sacred material. Featuring a multitude of rows and columns populated with hundreds of individually ornamented skulls, the displays manufactured a viewing experience unparalleled in other medieval religious spaces. Their sheer volume, with parts of the relics visible to the naked eye, certainly created an impressive, possibly even bewildering spectacle,³⁵¹ which simultaneously presented, validated, and authenticated the martyrs. The exhibition of the cult's unequivocal number additionally reinforced the Holy Virgins' cohesiveness and collective sanctity.

2.4 Accounting for the Historic 'Treatment' of the Skull Reliquaries

Given that many of the medieval displays were altered in later centuries or otherwise lost, dissolved, or destroyed, the study of the skull reliquaries contained within is complicated. Furthermore, between the high medieval period and as recently as the nineteenth century, most of the skulls have received at least one, but more often, multiple new textile covers; in most cases, the delicate nature and ephemerality of fabrics have also necessitated subsequent repairs and/or alterations to the original work. The later wrapping, re-wrapping, and new ornamentation have completely concealed or dramatically augmented the medieval

 ³⁴⁹ Nowiński thoroughly analysed the visual and liturgical aspects of this altarpiece, together with the display of Holy Virgins' relics in *Ars cisterciensis*, 247–54;
 Montgomery also addresses the Marienstatt altarpiece as part of the (male)
 Cistercian community, as compared to the *Clarenaltar*. See: *St. Ursula*, 83–98.
 ³⁵⁰ Karrenbrock, "Heilige Häupter."

³⁵¹ Mary Carruthers explores "bewilderment" as one end of the visual spectrum when experiencing "polyfocal perspectives". Although this is initially introduced in relation to architecture, her arguments form parallels with displays featuring a multitude of Holy Virgins' skulls; see *The Experience of Beauty in the Middle Ages* (Oxford: Oxford University Press, 2013), 151.

work. Perhaps most challenging for this study, is the difficulty these interventions present in accessing the initial medieval textile wrappings and the skull reliquaries themselves.

Some campaigns of 'enhancement' were more intrusive than others: in the mid-seventeenth century, the Jesuits sponsored hundreds of gold-embroidered, red velvet covers to decorate the numerous skulls found in the churches of the Holy Virgins (Figs 2.26-2.29) and Church of Mary's Assumption in Cologne (Fig. 2.30). These entirely concealed the previous textile layers, thus complicating detailed analysis of the earlier material. Then, in the late nineteenth century, Alexander Schnütgen, a theologian, cathedral curate, and art 'collector' in Cologne, stripped and redressed the nearly 300 skulls belonging to the cathedral's sacristy shelves.³⁵² From this collection, only two medieval skull reliquaries, C.SMA.1 (Figs 1a-k) and C.SMA.2 (Figs 2.31a-k), along with six silk embroidered fragments, were preserved;³⁵³ these are now housed in the Schnütgen Museum archives and labelled under the blanket description "Kölner Reliquienfunde" (Cologne reliquary findings).³⁵⁴ The once-plentiful and costly decorations – many cut and sold by Schnütgen to other museums or private collectors across Europe – are now lost or no longer associated with the skulls they once wrapped.³⁵⁵ This invasive 'restoration' project not only destroyed the vast majority of the medieval textiles but also erased the skulls' decorative biographies.

Prior to this project, accounts of more informal handling, such as that captured by Maria Edgeworth, in a letter to her aunt in 1809, might have also

³⁵² Legner, "Kölnische Hagiophilie," 225–27.

³⁵³ See below, section 2.9.

³⁵⁴ Gudrun Sporbeck, "Vages und Ungewisses - Spurensuche zur Geschichte der Textilsammlung Alexander Schnütgens," in *Alexander Schnütgen - Colligite fragmenta ne pereant - Gedenkschrift des Kölner Schnütgen Museums zum 150. Geburtstag seines Gründers*, ed. Ulrich Bock (Cologne: Schnütgen-Museum, 1993), 201.

³⁵⁵ Sporbeck, "Vages und Ungewisses." As noted here, large quantities of textiles were sold to museums in places including Hungary, Berlin, and Hamburg. Although it is impossible to trace the precise materials sold, it is presumed that the reliquary textiles were among these. Legner suggested that Schnütgen dismantled the medieval textile reliquaries in 1884 (instead of 1889 as previously suggested); these textiles would have therefore been part of the numerous sales occurring before 1889. See further: Legner, "Kölnische Hagiophilie," 225–27.

altered the skull decorations. She describes Mr John Foster's experience in Cologne, who, while visiting to the Church of the Holy Virgins, claimed:

The man who showed them used to fish the skulls out of their niches when he wanted strangers to have a nearer view of them by sticking a kind of hook at the end of a rod into the holes of their eyes ... St Ursula who was treated with the greatest respect was hooked down by her red topknot.³⁵⁶

Despite its 'hearsay' status, this account certainly suggests a less than reverent approach to handling sacred material, which, along with the various decorative campaigns over the centuries, would have inevitably impacted the delicate fabric surrounding the skulls. And, further exacerbating the situation, many skulls and their corresponding wall fixtures were lost or destroyed over the course of history, especially during the air raids of the Second World War, and survive today only through photographs and travel accounts.³⁵⁷

2.5 The Selection of Case Studies³⁵⁸

Nevertheless, this study is chiefly directed towards investigating the original medieval materials, decorations, and assemblages of the Holy Virgins' skull reliquaries. The selection of case studies was therefore, of necessity, largely governed by the access, or the lack thereof, to these materials.³⁵⁹ In some cases, however, despite the early modern enhancements, the newer textiles have frayed over time, revealing the underlying medieval fabrics and other material elements.

³⁵⁶ Maria Edgeworth, *Maria Edgeworth's Letters from Ireland*, ed. Valerie Pakenham (Dublin: The Lilliput Press Ltd, 2017), 126. I am grateful to Aideen Ireland for directing my attention to this account.

³⁵⁷ See above, p. 55; for a detailed photographic account of the destruction and rebuilding of Cologne's Romanesque churches, see Hiltrud Kier and Ulrich Krings, *Stadtspuren, Denkmäler in Köln: Köln, die romanischen Kirchen im Bild*, vol. 3 (Cologne: J.P. Bachem, 1984); for textual accounts and pictures of church reconstructions, see: Krings and Schwab, *Die romanischen Kirchen*.
³⁵⁸ See Table 1.

³⁵⁹ For an explanation of the access and the limitations to examining the skull reliquaries in this study, see above, pp 54-56. The approximate dates are listed on Table 1, but the majority of dates have not been included in the text unless more precisely identified.

This exposure, albeit limited, offers new insights into the earlier decorations and structural compositions, allowing consideration of them here; in rare cases, the outermost materials are, in fact, medieval, thus presenting valuable information about their make-up and arrangements. The consideration of these intricate and individualized compositions necessitated time-consuming and first-hand investigations.

Notable among the (accessible) skull reliquaries are the two from Cologne Cathedral now housed in the Schnütgen Museum Archives (C.SMA.1-2; Figs 1a-l, 2.31a-k), which display well-preserved and complete medieval arrangements. It is unclear whether they previously incorporated newer ornamentation, which was removed by Alexander Schnütgen, or whether the originals remained untouched over the centuries. Nevertheless, as they exist today, they offer a rare opportunity to investigate the medieval construction and ornamentation of the Holy Virgins' skull reliquaries; they provide insights into the technique, composition, and materials used in covering the relics that enable a comprehensive account of the skulls' earliest construction and ornamentation, and so lay the basis for establishing the connections between the collections both within Cologne and farther afield.

Of the Golden Chamber skulls, roughly twenty retain what appears to be their original medieval decoration, and five of these are investigated here: C.GK.2 (Figs 2.32a-k), C.GK.3 (Figs 2.33a-k), C.GK.5 (Figs 2.34a-f), C.GK.8 (Figs 2.35a-f), and C.GK.9 (Figs 2.36a-g). Three others display early modern covers that are particularly worn, and so demonstrate how the textiles were layered over time: C.GK.1 (Figs 2.37a-j), C.GK.4 (Figs 2.38, 2.39a-h, and 2.40a-d), and C.GK.6 (Figs 2.41a-i). C.GK. 7 (Figs 2.42a-c) was selected because of its unique form-fitting composition and stabilizers; C.GK.4.2 (the skull of C.GK.4b [Figs 2.40a-d]), although disassembled, exposes material that would otherwise be concealed. Finally, this example, together with C.GK.10 (Figs 2.43a-b) present well preserved cranial remains. In addition, all present notable examples of the visibility or concealment of forehead bones.

Three skull reliquaries from St Gereon in Cologne – C.SG.1 (Figs 2.44a-e), C.SG.2 (Figs 2.45a-d), and C.SG.3 (Figs 2.46a-h) – believed to be from soldiers in the Theban Legion, also present opportunities to explore the medieval materials and their composition. Although belonging to a different cult, the abundant use of linen

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together with anatomical alterations provide useful comparanda to those directly associated with the Holy Virgins.

Further to those still situated in Cologne, the skull reliquaries from Aachen's Cathedral Treasury (A.SA.1; Figs 2.47a-e), the abbeys of Ląd (L.AA.1 [Figs 2.48a-g]; L.HVA.1 [Figs 2.49a-g]; and L.HVA.2 [Figs 2.50a-h), Herkenrode (SQ.HA.1 [Figs 2.51a-e] and SQ.HA.2 [Figs 2.52a-h]), and Marienfeld (M.CC.1 [Figs 2.53a-c] and M.CC.2 [Figs 2.54), as well as those from Oliwa Cathedral (O.A.1 [Figs 2.55a-g] O.A.2 [Figs 2.56a-d]), are also considered here. It is likely that these were originally designed and decorated in Cologne prior to their translation to their respective sites. It is important to note that all of the German (Cologne, Aachen, Marienfeld) and Polish material (Ląd and Oliwa) was examined in person whereas information about the skulls from the Herkenrode collections derived from studies conducted by Frieda Sorber, Fanny Van Cleven and their team at KIK-IRPA. Taken together, these contribute significantly to our further understanding of the decoration and treatment of Cologne's skulls and shed light on the material network associated with these objects.

2.6 Layer Upon Layer: Crafting Cologne's Skull Reliquaries

Turning first to the two skulls from the Schnütgen Museum Archives, Skull C.SMA.1 (Figs 1a-k) from the cathedral sacristy is one of the best-preserved. It retains its structural integrity and cranial formation despite the absence of the skull it once enshrined. Various fabrics and materials were used in addition to a protective stuffing and to other stabilizing elements. As revealed by its worn corner (Figs 1a, j), the reliquary is composed of a system of layered materials that were tailored to encompass the skull securely, and exploration beneath the exterior ornamentation reveals the extent of the layered construction. Given that the reliquaries were created in such large quantities, it is likely that other skulls share structural similarities with this example, and so, in order to understand how this reliquary was constructed, it will be investigated from the innermost components outward.

At its core is a simple beige linen padded sack that fills the cranial cavity, the area that would have housed the brain (Figs 1a, j). This pouch, stuffed with lightweight, as yet undetermined, materials, provided a solid basis that internally reinforced the cranial remains. Moving outwards the skull itself is enveloped within four layers: a thick, coarse plant fibre (likely hemp or flax); fine white linen; fine pink linen; and lastly, the outermost cover of silk and velvet. The dense, austere fabrics nestled nearest to the skull and below several layers appear to serve a utilitarian function. They were most likely intended to be invisible; instead, the simple linen pouch and the thick plant fibres functioned in tandem to protect and preserve the precious relic.

It is the next layer of pure white linen fabric, almost entirely concealed by the fine pink linen, which prevents analysis of how the inner plant fibres were constructed to wrap the skull. The pink layer, the original vibrancy of which is visible under the worn corner of the outer velvet band, was strategically assembled as two strips that securely bound the skull. The first was draped over the top of the head, like a bonnet, and pleated at the top. The other was situated under the mask, across the 'face', and bound around the lower half of the skull (Figs 1a, c-e, j). With this 'hood and mask' assemblage, the two strips were arranged in such a manner as to create an opening across the forehead leaving the (now missing) bone exposed (Fig. 1a). At the base, a rich blue piece of very fine linen was stitched to the external pink layer with thin brown thread (Figs 1f, l). The reliquary thus presents a flat base – likely created by additional cloth and/or stuffing agents – allowing the skull to retain a fixed position.

When sewn together these elements create a uniform, all-encompassing 'cloak' that reinforces the skull both vertically and horizontally; constructed in this way, and together with the internal padding, the materials ensure that the relic was completely supported, both from within and swaddled externally. Such a formfitting construction additionally emphasizes the spherical contours of the skull, and thus visually indicates that a human cranium is encased within.

The final exterior layer displays costly materials – silk, velvet, sequins, and gold-threaded ribbons – which ornament the skull. All dating approximately to the thirteenth or fourteenth century,³⁶⁰ the majority of these elements are concentrated on the anatomical 'face', indicating that this is the 'display' side (Figs 1a-b, j). Positioned in this way, the relic looks outwards, facing the viewer and exhibiting its finery. The crown of the skull is draped with a delicate yellow silk decorated with a green floral or zoomorphic pattern (Figs 1a-e). Upon closer inspection, this is a very

³⁶⁰ As dated by Katarina Sossou in the Schnütgen Archives (July 2013).

finely crafted satin weave, with a metal warp and silk weft (Fig. 1h). This costly textile neatly traces the hairline and frames the 'face', in a manner replicating the veil of a nun's habit, as illustrated in the image of St Ursula and Holy Virgins from the Zwiefalten manuscript (Figs 1.18a-b). At the bottom of the 'mask', a large piece of maroon velvet, which originally stretched from ear-to-ear (Figs 1a-b), conceals the area that would correspond to the 'face': the upper jaw, nasal cavity and part, or all, of the eye sockets. The now-corroded metal sequins, each secured with white thread, are arranged in four, evenly aligned horizontal rows across the velvet fabric (Figs 1a-b, k). The frayed lower left-hand corner exhibits two stray sequins, indicating that these shiny ornaments once covered the full width of the mask. A view of the mask's inner side displays the stitching techniques used to secure the sequins (Fig. 1i). The final element of finery – a chequered ribbon, made of linen and gold Lahn (strips of flattened gold wire) and a light blue border – encircles the fenestella and bisects the mask vertically (Figs 1a-b, j-k). Sewn to the back of the reliquary, below the edge of the yellow silk, is a piece of parchment with the letters S *lacsbi* or *S lacobi* written in brown ink (Fig. 1g).³⁶¹

Analysis of the second Schnütgen Museum skull reliquary C.SMA.2 (Figs 2.31a-k) reveals several structural and material similarities shared with C.SMA.1. Beneath the fractured bone, the supportive internal pouch, composed of a simple linen fabric, is again visible (Figs 2.31a, d, g, h, j). This skull was notably heavier than the first, however, and seems to hold pieces of small, hard, and heavy material (likely bone fragments) within the sack. Although displaying a tiered construction, this reliquary does not include the same extent of layered materials below the external ornamentation as seen in C.SMA.1. The outer ornamental layer is composed of a very finely woven and vibrant blue linen (likely derived from a plant dye) (Figs 2.31b, d, j, k), as well as a yellow silk with a satin weave with a pomegranate and interlocking blossom pattern (Figs 2.31c-d, g-j). Again, positioned like a hood, the pleating of this textile around the forehead and the snug tailoring at the back create

³⁶¹ Material analysis as communicated by Katarina Sossou during Schnütgen Archives visit (May 2019). This might identify one of the group's male members, as authenticated by Elisabeth of Schönau. See above, section 1.6.b. Gia Toussaint, "Schöne Schädel. Die Häupter der Heiligen in Ost und West," in *Knotenpunkt Byzanz: Wissensformen und kulturelle Wechselbeziehungen*, ed. Andreas Speer and Philipp Steinkrüge (Berlin, Boston: De Gruyter, 2012), 673–76.

a flattering composition that highlights the cranial contours (Figs 2.31g-h). In lieu of velvet, this reliquary displays an extremely fine brown or black silk, again ornamented with metal sequins, that conceals the 'face' (Figs 2.31a, f).

Framing the forehead 'window' is a delicately woven ribbon of *Lahn* and linen (Figs 2.31g-i). Complementing this are two thick and highly ornate yellow bands, made of a braided weave displaying a rhombus design, which forms a cross over the *fenestella* (Figs 2.31a-c, g). These might have been incorporated as a reference to martyrdom but also to offer additional support for a fragile or damaged skull. Unlike C.SMA.1, this reliquary retains its original bone fragments (Figs 2.31.a, c-d, g-j), the thick pieces of which have fallen below their designated 'window'. Pieces of rolled fabric or linen-enclosed bone fragments are exposed in the centre of the 'face', in the position of a nose, as well as lining the lower 'chin' area (Figs 2.31a, f, j). These would have supplied 'facial augmentations' and in this case, offered additional structural support.³⁶² Like the first skull, this reliquary also presents a flat base covered in very fine brown linen, which matches the quality of the layer of blue linen (Figs 2.31e-f).³⁶³

The lack of other medieval skull reliquaries from this collection prevents further analysis and comparisons. Yet, together with the samples from the Golden Chamber, the Church of St Gereon, the abbeys of Marienfeld, Herkenrode, and Ląd, as well as Oliwa Cathedral and the treasury in Aachen, it is clear that all share the distinctive 'hood and mask' arrangement, and the majority feature a *fenestella*. Furthermore, skulls in the Golden Chamber (C.GK.1 [Figs 2.37c-d], C.GK.4 [Figs 2.39a-c, g-f], and C.GK.6 [Figs 2.41a-b, e-i), St Gereon (C.SG.1 [Figs 2.44a-d] and C.SG.2 [Figs 2.45a-d], Ląd (L.AA.1 [Figs 2.48c-d], Olwia (O.A.1 [Figs 2.55a-b, d-f), and Herkenrode (SQ.HA.2 [Figs 2.52e-h) all display a coherent tiered construction of inner stuffing, linen, and outer fine textiles. These similarities suggest there might well have been a 'standardized' composition that involved internal padding, exterior layers, and a tightly bound spherical form with a 'window' for the forehead. When many such similar skulls were displayed together, this uniformity established a visual cohesion, while the ornamental variety would have imbued each skull with its

³⁶² See further, section 2.7.c.

³⁶³ Material analysis as communicated by Katarina Sossou during Schnütgen Archives visit (May 2019).

own unique appearance. They are recognizably similar, yet the difference in fabric colours and patterns establishes a sense of individuality.

2.7 Manipulating the Sacred

The spherical shape of the reliquaries, along with the frequent appearance of a forehead bone, visually suggest that a complete skull resides below the layers of fabric. Many skulls donning baroque covers, and three of the skulls investigated here are still intact;³⁶⁴ most of the reliquaries analysed here, however, are, in fact, highly manipulated objects. Some 'adjustments' appear to have been necessitated by structural 'requirements': internal support, frontal orientation, and upright balancing; other augmentations appear to meet an anatomical need, that is to say they manufacture the presence of a skull by creating a round shape and incorporating a forehead, or a believable bone substitution.

Such treatments, the extent of which varies from skull to skull, were concealed beneath layers of fabric and, in this position, were likely never intended to be seen. Despite this, some internal modifications can be detected through handling the skulls, even those with complete covers; their weight and density usually indicate the quantity of bones and the extent of additional materials; similarly, fragmented or 'constructed' skulls often appear to be less structurally sound when compared to complete, intact skulls. Yet these observations can only be made when the skulls are handled – by the select few permitted to touch them. Analysis of these various modifications sheds light on the ways in which the skulls were – and continue to be – perceived.

2.7.a Constructing Composure: Stuffing and Stabilizers

All the skull reliquaries discussed present evidence of structural reinforcements, the most common of which is internal stuffing. As seen with the two skulls from the Schnütgen collection, the now-missing forehead and the damage to the external layers have revealed the skulls' structural composition. These elements, which can be observed in C.SMA.1 (Figs 1a-j), C.SMA.2 (Figs 2.31a-k), C.GK.1 (Figs 2.37a-j) and C.GK.4a (Figs 2.39a-h), C.SG.1 (Figs 2.44a-e), C.SG.2 (Figs 2.45a-d), L.AA.1 (Figs 2.48c, d), and O.A.1 (Figs 2.55a-g), are situated to fill the internal cavity of the skull.

³⁶⁴ See, C.GK.4 (Figs 2.38, 2.401-d), C.GK.7 (Figs 2.42a-b), and C.GK.10 (Figs 2.43a-b).

In each case, the pouches are composed of linen, which was in fact the material used for most of the pouches in the wider range of reliquaries that were analysed. As demonstrated in C.SMA.1 (Fig. 1a) and C.SG.2 (Fig. 2.45a), these sacks were filled with materials that gently support the skull's interior. While the precise components of the internal stuffing remain unknown in most cases, they are revealed in a few examples.

Skull C.GK4a (Figs 2.39a-c) for example, exposes the interior pouch, and although it remains sealed, its soft and 'deflated' appearance suggests that materials, such as fabric or plant fibres, were utilized within. The poor condition of skull O.A.1 (Fig. 2.55a) has, however, revealed these internal materials. Here, it appears that a sizeable piece of linen or perhaps smaller pieces, were folded or rolled together to create a dense core (Figs 2.55a-b, d-e). Fragments of bone as well as plant fibres have also been exposed through a hole in the pouch of C.GK.1 (Figs 2.37e-f), which also presents a curious inversion of bone and textile. Here, the top linen layer of the internal pouch was stuck to a rather large, flat bone - of the type that would usually occupy the *fenestella*. Given that this skull 'enjoyed' later decorative campaigns, it is difficult to identify with certainty where this bone was originally situated, but the construction of this reliquary, with a single band and the absence of additional exterior textiles, suggests that it once presented a well-formed piece of cranial bone in the *fenestella*. In this case, it is possible that a large piece of bone was displayed, and smaller bone fragments were concealed within the reliquary. As observed by Ulrike Reichert during her restoration of skulls from the Holy Virgins' church, several reliquaries have been found to incorporate smaller bones, likely excavated from the ager Ursulanus, within their interior cavity.³⁶⁵

In addition to bone, paper and parchment were also integrated into the construction of the skull reliquaries. The layer beneath the 'mask' of skull C.GK.2 is, in fact, a layer of paper that was moulded across the 'face' before being concealed beneath a layer of textile (Figs 2.32i-j). Cursory investigation within the 'naked' skull C.GK.4.2b revealed a host of fine textile fragments along with a bundle of folded parchment tied together with a string, which would have made up the interior stuffing (Figs 2.40a-d); closer inspection of the top section of the bundle revealed text in German script likely dating to the seventeenth century, and so identifying it

³⁶⁵ Ulrike Reichert, pers. comm. conversation, July 2013 and June 2016.

as a later addition (Figs 2.40b-c). Yet the use of medieval parchment in skulls from Ląd and Herkenrode provide examples of this phenomenon from earlier decorative campaigns. The internal layer of skull L.AA.1 includes folded parchment folios (Figs 2.48c-d) with text written in Carolingian miniscule in brown ink with decorative red initials that dates to around the twelfth century (Figs 2.48e-g).³⁶⁶ Dr Father Janusz identified the text as that of Psalms 70, 71 and 77.³⁶⁷ The text is not continuous indicating that the bifolium formed part of a quire from a Psalter.³⁶⁸

In this example, the parchment was strategically incorporated into the reliquary's construction to provide significant structural support. It was folded in half (horizontally), orientated upside-down (Fig. 2.48e), and one half positioned around the left 'ear' and 'cheek' to 'chin' area of the skull (Figs 2.48c-d). It thus constitutes a large portion of the reliquary's left side. This section of parchment was, furthermore, securely stitched together with the neighbouring materials – which appear to be bones in tightly-wrapped linen – ensuring that it remained stationary once concealed (Figs 2.48c-d): the middle of the bifolium roughly aligns with the centre of the 'face'; the other half was positioned beneath the large cranial fragment. It was then enveloped within at least two more layers of white linen – this is particularly notable on the left side – and then ornamented with textiles. It would seem that the position of the parchment was carefully calculated to offer maximum support, both externally – by functioning as part of the skull – and internally – by filling the cranial cavity.

The practice of incorporating parchment, and the Psalms more specifically, was noted in 20 skull reliquaries from Herkenrode, as evidenced, for example in Skull SQ.HA.1 (Fig. 2.51e).³⁶⁹ In each case a Psalter leaf was sewn to the base of the reliquary, and all the pages originated from the same manuscript. The text is written in dark brown ink with "stick letters" and stylised initials in red and blue, dated to

³⁶⁶ Nowiński described his findings via email (1 October 2020)

³⁶⁷ Helena Hryszko, "Dokumentacja Prac Konserwatorskich I Restauratorskich" (Warsaw, 2014).

³⁶⁸ I am grateful to Hanna Vorholt for sharing these codicological insights.
³⁶⁹ See: Geert Wisse and Patricia Strinemann, "Perkament en papier," in *Met maagdelijke blik: de reliekenschat van Herkenrode doorgelicht*, Scientia artis 17, ed. Fanny Van Cleven, Jeroen Reyniers, and Anton Ervynck (Brussel: Koninklijk Instituut voor het Kunstpatrimonium, 2019), 158.

the thirteenth century.³⁷⁰ Further analysis of the script indicates a provenance in regions of Liège or Bruges, thus suggesting that these were added to the base of the reliquaries after their arrival in Belgium. The text is centred on the base and is stitched over a pink coloured piece of linen. In this case, later textile additions to the sides of the reliquary have been sewn around the original base. Although the parchment is found on the base of the reliquary, its central placement and careful tailoring ensured that its text nevertheless remained accessible.

The particular incorporation of psalms within the skull reliquaries of Lad and Herkenrode is notable; the Psalter featured prominently within medieval religious practice. The psalms, the "well-spring of Christian worship",³⁷¹ were integral to private, community, and monastic devotion since at least the fourth century, and the appearance of new commentaries (*Glossa*), from the turn of the twelfth century, underscore a surge in scholastic interest in the verses. With rhythmic and melodic elements that blend together both metaphor and imagery, the psalms were deeply embedded within the liturgy;³⁷² they provided material that was memorized by monks and clergy, and served as exemplary exegetical tools.³⁷³ Within monastic and cloistered settings - the environments where these relics were likely assembled and frequently venerated – they provided material for intellectual engagement, as well as private and public prayer.³⁷⁴ Their use in *ruminatio*, the slow repetition of scripture articulated out loud, highlights the meditative and contemplative aspects of these passages. From the weekly public chanting of all 150 psalms during the Office to daily personal recitation, the psalms encompassed all aspects of monastic life. Given the significance of the Psalter, its appropriation within the Virgins' skull

³⁷⁰ Ibid., 156.

³⁷¹ Rosemary Muir Wright, "Introducing the Medieval Psalter," in *Studies in the Illustration of the Psalter*, ed. Brendan Cassidy and Rosemary Muir Wright (Stamford: Shaun Tyas, 2000), 1–3.

³⁷² Ibid., 3; W. Derek Suderman and Timothy Sandoval, "Psalms," in *Wisdom, Worship, and Poetry - Fortress Commentary on the Bible Study Edition*, ed. Gale A. Yee,
Hugh R. Page Jr, and Coomber (Minneapolis: Augsburg Fortress Publishers, 2016),
548.

³⁷³ Joseph Dyer, "The Psalms in Monastic Prayer," in *The Place of the Psalms in the Intellectual Culture of the Middle Ages*, ed. Nancy van Deusen (New York: SUNY Press, 1999), 59–89.

³⁷⁴ James W. McKinnon, "The Book of Psalms, Monasticism, and the Western Liturgy," in *The Place of the Psalms in the Intellectual Culture of the Middle Ages*, ed. Nancy van Deusen (New York: SUNY Press, 1999), 43–58.

reliquaries suggests it did not merely provide physical reinforcement; it likely also supplied spiritual fortification.

Although the grouping of Psalms 70, 71, and 77, as found on skull L.AA.1 (Fig. 2.48), are partial and might be coincidental, their collective presence could offer deeper insight. Indeed, Psalms 70 and 71 functioned as a single psalm that was subsequently split into two and were considered to be David's "prayer of petition",³⁷⁵ in which David expresses the extent of the threats and shame of his enemies by outlining the perils that await those who do not believe in God. He pleads for the Lord's swift protection and reiterates his almighty powers. The first section (Psalm 70) specifically calls for God's intervention, while the second (Psalm 71) alternates between describing troubles and trust in God.³⁷⁶ Above all, the 'prayer' emphasizes David's unwavering, and long-standing devotion. Psalm 77, on the other hand, although written in the first person, is intended as a communal passage of reflection that acknowledges and ponders the Lord's powers in both the past and present.³⁷⁷ This consideration ultimately prompts an urgent plea for divine intervention.

These passages, articulating the palmist's devotion and plea for help along with recognition of God's almighty power, are appropriately placed within the sacred remains. The relics, by means of the Virgins' steadfast devotion and eternal union with Christ, presented objects through which such prayers could be relayed heavenward. Similarly, when assembled together with the sacred relics of Cologne's virgins, the psalms assume new meanings: the desperate pleas expressed by David might symbolize the prayers of both the Virgins facing martyrdom, and those visiting their remains. With Psalm 77, it is perhaps the Virgins' corporate voice that narrates the verses in the time before they heroically spilt their blood and joined the heavenly community. Such associations would certainly be entirely apposite. It is also possible that the psalms, which collectively embody prayer and devotion, might

³⁷⁶ Suderman and Sandoval, "Psalms," 568.

³⁷⁵ Zenger Erich, "Psalm 70," in *Psalms 2, Commentary on Psalms 51-100*, ed. Klaus Baltzer (Augsburg: Augsburg Fortress Publishers, 2005), 187; Frank-Lothar Hossfeld, "Psalm 71," in *Psalms 2, Commentary on Psalms 51-100*, ed. Klaus Baltzer (Augsburg: Augsburg Fortress Publishers, 2005), 199.

³⁷⁷ Frank-Lothar Hossfeld, "Psalm 77," in *Psalms 2, Commentary on Psalms 51-100*, ed. Klaus Baltzer (Augsburg: Augsburg Fortress Publishers, 2005), 280.

have been recited when assembling the relics – their articulation would have evoked their theological complexity while ornamenting sacred material.

Together, the assemblage of relics and sacred text – composed on (animal) skin – underscore the select, albeit varied, nature of the materials utilized to construct the skull reliquaries; not only were they likely intended to physically support the skulls, they multiplied their sacred contents. Such incorporation imbues these objects with a potency, at their very core, that penetrates the perceivable surface. This practice is also found, on a larger scale, in the construction of the Church of the Holy Virgins where the architectural incorporation of the relics elicited a heightened experience within the space: devotees were completely enveloped by relics – both seen and unseen.

In addition to elements concealed within the reliquaries, other notable 'alterations' can be observed at the base of the skulls; the construction of a firm, flat surface or the attachment of small cloth pouches ensures that the skulls would remain upright. These are especially important when considering the orderly placement of the skulls within monumental relic shelves, such as those found in Cologne's cathedral (Figs 2-4a-c) as well as the churches of the Holy Virgins (Figs 2.13, 2.14) and St Kunibert (Figs 2.22, 2.23).³⁷⁸ From a structural perspective, a human skull – hollow, top heavy, and semi-circular – presents a challenging object to balance. The support offered by a lower jawbone might have assisted in balancing the cranial remains, but these are notably absent from most (if not all) the Holy Virgins' skulls.³⁷⁹ The desirability of such an arrangement is revealed in the thinly wrapped skull C.GK.7, which is balanced with the assistance of the upper front teeth and additional padding at the base (Fig. 2.42c). Elsewhere, flat bases, as seen here,

³⁷⁸ It cannot be determined if the upright and frontal positioning of the skulls was compulsory in the years predating these shelves; rather this orientation is an assumption that directly correlates with the high medieval display cases (from the thirteenth century onwards).

³⁷⁹ I am grateful to Ulrike Reichert for highlighting the lack of anatomical placement of jawbones within the reliquaries on which she has worked. Personal observations of skulls in other collections further confirmed this trend. Absence of jawbones is understandable; when a corpse decomposes, the fibrocartilage that attaches the lower and upper jawbones deteriorates, resulting in the separation of skull and jawbone. The detached remains were not incorporated into the anatomical arrangement, but, as noted by Reichert (2016), might have been included elsewhere within the montages of bones.

as well as those provided for skulls C.SMA.1 and 2 (Figs 1e, 2.31e-f), C.GK.3 and 9 (Figs 2.33f, 2.36e), C.SG.1 and 3 (Figs 2.44d, 2.46f), SQ.HA.1 (Fig. 2.51e), and others, were deliberately constructed from carefully arranged and layered fabrics and parchment. These additional layers were typically sewn together with the exterior cover, and so were enclosed within the framework of the reliquary. The utilization of the upper teeth to stabilize the skull was observed in a few Golden Chamber reliquaries. In all of these examples, the teeth were left exposed; with the example of G.CK.7, a layer of linen, lying beneath the yellow early modern silk, was wrapped around but not over the teeth. Another impressive example displays a complete set of upper teeth, which were left exposed when re-wrapped in the early modern period (Figs 2.57, 2.57a). The visibility of teeth might have served a function analogous to that of the forehead – anatomical verification that an (intact) skull resides beneath.

In lieu of building up a flat base, some skulls, as seen on C.GK.5 (Figs 2.34d-f) and C.GK.8 (Fig. 2.35f), incorporate stuffed pouches or pieces of folded cloth. These elements were strategically sewn onto the base or along the bottom edge of the skull's exterior cover, and so offered targeted support to particularly uneven areas. Two notable examples, C.GK.4a (Figs 2.39a-c) and C.GK.6 (Figs 2.41h-i), incorporate a combination of layered fabrics and large pink linen pouches that were fixed to the base of the skull. In both cases, the pink linen matches what is believed to be the original layer of ornamentation, suggesting that the stabilizing element was part of the original arrangement. Particularly notable in C.GK.4 is the fact that this stabilizing element was enveloped within the subsequent decorative covering, rendering it less visible from the surface. It is, therefore, probable that many other skulls integrate one or both of these 'alterations' to ensure that the skulls stood 'upright', but that they remained concealed beneath layers of additional covers.

Adding to the stabilizing 'alterations', skulls were often situated on a pillow to which they were affixed by sewing the fabric of the reliquary to that of the cushion; the tactic is notable in the examples from Marienfeld (Germany) (Figs 2.53, 2.54), and St Gereon (Cologne) (Fig. 2.58). While this was likely undertaken to bestow additional honour on the relic, such pillows would also have served as structural supports, similar to the smaller pieces of folded fabric or pouches attached to the bases of other skulls. It was not an isolated practice. Several such

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cushions, the exterior textiles of which date to the seventeenth century, are preserved in the Golden Chamber within the cult's titular church (Figs 2.26, 2.29); although these appear to be baroque, it is probable that, like the skulls, they received 'updated' covers concealing the medieval layers. Today, 32 of the 40 pillows in Marienfeld can be accessed. One particularly notable example, skull M.CC.2 (Figs 23, 2.54) displays costly yellow silk that dates to the fourth quarter of the twelfth century.³⁸⁰ Two further pillows display red textiles of early fourteenthcentury date (Figs 22, 2.53a-c).³⁸¹ These, together with the additional seven pillows displaying fifteenth-century textiles, the fourteenth-century cushions from St Gereon, and those in Ląd (Figs 2.50),³⁸² suggest the widespread use of such pillows in the medieval period. It is therefore more than likely that the pillows covered with baroque decoration in the Golden Chamber replace medieval examples.

2.7.b Reconstructing a Head: Anatomical Augmentations

Given that the Holy Virgins' relics originated within a Roman cemetery, it is likely that many of the skulls were in a damaged or fragile state when exhumed in the various excavation campaigns and required physical reinforcement to retain or construct structural integrity. The core stuffing, as discussed, prevents the skull from collapsing inwards, and the form-fitting, multi-layered fabrics ensure the bones remain stationary. In fact, this design can also strategically conceal a host of anatomical lacunae and alterations disguised beneath layers of fabric.

During the restoration of the textile reliquaries, Ulrike Reichert has discovered that some reliquaries from the Golden Chamber do not exhibit an actual forehead; instead the bone from the back of the skull, or other appropriately shaped bones, have been positioned in the *fenestella* in order to replicate the forehead.³⁸³ In one example, C.GK.2, two different bones have been cut and situated next to one another to create a similar effect (Figs 2.32g-h).³⁸⁴ Not only does this anatomical

³⁸⁰ Karrenbrock, "Heilige Häupter," 287–88.

³⁸¹ A total of four skull reliquaries were displayed in Bonn's Cistercian exhibition (2017-2018).

³⁸² The majority of the skull reliquaries in the St Ursula altarpiece are positioned on pillows, similar to that pictured in Fig. 2.50.

³⁸³ Ulrike Reichert, pers. comm. conversation, July 2013 and January 2016.

³⁸⁴ I am grateful for Ulrike Reichert bringing this to my attention in July 2017.

fabrication underscore the importance of the forehead, it also reveals that some cranial remains underwent extensive manipulation to provide it.

Arranged within a spherical-shaped textile reliquary, an artificial forehead had the power to 'produce' an entire skull, which in turn conspired to populate the virgin martyrs' headcount. This tactic certainly benefitted this cult that boasted such copious members. Despite the inclusivity of *pars pro toto*, the practice of 'rearranging' bones additionally reveals the importance of manufacturing a head, and this becomes the characteristic for what the Holy Virgins' relics look like. Substituting the rear cranium or even a hipbone for a forehead did not alter the spiritual significance of the object. Yet, from a structural standpoint, such manipulation of corporal remains is worthy of further investigation.

As indicated, the degree of a skull's wholeness or fragmentation at the time of the reliquary's construction might be directly linked to the amount of structural fortification and the varying size of the 'windows' through which the forehead was visible: the more complete a skull, the larger the window showcasing the forehead – often from the crown to the eye sockets (e.g., C.GK.10; Figs 2.43a-b). This is particularly notable in C.GK.7 (Figs 2.42a-b), which is wrapped in a thin and tightly fitting gold textile. Perhaps this technique was used (and remained without newer additions) in order to display its impressive wholeness. Other remarkably intact forehead bones include skulls C.GK.3 (Figs 2.33a-c) and C.GK.4b (Figs 2.38, 2.40a-d), both originating from the Golden Chamber's collection. Among these, many intact skulls, some exhibiting eye sockets, were amassed for collective display during the baroque restoration phase, but were possibly exhibited earlier. Prior to the restoration project, these were situated in wall cabinets that comprise rows of skulls or isolated in glass boxes – all wrapped in red velvet surmounted on cushions (Figs 2.26, 2.29).

With the exception of C.GK.4b, which has separated from its fabric arrangement, the large, unbroken surfaces of the forehead bones in these reliquaries are prominently displayed through sizeable *fenestellae*, notable when set alongside those with small *fenestellae* and correspondingly small 'forehead' bones, such as those of C.GK.2 (Figs 2.32a, g), C.GK.9 (Figs 2.36a, f), A.SA.1 (Fig. 2.47a), and L.HVA.2 (Figs 2.50a, f-h); others are completely covered by fabric (C.GK.5 and 8; Figs 2.34 and 2.35), possibly suggesting that the skulls were damaged beyond repair, or

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that a forehead – real or forged – was originally visible through a *fenestella* that was later concealed by textiles. Today, these reliquaries rely on their round cranial shape to suggest the presence of a skull. Over time it seems that some lost their original shape and morphed into oblong simulacra, a phenomenon particularly marked by C.GK.5 and L.HVA.2 (Figs 2.34, 2.50).

Other skulls lie between the extreme examples of those that are impressively intact and those completely concealed beneath fabrics: those that reveal significant manipulation. The recent studies in Lad removed two newer covers from the reliquaries (c. nineteenth-century and sixteenth-century) to reveal the skulls' original arrangements, and consequently the complex nature of their constructions (likely thirteenth-century). Skulls L.AA.1 (Figs 2.48c-d) and L.HVA.1 (Figs 2.49a-g) demonstrate two methods of reconstruction: partial and complete. L.AA.1 is composed of a white linen core, a substantial cranial fragment situated in the position of the forehead, blue and white linen fortifying the base, rear, and left side, along with the folded piece of parchment containing the psalms positioned on the right (Figs 2.48c-d). All the elements were sewn together with large stitches that appear to maintain structural integrity from within. This example clearly demonstrates the ways in which this skull was manipulated so as to simulate a complete cranium (a spherical construction that was made from and supported by fabric, parchment, and linen-wrapped bones), and the strategic placement of a cranial fragment to masquerade as the forehead.

The second example, L.HVA.1 (Figs 2.49a-g), demonstrates the extensive recreation of a human skull. Here, bone fragments were covered by white linen and the edges sealed with stitches. These individual pouches were then artfully assembled to form a human head, inclusive of a skull and 'face'. The 'forehead', held in place by drilling holes for thread and then sewing the bone to the neighbouring cloth pouches, was notably left uncovered (Fig. 2.49e); this bone, or bone fragments, were aligned with the opening of the *fenestella*. Together with the exposed bone and spherical shape, this object was created with the intention of presenting a complete skull. Differing from L.AA.1 (Fig. 2.48), it utilizes human remains and a notably more complicated construction method to fabricate an elaborate illusion.

All these tactics – substituting another bone for a forehead; restricting or obstructing the view of the forehead; and manipulating various materials to form a

'skull' – work collectively to construct a 'whole' cranium. In doing so, the materials form a recognizable body part, and were thus presumably considered more suitable for display among other skulls. The net result of such endeavours would have ultimately increased the number of holy heads, and undoubtedly bolstered the prestige of both the hosting institution and Cologne, the city itself.

2.7.c Facial Reconstructions

Analysis of L.HVA.1 also reveals the modelling of facial features (Figs 2.49a, d, f) to include a nose, the ridge of the eyebrow, and cheekbones. The extended jawline was created by adding materials to the base, thus alluding to the inclusion of a lower jawbone and chin (Figs 2.49d, f). As discussed, these features were constructed from linen-wrapped bones, which also appears to be the method used to create the nose. The curvature of the brow and cheek bones suggest that bone fragments, along with modelled fabric, were employed. Similar treatment is observed in Skull C.GK.3, which displays a nose as well as cheekbones, the latter of which have worn through later textile layers to reveal the white linen below (Figs 2.33b, c, j). The anatomical feature of a nose is also present in skulls C.SMA.2 (Fig. 2.31a, j), C.GK.2 (Figs 2.32a-c, i), C.SG.1 (Figs 2.44a-d), L.HVA.2 (Figs 2.50a-c, g, h), and those from Oliwa Cathedral (Figs 2.59-61). For those with concealed noses, it is obviously not possible to determine the material used to construct this feature, yet the example from St Gereon, C.SG.1 (Fig. 2.44c) reveals that a small pink linen pouch was sewn on to the front of the 'skull', like the cathedral sacristy skull, C.SMA.2 (Fig. 2.31a, j) or that belonging to Lad Abbey, L.HVA.1 (Fig. 2.49a, f), partially exposing a nose that appears to be constructed from textiles or bones wrapped in fine white linen. Further to the skulls in this study, many others included the addition of a nose, and thus indicate this to be a relatively common practice within the cult.

Once surrounded with structural and ornamental fabrics, these 'alterations' insinuate not only that a complete skull resides beneath the textile mask, but also that, with its 'facial' features it constitutes a living face. Perhaps most interesting with regard to these particular anatomical fabrications is that they reverse the natural course of death and decomposition; when the cartilage and small bones of a corpse's nose decompose a gaping hole is left their place, which is especially visible in skull C.GK.7 (Fig 2.42a). If the hole signifies an aged corpse, then a protruding

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nose could be understood as referencing a living being. These features might therefore be understood to reinforce the 'living' presence, the *presentia*, of the saints within their relics, but they might also indicate the relics' incorruptibility. Because saints assume an eternal residence in Heaven it was believed that their bodies were not necessarily subject to the same biological decay of ordinary humans. Many medieval miracles documented the discovery of saint's intact bodies with their corpses often emitting a sweet odour.³⁸⁵ Although the Grandmont monks reported hair on the head of St Athalia,³⁸⁶ the Holy Virgins' bodies were not generally considered incorrupt upon discovery. The addition of 'living' features to the skull relics – involving nose, chin, and lower jaw – thus illuminates a reliquary's transformative properties,³⁸⁷ and might also represent the Holy Virgins' (metaphoric) incorruptibility.

2.8 The Forehead: An Activated Surface

The deliberate exposure of the forehead, coupled with its common anatomical simulacra in the skull reliquaries, underscores the importance of this particular anatomical feature. In addition to the internal manipulations, external features conspire to draw attention to this part of the skull. As evidenced by skulls from Cologne, Aachen, Herkenrode,³⁸⁸ Marienfeld,³⁸⁹ Ląd, and Oliwa, the *fenestellae* were frequently framed with decorative bands and gold thread.³⁹⁰ This lavish ornamentation marks the threshold between bone and fabric, between sacred material and that of the earthly realm. These, now reduced to a few flecks, would have originally emphasised the liminal spaces with the flickering flames produced by candles and other light sources. In addition to the gold bands and metal

³⁸⁵ P.A. Brazinski and A.R.P. Fryxell, "The Smell of Relics: Authenticating Saintly Bones and the Role of Scent in the Sensory Experience of Medieval Christian Veneration.," *Papers from the Institute of Archaeology*, 23 (2013): 1–15.
³⁸⁶ Legner, "Kölnische Hagiophilie," 220.

³⁸⁷ Hahn, "What Do Religuaries Do for Relics?"

³⁸⁸ "De decoratieve elementen," in *Met maagdelijke blik: de reliekenschat van Herkenrode doorgelicht*, ed. Fanny Van Cleven, Jeroen Reyniers, and Anton Ervynck, Scientia artis 17 (Brussel: Koninklijk Instituut voor het Kunstpatrimonium, 2019), 118–52.

³⁸⁹ Karrenbrock, "Heilige Häupter," 282.

³⁹⁰ See, Figs 1a, 2.31g, 2.32g, 2.33i, 2.36f, 2.46g, 2.47a, 2.51a, 2.52f, 2.53a, 2.54, and 2.56b.

embroidery, these effects would have been emphasised by the abundance of metal sequins used.³⁹¹ Light dancing across shiny metal surfaces possesses the power to dissolve edges as well as animate the surface;³⁹² in this case, the 'mask' and 'frame' around the exposed forehead were brought to life. Although the saint's 'face' is concealed, the pulsating light would have suggested movement beneath the surface. The degree of a flame's movement is directly related to the presence or absence of people in the space – the opening of a door, walking about the space, and even breathing.³⁹³ The relics, therefore, would have appeared to be both activated by and responding to people sharing their space. This effect would have been rendered all the more convincing by the display of a 'complete' head that included a nose and chin.

The effect, multiplied across the hundreds of other skulls in the group, which also likely displayed shimmering metal elements, and possibly accentuated facial features, would have provided a spectacular display of considerable magnitude, amplifying the Virgins' living presence; more importantly, the glistening elements, further activated by the flickering candlelight, would have visually drawn attention to the gleaming white, comparably static forehead. The *fenestella*, with the assistance of luminescent metal elements, thus serves as a potent framing device that constructs the visibility of exposed bone: a blank, naked surface offset by the shimmering shine of the 'reliquary'.

The importance of the forehead features prominently in the textual accounts associated with the cult. As noted in Chapter 1, Helmdrude's vision³⁹⁴ records how, after the nun receives Cordula message and seeks confirmation of the virgin's identity:

³⁹¹ As seen on skulls C.SMA.1-2 [Figs 1 and 2.31]; C.GK.2, 3, 6, and 9 [Figs 2.32, 2.33, 2.41, 2.36; and C.SG.3 [Fig. 2.46].

³⁹² Bissera V. Pentcheva, *The Sensual Icon: Space, Ritual, and the Senses in Byzantium* (University Park, PA: Pennsylvania State University Press, 2010), 132–38.
³⁹³ Here, it is argued that an icon's "performative" qualities relate to surface and human presence within a sacred space. Despite the difference in medium, many intriguing comparisons arose with the Holy Virgins' skull reliquaries Bissera V. Pentcheva, "The Performative Icon," *The Art Bulletin* 88, no. 4 (2006): 631–55.
³⁹⁴ See above, section 1.6.a.

she was commanded by the virgin to gaze upon her forehead, so that Helmdrude might know for herself, without any doubt the name she would find inscribed there. Helmdrude complied. She saw and read the separate syllables and discovered what was distantly written there: Cordula.³⁹⁵

Here the forehead is promoted as the select body part by which Cordula's identity is revealed. Evoking the authority of an epigraph, the virgin's name is inscribed (*exaratum*; lit.: to note down, by scratching wax on a tablet) on her forehead; it thus becomes the surface specifically selected for revelation. While this underscores the significance of the forehead within the Holy Virgins' cult, it also reveals a possible textual justification for both the exposure and the deliberate fabrication of this particular body part within the reliquary construction.

Revealing symbols or a text on the forehead is a motif that occurs frequently in the Old and New Testament. When describing Aaron's priestly garments, it was specified that a golden plate, with the inscription "Holy to the Lord" (*Sanctum Domino*),³⁹⁶ was to be worn "always ... on his forehead, that the Lord may be well pleased with them".³⁹⁷ Discussion of Aaron's priestly headgear features prominently in Bede's widely copied treatise, *De Tabernaculo*,³⁹⁸ when he specifies that this golden plate is

holier than his other garments ... [and that it] should stand out higher by surmounting the other garments and adornments ... and sanctify them all by occupying a prominent position on his forehead. Now this

³⁹⁵ See fn. 231.

³⁹⁶ Exodus 28:36; all Latin references to biblical passages will be taken from the Vulgate, and the English translations from the Douay-Rheims, available through Bible Gateway Online (https://www.biblegateway.com). Last accessed: 10 October 2021.

³⁹⁷ Exodus 28:38: "Erit autem lamina semper in fronte ejus, ut placatus sit eis Dominus."

³⁹⁸ George Hardin Brown, *A Companion to Bede* (Suffolk: Boydell Press, 2009), 120.

signifies the very pledge of our profession which we bear on our foreheads.³⁹⁹

In this prominent, exterior location, the golden plate was visible both to those surrounding the priest and to God.

Likewise, when the angel describes Christ's Second Coming to John, he explains that the faithful will receive God's name "on their foreheads" (*in frontibus eorum*);⁴⁰⁰ this will identify them as good and permit them to "reign for ever and ever" (*regnabunt in saecula saeculorum*).⁴⁰¹ It is perhaps because of such associations that the catechumens' forehead was repeatedly "sealed" with the sign of the cross during baptismal rituals, a longstanding tradition which underscores the significance of this body part within ecclesiastic ritual.⁴⁰²

Yet the forehead was not always a site for favourable identification; it was upon the Babylonian prostitute's forehead that a lengthy name, essentially a description of her wrongdoings, was written.⁴⁰³ Despite its negative association, this account further reiterates the forehead as being a site where significant information is revealed. Along with the inscription worn on Aaron's priestly headgear, the identification of the elect at Judgment Day, as well as the ceremonial cross placed upon a forehead presents strong biblical foundations for Helmdrude's identification of Cordula and further emphasises the relevance of the Holy Virgins' exposed foreheads on the skull reliquaries.

The importance of the forehead transcends Christian religious practice, however, being also found in the Jewish Kabbalah where, in the case of the Golem,

³⁹⁹ "Facies et lamminam de auro purrissimo in qua sculpes opere celatoris, Sanctum domino, ligabisque eam uitta hyacinthina, et erit super tiaram imminens fronti pontificis." Book III.VII. Bede, *Bedae Venerabilis Opera, Pars II Opera Exegetica*, Corpus christianorum, Series Latina 121 (Turnhout, Belgium: Brepols, 1983), 113; trans: Arthur G. Holder, *Bede, on the Tabernacle*, TTH 18 (Liverpool: Liverpool University Press, 1994), 130; for readership of Bede in the high Middle Ages, see: Brown, *A Companion to Bede*, 117–34. Both Albertus Magnus and Thomas Aquinas, who were both active in Cologne, engaged with Bede extensively; Albertus Magnus cited the Tabernacle in his works: see esp. 129.

⁴⁰⁰ Revelation 22:4.

⁴⁰¹ Revelation 22:5.

⁴⁰² Bryan D. Spinks, *Early and Medieval Rituals and Theologies of Baptism: From the New Testament to the Council of Trent* (Ashgate Publishing, Ltd., 2006), 41–45.
⁴⁰³ Revelation 17:5 "Et in fronte ejus nomen scriptum".

the forehead is similarly promoted as a site of display and identification. Although the stories vary, it was generally believed that a rabbi could form the Golem by mixing dust and water, shaping the clay into a human form, and speaking words or spells. This inanimate creature was only brought to life when the word "truth" (emet) was inscribed on his forehead; he was rendered lifeless by removing the first letter of emet, to create the word met (death).⁴⁰⁴ The narrative of the Golem indicates that his existence depended on various words inscribed upon his forehead. During the high and late medieval period this narrative was particularly popular in Germany, as seen in the works of Rabbi Eleazar of Worms (1176-1238), who provided instructions on how to create Golem in his commentary on the Sefer Yetzirah.⁴⁰⁵ These textual references reveal an established multi-faith tradition that designated the forehead as an area of revelation of important information. It is not surprising then that the structural design of the Holy Virgins' skull reliquaries, which prominently feature bare foreheads, perhaps inspired by literary sources, designate this part of the body as the place of animation, destruction, display, and revelation.

Within the cult's literary tradition, the forehead certainly emerges prominently in Elisabeth of Schönau's twelfth-century visionary account on the Holy Virgins' feast day. During mass, Elisabeth goes into a trance in which she sees a large group of female martyrs. In addition to their golden crowns and glorious vestments, she identifies the group as the martyred women because "on their foreheads was the bloody redness in testimony to the blood they had poured out in their holy confession".⁴⁰⁶ Here, the forehead is the site upon which the violence of the Virgins' death is staged and, perhaps more importantly, serves to identify the women as members of the martyred group.

⁴⁰⁴ Joshua Trachenberg, *Jewish Magic and Superstition: A Study in Folk Religion* (University of Pennsylvania Press, 2004), 85–86.

⁴⁰⁵ Ibid., 85; for more regarding Eleazar of Worms and the Kabbala, see: Joseph Dan, *The "Unique Cherub" Circle: A School of Mystics and Esoterics in Medieval Germany* (Tübingen: Mohr Siebeck, 1999). It is challenging to recreate the textual and intellectual communities of Jewish mysticism during the twelfth and thirteenth centuries, yet this book outlines important connections with the Rhineland, see esp. 6, 262.

⁴⁰⁶ "in frontibus earum rubor sanguineus in testimonium cruoris , quem in confessione sancta fuderunt". Roth, *Visionen*, 133; trans.: Clark, *Complete Works*, 255.

The significance of the forehead, in relation to the Virgins' martyrdom, also features in the account of the Grandmont monks' search for relics (1181). In Siegburg, while en route to Cologne, an abbot gives the monks two bodies of the Holy Virgins; one of these was identified as the holy virgin and martyr Albina, who displayed an axe wound on her forehead.⁴⁰⁷ At the abbey of St Martin in Cologne, the monks acquire the head of the holy virgin and martyr, Anathaliae, which is still covered with hair and decorated with the sign of the martyr on her forehead.⁴⁰⁸ With the first body, and presumably Anathaliae's_head, the forehead was *the* body part designated to exhibit physical 'evidence' of martyrdom. Whether a cranial laceration, a hole, a dent, or possibly a fractured skull, it would have showcased the evidence of martyrdom, and simultaneously authenticated the relics.

As noted, this account originated in the immediate aftermath of the systematic *agar Ursulanus* excavations led by the Deutz abbey, the activity that precipitated the suspicion around authenticity addressed by Elisabeth of Schönau.⁴⁰⁹ In this context, it is likely that relics displaying the "sign of the martyr" were in high demand. One extant example is skull L.AA.1 from Ląd Abbey (Figs 2.48a-b), which displays two large holes in the forehead. As noted, this skull fragment was strategically situated to fit within the *fenestella*.⁴¹⁰ Here, presenting its 'wound' the fragment authenticates the relic as that of a martyred victim but also as one belonging to the Holy Virgins' cohort. Other skulls or bone fragments marked with signs that might suggest physical harm framed within the *fenestella* include two skulls from the Golden Chamber that are now ornamented in Baroque covers (Figs 2.62, 2.63).⁴¹¹ Of particular note is a skull reliquary from Herkenrode that

⁴⁰⁷ "reverentia corpus sanctae Albinae virginis et martyris … patet autem in fronte ipsius vestigium martyrii, securis (scilicet) vulnus". "Itinerarium Fratrum Grandmont," 1226; trans.: author. It is notable that this is the same name inscribed on the fragmentary *titulus* (Fig. 1.15) and one of the virgins who converse with Elisabeth of Schonäu's visions.

⁴⁰⁸ "caput et in fronte signum martyrii … caput sanctae Anathaliae virginis et martyris, quod capillis tegitur et signo martyrii decoratur". Ibid., 1229; trans.: author.

⁴⁰⁹ See ch. 1, p. 9, fn. 177.

⁴¹⁰ See above, p. 160.

⁴¹¹ Further search for 'wounded' foreheads in the Golden Chamber was inhibited by the installation of many skulls above eyelevel (accessing them by means of a hook through the eye sockets is no longer permitted; see above, fn. 357), and the absence of others due to the restoration project.

displays a large hole on the right side of the skull (Figs 2.64, 2.65); the fabric around the hole is tailored with thick stitches that accentuate this feature. These examples can be understood as harnessing the evocative power of the forehead and displaying on bare bones the physical evidence of martyrdom. The connection between forehead and martyrdom wound continue into the early modern period as depicted in a printed booklet, dated to 1517, that promoted the relics of the Holy Virgins at their titular church (Fig. 2.66). Here, accompanying the most prominent cult members, including St Ursula (who wears a crown) and a Pope (shown in a papal tiara), is an unnamed virgin with a sizable arrow lodged in her forehead.

Perhaps, however, the monks' famous "holy head with the ... sign of martyrdom" refers to the forehead of another prominent medieval type of head relic: that of John the Baptist. Among the plethora of relics looted from Constantinople during the Fourth Crusade (1204), twelve heads supposedly belonging to the Baptist were translated to Europe;⁴¹² in 1217, Walon of Sarton transported the one deemed most authentic to Amiens' Cathedral, France (Figs 2.67, 2.68).⁴¹³ This differed from the others in that it displayed a scar over the left eyebrow, which ultimately prompted the creation of a new narrative pertaining to the Baptist's martyrdom: Herodias vengefully stabs the decapitated head when it was presented to Herod on a plate.⁴¹⁴

This (apocryphal) narrative was made visually manifest in a plethora of devotional imagery, with the slash migrating to John the Baptist's forehead. This is most visible in examples of the *Johannesschüssel*, sculptures and paintings of the

⁴¹² Toussaint's analysis of the St John's head is helpful for considering the different methods of displaying sacred material (between Constantinople and France) in the early thirteenth century. "Schöne Schädel," 670–73; for further discussions, see: Hella Arndt and Renate Kroos, "Zur Ikonographie der Johannesschüssel," *Aachener Kunstblätter* 38 (2017): 243–328; Barbara Baert, "The Johannesschüssel as Andachtsbild: The Gaze, the Medium and the Senses," in *Disembodied Heads in Medieval and Early Modern Culture*, ed. Barbara Baert, Anita Traninger, and Catrien Santing (Leiden: Brill, 2013).

⁴¹³ Annemarie Weyl Carr, "The Face Relics of John the Baptist in Byzantium and the West," *Gesta* 46, no. 2 (2007): 245.

⁴¹⁴ Matthew 14:1-12; Mark 6:14-29. John the Baptist had publicly condemned Herod's marriage to Herodias, his sister-in-law, and thus precipitated his execution. See further: Arndt and Kroos, "Zur Ikonographie der Johannesschüssel," 301–7, esp. 301–2. It is unknown when, exactly, this story became linked with the Amiens relic; the earliest visual representation dates to the early fourteenth century.

Baptist's head being presented to Herod on a platter. The thirteenth-century *Johannesschüssel*, located in Naumburg Cathedral Treasury (Fig. 2.69), clearly displays this iconographic alteration. The wound, on the left side of the forehead, is enlarged, coloured red, and situated in an area that is more visible than the presumed site of the injury, on the eyebrow. It takes the form of a gaping laceration, freshly inflicted on the Baptist's head, visually underscoring the presence of the wound and the outburst that caused it. Relocating it in this way certainly draws attention to the wound; no longer a small mark near the eyebrow, it is a fresh, bleeding incision situated at the centre of the forehead. Not only was the wound made more visible, it also suggests the repositioning might have been influenced by established associations promoting the forehead as the prominent anatomical site of display.

Closer analysis of the Amiens' relic and reliquary revels a compelling visual example of the forehead as a surface of display. Du Cange's 1665 print depicts the now-destroyed reliquary; the current arrangement was modelled as a replica using this image (Fig. 2.67). The shape of St John's medieval head reliquary is still a matter of debate,⁴¹⁵ but its appearance in the seventeenth century yields intriguing comparisons with Holy Virgins' reliquaries. It indicates that the lower half of the forehead remained exposed while an encrusted metal band, which formed part of the reliquary cover, concealed the upper part of the forehead. Above this, situated directly over the middle of the forehead, was a medallion depicting a bust of John. The medallion thus occupied the area of the body associated with revelation. Working in tandem, the wound (the physical remnants of his martyrdom) and the medallion (the pictorial identification) fully harness the forehead's agency.

These textual and visual examples underscore the forehead's longstanding and diverse designation as a potent site of display; its surface carries an authoritative power to identify and to validate. The selective, repetitive, and oftentimes forged exposure of the Holy Virgins' forehead reveals a conscious effort to tap into these associations.

⁴¹⁵ Carr, "The Face Relics of John the Baptist," 167.

2.9 The Materiality of the Sacred

Having examined the compositional elements of the Virgins' reliquaries, the ways in which their skulls were structurally and anatomically manipulated, and the potent significance of the forehead, it is now possible to consider further the materiality of the reliquaries: the textiles and the linen, in particular, which reveals their roles within the Holy Virgins' skull reliquaries and in the wider context of medieval reliquaries generally. As has already been set out, the skull reliquaries invite investigation of the structural inversion and adaptation, and therefore the relationship between 'relic' and 'reliquary', between 'container' and the 'contained'. This distinction is further complicated by the practice of layering fabrics, and by wrapping and re-wrapping the sacred remains, practices that remain central to the textile reliquaries.

The compositional analysis of the C.SMA.1 and C.SMA.2 (Figs 1, 2.31), along with other medieval case studies considered, have demonstrated that fabrics – mainly linen and precious textiles – serve as the primary materials for the structural support and decoration of the reliquaries. Other materials such as gold and silver threaded ribbons, non-precious metal sequins, glass and metal beads, silk embroidery, ornately woven bands, and parchment also feature as part of the skulls' medieval manufacture and decoration as we have seen. The presence of these various materials, many of which are also found in larger medieval shrines, are important to this study. Rather than analysing each of them individually, however, the investigation will focus on the centrality of textiles, with a particular emphasis on linen – both fine and coarsely woven – as this comprises the most commonly and strategically used material.

The textiles observed on, or previously removed from the Virgins' reliquaries are numerous and diverse, and particularly understudied. A select few will be considered briefly here as a means of demonstrating the variety and lavishness of the materials ornamenting the outer cover, but also incorporated into the internal structure of the skulls. One such example, a silk embroidery of the Adoration of the Magi, was discovered during the restoration of skull C.GK.1 from the Golden Chamber (Figs 2.37g-j). Although representing part of a larger work, this piece displays vibrant colours and gilded metal threads, and so indicates both skilled execution and material finery, while also displaying a well-suited subject matter for

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relic veneration. Further to this, the six fragmented textile wrappings (*involucre*) in the Schnütgen Museum Archives that originally ornamented skull relics from the Cathedral are particularly noteworthy (Figs 2.70-2.78); they were removed, subdivided, but retained by Alexander Schnütgen following his 'restoration' of skulls displayed in the wall shelves. All have been roughly dated between the thirteenth and fourteenth centuries, indicating that they formed part of the original medieval compositions. They comprise examples of *Filetstickerei*, a finely knotted silk embroidery considered to be a precursor to lace.⁴¹⁶ In addition, *Filetstickerei* can also incorporate *Häutchengoldfaden*, silk threads wrapped within thin metal sheets; they evidence the material finery traditionally associated with the ornamentation of sacred bodies.

Five of the six Schnütgen fragments have been restored, a process that has revealed their original vibrancy, structural delicacy, and extraordinary workmanship.⁴¹⁷ A further fragment (Fig. 2.73) that was intentionally not restored is delicately laid out across and fixed to a red silk; mounted in this way, it demonstrates how such a piece was applied to the surface of the reliquaries. Collectively these display zoomorphic, geometric, and floral patterns, with one exception (Fig. 2.78), which presents elaborate netting with thickly embroidered medallions – possibly coat of arms – displaying lions and (double?)-headed eagles. This example presents many similarities to one of the most prized discoveries in Lad: a thirteenth-century embroidery known as the "Coat of Arms Cloth" that was positioned at the innermost decorative layer of a skull reliquary (Figs 2.79-2.84). Unlike those in the Schnütgen collection, this piece presents a complete reliquary cover and one that appears to have been a bespoke design for this reliquary (Figs 2.79, 2.80). This demonstrates the opulence of the lost and concealed ornamentation of these sacred objects. It is decorated with over sixty coats of arms and is thought to have originated in the region of Cologne.⁴¹⁸ It draws attention to material comparisons, namely Filetstickerei, displayed on other Holy Virgins' skull reliquaries outside the city. This ornamentation is furthermore noted on Cologne's earlier-

⁴¹⁶ See further: Gudrun Sporbeck, *Textil Kunst aus Tausend Jahren - Meisterwerke im Schnütgen-Musuem Köln* (Cologne: Greven Verlag, 1996), 20.

⁴¹⁷ Legner briefly notes three additional textile fragments; see, "Kölnische Hagiophilie," 225.

⁴¹⁸ Nowiński and Mrozowski, "Tkanina herbowa," 75–79.

known skull relic, that of Queen Richeza (eleventh century) which is now enshrined in the cathedral (Fig. 2.85).⁴¹⁹

Indeed, throughout the medieval period, textiles were routinely used to wrap sacred remains.⁴²⁰ From a functional perspective, cloth protects relics from direct human touch. In the same way that hands were veiled when handing something to the emperor, as illustrated in the aulic art of late antiquity; it was a liet motif adopted into early Christian art to depict angels or saints holding objects received from, or passed to, Christ with their hands veiled. Considered against this visual practice, the wrapping of human remains in fine materials can be understood as an act of veneration, one reserved for the elite dead - saints, other religious figures, and royalty – with the costly fabrics often imported from distant locations such as Byzantium, Persia and Western China. As luxury items, the economic value of these textiles complimented other finery, such as precious metals, ivory, and gems, which were more customarily reserved for a reliquary's exterior. Furthermore, the possession of such imported items often demonstrated religious power, political legitimization, and diplomatic relations.⁴²¹ In other words, textiles signified far more than monetary value, and were ideally suited to wrapping saints' remains, which themselves were deemed priceless. Precious textiles are preserved in numerous medieval shrines across Europe, but the practice was particularly prevalent in Cologne as recently noted in *Colonia Romanica*,⁴²² a publication devoted to the analysis of the various textiles discovered in the city's shrines, including those of St

⁴¹⁹ Comparision with the Holy Virgins' skull reliquaries is speculative, but noted by Legner in: "Kölnische Hagiophilie," 227; *Kölner Heilige*, 117; for further discussion of Queen Richeza, see: Zygmunt Swiechowski, "Königen Richeza von Polen und die Beziehungen Polnischer Kunst zu Köln im 11. Jahrhundert," *Kölner Domblatt* 40 (1975): 27–48.

⁴²⁰ Stauffer, "Die kostbaren Hüllen der Heiligen" 9–16; Martina Bagnoli, "Dressing the Relics: Some Thoughts on the Custom of Relic Wrapping in Medieval Christianity," in *Matter of Faith: An Interdisciplinary Study of Relics and Relic Veneration in the Medieval Period*, ed. James Robinson, Llyod de Beer, and Anna Harnden (London: The British Museum, 2014), 100–109.

⁴²¹ Stauffer, "Die kostbaren Hüllen der Heiligen," 15.

⁴²² Colonia Romanica - Jahresbuch des Fördervereins Romanische Kirchen Köln, Die kostbaren Hüllen der Heiligen - Textile Schätze aus Kölner Reliquienschreinen. Neue Funde und Forschungen, vol. XXXI (2016).

Kunibert, St Hippolytus (Church of the Holy Virgins), and St Severin.⁴²³ Here, textiles were wrapped directly around the body or body parts, while others were arranged in close proximity and then enclosed with the corporal relic *within* the shrine. The exterior placement of textiles on the Holy Virgins' reliquaries and the role of these textiles – as both ornamentation and structural support – marks a significant departure from such traditional practices which conceal the sacred material *within* shrines or smaller reliquaries. The primacy of textiles – especially linen and its symbolic frames of reference within Christian burial traditions and liturgical contexts – encourage reconsideration of the ubiquitous use of such materials on the holy heads.

2.9.a The Centrality of Linen

As noted, most of the innermost components of the Holy Virgins' textile skull reliquaries analysed here involved the use of linen; Skull C.SMA.1 (Fig. 1), with a layer of thick plant fibre between the bone and first linen layer, is a notable exception. In addition to being the material wrapped around the outside of the skull, the interior fabric pouches were also frequently made from linen. As confirmed by Frieda Sorber, linen was routinely and abundantly used in the composition of the Herkenrode skull religuaries, not only as part of the innermost layer, but as a material to wrap smaller bones that were then placed inside the skull.⁴²⁴ Skulls C.GK.1 and C.GK.4 (Figs 2.44, 2.39) are particularly notable in their use of this material, as both the exterior liner and internal fabric support. The same practices were observed when analysing the reliquaries from Lad and Oliwa (skulls L.AA.1 [Fig. 2.48], L.HVA.1 [Fig. 2.49], and O.A.1 [Fig. 2.55]). It would appear that the abundant use of linen was a popular local practice; given that all skulls were likely decorated in Cologne, before being translated elsewhere, the use of linen in newer decorations is likely to be a continuation of this tradition. Linen was readily available and produced locally, thereby offering a more cost-effective alternative to imported luxury textiles. In these assemblages it nevertheless has a privileged

⁴²³ Annamarie Stauffer, "Ein prachtvolles Gewand? Die Seide aus dem Schrein des heiligen Kunibert," 17–22; Tracy Niepold, "Die frühmittelalterlichen Textilien aus St Ursula in Köln," 53–72; Sabine Schrenk, "Gewebe erzählen Geschichte(n), Die Textilien im Schrein des Bischofs Severin in Köln," 73–96.

⁴²⁴ Frieda Sorber, pers. comm. email, 4 September 2019.

position by sharing physical contact with the sacred remains. This arrangement was deliberate; it suggests that linen embodied a prestige beyond monetary value.

Made from flax stalks that are spun into yarn then woven into cloth, linen is a highly versatile material. It was ubiquitous throughout medieval Europe, but it existed in varying qualities. When quickly produced and with materials that did not undergo a thorough cleaning the final product was greyish-brown and relatively coarse. Higher quality linen was often 'bleached', a term referring to the removal of dirt, grease, and other undesired materials during the production process;⁴²⁵ the degree of additional cleaning determined the vibrancy of the linen that could be very finely woven. The stark contrast between highly treated and less treated linen are demonstrated by numerous skulls, including: C.GK.1 (Fig. 2.37c), C.SG.1-3 (Figs 2.44c, 2.45d, 2.46f), L.AA.1 (Figs 2.48c-d), (Fig. 2.52g); in some of these cases, the innermost linen is notably whiter than their neighbouring layers of beige linen.

Socially, plain weave tunics, made of low-grade linen, were worn frequently as a base layer by the lower classes throughout the Middle Ages. The relative ease with which this fabric was laundered meant that it was commonly employed as an undergarment, providing an intermediate layer between the skin and outer clothes.⁴²⁶ High-grade bleached linen was far more costly and was used by social elites who could afford such finery. Here, however, it is the use of linen within sacred contexts that is relevant to this discussion.

Here, bleached linen was prized not only for its bright white colour but also for its purity. It was this type that was thus most often used for liturgical vestments. Returning to the description of Aaron's priestly garments, it is noteworthy that the instructions specified his tunic and mitre should be made of fine linen (*bysso* and *byssinam* respectively).⁴²⁷ The highly significant headpiece, which touches Aaron's forehead directly, was made from the same material used to decorate, at the

⁴²⁵ A.A.H. Poot, "Chemical Bleaching of Ancient Textiles," *Studies in Conservation* 9 (1964): 53–64.

⁴²⁶ Sarah Thursfield, *Medieval Tailor's Assistant: Common Garments 1100-1480* (Ramsbury: Crowood Press, 2015), 23, 41.

⁴²⁷ Exodus 28:39. Bysso/byssus is defined as "byssus (bissus) [βύσσος], fine linen or other fabric". "Byssus," in *DMLBS*, accessed 25 October 2021, https://logeion.uchicago.edu/byssus; it is also defined as "a very fine yellowish flax and the linen woven from it". Although the flax can have a yellowish tint, the final

product, if cleaned, is a bright white fabric. "Bysso," in *WordSense Dictionary*, accessed 22 January 2021, http://www.wordsense.eu/bysso/.

innermost layer, the Holy Virgins' skull relics. White linen was also the primary material used for albs – the floor-length tunics worn by bishops, priests, deacons and sub-deacons during liturgical ceremonies.⁴²⁸ As an undergarment, it notably resides between the cleric's body and outer vestments. In order for a cleric to preform mass – to act as a conduit between Christ and his people – it was essential that he be 'pure'.⁴²⁹ In this respect it is perhaps not a coincidence that the term alb derives from the Latin *albus* (white).⁴³⁰ The symbolic and material properties of white linen, situated in this liminal position, reinforced the cleric's purity and permitted the sanctified performance of the sacrament.

The bishop and liturgical scholar, William Durand of Mende (c. 1230-1296) discussed the alb at length in his treatise, *Rationale divinorum officiorum*, offering clear insights into the use of fine linen to create this particular liturgical vestment. He first specifies the importance of its colour by invoking Ecclesiastes 9:8: "at all times let thy garments be white."⁴³¹ He went on to elicit further symbolic connections between linen – whose whiteness was produced not by nature but "through much thrashing and handling"⁴³² – and the body of man; humans are not born pure, but instead gain their purity though good deeds and being "softened by many punishments".⁴³³ Finally, and most important to this study, he justified the use of white linen in this context simply by invoking Revelation 19:8: "For the fine linen

⁴²⁸ Joseph Braun, *Die liturgische Gewandung im Occident und Orient. Nach Ursprung und Entwicklung, Verwendung und Symbolik* (Freiburg im Breisgau: Herdersche Verlagshandlung, 1907), 57–58; Maureen C. Miller and Monica L. Wright, "The Liturgical Vestments of Castel Sant'Elia: Their Historical Significance and Current Condition," in *Medieval Clothing and Textiles*, ed. Robin Netherton and Gale R. Owen-Crocker 10 (Boydell and Brewer, 2014), 90.

⁴²⁹ Braun, *Die liturgische Gewandung*, 60.

⁴³⁰ Ibid.

⁴³¹ Ecclesiastes 9:8. "Omni tempore sint vestimenta tua candida".

⁴³² "Sicut enim linum, vel byssus, candorem, quem ex natura non habet, multis tunsionibus attritum, acquirit per artem." Vincenzio d'Avino, *Rationale Divinorum Officiorum … Accedit aliud Divinorum Officiorum Rationale a Joanne Beletho … conscriptum* (Naples: Apud Josephum Dura, 1859), 105; trans. Timothy Thibodeau, *William Durand on the Clergy and Their Vestments: A New Translation of Books 2 and 3 of The Rationale Divinorum Officiorum* (Scranton: University of Scranton Press, 2010), 147. Quote amended to Douai-Rheims Bible, Revelation 19:8.

⁴³³ "per exercitia bonorum operum multis castigationibus macerata sortitur in gratiam." d'Avino, *Rationale Divinorum Officiorum*, 105; trans.: Thibodeau, *Clergy and Their Vestments*, 147.

(*byssinum*) are the justifications of the saints".⁴³⁴ This passage, which references the symbolic union between Christ and the Church, points to the biblical authority informing the links between fine white linen and the clothing appropriate for saints.

Perhaps not coincidentally, large ornate fragments of an alb were discovered within one of the Holy Virgin's skull reliquaries in Ląd (Figs 2.86-2.88). Delicately woven, these pieces were derived from the sides of the alb in the area just below the waistline, and were situated next to the relic itself, lying between it and the external layers of fabrics. In this position, the appropriated vestment mirrors both the placement as well as the purifying function of the alb when worn by clerics.

The ornate woven rhombus design of the fragment is, furthermore, strikingly similar to a piece of bright white linen that was utilized in the 'mask' of skull C.GK.3 (Fig. 2.33k). It is difficult to determine if this fabric maintained direct contact with the relics below, yet such similarities might suggest that these skulls were ornamented in the same location; alternatively, it implies the use of a pattern commonly featured on albs. More importantly here, it suggests that this particular element of the vestment was incorporated into the formation of these, and possibly other, reliquaries. Indeed, a large quantity of albs, alongside other fine white linen clothes dating to between the seventh and fourteenth centuries, have been recently discovered in the shrine of St Evergislus in Cologne.⁴³⁵ The high volume of linen recovered presents a rare medieval example of a reliquary that utilized the finery of linen instead of silks. Furthermore, the contents reveal the diversity and exceptional quality of these re-purposed linens;⁴³⁶ they underscore the association of linen with high status liturgical vestments and their use and re-use in reliquaries, notably within Cologne.

When investigating the significance of linen, its connection with sacred deaths, burials, and veneration is also relevant. Biblical texts contain several accounts of linen cloths being used for wrapping the dead. Paramount among these are those recounting the body of Christ being wrapped in linen following the Crucifixion. In varying degrees of detail, each evangelist describes the burial, and all

⁴³⁴ "Byssum justificationis sunt sanctorum" d'Avino, *Rationale Divinorum Officiorum*, 105; trans.: Thibodeau, *Clergy and Their Vestments*, 147. Here, byssum translated as fine linen.

⁴³⁵ Reichert and Stauffer, "Die Textilien," 117–31.
⁴³⁶ Ibid., 129.

specify linen as the material within which Joseph of Arimathea wrapped the body. Luke states that after "taking him down, he wrapped him in fine linen (*sindone*)";⁴³⁷ in Mark's account, Joseph bought "fine linen, [and] taking him down, wrapped him up in the fine linen";⁴³⁸ while Matthew recorded that the body was wrapped in a "clean linen cloth" (*sindone munda*).⁴³⁹ According to John, prior to Christ's burial, Joseph and Nicodemus "took therefore the body of Jesus, and bound it in linen cloths, with the spices, as the manner of the Jews is to bury".⁴⁴⁰ Mark's specification of "fine linen" (*sindone*) and Matthew's mention of "clean linen" (*sindone munda*) likely indicate that it was 'bleached' and finely woven, and therefore of higher quality. Together these passages reiterate that the finest winding clothes, befitting of an elite burial, were used to wrap Christ's body.⁴⁴¹

Further to the use of linen in burial contexts, the biblical narrative also highlights the material's direct ties to the miracle of the resurrection. Following the Crucifixion, Peter enters the tomb and sees Christ's "linen cloths" (*linteamina*) lying there.⁴⁴² These discarded cloths present the physical evidence for Christ's victory over death. No longer used for their original purpose, they instead confirm that the corpse they once enveloped is gone. Indeed, as *the* contact relics they become some of the most powerful (and disputed) fabric relics in Christianity.⁴⁴³ Also, notable among highly prized linens are those collected by Charlemagne and housed in the palatine chapel at Aachen; these included Christ's childhood swaddling clothes, the loincloth he wore at the Crucifixion, the Virgin's chemise, and John the Baptist's

⁴³⁷ "et depositum involvit sindone". Luke 23:53 Note: *sindone* is translated as "fine linen" in Douay-Rheims, but it can mean linen fabric, and typically references a particular undergarment made of linen, or a linen burial cloth.

⁴³⁸ "Joseph autem mercatus sindonem, et deponens eum involvit sindone." Mark 15:46.

⁴³⁹ Matthew 27:59.

⁴⁴⁰ "Acceperunt ergo corpus Jesu, et ligaverunt illud linteis cum aromatibus, sicut mos est Judaeis sepelire". John 19:49.

⁴⁴¹ In these biblical passages, *sindone* describes both linen fabric and a linen (burial) garment, but it should not be confused with the modern conflation of *sindon* to indicate the Shroud of Turin. Philip E. Dayvault, *The Keramion, Lost and Found: A Journey to the Face of God* (Newport News: Morgan James Publishing, 2016), 32.
⁴⁴² John 20:6.

⁴⁴³ The subject of the "Shroud of Turin" is vast and with many opposing opinions. For an overview of the object, see: Ian Wilson and Barrie Schwortz, *The Turin Shroud: The Illustrated Evidence* (London: Michael O'Mara, 2000).

decollation cloth.⁴⁴⁴ These, together with the linen shed by Christ, establish a rich association between linen, the resurrection, and everlasting life. Utilized as the material enveloping the skulls of Cologne's martyred virgins, linen can thus be understood as simultaneously treating their earthly remains with reverence while acknowledging their spiritual 'resurrection' and eternal residence in heaven.

The symbolic and material connection between linen and resurrection is further demonstrated by the requirement that linen be utilized for particular liturgical textiles. The first of these is the corporal, being the only textile permitted to touch the chalice and paten, the liturgical vessels that hold Christ's blood and body.⁴⁴⁵ In this role, the materiality of the linen had the power to evoke the memory and the torment inflicted on Christ's body before his death and resurrection. Altar cloths, which were nearly exclusively created with linen, and sometimes from a linen and silk blend,⁴⁴⁶ operate in an analogous manner. Because the altar symbolized the table of Christ's sacrifice – the significance of which was re-enacted with each celebration of the Eucharist - linen's symbolic associations were especially potent in this context, and the symbolic and material associations were visually reiterated to those witnessing the mass. In this position, linen altar cloths also shared another notable relationship with relics - those enclosed within the altar. A good example of this can be seen in the St Michael Chapel in Lad (Figs 2.89-2.90), where relics were placed within the cavity of the stone altar-slab (rather than the pedestal supporting the mensa) and then covered with a linen cloth. Like the intimate positioning of linen found on the Holy Virgins' skulls, linen laid over relics within an altar, or those used to wrap the chalice and patent, further demonstrates the material's particular bond with sacred (corporeal) remains. As seen in the biblical accounts of Christ's burial, the linen used for both clerical vestments and altar cloths was to be made from the finest quality.

⁴⁴⁴ Margaret Goehring, "Textile Contact Relics," in *Encyclopedia of Medieval Pilgrimage* (Leiden: Brill, 2010), 740. Beginning in 1349, these fabric relics have been displayed every seven years as part of the Heiligtumsfahrt. The 2021 program has been postponed until 2023 due to the COVID-19 pandemic.
⁴⁴⁵ Thomas M. Izbicki, "Linteamenta Altaria: The Care of Altar Linens in the Medieval

Church," in *Medieval Clothing and Textiles*, ed. Robin Netherton and Gale R. Owen-Crocker 12 (Suffolk: Boydell Press, 2016), 42.

⁴⁴⁶ Stauffer, "Die kostbaren Hüllen der Heiligen," 14.

Throughout the medieval period, linen shared another important, albeit earthly relationship with venerating the deceased. In addition to enveloping human remains, cloths were often draped over tombs and catafalques during funerals and memorial services. Recent studies have revealed that many of these covers, typically believed to have been made of costly materials such as silk with gold and silver threads, were instead created from linen.⁴⁴⁷ One such early example, an eighthcentury cloth from the Holy Apostles Church in Cologne, was believed to later cover the tomb of the city's Archbishop Pilgrim (985-1036); a painted linen cloth was also used to cover the relic shrine of St Elisabeth in Marburg (1207-1234).448 In addition, analysis has revealed a large, rectangular linen cloth from the Premonstratensian abbey of Altenberg on the Lahn (Fig. 2.91).⁴⁴⁹ The elaborate light blue and white embroidery set against the white linen background of this cloth is stitched with precision; as argued by Seeberg, the composition depicts the genealogy of St Elisabeth, with whom the abbey shared a special bond. Elisabeth bequeathed the abbey to her youngest daughter, Gertrude (1227-1297), who later became abbess in Altenberg; the cloth thus traces Elizabeth's royal lineage and is thought to have been draped over the empty catafalque – the commemorated bodies being interred in St Elizabeth's church in Marburg. The ceremonial display over the Altenberg catafalque thus visually evoked the memory of the deceased family members notably at a site that was separate from their physical remains. Finely embroidered white linen, thought to have been made by the local nuns,⁴⁵⁰ served as the physical intermediary between the living and the dead; linen, with its symbolic ties to purity and everlasting life, signified commemoration. In this context, the linen catafalque cover presents tantalizing connections between spiritual presence, memory, and

⁴⁴⁷ Stephanie Seeberg, "Monument in Linen: A Thirteenth- Century Catafalque Cover for the Members of the Beata Stirps of Saint Elisabeth of Hungry," in *Dressing the Part: Textiles as Propaganda in the Middle Ages*, ed. Kate Dimitrova and Margart Goehring (Turnhout, Belgium: Brepols, 2014), 81–94; Stephanie Seeberg, *Textile Bildwerke im Kirchenraum: Leinenstickereien im Kontext mittelalterlicher Raumausstattungen aus dem Prämonstratenserinnenkloster Altenberg/Lahn*, Studien zur internationalen Architektur- und Kunstgeschichte; 114 (Petersberg: Michael Imhof, 2014).

⁴⁴⁸ Seeberg, "Monument in Linen," 81, 92. ⁴⁴⁹ Ibid., 89–94.

⁴⁵⁰ Ibid., 84.

veneration, all of which find direct resonance with the discussion of Cologne's linenenshrined skulls.

In these varied contexts linen often assumes the role of protector or intermediary between the sacred and the secular – whether it be the linen strips that wrapped the bodies of the deceased, the clothes used to bedeck tombs, clerical (under) garments and altar covers, or the material used to wrap sacred relics within shrines – linen is often situated between the sacred and the earthly. It is cast as the guardian and purifier, and carried strong associations with death, resurrection, and veneration. Its intimate placement within the Holy Virgins' skull reliquaries can thus be understood to reflect a deliberate choice, one that draws upon the longstanding and weighted significances of the material.

2.10 Inverted Interiority: The Roles and Relationships of Textiles and Bones

Although it was customary to wrap sacred bodies or relic fragments in textiles before enshrining them, the large shrines used to house bodily remains, as well as smaller-scale reliquaries, concealed their textile-wrapped relics within metal or wooden containers. In this position, the textiles were hidden from view and only seen when the shrines were opened on rare occasions. Although the application of textiles and costly materials of Cologne's sacred skulls was in keeping with a shared tradition, which had its origins in antiquity and early Christianity, the location of these materials differ from traditional shrines. The exclusive use of textiles, as investigated here – without the additional layer of a metal or wooden shrine – creates a new category of reliquary. They effectively invert the standardized method of display by dispensing with the exterior shrine and allowing the textile montages to fulfil the role of a reliquary. Further to this, textiles functioned as key structural elements that shaped, fortified, and augmented the skulls and their 'faces'. In doing this, these objects blur the lines between sacred material and their container, and therefore challenge the scholarly distinction between relic and reliquary.

The investigation of two medieval reliquaries from Cologne will address this curious migration of textiles from strictly interior to partly exterior components. The first is the large shrine belonging to St Severin (Figs 2.92-2.94), the third Bishop of Cologne (*c*. 348-403), which was opened and investigated in 1999 and found to contain eight large textiles and liturgical vestments dating from the third to eleventh

centuries.⁴⁵¹ Interesting here is the use of textiles, not only to envelop the sacred bones, but also to ornament the interior of the shrine itself; all four walls, the base, and the lid are clad with tenth-century, brightly-coloured silk, known as *Hahnenseide* or "chicken silk" in reference to the motif.⁴⁵² This arrangement probably dates to 947 when Archbishop Wichfried (925-953) commissioned a new wooden shrine, likely to mark the onset of construction of St Severin's church in Cologne.⁴⁵³ The textile was cut according to the measurements of the shrine's interior and then fixed in place with metal nails, ensuring that it remained stationary and *in situ*. In this position, it thus inhabits the confines of the shrine yet does not directly envelop the holy bones. Instead, it acts as a costly and honorary barrier between the saint and the outer world. Although an isolated example, it nevertheless demonstrates the liminal use of textiles in the treatment of relics in Cologne, and similarly would have contributed to the act of revelation when the box was opened.

The late thirteenth-century silk reliquary found in the Holy Virgins' treasury (Figs 2.95, 2.96) provides yet another useful example in charting the migration of textiles from innermost to outer ornamentation. This rectangular chest, with a roof-shaped lid and decorative *fleur-de-lis* metalwork, provides a rare example of a reliquary covered completely in textiles. Inside, the thin wooden panels are lined with a finely woven white linen. The exterior, made of a cross-patterned silk embroidery also set against a linen ground, originally displayed vibrant hues of light red, light and dark green, and white (Fig. 2.96).⁴⁵⁴ Unlike the textile cut to fit St Severin's shrine, this embroidery was specifically created to decorate this reliquary; each edge and corner is demarcated by a band that separates the reliquary's alternating pattern. This structural division and the variations are visually exciting, and indicate the work of a skilled embroiderer,⁴⁵⁵ while also evidencing the exterior use of textiles in the display of relics, notably at the Church of the Holy Virgins.

⁴⁵¹ Schrenk, "Gewebe erzählen Geschichte(n)," 73–96; Schrenk and Reichert, "Die Textilien."

⁴⁵² Schrenk and Reichert, "Die Textilien," 256–69.

⁴⁵³ Schrenk, "Gewebe erzählen Geschichte(n)," 76–78.

 ⁴⁵⁴ Thorough description of this object is found under item number 26 in Bock, *Das heilige Köln*, 5–6; for a brief mention, see: Martin Seidler, *St Ursula Goldene Kammer, Heiltümer Und Kirchenschatz, Köln* (Regensburg: Schnell & Steiner, 2011), 16.
 ⁴⁵⁵ Bock, *Das heilige Köln*, 6.

These two reliquaries, both presumably created in Cologne between the eleventh and thirteenth centuries, supply useful examples of textiles positioned in locations other than their customary role of wrapping the sacred remains. Instead, they were employed as an interior liner, and later on the exterior of a shrine. In these positions, they assume a new role: demarcating the presence of sacred remains. Their decorative, economic, and cultural value additionally situate them as lavish ornamentations, and thus align them with textiles found in other medieval shrines. Yet the creativity involved in the production of these two examples exemplifies the phenomenon that came to define Cologne's treatment of sacred material; this was likely the driving force behind formulating the original design of the Holy Virgins' textile reliquaries, which might have originated as early as the twelfth century, the execution of which was replicated for centuries to come.

2.10.a Amplifying the Sacred: Covering, Wrapping, and Layering

As has been established, the vast majority of skull relics from the Holy Virgins' church and Cologne Cathedral, as well as further afield, received new covers over the centuries. The tradition of enveloping these objects in new fabrics has the power to evoke "in the faithful the feeling of beyond, of something that is not present and available to perception."⁴⁵⁶ Like the series of enclosures associated with relics wrapped in textiles and then situated within a shrine, the Holy Virgins' skull reliquaries constitute a succession of layered fabrics. Having left the relic core and the older decorations in place, new textile covers were tailored to fit around the earlier ornamentation; they have accumulated alterations and updated cloaks, and can thus be seen as objects "of making and remaking", typical of reliquaries.⁴⁵⁷ As demonstrated by Nowiński in Ląd, three layers dating to the nineteenth, sixteenth, and thirteenth centuries were identified,⁴⁵⁸ each new layer revealing a different moment in time when it was deemed either necessary or desirable to (re)decorate the skulls, and thus add new chapters to their biographies.

The practice of re-wrapping the skulls was widespread, and in addition to those in Poland, many skulls from the Herkenrode collection and Cologne reveal

⁴⁵⁶ Leone, "Wrapping Transcendence," 49.

⁴⁵⁷ Hahn, "What Do Reliquaries Do for Relics?," 288.

⁴⁵⁸ Nowiński, "Prezentacja tkaniny herbowej z Ladu," 303–10.

successive layers. Skull C.GK.4a (Fig. 2.39) from the Golden Chamber is particularly revealing of this practice:⁴⁵⁹ the exterior cover of this skull is worn, clearly displaying the extent of successive layering. Exploration of these facilitates analysis of the various treatments. When viewed from the side, three separate covers predating the seventeenth century can be detected (Figs 2.39a-c). Nearest to the fine linen core, the original ornamentation constitutes a bright yellow patterned satin. This was wrapped around the back (and presumably the top) of the skull and stitched together with a fine blue linen mask. Between this and the cover – a finely woven salmon-pink linen - is a notable amount of natural hemp fibres in the 'mask' area; this might have been added to build up and/or strengthen the facial area (Figs 2.39g-h). The pink linen was then placed over the back and a delicate orange velvet added to the mask. Further to this is the sizeable supportive cushion, situated under the skull made of matching pink linen that was folded over to achieve the desired thickness. This indicates that the skull received its supplementary support during this campaign of decoration (Fig. 2.39c) - one that also saw the addition of a sequined bright red textile to the area of the mask (Fig. 39h). Noteworthy, is the similarity of this pink linen with that found on C.SMA.1 (Fig. 1), suggesting that they were made from the same fabric and during the same decorative campaign. The third and final layer of this reliquary is composed of three materials: a yellow silk in the back; a thickly embroidered mask (likely derived from a clothing donation⁴⁶⁰) (Fig. 2.39g), and a fine white linen base that encloses the earlier cushion. The reliquary thus displays three distinct decorative treatments that use materials differing in style and colour that all pre-date the seventeenth century. Furthermore, none of the textiles appear to be notably worn or damaged, indicating that each successive cover was desired rather than necessitated.

Pertinent here are the ways in which this practice amplifies the ambiguity of relic and reliquary, problematizing the distinction between exterior and interior. The addition of new fabric layers and ornamentation ostensibly creates a new exterior, a new 'reliquary'; the older layer is subsumed beneath the surface and thus becomes part of the interior. In effect, the outer layers are rendered sacred with each act of (re)covering or enshrining; the sacred properties of the materials

⁴⁵⁹ For others, see C.GK.1 (Fig. 2.37), C.GK.6 (Fig. 2.41), and O.A.1 (Fig. 2.55). ⁴⁶⁰ Ulrike Reichert, pers. comm. conversation, 17 May 2019.

situated in immediate or close proximity to relics assume the status of *brandea*, or contact relics. The ritual of wrapping, performed upwards of three to four times over several centuries, confirms and multiplies the sacred nature of these skulls. With each new layer, the enclosed relics became more removed from the outside world, and so highlight their presence while simultaneously enhancing their absence.⁴⁶¹

This layered treatment replicates the medieval tradition of wrapping sacred bodies at burial and rewrapping them every time the tomb was opened.⁴⁶² In the aftermath of the Virgins' martyrdom, *Passio II* documents that Cologne's citizens "found unburied corpses of the virgins on the bare ground" and "some covered them with clothing, some dug the earth, others placed bodies in sarcophagi".⁴⁶³ Every ornamental layer can be understood as a devotional act that mirrors those first performed by Cologne's citizens in the aftermath of the Virgins' martyrdom. Exploration of these layers today offers insights into the biography of the skull reliquaries and the materials considered worthy of touching, supporting, and ornamenting these sacred objects.

2.10.b Blurring Material Lines: 'Relic' and 'Reliquary'

These acts further indicate that the Holy Virgins' heads, within which fragmentary bones share an intimate relationship with the surrounding and enclosed fabrics, challenge the traditional classifications of 'container' and 'contained' (established in nineteenth- and twentieth-century studies of relics and reliquaries), to the extent that investigation of these objects has been hindered. To overcome this, it is necessary to explore how these objects can be considered both as part of and falling outside these canonical taxonomies.

Julia Smith's recent study of the subject has demonstrated how cultural definitions of a relic have fluctuated across time, but modern views have been heavily impacted by the ideologies of conventional, primarily western historians

⁴⁶¹ The tension between presence and absence was here suggested when discussing the icon of Christ in the Sancta Sanctorum. Despite the difference in media, the technique of layering applies to the Virgins' skull reliquaries. Kristin Noreen, "Re-Covering Christ in Late Medieval Rome: The Icon of Christ in the Sancta Sanctorum," *Gesta* 49, no. 2 (2010): 121.

⁴⁶² Bagnoli, "Dressing the Relics," 101.

⁴⁶³ See above, fn. 169.

and theologians over the past five centuries,⁴⁶⁴ which have adopted three (hierarchic) relic categories: a (primary) complete body or body part; (secondary) objects associated with saints; and tertiary (contact) relics. Yet, considering that relics are "passive and neutral",⁴⁶⁵ as well as "silent and speechless"⁴⁶⁶ it is in fact the people who interact with them that construct, manipulate, and maintain their power.

Reliquaries, on the other hand, are described as the containers of this sacred material; they "are the semiotic devices that ... control, channel, and qualify the eroticism of relics."⁴⁶⁷ The reliquaries' main function was to honour through (ostentatious) ornamentation, a phenomenon understood to visually convey the sacred value of their contents.⁴⁶⁸ They were also tasked with safeguarding their contents by physically protecting them from public view, while also providing an intermediary between devotees and sacred matter. These containers are thus used to communicate the importance of the relics encased within; their materials, size, and construction reflect upon both those commissioning the work and the culturally constructed sacred nature of the relic.⁴⁶⁹ The oversized, gem-encrusted golden house of the Three Kings Shrine (Figs 2.97, 2.98) in Cologne's cathedral exemplifies just such a reliquary.⁴⁷⁰

Traditionally, then, relics have been categorically and routinely perceived as distinct from their vessels, which were, nevertheless, also considered necessary constituents of relics; Cynthia Hahn, who has dedicated much thought to these topics, has underscored this perceived relationship by claiming that a relic relies on a reliquary to transform the "bones and dust into beauty and power".⁴⁷¹ Elsewhere,

⁴⁶⁴ Smith, "Relics: An Evolving Tradition," 41–60.

⁴⁶⁵ Geary, *Furta Sacra*, 3.

⁴⁶⁶ Hahn, The Reliquary Effect: Enshrining the Sacred Object, 11.

⁴⁶⁷ Leone, "Wrapping Transcendence," 53.

⁴⁶⁸ Hahn, "What Do Reliquaries Do for Relics?," 306.

⁴⁶⁹ Martina Bagnoli's consideration of the materials and creation of reliquaries is a helpful source, among many, on this topic: "The Stuff of Heaven: Materials and Craftsmanship in Medieval Reliquaries," in *Treasures of Heaven: Saints, Relics and Devotion in Medieval Europe*, edited by Martina Bagnoli et al. (London: British Museum Press, 2011), 137–47.

⁴⁷⁰ See Rolf Lauer's composition for a concise overview of this reliquary:
"Dreikönigenschrein," in *Ornamenta Ecclesiae*, ed. Anton Legner, vol. II (Köln: Schnütgen-Museum, 1985), 216–26.

⁴⁷¹ Hahn, "What Do Reliquaries Do for Relics?," 310.

she has argued that "an object is most clearly *identified* as a relic when it is enclosed and presented in a reliquary,"⁴⁷² and that the "container ultimately supersedes the contained".⁴⁷³ Hahn, as is characteristic of this approach, thus underscores the (modern) partiality towards reliquaries, which is especially notable in those who have investigated the Holy Virgins bust reliquaries.⁴⁷⁴ Focusing almost exclusively on the containers, without due consideration of the sacred material that lay (or was laid) within, creates an imbalance that likely correlates with the growing interest in reliquaries and the waning importance of relics. Such studies certainly fail to account for the sacred skulls of Cologne's Holy Virgins, which challenge such dualistic terminology and necessitate consideration of an alternate relationship between the objects.

Medieval viewers, familiar with alternating between visible objects and those in the mind's eye, would have very likely perceived these sacred objects differently. When discussing the semiotics of reliquaries, Massimo Leone underscores the perception of viewers within this experiential nexus: "the faithful are encouraged to understand that the relic is not plenitude ... but a sign (i.e. both *representamen* and screen) of the more perfect, albeit ungraspable, whole".⁴⁷⁵ These objects, which insist on a wholeness, playfully invite meditation of that which resides beneath the surface.

Thus far, this study has reiterated the dualistic terminology set out by earlier scholars, by employing the respective terms relics (the bones of the Virgins) and reliquaries (the materials used wrap and ornament the bones), despite the complicated relationship between bones and fabric that has emerged. The detailed structural analysis provided here has demonstrated unequivocally that these objects notably defy conventional perceptions of 'container' and the 'contained' in various ways. The fusion of skulls with other bone fragments, together with cloth and parchment not only blur material boundaries, they present an alternate category of sacred objects altogether.

⁴⁷² Hahn, *The Reliquary Effect*, 7.

⁴⁷³ Hahn, "Speaking Reliquaries," 28.

⁴⁷⁴ See above, pp. 39-42.

⁴⁷⁵ Leone, "Wrapping Transcendence," 53.

As considered above,⁴⁷⁶ exploration beneath the surface reveals that the majority of skulls consist of a large internal fabric pouch, situated within the cranial remains, which served as a supportive core. In addition to offering internal support, textiles were also employed as substitutions for bones and other anatomical parts. In this role, these material components aid in creating the perception of a complete 'skull' that challenges traditional distinctions between body part and container. As substitute bones these textiles are differentiated from those used to wrap the skulls, which conform more closely into the traditional understanding of 'container', while also challenging these distinctions.

A re-examination of Skull L.AA.1 (Fig. 2.48), where the materials are employed to fulfil a variety of roles, illustrates the way in which these objects problematize scholarly conventions. In this example, the cranial bone is incomplete, and a fragment is positioned to display the martyr's wounds within the *fenestella* (Fig. 2.48b). Under the surface, it is the carefully folded parchment covered with the text of the Psalms, together with the linen, linen-wrapped bones, and other textiles, that collectively construct the remaining 'cranium' (Figs 2.48c-d). Here, the fabric and other materials were manipulated to form the shape of a skull, and in so doing were transformed into substitute-bones. In this role, concealed from the viewers, these materials accumulate layered meanings that exceed that ascribed to the exterior ornamentation. Similar complications occur with the use of textiles in Skull L.HVA.1 (Fig. 2.49); here linen pouches, filled with bone fragments, were assembled and sewn together to form a complete 'skull'. The exposed forehead bone, which was secured with threads to neighbouring relic pouches, is the isolated exception.

In both examples, fabric serves as an integral structural element, the absence of which would fail to present a recognizable 'skull'. Further to this, several 'skulls' revealed smaller bones – wrapped cloths – situated within the cranial cavity. Positioned in this way, these bones offer some additional internal support; yet, considering their sacred nature, they simultaneously amplify the objects' sacredness. This layered build-up of bones and cloth together with the interchangeable nature of bone, linen, textile, sacred text and other materials, radically distorts the boundaries between 'relic' and 'reliquary'.

⁴⁷⁶ See above, section 2.7.a.

In these constructs, the textiles enveloping the skulls are bound in a manner that creates and shapes the head. In one regard, the fabrics and stuffing function as supportive, structural implements, and so can be viewed as intermediary components that remain distinct from both the skull and the exterior ornamentation. Yet, the fabrics of the reliquary also anatomically construct, manipulate, preserve, and enact the human skulls. When a skull was fragmented, fabrics were employed to fortify and construct 'wholeness' by assuming the role of the missing bones. In this case the relic and reliquary are in fact fused, and the intermediary material – the stuffing and fabrics – become building material creating the entity. They certainly do not encase, and so enshrine, the relic externally.

Other examples, such as C.SG.3 (Fig. 2.46), found at St Gereon, SQ.HA.1 (Fig. 2.51) from the Herkenrode collection, as well as those from Marienfeld (Figs 2.53, 2.54), all openly display a piece of pure white silk positioned in the *fenestella* (Figs 2.46g, 2.51d, 2.53a, 2.54). There is no evidence of a bone here; the piece of white silk intentionally replicates the appearance of the bone relic, and so 'becomes' the relic. While this particular skull (C.SG.2; Fig. 2.45) was situated within a wooden bust (i.e. Figs 17-18) making it unclear how often, or to what extent, it was viewed, three of the skulls analysed in Strake-Sporbeck's study displayed white silk and white linen 'bone' within their *fenestellae*;⁴⁷⁷ two of these are balanced on large pillows, which indicates their (original) stationary and unconcealed display within the church. Similarly, the oblong shape and flat base of SQ.HA.1 (Fig. 2.51b, c, e) indicate that it too was almost certainly on display along with the other skulls in this collection. These substitutions between bone and fine silk or linen reveal the extent of interchangeable material involved in the construction of these objects. Considering there was no shortage of bones – skulls or appropriated fragments – textiles posing as bones raise questions surrounding value and materiality versus visibility and 'authenticity', while furthermore complicating distinctions between sacred remains and ornamental material (relic and reliquary).

Some recent studies have considered a less conventional relationship between relic and reliquary, and so offer pertinent methods for understanding Cologne's holy heads in this respect. Seeta Chaganti, for example, suggested that "the contained and the containing are interchangeable, and the borders between them

⁴⁷⁷ Strake-Sporbeck, "Textilie Ausstattung und Religuienfassung," 108–9, Figs 16-18.

are indeterminate even as the containing continues to articulate itself in the object's physical features".⁴⁷⁸ Although maintaining a distinction between 'relic' and 'reliquary', Hahn similarly touches upon the fluidity of this relationship in a recent publication asserting that: "The reliquary, while framing the relic and thus creating an interior, also joins together the relic and the reliquary, simultaneously destroying any clear sense of interior and exterior and fusing contained and the containing".⁴⁷⁹ These comments introduce the possibility of dematerializing boundaries, and this emerging scholarly trend is particularly helpful for this study.

In fact, emancipated from the definitive terminology that has characterized the scholarship, the Holy Virgins' freestanding skulls can be understood as transcending the dichotomy of mere 'relic' and 'reliquary'; instead, they offer the possibility that materials can simultaneously exist as both 'encased' and 'encasing'. The complex substitution of linen, silk, and parchment for bones presents a material transformation, where the independently ordinary collectively becomes the sacred. In this way, these objects introduce a new category of medieval reliquary that promotes the blurring of material lines and inspires scholarly consideration not only of what is visible, but also of that which resides beneath the surface and how the collective components work together.

2.11 Full Disclosure: Bare Bones and the Medieval Viewing Experience

Having considered the unique relationship between textiles and bones, it is now possible to turn to the other notable trademark of these holy heads: the exposure of bone. The bare 'forehead' of the Holy Virgins is, as noted, one of the most intriguing elements of this cult's relic construction and display, and great lengths were taken to ensure that the skulls were equipped with suitable foreheads – authentic or fabricated. Not only did this anatomical element facilitate the construction of a 'complete' head, the revealed forehead permitted direct visual access, an unprecedented exposure that introduced an innovative method of display predicated on visibility and 'authenticity'.

 ⁴⁷⁸ Seeta Chaganti, *The Medieval Poetics of the Reliquary: Enshrinement, Inscription, Performance* (New York; Basingstoke: Palgrave Macmillan, 2008), 15.
 ⁴⁷⁹ Hahn, *The Reliquary Effect*, 12.

From at least the late thirteenth century the plethora of holy heads assumed a new role in the practice of medieval relic display: visible on shelves, in niches, and within winged altarpieces. With this 'translation', they present a radical departure from contemporary relic displays, where the visibility of sacred matter was monitored or completely obstructed. It is, therefore, important to explore this visual shift by considering both historic and cultural factors that might have inspired and facilitated this new method of presentation.

Dietrich's lengthy and comprehensive discourse on the history of visibility of relics outlines the governing practices of relic 'displays' from late antiquity to the late medieval period.⁴⁸⁰ With the onset of relic collection and 'display' in the late fourth century, sacred materials had been characteristically concealed within richly decorated boxes, shrines, and shaped objects, clearly delineating the spheres of viewer and sacred relics. Dietrich argues that slight adjustments to reliquaries began in the late twelfth century, which facilitated greater visibility of, and thus 'access' to sacred mater. These changes were not an isolated phenomenon, however, but rather, were integral to more complex developments within medieval liturgy, devotional practices, and the construction of sacred space, all of which prioritised sight above all other senses.⁴⁸¹ Cologne was party to these developments, and although the Holy Virgins' skulls are not considered by Dietrich, they can be contextualized and explored as pertinent contributors to these processes.

One of the earliest and most significant shrines to expose sacred material was that of the Three Kings, its viewing grill completed in 1191 (Fig. 2.98).⁴⁸² There was a detachable trapezoidal plate in the front of the shrine that, once removed, rendered the sacred skulls of the kings visible behind the ornate grill. At approximately the same time, the left 'wall' of the house-shaped reliquary of St Albinus was equipped with a hinged door that, when opened, revealed the textile-wrapped body situated behind a metal lattice grill. It appears that displaying the

⁴⁸⁰ Dietrichs, *Vom Glauben zum Sehen*.

⁴⁸¹ See e.g., Hahn, "Seeing and Believing."

⁴⁸² Dietrichs, *Vom Glauben zum Sehen*, 102–18; Legner, *Kölner Heilige*, 109–14; Lauer, "Dreikönigenschrein."

body was not part of the original design, but was, rather, a later alteration,⁴⁸³ which importantly (at least in this example) required human intervention.⁴⁸⁴

Around the turn of the thirteenth century, when removable elements on reliquaries started to appear, there was also a notable increase in the use of rock crystal in reliquary design.⁴⁸⁵ Enshrinement behind this transparent material facilitated an unprecedented opportunity to see relics. Believed to be congealed water and therefore the purest substance on earth, rock crystal embodied a complex and diverse theological symbolism in medieval thought that ranged from sainthood and baptism to the Incarnation.⁴⁸⁶ It was thought that crystal had a purifying capability, which, when situated in front of a relic, filtered impurities from the viewer's gaze before it came to rest on the sacred material. The crystal ensured the relics were secured from the world's profanity – and theft.

In addition to permitting a fixed viewing of relics, the magnifying quality of crystal optically enhanced the sacred material within. The small, thirteenth-century house-shaped reliquary from the Church of the Holy Virgins' treasury (Figs 2.99, 2.100) demonstrates this evocative role. Situated within the barrel-shaped crystal, several unadorned bone fragments and parchment *cedula* authenticating the relics as "the blood covered hair of a virgin from the company of St Ursula" are magnified (Fig. 2.100).⁴⁸⁷ The crystal's high polish and reflective surface create transparent 'walls' that, although providing a physical barrier, appear to dematerialize in a way

⁴⁸³ Legner, *Kölner Heilige*, 165–66.

⁴⁸⁴ Toussaint, "Schöne Schädel", underscores the increased visible and physical access to Eastern (Byzantine) relics as a fundamental difference to Western (European) reliquaries. The influx of looted Byzantine reliquaries that arrived in Europe at the turn of the thirteenth century likely impacted the importance of sight and touch in Western examples.

⁴⁸⁵ Dietrichs, *Vom Glauben zum Sehen*, 102–18.

⁴⁸⁶ The diverse significance of rock crystals have recently been considered in: *Seeking Transparency*, edited by Cynthia Hahn and Avinoam Shalem, (Berlin: Gebr. Mann Verlag, 2020). See especially: Brigitte Buettner, "Icy Geometry," 118–20; Pentcheva, "The 'Crystalline Effect'," 211–23; and Toussaint, "The Sacred Made Visible," 225–36; see also, Stefania Gerevini, "Christus Crystallus: Rock Crystal, Theology and Materiality in the Medieval West," in *Matter of Faith: An Interdisciplinary Study of Relics and Relic Veneration in the Medieval Period*, ed. James Robinson, Llyod de Beer, and Anna Harnden (London: The British Museum, 2014), 92–99; Hahn, "What Do Reliquaries Do for Relics?," 310.
⁴⁸⁷ Legner, *Kölner Heilige*, 223.

analogous to (stained) glass windows.⁴⁸⁸ With this, the crystal's materiality heightens the perception of accessibility to the larger-than-life relics. Also notable in this example are the unadorned relics. Without the protection of fabrics, these relics rely exclusively on the crystal for their enshrinement, protection, and visibility.

Cologne played a prominent role in this development with an important crystal-cutting school established in the city in the early thirteenth century. Together with a similar establishment in Hildesheim, it produced a high quantity of sacred objects that incorporated this material. So popular was it, that in the 1980s it was proposed that cabochon (rounded rock crystal) first originated in the Rhineland.⁴⁸⁹ While this has subsequently been disputed,⁴⁹⁰ the mere suggestion highlights the region's close association with the material, especially as incorporated into religious objects. The prevalence of reliquaries from Cologne with transparent rock crystal together with the shrines that feature removable parts underscores the city's collective propensity for the visibility of and accessibility to sacred material.⁴⁹¹ These early examples provide evidence of the (opportune) visual culture in which the Virgins' holy head reliquaries, featuring an exposed forehead or sometimes an entire crown, were designed.

Nevertheless, reliquaries incorporating removable elements, metal grills and transparent crystal windows still maintained a physical barrier between viewers and the sacred. When compared to other contemporary thirteenth-century reliquaries, the Holy Virgins' skulls thus present a radical departure from the norm. Neither removable parts nor rock crystals mediate between the heads and their devotees. The bare foreheads of these martyrs present a new and heightened level of accessibility. Although some skulls are enclosed within niches at the Church of the Holy Virgins, the overall elimination of 'barriers' instigated an intensified sensory experience: in addition to sight, exposing bare bones invited touch.

Toussaint has demonstrated that the phenomena of 'bare' bones and enhanced visibility of sacred vessels was early established, in large numbers, in

⁴⁸⁸ Dietrichs, *Vom Glauben zum Sehen*, 117.

⁴⁸⁹ Anton Legner, Ornamenta Ecclesiae, vol. III (Köln: Schnütgen-Museum, 1985), 139.

⁴⁹⁰ Dietrichs, *Vom Glauben zum Sehen*, 102–26.

⁴⁹¹ Albertus Magnus explored the creation of rock crystals in De mineralibus (midthirteenth century), see further: Buettner, "Icy Geometry," 120.

Byzantium,⁴⁹² and while many exhibited pieces of the True Cross,⁴⁹³ the quantity of skull relics was also particularly notable.⁴⁹⁴ With the example of John the Baptist's head, Toussaint argued that the influx of plundered (head) reliquaries during the Fourth Crusade (1199-1204) are directly connected to the notable subsequent increase in visibility of sacred material across Europe.⁴⁹⁵

Even within this context, however, the sheer number of Holy Virgins and their corresponding quantity of relics – especially their heads – positioned this cult in a sacred category of its own. Perhaps the decision to openly display the foreheads was settled on to visually reiterate, and possibly prove, the cult's impressive number of members. The isolated presentation of a head, as opposed to an arm, foot, or rib, was especially expressive of an individual and when displayed together certainly reiterated the groups' impressive size. As has been noted here, the exposure of human bone, or its simulacrum, supplies indisputable 'proof' that a relic is indeed present, while also exhibiting the saints' incorruptibility. Together with wide and continued circulation of Elisabeth of Schönau's *Liber Revelationum* (1156), which textually authenticated the Virgins' many relics,⁴⁹⁶ these open displays offered visual verification.

Yet devotees were not permitted entirely unmediated access to these objects. In addition to the siting of the displays, the surrounding fabric, which shapes and contains the relic, effectively frames it and determines what is visible and that which will remain concealed. The concept of a *fenestella* mediating sacred material for devotees is well documented in early Christian contexts; instead of revealing parts of the bones within a reliquary, desirable glimpses of the sacred body were afforded through narrow holes in the shrine, as at the shrines of Peter and Paul in Rome.⁴⁹⁷

⁴⁹² Toussaint, "Schöne Schädel."

⁴⁹³ Legner, Kunst und Kult, 55–77; Dietrichs, Vom Glauben zum Sehen, 31.

⁴⁹⁴ Toussaint, "Schöne Schädel," 663–70.

⁴⁹⁵ Toussaint's consideration of Byzantine skull/head relics, although these vary, proved especially helpful for re-considering the materials and display of Cologne's holy heads; ibid., 671–77.

⁴⁹⁶ See section 1.6.b.

⁴⁹⁷ Dietrichs, *Vom Glauben zum Sehen*, 17; this is noted in Gregory of Tours visit to Rome along with other historic accounts; see: Brown, *The Cult of Saints*, 87–89.

Although relics and icons differ in some regards, there are notable similarities in their handling and presentation of sacred material;⁴⁹⁸ these parallels become particularly poignant when considering the Holy Virgins' skull reliquaries. Like the *fenestella*, the selective exposure of sacred material is also observed with medieval icons equipped with *riza*. These metal revetments were constructed with holes, which exposed select areas of the painting, namely the faces, hands, and feet. Effectively serving as a punctuated cover, they monitor access to the icon by controlling what was visible and what remained concealed.

Arguably one of the most important images from medieval Rome, the Sancta Sanctorum icon of Christ (Fig. 2.101), provides an example of an early Christian icon with just such revetment. Here, the full-length painted image of Christ, presumably from the seventh century, was covered with a twelfth-century gilded silver *riza* that "concealed, restructured, or revitalized Christ's miraculous image".⁴⁹⁹ Like a fenestella, this metal cover is equipped with 'windows' that expose Christ's head and feet, the latter through metal shutters (Fig. 2.102). In this way, the cover mediates between the sacred image and the viewer, revealing important parts of Christ's "permanently disembodied" image.⁵⁰⁰ Important here is that *riza* (ρ ($\zeta \alpha$ in Greek) translates as 'garment'; it is perceived to cloak and dress the icon, the terminology likely working together with the reputed presence of veils that were used to partially cover or completely conceal the icon.⁵⁰¹ In this way, these metal covers share conceptual similarities with the fabric used to frame the Virgins' holy bones, while also determining the amount of exposed bone. This particular construct of mediation can therefore be understood as an "active agent that reinforces both the absence and the presence" of the holy figures.⁵⁰²

The exterior textiles of the Virgins' skull reliquaries serve a comparable role of mediating, manipulating, and controlling visibility. Such viewing inevitably created visual tension between that which was seen and that which remained hidden. This optical push and pull would have likely enhanced the viewing

⁴⁹⁸ For a comparative analysis, see: John Wortley, "Icons and Relics: A Comparison," *Greek, Roman, and Byzantine Studies* 43 (2003): 161–74.

⁴⁹⁹ Noreen, "Re-Covering Christ in Late Medieval Rome," 122.
⁵⁰⁰ Ibid.

⁵⁰¹ Ibid.

⁵⁰² Ibid., 121.

experience by inviting devotees to imagine the parts of the skull that were masked by textiles. Medieval viewers would have been well-versed in oscillating between the 'mind's eye' and what was visually accessible in order to create a 'whole'.⁵⁰³ This activity would have ultimately drawn attention to the relationship between what is represented and that which remains concealed, that is between the concepts of container and contained. Contemplating these elements would have invited speculation around the bond between the human bone and luxury fabrics, the juxtaposed materiality of which would have further enhanced the sensory experience of the encounter with these skulls.

Taken together, we have seen that the Holy Virgins' skull reliquaries, with their spherical shape and uncovered 'forehead' bone, became the cult's signature method of display. They developed during a period when it was uncommon to openly expose bones in medieval reliquary displays, and thus the amount of bare relics is particularly impressive. The revelation of these, however, was carefully constructed through the use of the *fenestella*. This framing feature, frequently an area of enhanced ornamentation, shares notable similarities with icons in that the *fenestella* can be seen as both displaying and limiting access to the female martyrs, and this tension – which also invited touch – would have been especially notable to medieval viewers. Addressing the Holy Virgins' skull reliquaries alongside contemporary vessels that were also created in Cologne make it evident that the textile reliquaries dramatically broke new visual boundaries, established new sacred viewing experiences, and furthermore enhanced 'access' to the cult as a whole.

2.12 Re-Considering the Emergence of the Skull Reliquaries

After considering the various constructs of viewing sacred matter, and especially the tension between what was visible and concealed, new light can be shed on the Holy Virgins' skull reliquaries; it now becomes pertinent to re-consider the question of their emergence. So far, the subject of dating these objects has not been considered in great depth in the scholarship; instead, the general perception of their origins as lying around the same time as the earliest-known displays that featured the wrapped skulls has been implicitly accepted: namely, the late thirteenth-century

⁵⁰³ Hahn, "What Do Reliquaries Do for Relics?," 310.

appearance of Cologne's cathedral shelves (Figs 2, 3, 4a-c), and the choir niches at the Church of the Holy Virgins (Figs 2.7-2.10).⁵⁰⁴ In other words, the reliquaries have thus far been discussed in relation to, or more precisely, as a result of, these fixtures. To further address the origins of these objects, it is, however, necessary to separate them from these displays.

Already in the twelfth century, as previously explored, the Holy Virgins' skulls were desirable relics that circulated independently from other body parts. At this time, in keeping with medieval rituals and relic treatment, the Virgins' skulls were, in all likelihood, covered in fabrics at the point of their excavation, and almost certainly before being translated to sites in Cologne or across Europe.⁵⁰⁵ Considering the high amount of handling of these skulls, it is thus possible that some kind of standardized design, possibly even the characteristic 'hood and mask', was developed prior to the late thirteenth century.

The limited commentaries on the Holy Virgins' relics from this period indicate that they were indeed enclosed within larger containers. For example, prior to the expansion of the Church of the Holy Virgins, relics of the female martyrs were held within eleven Roman sarcophagi situated within the nave (Fig. 1.11). Thiodericus further records that the Holy Virgins' relics belonging to the monastic church of St Heribert were contained within a chest or coffer (*arcis*) at the high altar (*c*. 1164). He then explains that the remaining relics of this group were safeguarded in a box (*scriniolis*) within the crypt.⁵⁰⁶ Although he specifies that the relics at the high altar were made available for veneration, it is clear that both collections were concealed within containers. When the Grandmont monks collected relics from the Church of the Holy Virgins (1181), the Abbess left them an entire body on top of an altar. Although it is unclear if these remains were wrapped or otherwise concealed, the mention that the monks saw an accompanying nail stuck into the body suggests that they were partially visible, if only for a brief moment.⁵⁰⁷

⁵⁰⁴ See above, section 2.3.

 ⁵⁰⁵ The practical and spiritual significance of wrapping relics during the medieval period is explored by Bagnoli, "Dressing the Relics."
 ⁵⁰⁶ See above, fn. 213.

⁵⁰⁷ "ad majus altare, posito interim super illud uno unius virginis sacro corpore quod dedit nobis abbatissa, in quo quidem corpore clavus quidam videbatur permaximus". "Itinerarium Fratrum Grandimont," 1228; trans: author.

Approximately 40 years later, while recounting the tale of two Holy Virgins' skeletons, Caesarius of Heisterbach records how these relics were placed in a box (*scrinium*) interred within a vault to protect them from invading armies. When peace was restored, the relics were neglectfully left in place.⁵⁰⁸ The dissatisfied saints appeared before the congregation then proceeded to exit the church; the empty chest (*scrinium*) that once held their relics confirmed their departure. At approximately the same time, in 1222, at the consecration of the church in Marienfeld, 40 skulls of the Holy Virgins were documented as being contained within a cylindrical vessel (*capsis*) placed on the Holy Cross altar (*positis super altare*) together with another vessel filled with relics of other saints.⁵⁰⁹ This altar was located in the nave in front of the rood screen,⁵¹⁰ and thus prominently situated the Holy Virgins' relics in a space that ensured many could 'see' the prized remains.

These accounts describe the skulls, along with complete skeletons and body fragments, as being enclosed within containers, which might in fact refer to their transport vessels: the giant wooden chests, as seen in the example from Marienfeld (Figs 2.103, 2.104).⁵¹¹ The concealment of relics in these accounts certainly appear to have abided with the established traditions of relic display during late twelfth and early thirteenth centuries. Although it appears these skulls were likely enclosed within some type of container until at least the early thirteenth century, it remains possible that their structural assemblage and characteristic 'hood and mask' design that exposes the forehead might well have pre-dated their display on shelves, in niches and altarpieces. In fact, the translation of skulls beyond Cologne during this period indicates that the skulls were wrapped and decorated prior to departure. This is particularly notable in the cases of 'skulls' that were extensively constructed, including those in Ląd (L.AA.1 and L.HVA.1 [Figs 2.48, 2.49]) and Oliwa (O.A.1 [Fig. 2.55]). Not only did such skulls require the support offered through the strategic

⁵⁰⁸ Ch. LXXXV, Strange, *Dialogus miraculorum*, II: 153.

⁵⁰⁹ "Sunt et ibi plus quam quadraginta captia preterea in duabus capsis positis super altare sancte crucis; sunt multe reliquie ... de Ursula et sodalibus eius". Friedrich Zurbonsen, *Das "Chronicon Campi S. Mariae" in der ältesten Gestalt (1185-1422)* (Paderborn: Ferdinand Schöningh, 1884); trans.: author.

⁵¹⁰ This was notably not the high altar. Karrenbrock, "Heilige Häupter," 268. ⁵¹¹ Gudrun Sporbeck-Strake kindly shared her hypothesis, and broght this to the attention of those curating the Cistercian exhibition in Bonn (2017-2018). See further: Stefan Baumeier, *Beschlagene Kisten. Die ältesten Truhen Westfalens* (Essen: Klartext-Verlagsges, 2012), esp. 23-29.

wrapping prior to long distance travel, such elaborate efforts ensured that indeed a 'skull' was translated.

Primary sources describing the skulls' decoration, or lack thereof, upon arrival at distant sites are notably absent; modern studies, however, postulate that they were wrapped and decorated in and around Cologne prior to translation. According to Karrenbrock's analysis, many of the skulls in the Marienfeld collection (acquired in the early thirteenth century) are wrapped in textiles dating to the eleventh and twelfth centuries, suggesting their construction lay closer to the date of the textiles than their early thirteenth-century translation.⁵¹² Lad's collection, acquired in the mid-thirteenth century,⁵¹³ also displays older textiles, thus suggesting these were created prior to their translation.⁵¹⁴ Further to these sites, Sorber's examination of the metal thread flowers attached to one skull in Herkenrode and noted on skulls in Belgium and across Europe led her to believe this to be the mark of Cologne's "relic production" of the twelfth and thirteenth centuries (Figs 2.64, 2.65).⁵¹⁵ Her studies further link the silk and embroidery of the innermost layers of the reliquaries with a Cologne provenance.⁵¹⁶ Collectively, these studies indicate that the skull reliquaries were wrapped and ornamented prior to their translation to sites outside Cologne, and as such they almost certainly originated prior to the open displays in Cologne as well as the wooden busts.⁵¹⁷ Instead of being designed with the intent of populating monumental displays, it is seems more probable that instead it was these innovative reliquaries that inspired the fixtures that eventually presented them.

The analysis of the earliest skull decorations additionally point to the tailored 'hood-and-mask' design as having originated in Cologne. While the specific religious institutions involved with the initial decorations remain unknown, it is probable they were situated directly within or in close proximity to the city. Establishing

⁵¹² Karrenbrock, "Heilige Häupter," 276–87.

⁵¹³ Nowiński, *Ars cisterciensis*, 254.

⁵¹⁴ The date of the textiles does not necessarily correlate directly with the date of the assemblage.

⁵¹⁵ Fried Sorber pers. comm. email, 9 April 2019; see further, Sorber, "De decoratieve elementen."

⁵¹⁶ Frieda Sorber, pers. comm. email, 4 September 2019.

⁵¹⁷ The two oldest busts are found in the Golden Chamber and dates to around 1270. See restoration records, 1-2 in Urbanek, *Die Goldene Kammer*, 144–47.

Cologne's involvement with this design is fundamental to understanding the visual 'heritage' of this cult. It served as the decorative template that was replicated in each subsequent decorative campaign for collections both located within Cologne as well as those in distant institutions. The textile reliquaries can thus be understood as fashioning a visible network – a sacred trademark – that not only unified the Holy Virgins with Cologne, but also integrated the female martyrs within their new 'spiritual' residences.

2.13 Faces and Skulls: The Holy Virgins' 'Skulls' and Wooden Bust Reliquaries

In addition to these revolutionary skull reliquaries, the Holy Virgins' cult also incorporated numerous polychrome wooden busts (Figs 7-13, 2.15-2.19). As noted, these have received considerably more scholarly attention and have thus overshadowed the skull relics.⁵¹⁸ The busts' favoured treatment is, nevertheless, a relatively recent development; aside from the fact the skull reliquaries exist in far greater numbers and they experienced a much wider geographic distribution, the free-standing skulls and wooden busts were displayed together from the medieval period until the destruction of the displays in the Second World War.

The respective display of the two is depicted in the St Severin painting (Fig. 2.105) which includes both a wooden bust and a wrapped skull, among other sacred objects on the altar, visible to the crowds of visiting pilgrims. It is also apparent in the two, now-destroyed reliquary shelves found in St Kunibert (Figs 2.22, 2.23), which artfully arranged and framed the busts together with the skull reliquaries and other wrapped bones within ornate gothic tracery. Then there was the mid-seventeenth-century Golden Chamber (and presumably the now-lost medieval *camera aurea*) in the Church of the Holy Virgins, which also situated numerous figural busts and nearly one thousand textile reliquaries side-by-side in an all-encompassing display (Figs 2.15-2.19).⁵¹⁹ In the choir of the same church, freestanding skulls were displayed within open wall niches and wooden busts were placed on the altar (Fig. 2.16). Other such arrangements were found in gothic winged altarpieces, including those from the Cistercian Marienstatt (Fig. 2.25), and

⁵¹⁸ See, above, pp. 39-42.

⁵¹⁹ In the most recent study, 118 busts were associated with the Golden Chamber: 94 of these date to the late thirteenth and fourteenth centuries. For individual bust records, see: Urbanek, *Die Goldene Kammer*, 144–287.

possibly the Franciscan *Clarenaltar* (Fig. 2.24). The frequency of such populated displays throughout history suggests that these objects were not intended to be understood in isolation; rather, their physical proximity, along with the corresponding function of the busts to house a skull relic, bespeaks a relationship worthy of investigation here.

These wooden busts, along with their quantity, is a phenomenon specific to medieval Cologne.⁵²⁰ The oldest busts date to 1270 but production only peaked between 1320-1360, eventually waning around the turn of the fifteenth century,⁵²¹ with a minor revival in the mid-seventeenth century, as demonstrated by those created during the construction of the Golden Chamber. Most of the medieval busts were designed with a cranial cavity that matched the size and shape of a textile skull reliquary:⁵²² the top half of the sculpture's head was fashioned as a hinged lid that opens at the rear to reveal the wrapped skull contained within (Figs 2.106-2.108). Some busts additionally presented a chest or body cavity with ornate tracery that contained wrapped bone fragments, but it is uncertain if the bare, unwrapped relics of today were also visible during the medieval period (Figs 2.109, 2.110). Thus, although these are tasked with the same fundamental purpose – housing the Virgins' skull relics – the wooden busts achieve this through an additional level of enshrinement.

The surviving evidence suggests that the skulls within the bust cavities were wrapped in textiles like their free-standing counterparts; when the lid is closed, however, the relic is concealed from view. The lack of skulls *in situ* does problematize the understanding of their arrangements; however, photgraphs of skulls situated within the cranial cavity of one bust in the Aachen Cathedral Treasury (Figs 2.106-2.108), two pre-restoration busts from the Golden Chamber (Figs 2.111, 2.112), and a bust in St Kunibert (Fig. 2.113) point to this placement. Although the original location of the Aachen examples is unknown, they have been dated approximately to the fourteenth century, and the two textile reliquaries that were presumably situated within these busts are extant. Skull A.SA.1 (Figs 2.47,

⁵²⁰ Bergmann, "Kölner Bilderschnitzwerkstätten," 33.

⁵²¹ Ibid., 73–83; for an amalgamated chart of Bergman's dates, see: Holladay,
"Visualizing the Holy Virgins," 86; for the busts belonging to the Golden Chamber, see the catalogue in: Urbanek, *Die Goldene Kammer*, 142–287.
⁵²² Bergmann, "Kölner Bilderschnitzwerkstätten," 73.

2.106-2.108) displays textile covers from the high medieval period, whereas the second reveals a small piece of its original textile ornamentation under what appears to be much newer wrappings.⁵²³ Notable in this latter example is the medieval *cedulae* that was reattached to the updated cover (Fig. 2.108); although difficult to decipher in its entirety, *caput* (head) is clearly visible in the lower right corner.

Both skulls present remarkable similarities to the free-standing skull reliquaries analysed here: they display the tightly tailored 'hood and mask' arrangement; forehead bones are exposed through ornately framed *fenestellae*; and particularly notable in Skull A.SA.1 is the abundantly decorated maroon velvet 'mask' complete with floral-shaped sequins (Fig. 2.47a); and finally, there is a colourful woven ribbon that bisects the skull horizontally and vertically (Fig. 2.47c). On the left side two ornate flowers, made of blue and orange glass beads, are fixed to fabric/paper and secured to the ribbon (Fig. 2.47e). Apart from slight wear of the red silk cover on the left that reveals a base layer of strikingly white linen (Fig. 2.47e), this is a remarkably well-preserved skull. The vibrancy of the textiles and the ribbon strongly suggest that it was enclosed within the wooden bust and was therefore protected from dust, soot (from lamps and candles), and sunlight. Its notable preservation further suggests that it may not have been regularly removed or handled.

Consideration of the busts and their wrapped skulls from the Golden Chamber is more problematic. Although Urbanek did not discuss them, the photographs do show two skulls, wrapped in medieval materials; one, still situated within the bust's cranial cavity, is covered in a fabric netting, sealed with a red wax *authenticae*, and placed within a thickly padded container lined with red velvet and ornamented with pearls (Fig. 2.111).⁵²⁴ The container, which Urbanek identifies as

⁵²³ These objects were tentatively dated by Monica Paredis-Vroon, the textile restorer at the Aachen Cathedral Treasury. Dr Stefanie Seeberg (medieval art historian at the University of Cologne) joined the meeting and offered her suggestions when dating the textiles. Aachen Schatzkammer Archives, 13 January 2016.

⁵²⁴ This skull reliquary was photographed in Bust #37 and noted as a "skull reliquary assembled with textiles" (Schadelreliquie mit Textilien montiert). The lack of further description renders it challenging to discuss this object in much detail. Urbanek, *Die Goldene Kammer*, 77, 187.

baroque, cradles the skull within an otherwise cavernous cranial cavity. The rim of this padding is notably faded, but the original vibrancy is visible in the area around the skull as well as the underside of the exterior. Such fading suggests that this skull and its padded vessel were exposed to sunlight (perhaps because of the missing cranial lid), indicating that the lid of the bust might have been left open or that this skull was often removed. Today, inside a small glass box in the Golden Chamber, a skull is showcased within circular padding made of velvet and pearl circular padding (Fig. 2.114). This montage is notably similar to that pictured by Urbanek, yet the skull lacks the netted cover and *authentica* of the photograph. This might indicate that more of these containers were created, or new covers were stitched to earlier (medieval) containers as part of a redecoration campaign. The fact that one of these is now presented outside its original bust reveals more about subsequent relic displays than the original medieval placements, namely that it was desirable to emancipate skull reliquaries from their wooden busts.

The second image captures a better-preserved red velvet container that was removed from a bust, yet further details are not specified (Fig. 2.112). It is ornamented with pearls and sequins and also believed to date to the baroque period, possibly the mid-seventeenth century.⁵²⁵ Although the pearl ornamentation differs, the structures of the velvet containers are notably similar. The skull is wrapped in delicate medieval netting; it is difficult to determine whether this netting covers bare bone, or whether other light coloured textiles were involved. In either case, both the Golden Chamber examples demonstrate that wrapped skulls were contained within the wooden busts at some point in recent history. It is, however, unknown if the medieval skulls were surrounded with padding, or if these containers were indeed medieval and, like the textile reliquaries and pillows at this site, received new covers during the seventeenth century.

Apart from these examples, it is the medieval wooden bust from St Kunibert (Fig. 2.13) that still houses a skull within its cranial cavity which is of particular interest here. Although the skull is wrapped within baroque velvet and ornamented with gold brocade, it appears to be arranged with the *fenestella* and 'mask' facing upwards. That is to say, the skull mirrors an anatomical orientation but is positioned so that the large bare bone and the ornamented mask are visible when opening the

⁵²⁵ Ibid., 77.

cranial lid. It is possible the skull was originally positioned as it appears today, yet, its removal and re-decoration at a later date means this cannot be ascertained with any certainty.

So, despite the fact that these wooden busts were designed to contain textile wrapped skulls, their function as reliquaries differs greatly to that of the freestanding skulls. As a figural representation, a bust visually expresses its encased bones in human form, and so has been explained as 'fleshing out' the relics.⁵²⁶ Montgomery asserts that busts become a "surrogate visage" that conflates "the image, relic, and actual presence of the saint".⁵²⁷ With the inclusion of heraldry and contemporary fashion trends, Holladay explains that viewers would have thus been "confronted with a striking example of a contemporary" figure.⁵²⁸ She also argued that they facilitated a "direct connection between the historical Virgins and the young women of medieval Cologne" that simultaneously "blur the relationship between past and present".⁵²⁹

Although comparable to other "speaking reliquaries" or Cynthia Hahn's more appropriately termed "shaped reliquaries",⁵³⁰ the sensory qualities of these busts additionally create the illusion that the saints are living, cognizant, and therefore more relatable figures. In general, figural reliquaries have been interpreted as animating the relics, as fabricating the perception that the sculpture is capable of human sensory activities, making them ideally suited to see devotees, hear their prayers, and relay such pleas to God. Their form allows viewers to "focus on the virgins' state of being" and fills in the visual gap between relic and earthly embodiment.⁵³¹ On a similar note, in Legner's vast analysis of reliquaries of all shapes and sizes, he considers the anthropomorphic form and sculptural image to be the most convincing form to display and embody a saint's *Realpresenz*.⁵³² This face-to-face interaction between reliquary bust and devotee has generally, and more

⁵²⁶ Montogmery frequently used this terminology to describe the bust reliquaries in *St. Ursula*.

⁵²⁷ Ibid., 60. The potency of bust reliquaries is referenced throughout, but discussed in detail, 59-81.

⁵²⁸ Holladay, "Visualizing the Holy Virgins," 88.

⁵²⁹ Ibid.

⁵³⁰ Hahn, "Speaking Reliquaries."

⁵³¹ Holladay, "Visualizing the Holy Virgins," 88.

⁵³² Legner, *Kunst und Kult*, 245.

specially within the Holy Virgins' cult, been elevated as the most lauded reliquary form.⁵³³

When compared side-by-side, the wooden busts and free-standing skull reliquaries do, of course, present several differences, including their size, materiality, execution, and presentation. Although they house the same relic, the relationship between sacred material, reliquary, and devotee is notably distinct. The wooden busts conceal the skull relics, albeit offering a mediated viewing opportunity, and supply the viewer with a figural representation while the textile reliquaries construct a viewing experience that is predicated on direct contact with the skull through the *fenestella*. Visual access of the forehead (or the replication of a forehead) offers an intimate encounter that authenticates the relic and lessens the perceived distance between devotee and sacred material. As established, this type of heightened viewing experience was extremely rare and often mediated in the thirteenth century; exposed bones would have undoubtedly generated excitement and facilitated an intimate connection between viewer and relic making viscerally real the earthly nature of the now heavenly saint. Instead of a 'fleshed out', figural representation of a Holy Virgin, the devotee is required to supply the visual gaps between relic and human form.⁵³⁴ Yet, when placed side by side, these two forms worked in tandem – offering direct visual access to the bare bones and supplying a relatable sculptural figure. Together they presented devotees the full spectrum of reliquaries, which would have engaged the senses and heightened the viewing experience.

Overall, however, closer analysis of the textile reliquaries has revealed that the skulls were often-times highly manipulated. 'Incomplete' skulls were augmented in ways that ensured the fragments and other materials created an (anatomical) whole. As established, these were not intended to be viewed as the remains of 'dead' figures;⁵³⁵ instead, the structural composition of facial features, including a nose,

⁵³³ Brigitta Falk, "Bildnisreliquiare. Zur Entstehung und Entwicklung der metallen Kopf-, Büsten-, und Halbfigurenreliquiare im Mittelalter," *Aachener Kunstblätter*, 59 (Cologne: Dumont Schauberg, 1991), 99–238; in addition to the sources listed above, a substantial overview of bust studies until the late 1990s is included in: Caroline Walker Bynum and Paul Gerson, "Body-Part Reliquaries and Body Parts in the Middle Ages," *Gesta* 36, no. 1 (1997): 3–7.

⁵³⁴ Hahn, "What Do Reliquaries Do for Relics?," 305.
⁵³⁵ See 2.7.c.

chin, and cheekbones, present on several skulls, suggests that a living figure resides just behind the mask. These elements, which deny the natural course of postmortem decay, represent the saints' incorruptibility; they simulate the presence of a face, a phenomenon that might be understood as shifting perceptions from skulls to human heads. In this regard, many of the 'beneficial' qualities applied to the figural aspects of the wooden busts – replication of a corporal visage, capability of sensory function, and easily relatable to the viewer – can be applied to the skull reliquaries.

Yet, unlike the busts, the 'faces' of the skulls are concealed behind a mask. and so they remain inaccessible to viewers. In addition, they lack the polychromed eyes that stare back at viewers, the flushed cheeks, and the slight smile figured on the busts, which collectively amplify the perception of a living figure. This said, the outermost layer of a religuary, which has been likened "to the epidermal layer of the saint's body ... becomes the skin covering the saint's bones, the reliquary itself takes on the guise of part of the saint."536 The respective materiality of these reliquaries – wood and textile - is therefore important. Both stray from the materials - metal and jewels – traditionally utilized within the genre of reliquaries.⁵³⁷ Although the oak used to create the bust reliquaries supplied a cost-effective alternative to precious metals, it additionally offered an organic ("fleshy"⁵³⁸) material that was carved with relative ease. Wood is also notable as a material well suited to the vibrant paints applied to its surface. The colour supplied by enamel and coloured stones might indicate eyes and lips, but do not emulate the 'natural' appearance of human facial features with the immediacy enacted by paint applied to wood. Textiles are also malleable compared with wood so although they cannot represent human eyes, checks, and mouths in the way that paint on the wooden carved busts can, their softness instantly brings to mind the sensuality of human skin and above all the human face.

Furthermore, the local and imported textiles and cloths used as the primary decorative material for the skull reliquaries range from richly coloured linen to fine velvet and silk. These lavish ornamental elements – silk embroideries, bands woven from precious metals, metal sequins, and glass beads – not only match the materials

⁵³⁶ Montgomery, *St. Ursula*, 60.

⁵³⁷ As explored in great depth in: Falk, "Bildnisreliquiare."

⁵³⁸ Montgomery, *St. Ursula*, 63.

appropriate to adorn the martyrs' sacred remains, they are far from a less-expensive alternative to wood. In fact, the textiles, many of which originated in distant lands, declared the city's economic wealth and international commerce – while the locally produced fabrics, such as linen, carried multivalent symbolic meanings. And, while the flexible and forgiving materiality of cloth is well suited to wrap, construct, and support the Holy Virgins' skulls, it also shared a symbolic relationship with skin and other anatomical elements, and thus further enriched the materiality of these objects.⁵³⁹

In this context it is worth turning, in closing, to consider a recent discovery of three anthropomorphic relic-montages from the Cistercian sacristy of Munsterkerk in Roermond, in the modern-day Netherlands. These were uncovered together with 45 Holy Virgins' heads in an altar that had been bricked up, possibly during the Counter-Reformation or the Napoleonic invasions (Figs 2.115, 2.116).⁵⁴⁰ Although this discovery invites comparison between these holy heads and others, it is the accompanying human figures that present intriguing comparanda in consideration of the wooden busts and textile skull reliquaries. Bearing in mind their striking resemblance to the textile skulls, they are explored as such here, although it is important to note that these figures have not been explicitly identified as such.⁵⁴¹

Of the three montages, one presents a fully formed figure with arms, legs, and torso (Figs 2.117-2.120); the second resembles a swaddled infant (Figs 2.121, 2.122); and the third and smallest montage resembles a partial wrapped form, but does not conform to a human figure (Fig. 2.123). In her study of these objects, Frances Bartzok-Busch notes that the remains of a few skeletons were divided between all three relic-montages, and although they were not assembled to exactly

⁵³⁹ For fuller discussion, see below, ch. 3, esp section 3.4.c.

⁵⁴⁰ For a history of the abbey, see: Rob Drückers, "De reliekenschat uit de Munsterkerk van Roermond; een eerste verkenning," *De Maasgouw* 121 (2002): 39– 52; the skull reliquaries follow the 'hood and mask' design that typify the examples from Cologne, the Rhineland, Belgium, and Poland. For the results of Stauffer's study, see: "Ein außerordentlicher Reliquienfund."

⁵⁴¹ Bartzog-Busch suggests an association with the Holy Virgins' cult, yet, as representations of young girls, these might represent local patron saints associated with child-bearing prayers. "Anthropomorphe Reliquienmontagen," 189–90. Stauffer highlights these as young girls, who, together with the Holy Virgins and the Virgin Mary, speak to the collective concept of "virgins among virgins" (*virgo inter virgines*). "Ein außerordentlicher Reliquienfund," 236.

replicate the human anatomy, they do appear to present the exterior appearance of a human form.⁵⁴² To achieve the simulacra, the bones were first wrapped in a layer of white linen and then surrounded by 34 different lavish textiles dating from the fourteenth and fifteenth centuries ⁵⁴³ The x-rays of the largest figure (Figs 2.118, 2.119) reveal the strategic and extensive arrangement of bones before being wrapped; x-rays of the 'body' of the swaddled figure similarly present an extensive arrangement of bones that were intricately sculpted by and enveloped within cloth, demonstrating that the synergy between fabric and bones mirrors that of the Virgins' holy heads, albeit on a greater scale.

Like the Virgins' skull reliquaries, the figures incorporated 'forehead' bones that, notably, constitute the only visible bones of the montages. In the largest figure, these are surrounded with gold and silver thread to heighten the sacred significance of the material framed within. Elsewhere, cloths envelop bones, reconstruct limbs, joints, torsos, and heads, and in so doing, create articulated human forms.⁵⁴⁴ Unlike both the wooden busts and the textile reliquaries, this mobility would have enhanced perception of these as living figures. They, therefore, occupy a unique category of their own that supersedes the busts' lauded "conflation between image, relic, and actual presence of the saint."⁵⁴⁵

Of particular note is the embroidered 'face' of the largest of the figures (Fig. 2.118). Set against a rich dark green velvet, red glass beads and pearls were carefully stitched to form eyes.⁵⁴⁶ Above these, eyebrows – or possibly open eyelids and eyelashes – were articulated with gold thread. This highly unique appliqué also appears to work in tandem with the pomegranate pattern of the green velvet, which

⁵⁴² Bartzog-Busch, "Anthropomorphe Reliquienmontagen," 187; Stauffer, "Ein außerordentlicher Reliquienfund," 229–30.

⁵⁴³ Bartzog-Busch, "Anthropomorphe Reliquienmontagen," 181–83; Stauffer, "Ein außerordentlicher Reliquienfund," 229.

⁵⁴⁴ Stauffer suggests that these might have been displayed on top of or near the high altar and they might have served liturgical functions during select festivities. This would have been a collective display comprising anthropomorphic figures, textile reliquaries, and a wooden bust of a Holy Virgin; see Stauffer, "Ein außerordentlicher Reliquienfund," 236.

⁵⁴⁵ Montgomery, *St. Ursula*, 60. The potency of bust reliquaries is referenced throughout this book, but is discussed in detail, pp. 59-81.

⁵⁴⁶ Frances Bartzok-Busch and Gerard Venner, "Drei textile Reliquienmontagen anthropomorpher Gestalt aus der Münsterkirche in Roermond," *Annalen des Historischen Vereins für den Niederrhein* 216 (2016): 147–48.

is strategically positioned to create the appearance of a nose. Although reminiscent of the features found on select skulls from Marienfeld (M.CC.1 and 2 [Figs 22, 2.53, and 23, 2.54]), this montage provides a striking facial articulation; in this way it also illuminates notable parallels with the busts' polychromed faces and their highly desirable 'face-to-face' interaction. Together with the Virgins' holy heads and the wooden busts, these figural relics underscore the complex fluidity of human bones, textiles, and other materials within a sacred arrangement unique to the Holy Virgins' cult.

Consideration of these (originally) collaborative displays underscores the differences and similarities between their engagement with and presentation of sacred material. Their construction and materiality uniquely express the (sacred) human form, and so expose the busts' widely-promoted 'superiority' as a modern construct. Instead, these displays evocatively engage with the Holy Virgins' sacred material through respective methods, and in working together, they reveal a complex dialogue relating to the potency of the martyrs' relics and the recreation of their earthly bodies.

2.14 Summary

The investigation of these objects has inter-woven their material finery, structural complexity, and sacred 'enhancements'; the visible has been considered together with that which resides beneath the surface. It has furthermore focused attention to the head and its paramount importance within the cult, deduced not only from the astonishing number of skull reliquaries, but also from the varied, and often extensive alterations that ensured a 'complete' skull was presented. Among these modifications the forehead featured prominently as the primary area of exposure. This 'window' of revelation similarly received considerable attention; precious metals, vibrant ribbons, glass beads, together with other costly ornamentation were concentrated around the edges of the *fenestellae*, and so marked the threshold between sacred and earthly realms.

The inverted positioning of fabrics and bones presented by these assemblages, together with their emancipation from larger, concealing enshrinement indicated profound innovation. Similarly, they offer the opportunity to reconsider the canonical terminology that has long separated 'relic' and

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'reliquary'. Employed both as ornament, but perhaps more intriguingly as structural support and many times as substitutions for sacred bones, textiles here gain an elevated status. Their revolutionary use of textiles and other materials forged new traditions within reliquary assemblages and thus introduce a new category where 'container' and 'contained' are less clearly defined. Thus, instead of being repeatedly overlooked or deemed less worthy than the wooden bust reliquaries, or indeed other medieval reliquaries, these textile constructions are here elevated.

These freestanding skull reliquaries, constructed from fabrics and presented in great numbers, exemplify the sacred remains of Cologne's Holy Virgins. These showcase the martyrs' heads – their most prized body part – and utilize innovative methods that lessen visual barriers between devotee and sacred matter. These objects multiplied and were distributed across Europe's sacred landscape. In doing so they established a prolific network of sanctity that united each site with the virgin martyrs and ultimately with Cologne.

Chapter 3

Sacred Anatomy:

Holy Heads and Medical Perceptions of the Cranium

3.1 Introduction

Consideration of these reliquaries – which ultimately showcase disembodied heads – has collectively revealed a notable interest in this particular body part. The exposed foreheads, the incorporation of 'living' features, and elaborate cranial reconstructions furthermore denote a particular 'anatomical' engagement with the human head that is worthy of further investigation here. This chapter therefore ventures beyond the historical, epigraphic, and art-historical disciplinary bounds in order to address these complexities.

High medieval perceptions of cranial anatomy emerged as a result of numerous factors, but particularly notable was a prolific literary expansion and reexamination of older works that facilitated the development of new and updated ideas and terminologies. These accounts were, in fact, deeply embedded within the fabric of religious institutions – especially those of the Benedictines and Dominicans – and were exchanged across great distances. Cologne's thriving religious intellectual activities, as demonstrated particularly in the work of Albertus Magnus, contributed to these ventures, establishing the city as a centre where medical literature was preserved, translated, transcribed, composed and circulated. By focussing on the inherently anatomical nature of the Holy Virgins' textile skulls, this chapter explores a range of visual and textual accounts of cranial anatomy and surgical treatments that extend our understanding of the anatomical particularity of the skull reliquaries.

3.2 Medicine within Sacred Communities

Turning to the numerous and complex relations that existed in this sphere of activity, the first point to note is that health and restorative healing were core aspects of Christianity; they were promoted in biblical and hagiographic texts, and reverberated in medieval communities through sermons, exegetical discourse and glosses.⁵⁴⁷ Thus religious centres played an essential role in the preservation, copying, and circulation of medical knowledge. Before investigating religious engagement with these texts and images, however, it is important to highlight the medical practices that occurred within – and in association with – these centers, given that they were intended to provide both spiritual and physical healing.⁵⁴⁸

During the high medieval period, clerics – both religious and secular – performed a host of medical treatments ranging from bloodletting, herbalism, and ancient (Hippocratic and Galenic) medicine.⁵⁴⁹ Within a religious infirmary, *fratres medici* – generally novices, clerics, and lay brothers (or the female equivalent) – were tasked with diagnosing and treating illnesses, prescribing medicine, and overseeing the recovery of those in need within the abbey.⁵⁵⁰ Theoretical medical literature often formed part of traditional monastic learning during this period.⁵⁵¹ It

⁵⁴⁷ Darrel W. Amundsen, *Medicine, Society, and Faith in the Ancient and Medieval Worlds* (Baltimore, MD: Johns Hopkins University Press, 1996); the diverse and abundant use of medicine within medieval writing is discussed in detail by: Joseph Ziegler, *Medicine and Religion, c.1300: The Case of Arnau de Vilanova. Oxford Historical Monographs* (Oxford: Oxford University Press, 1998); Angela Montford, *Health, Sickness, Medicine and the Friars in the Thirteenth and Fourteenth Centuries,* History of Medicine in Context (Aldershot: Ashgate, 2004); Joseph Ziegler, "Religion and Medicine in the Middle Ages," in *Religion and Medicine in the Middle Ages,* York Studies in Medieval Theology, 3, edited by Peter Biller and Joseph Ziegler (Woodbridge: York Medieval Press, 2001), 1–14; Naoë Kukita Yoshikawa, "Introduction," in *Medicine, Religion and Gender in Medieval Culture,* ed. Naoë Kukita Yoshikawa (Boydell and Brewer, 2015), 1–24.

⁵⁴⁸ The architectural manifestation of spiritual and physical healing, as promoted in the Rule of St Benedict practices, is explored in the architecture of the monastic hospital at St Gall by Benjamin C. Silverman, "Monastic Medicine: A Unique Dualism Between Natural Science and Ritual Healing," *The Hopkins Undergraduate Research Journal* 1 (2002): 10–17.

⁵⁴⁹ For discussion on the medieval practice of bloodletting, see: M.K.K. Yearl, "Medieval Monastic Customaries on Minuti and Infirmi," in *The Medieval Hospital and Medical Practice*, vol. 3, AVISTA Studies in the History of Medieval Technology, Science and Art, ed. Barbara S. Bowers (Aldershot: Ashgate, 2007), 176–78. This also contextualizes medical practice within monastic communities.

⁵⁵⁰ Montford, *Health, Sickness, Medicine*, 66–68; Florence Eliza Glaze explores the role of medicine within cloistered communities in, Florence Eliza Glaze, "Medical Writer 'Behold the Human Creature,'" in *Voice of the Living Light: Hildegard of Bingen and Her World* (Berkeley, CA: University of California Press, 1998), 125–48. See further: pp. 222-23.

⁵⁵¹ Consideration of this topic during the Carolingian period can be found in: Frederick S. Paxton, "Curing Bodies—Curing Souls: Hrabanus Maurus, Medical Education, and the Clergy in Ninth-Century Francia," *Journal of the History of*

is, therefore, possible that some received varying degrees of medical training within the monastery, although empirical medical education is debatable.⁵⁵²

Nevertheless, during the period under consideration here, the nature of treatments (medical or surgical) and the question of who performed the procedures became increasingly important. Numerous ecclesiastic decrees were issued between the early twelfth and mid-thirteenth centuries that imposed limitations and prohibitions on clerics practicing medicine and surgery – especially for profit.⁵⁵³ Nothing, however, prohibited a trained physician from joining a religious order and continuing their practice.⁵⁵⁴ Additionally, while most of the legislation forbade clerics from leaving their community to pursue formal training in medicine, no restrictions prevented the study of medicine within the monastery. From at least in the early medieval period, monasteries housed most of the available medical and philosophical literature, and thus provided an ideal setting within which to engage with medical sources.⁵⁵⁵ As Hammond eloquently stipulated, because the religious "were the sole possessors of the skills necessary to interpret and use the medical work of the ancients, they could not escape their role in medical development."⁵⁵⁶

In the period leading up to the tenth century, medical literature that had been translated into Latin existed as a limited and abridged body of work; most, however, remained in its original language, primarily Greek, and so remained largely inaccessible. It was not considered a time of medical expansion *per se*; yet

⁵⁵³ For a comprehensive overview of this topic, see: Darrel W. Amundsen, "Medieval Canon Law on Medical and Surgical Practice by the Clergy," *Bulletin of the History of Medicine* 52, no. 1 (1978): 22–44; for a more recent study focussing on the University of Paris, see: André Goddu, "The Effect of Canonical Prohibitions on the Faculty of Medicine at the University of Paris in the Middle Ages," *Medizinhistorisches Journal* 20, no. 4 (1985): 342–62.

⁵⁵⁴ Angela Montford, "Dangers and Disorders: The Decline of the Dominican Frater Medicus," *Social History of Medicine* 16, no. 2 (2003): 173.

Medicine and Allied Sciences 50, no. 2 (1995): 230–52; Nancy G. Siraisi, "The Medical Learning of Albertus Magnus," in *Albertus Magnus and the Sciences - Commemorative Essays 1980*, Studies and Texts 49, ed. James Weisheipl (Toronto: Pontifical Institute of Mediaeval Studies, 1980), 387.

⁵⁵² E. A. Hammond, "Physicians in Medieval English Religious Houses," *Bulletin of the History of Medicine* 32, no. 2 (1958): 120; Montford, *Health, Sickness, Medicine*, 68–69.

⁵⁵⁵ For detailed discussion, see: Florence Eliza Glaze, "The Perforated Wall: The Ownership and Circulation of Medical Books in Medieval Europe, ca. 800-1200" (doctoral thesis, Duke University, Ann Arbor, MI, 2005); Grudzen, *Medical Theory*.
⁵⁵⁶ Hammond, "Physicians in Medieval English Religious Houses," 119.

further insight is provided by the transmission and assimilation of medical scholarship in both royal and monastic settings during the later eighth and ninth centuries in Carolingian Gaul, and these can be seen as impacting the circulation of associated literature during the central Middle Ages and beyond. While establishing his palatial library, Charlemagne oversaw the sourcing and copying of various antique works – some of which were medical in nature – from Ireland, Britain, Spain, Italy and Byzantium.⁵⁵⁷ As part of literary exchanges between monastic, ecclesiastic, and royal collections, medical material was collected and circulated on a grand scale. Monastic foundations, particularly those which closely followed the Benedictine Rule, shared strong ties with the Carolingian court, and were thus entrusted with transcribing this literature.⁵⁵⁸ From this period onwards, therefore, many monasteries were the privileged proprietors of medical material.⁵⁵⁹

Some of the key turning points in medical history stemmed from the translation into Latin of Greek and Arabic texts. Benedictines at the abbey of Montecassino, together with scholars at the secular medical 'school' in Salerno, were responsible for translating many influential works primarily between the late eleventh and thirteenth centuries.⁵⁶⁰ Scholars at both centres engaged with various medical, anatomical, and philosophical texts that had a profound impact on the understanding of and engagement with Greco-Roman and medieval Arabic works. Paramount to this was the work of Constantinus Africanus (Constantine the African, *c*. 1020-1099), a scholar who was first active in Salerno and then continued work as a monk at Montecassino.

⁵⁵⁹ Glaze, "The Perforated Wall," 69–86.

⁵⁵⁷ Glaze, "The Perforated Wall," 69–72; Karl Christ, *The Handbook of Medieval Library History* (Metuchen; London: Scarecrow, 1984), 121–32; Bernhard Bischoff, *Manuscripts and Libraries in the Age of Charlemagne* (Cambridge: Cambridge University Press, 2007), esp. 56-75; Christ, *Medieval Library History*, 121–32.
⁵⁵⁸ Especially helpful for understanding this relationship is: Bischoff, *Manuscripts and Libraries in the Age of Charlemagne*, 134–60.
⁵⁵⁹ Claze, "The Derformed Wall," 60–96.

⁵⁶⁰ The scholarship on this topic is vast, but see, e.g., Paul Oskar Kristeller, "The School of Salerno: Its Development and Its Contribution to the History of Learning," *The Bulletin of the History of Medicine* 17, no. 2 (1945): 138–94; Luis García-Ballester, "The Construction of a New Form of Learning and Practicing Medicine in Medieval Latin Europe," *Science in Context* 8, no. 1 (1995): 75–102; Siraisi, *Medieval & Early Renaissance Medicine*, 48–77; for a more recent discussion, see: Glaze, "The Perforated Wall," 161–86.

Constantinus' translations of Greco-Arabic medical treatises were among the earliest to permeate intellectual circles within Europe; his pioneering efforts, which produced several inventive terms, were of considerable importance to Latin medical nomenclature. Although his translation was retrospectively belittled and eventually re-translated by Stephen of Antioch (*c*. 1127), Constantinus' *Liber Pantegni* (1077-87) served as a pivotal treatise that furnished medical scholars with the new vocabulary required to interpret and discuss cerebral anatomy, among other topics. He thus looms large in medical history and much has been written about his 'revival' of medical literature.⁵⁶¹ Here, as a transcriber and translator of medical treatises, his role, together with that of other monastic scholars, is mentioned to underscore the integration of medical literature within sacred communities during the high medieval period.

It was only at the turn of the fourteenth century that monastic engagement with medical literature and practices began to wane.⁵⁶² Prior to this, new medical sources were collected for or bequeathed to monastic libraries to serve *fratres medici*, practicing clergy, theologians, and philosophers.⁵⁶³ The largest of these collections was found at the Benedictine abbey of Saint-Benoît-sur-Loire at Fleury in

⁵⁶¹ See further, sections 3.4.b and 3.4.c. For the most extensive work on Constantius' translations see essays in: Charles Burnett and Danielle Jacquart, ed., Constantine the African and 'Alī Ibn Al-'Abbās al-Magūsī: The Pantegni and Related Texts, vol. 10, Studies in Ancient Medicine (Leiden and New York: E.J. Brill, 1994); more recently the first copy of the Pantegni has been thoroughly explored in Erik Kwakkel and Francis Newton, Medicine at Monte Cassino: Constantine the African and the Oldest Manuscript of His Pantegni: Constantine the African and the Oldest Manuscript of His Pantegni (Turnhout: Brepols, 2019); but see also: Raphaela Veit, "Al-'Alī Maǧūsī's Kitāb al-Malakī and Its Latin Translation Ascribed to Constantine the African: The Reconstruction of Pantegni, Practica, Liber III," Arabic Sciences and Philosophy 16 (2006): 133–68; and Anatomical Texts of the Earlier Middle Ages: A Study in the Transmission of Culture, with a Revised Latin Text of Anatomia Cophonis and Translations of Four Texts (Carnegie Institution of Washington, 1927), 44. ⁵⁶² For a thorough analysis of the medical involvement of Dominicans, and (to a lesser extent) Franciscans, see: Montford, "Dangers and Disorders." She credits the ultimate decline of medical friars to the Dominican's internal restrictions and the rise of secular medical professionals.

⁵⁶³ Siraisi, *Medieval & Early Renaissance Medicine*, 50; Glaze, "The Perforated Wall"; Christ, *Medieval Library History*, 12.

France, which surpassed the impressive collections of Montecassino.⁵⁶⁴ Other notable collections were found among the Benedictine communities of Hildesheim Cathedral, Lorsch Abbey, St Amand Abbey, St Gall Abbey, and Durham Cathedral among others.⁵⁶⁵

Today at least 550 volumes of Latin medical manuscripts created between 1075 and 1225 survive; there are an additional 160 texts documented in catalogues or inventory witnesses from the same period.⁵⁶⁶ Although some individuals acquired medical literature, the majority were nevertheless affiliated with monasteries, and their collections were donated to religious libraries at their deaths.⁵⁶⁷ And these numbers do not include encyclopaedic entries that discuss medical topics; that number is far greater.

The study of medical material within religious settings is complicated by the fact that many such literary works were not consistently listed in monastic library catalogues, even within the medically-inclined Benedictine houses.⁵⁶⁸ This, however, does not necessarily indicate an absence of such literature; it might instead reflect contemporary customs to selectively document an institution's written works. Works that fell outside these parameters – vernacular, secular, and non-Christian material – were often excluded, which thus distorts the character of a library's holdings.⁵⁶⁹ Further obscuring the study of high medieval manuscript collections, particularly those of the Benedictines, many abbeys stopped producing booklists in the last quarter of the twelfth century.⁵⁷⁰ It is, therefore, highly probable that many other medical works were to be found in monastic collections than are known today.

⁵⁶⁴ Monica H. Green, "Medical Books," in *The European Book in the Twelfth Century*, vol. 101, Cambridge Studies in Medieval Literature (Cambridge: Cambridge University Press, 2018), 283.

⁵⁶⁵ For an in-depth analysis, see: Glaze, "The Perforated Wall," 187–261; see also: Green, "Medical Books."

⁵⁶⁶ Green, "Medical Books," 278.

⁵⁶⁷ Glaze, "The Perforated Wall," 193–94; K. W. Humphreys, "The Medical Books of the Medieval Friars," *Libri* 3 (1953): 100.

⁵⁶⁸ Humphreys, "Medieval Friars."

⁵⁶⁹ Ibid., 98–99.

⁵⁷⁰ Tjamke Snijders, "Reconsidering Benedictine Manuscript Production in the Thirteenth Century: The Case of Stavelot-Malmedy," *Revue Du Nord* 407, no. 4 (2014): 782–84.

Yet, as demonstrated here, it remains the case that this specialized knowledge was "permitted, tolerated, and justified" within the Christian tradition,⁵⁷¹ and numerous religious communities across Europe were instrumental in preserving and propagating this material for centuries. These settings were "founded and institutionally promoted through networks of communication with one another and the court";⁵⁷² in this way, monasteries facilitated the pursuit of the theoretical and practical medical knowledge.

3.2.a Medical Content in Encyclopaedic Works

Alongside the 'medical' literary works that often contained a significant amount of specialized information on anatomy, physiology, surgery, and various medical treatments there were encyclopaedic collections, a long-standing literary genre.⁵⁷³ These compendia condensed a vast amount of information in an organized manner, and thus became immensely popular across diverse readerships. Because medical content was included with an array of non-medical topics, modern scholars have tended to exclude them from their medieval medical booklists. If included, however, the potential medical material within monastic collections significantly increases.

Within the history of medical literature, Isidore of Seville's celebrated encyclopaedic *Etymologiae* (*c*. 600-625) is particularly important. He explores the spiritual and physical aspects of the human body, and his inclusion of medical and anatomical information provides a rare and insightful example for the continuum of general medical learning during this period.⁵⁷⁴ Book IV "On Medicine" (*De medicina*) discusses the humours of the body, acute and chronic diseases, remedies and medications, and practical descriptions of physicians' instruments. This is

⁵⁷¹ Glaze, "The Perforated Wall," 202.

⁵⁷² Ibid., 102.

⁵⁷³ Jason König and Greg Woolf, *Encyclopaedism from Antiquity to the Renaissance* (New York: Cambridge University Press, 2013).

⁵⁷⁴ Most of Isidore's medical and anatomical content is found in Books IV and XI respectively; for an English translation, see: Stephen A. Barney, *The Etymologies of Isidore of Seville* (Cambridge: Cambridge University Press, 2006), 109–16, 231–46; for a recent consideration, see: Faith Wallis, "Isidore of Seville and Science," in *A Companion to Isidore of Seville*, ed. Andrew Fear and Jamie Wood (Brill, 2019), 182–221; an earlier and thorough discussion is found in: William D. Sharpe, "Isidore of Seville: The Medical Writings. An English Translation with an Introduction and Commentary," *Transactions of the American Philosophical Society* 54, no. 2 (1964): 1–37.

complemented by a history of medicine and the importance of the practice;⁵⁷⁵ he concludes by describing medicine as the "Second Philosophy, for each discipline claims for itself the entire human body: by philosophy the soul is cured; by medicine, the body";⁵⁷⁶ thus not only does he endorse medicine as a valid scientific endeavour, he revered it superior because it incorporates all of the liberal arts. Human anatomy, physiology, psychology, and embryology are, however, addressed separately in Book XI "The Human Being and Portents" (*De homine et portentis*). Although *Etymologiae* was composed in the early seventh century, its popularity ensured its circulation into the high medieval period and beyond.⁵⁷⁷ Its presence in Cologne's Cathedral library, dating back to at least the early ninth century, makes it of particular importance to this study.

The encyclopaedic genre was especially popular with Islamic medical and surgical writers, and their works had a significant impact on medieval Latin medical knowledge and practice. Especially noteworthy was Haly Abbas (al-Majusī), the tenth-century Persian scholar who composed two versions of the *Complete Book of Medical Art (Kitab al-Maliki)*, known by their Latin names: *Liber Pantegni*, translated by Constantinus Africanus, and *Liber Regius*, translated by Stephan of Antioch. Avicenna (Ibn Sinā, d. 1037), another Persian scholar, wrote *The Canon of Medicine (Al-Qānūn fi al-tibb)*, a large encyclopedia on medicine and philosophy, which, once translated into Latin in the thirteenth century, became a key text in academic medical programs.⁵⁷⁸ Equally important were the medical writings of Averroës (Ibn Rušd, d. 1198), the court physician of the Almohad Caliphate whose works drew heavily on Aristotle, Galen and the medical treatise of Avicenna. His most popular medical contribution was the *al-Kulliyātfi'l-Tibb* (The General Principles of Medicine,

⁵⁷⁵ The medical aspects of Isidore's writings are comprehensively discussed in: Sharpe, "Isidore of Seville."

⁵⁷⁶ "Hinc est quod Medicina secunda Philosophia dicitur. Vtraque enim disciplina totum hominem sibi vindicat. Nam sicut per illam anima, ita per hanc corpus curatur." (Book IV.xiii). W. M. (Wallace Martin) Lindsay, *Isidori Hispalensis episcopi Etymologiarum sive Originvm libri XX*, vol. 1 (Oxford: E typographeo Clarendoniano, 1911), 190; trans.: Barney, *Etymologies*, 115.

⁵⁷⁷ For a concise discussion, see: ibid, 24–26; see also the new online database "Innovating Knowledge," (started 2018), https://innovatingknowledge.nl/ [accessed on 18 July 2021].

⁵⁷⁸ William Osler, *The Evolution of Modern Medicine, A Series of Lectures Delivered at Yale University* (New Haven, CT: Yale University Press, 1921).

latinized as the *Colliget c.* 1162).⁵⁷⁹ Once translated, these works, among others, were adopted as part of the European medical canon, and greatly influenced the perception of medical practices and the human anatomy among Latin scholars; they came to sit alongside the encyclopaedic works of Western medieval scholars such as William of Conches (*c.* 1090- *c.* 1155) and Bartholomaeus Anglicus (Bartholomew the Englishman, 1203-1272).⁵⁸⁰ Together, they became a powerful platform through which medical information circulated in both religious and secular circles.⁵⁸¹

3.3 The Fabric of a City: Medical Knowledge within High Medieval Cologne

During this period of significant medical output, Cologne was a densely populated metropolis, a bustling centre of international trade and commerce, as well as an archiepiscopal seat. The sheer number of residents necessitated the presence of numerous medical professionals; the wealthy ecclesiastics, businessmen, and politicians would have increased the demand for highly skilled and academically trained physicians and surgeons. This situation undoubtedly contributed to the specialized medical knowledge – especially that pertaining to cranial anatomy – circulating within the city. Yet, considering this information was exchanged predominantly through ecclesiastical networks, it is worth considering further the city's religious institutions and their (presumed) library collections.

Medieval Cologne was home to 80 libraries situated within monasteries, nunneries, and community churches, but little is known about their collections today.⁵⁸² The Cathedral library catalogues present notable exceptions, but a gap in the booklists between the eleventh and fourteenth centuries does complicate their study. Indeed, overall, the inventories of the city's libraries are sparse and those that exist only infrequently document medical texts; yet this does not necessarily

⁵⁷⁹ Majid Fakhry, *Averroes: His Life, Work and Influence* (Oxford: Oneworld, 2001), 124–26.

⁵⁸⁰ See, e.g.: Michael Seymour, *Bartholomaeus Anglicus and His Encyclopedia* (Aldershot: Vaviorum, 1992).

⁵⁸¹ For further discussions, see below, section 3.4.b.

⁵⁸² Klemens Löffler, *Kölnische Bibliotheksgeschichte im Umriss* (Cologne: Rheinland Verlag, 1923); see also: Wolfgang Schmitz, "Die mittelalterliche

Bibliotheksgeschichte Kölns," in *Ornamenta Ecclesiae*, ed, Anton Legner, vol. II (Cologne: Schnütgen-Museum Verlag, 1985), 137–48.

indicate a lack of corresponding holdings,⁵⁸³ for consideration of other avenues through which popular medical thought was brought into the city does contribute to our knowledge of the medical culture during the High Middle Ages. These include Cologne's prominent figures and institutions, together with the city's access to works circulating in intellectual and religious networks outside the city. Together, these factors suggest that medical literature was not only present in medieval Cologne, but that it was accessible to those closely involved with the ecclesiastical collection of the Holy Virgins' relics – namely the Benedictines, and later the Dominicans.

Cologne's Cathedral school and library, St Peter's, played a central role within the city's intellectual community. It was founded by Archbishop Hildebald (r. 784/87-818) who had fostered a close, lifelong relationship with Charlemagne, and served as the emperor's arch-chaplain from 791 until his death. As the highestranking ecclesiastic of the Carolingian court, Hildebald established advantageous ties within the Frankish empire and with members of the papal court, thus enriching Cologne's libraries with copies from some of the finest collections available at the time.⁵⁸⁴ Of particular note is his friendship with Alcuin whose forthright admiration for medicine is well documented.⁵⁸⁵ When Alcuin became abbot of St Martin's in Tours (796) it seems that the medical works at this centre increased; it has also been suggested that Hildebald had treatises from Tours transcribed, which would have eventually been housed in Cologne.⁵⁸⁶ Adding to these, the archbishop

⁵⁸³ See above, fn. 568.

⁵⁸⁴ Thomas R. Farmer, "The Transformation of Cologne: From a Late Roman to an Early Medieval City" (doctoral thesis, University of Minnesota, Twin Cities, MN, 2011), 213–16; manuscripts sent by Pope Leo III to Charlemagne were copied for Hildebald, see: Löffler, *Kölnische Bibliotheksgeschichte im Umriss*, 1–2; Christ, *Medieval Library History*, 150–51.

⁵⁸⁵ Paxton, "Curing Bodies—Curing Souls," 239; Loren Carey MacKinney, *Early Medieval Medicine: With Special Reference to France and Chartres* (Baltimore, MD: Johns Hopkins Press, 1937), 85–87; for Alcuin's contribution to Carolingian libraries, see: Ladislaus Buzás, *German Library History*, 800-1945, trans. William Douglas Boyd (Jefferson, NC: McFarland & Co, 1985), 14–15.

⁵⁸⁶ Joachim M. Plotzek, "Zur Geschichte der Kölner Dombibliothek," in *Glaube und Wissen im Mittelalter. Katalogbuch zur Ausstellung*, ed. Joachim Poltzek and Surmann Ulrike (Munich: Hirmer, 1998), 24.

bequeathed his prolific personal manuscript collection to the Cathedral collections on his death.⁵⁸⁷

Indeed, as an integral part of the Carolingian imperial milieu, St Peter's possessed an impressive collection, and its manuscript production flourished as part of Charlemagne's campaign of literary expansion. This practice was continued by his successors, so that Archbishop Bruno I (953-966) increased the status of the Cathedral library and school during his archiepiscopate, to the extent that Cologne's religious schools gained widespread acclaim and attracted some of the finest ecclesiastical scholars.⁵⁸⁸ Expanding the city's literary holdings was central to the educational growth of the city's foundations during the Ottonian period, and among them the cathedral library was noted as holding the largest manuscript collection.

In this context, archbishop Rainald von Dassel (r. 1159-1167), whose leadership coincided with a particularly pivotal period in the Holy Virgin's cult history,⁵⁸⁹ fostered a personal interest in contemporary medical material. Before arriving in Cologne, he served as provost of Hildesheim Cathedral, which has been noted for its prolific medical collection.⁵⁹⁰ At this time, Rainald also corresponded with the abbot of Montecassino regarding the exchange of medical manuscripts – including one from his private collection.⁵⁹¹ Rainald likely imported such manuscripts into Cologne and might well have continued to collect this specialised material during his archiepiscopate.

Although many of the manuscripts from this collection have vanished,⁵⁹² Anton Decker's chance discovery of a library catalogue dating to 833 (with later

⁵⁸⁷ Anton Decker, "Die Hildboldische Manuskriptensammlung des Kölner Domes," in *Festschrift der 43. Versammlung deutscher Philologen und Schulmänner dargeboten von den höheren Lehranstalten Kölns* (Bonn: Universitäts-Buchdruckerei, 1895), 220.
⁵⁸⁸ Henry Mayr-Harting, "Ruotger, the Life of Bruno and the Cologne Cathedral Library," in *Intellectual Life in the Middle Ages: Essays Presented to Margaret Gibson*, ed. Lesley Smith and Benedicta Ward (London: Hambledon Press, 1992), 33–60; see also, Martin Schubert, *Schreiborte des deutschen Mittelalters: Skriptorien – Werke – Mäzene* (Berlin: De Gruyter, 2013), 222.

⁵⁸⁹ See above, section 1.5.

 ⁵⁹⁰ Glaze, "The Perforated Wall," 280, 285; Christ, *Medieval Library History*, 195–96.
 ⁵⁹¹ Glaze, "The Perforated Wall," 224–25, fn. 58.

⁵⁹² Today, 35 of the 175 documented codices survive (according to the list of 833). Plotzek, "Kölner Dombibliothek," 22.

annotations) supplies references to much of the lost material,⁵⁹³ which went missing during the course of the twentieth century. The list reveals the contents of the cathedral library in the Carolingian period. Decker identified thirteen different categories of which (classical) medicine was one;⁵⁹⁴ it included a copy of Isidore of Seville's *Etyomologiae*, a text that, as noted, contained a substantial amount of medical content.⁵⁹⁵ While the medical texts do not survive, their presence in the booklist verifies that such literature was part of the cathedral's holdings in the ninth century, pointing to a particular interest in medical scholarship during this formative period. The gap in library inventories between the eleventh and fourteenth century make it difficult to ascertain specific holdings with any certainty. Yet, given the existence of the early booklist and the known activities and interests of the early ecclesiastics in Cologne, it is indeed possible to suggest that the library held, and probably continued to acquire medical texts, particularly those circulating in the eleventh to thirteenth centuries.⁵⁹⁶

The collection certainly served an important role within the city's intellectual circulation of knowledge and ideas as various religious in the city frequented it. For example, a lender's list from the first half of the twelfth century documents the abbess of the Holy Virgins' cloister among those reading the material within the collection.⁵⁹⁷ Beyond the cathedral's library, there were also collections at monasteries, nunneries, and parish churches. Because these do not often keep

⁵⁹³ The contents of this list were transcribed in: Decker, "Die Hildboldische Manuskriptensammlung des Kölner Domes"; the location of this list is now unknown, but its contents have been examined in: Paul Lehmann, "Erzbischof Hildebald und die Dombibliothek von Köln," *Zentralblatt für Bibliothekswesen* 25, no. 4 (1908): 157; Goswin Frenken, "Zu dem Kataloge der Dombibliothek von 833," in *Kölnische Bibliotheksgeschichte im Umriss* (Cologne: Rheinland Verlag, 1923), 53–54; the most updated analysis of this collection is found in: Plotzek, "Kölner Dombibliothek."

⁵⁹⁴ Decker, "Die Hildboldische Manuskriptensammlung des Kölner Domes," 223; medicine was classified as being classical in origin; see: Löffler, *Kölnische Bibliotheksgeschichte im Umriss*, 2.

⁵⁹⁵ The complete copy of Isidore's *Etymologiae* is no longer found in the cathedral library holdings. Plotzek, "Kölner Dombibliothek"; however, seven partial transcriptions, dating between the eighth and tenth centuries, remain in this collection. "Innovating Knowledge" https://db.innovating knowledge.nl [accessed on 18 July 2021].

⁵⁹⁶ Green, "Medical Books."

⁵⁹⁷ Löffler, Kölnische Bibliotheksgeschichte im Umriss, 3.

library lists, most of what is known about their collections is deduced from other evidence,⁵⁹⁸ which indicates that information was collected and made accessible throughout the city, primarily to those associated with particular religious institutions.⁵⁹⁹

Here, it is worth turning to two of the largest medieval libraries in the city, those associated with the Benedictine monasteries of St Pantaleon and Great St Martin. The fact that both housed important scriptoria increases the probability that medical literature was among their holdings.⁶⁰⁰ St Pantaleon, founded in 955 by Archbishop Bruno I, would rise to become the most important scriptorium in medieval Cologne; Great St Martin, situated close to the Cathedral, also housed the city's other major scriptorium in the eleventh century.⁶⁰¹ Furthermore, like many of Cologne's abbey churches, both communities included a hospital for the care of resident monks, but possibly also for members of the laity. The ninth-century hospital that existed on-site came under the guardianship of St Pantaleon in the tenth century.⁶⁰² The abbey-run hospital of Great St Martin's, named St Brigida, was founded in 1142;⁶⁰³ it was situated near the monastic church and run by laymen who were ultimately overseen by the abbots of Great St Martin. Although monks might not have been offering medical treatments, *per se*, it seems likely that libraries

⁶⁰⁰ For St Pantaleon's partial library lists, see: Franz Friedrich Pape, "Die öffentlichen Bibliotheken der Stadt Köln am Rhein," in *Kölnische Bibliotheksgeschichte im Umriss*, ed. Karl Löffler (Cologne: Rheinland Verlag 1923), 58; Löffler, *Kölnische Bibliotheksgeschichte im Umriss*, 5; Hans-Joachim Kracht, *Geschichte der Benediktinerabtei St. Pantaleon in Köln 965-1250*, Studien zur Kölner Kirchengeschichte 11 (Siegburg: Schmitt, 1975), 75, 187, 189; for those now found in Hamburg's collections, see: Hans-Walter Stork, "Handschriften aus dem Kölner Pantaleonskloster in Hamburg: Beobachtungen zu Text und künstlerischer Ausstattung," *Mittelalterliche Handschriften der Kölner Dombibliothek*, 2005, 259–85; for Great St Martin's previous holdings, see: Peter Opladen, *Gross St. Martin. Geschichte einer stadtkölnischen Abtei … Anhang*, Studien zur Kölner Kirchengeschichte 2 (Düsseldorf: Verlag L. Schwann, 1954), 78–79.

 ⁵⁹⁸ Schubert, "Köln," 220; Löffler, *Kölnische Bibliotheksgeschichte im Umriss*.
 ⁵⁹⁹ Christ, *Medieval Library History*, 45–50.

⁶⁰² Together with a useful history of St Pantaleon's abbey, its hospital is discussed in Kracht, *St. Pantaleon in Köln*, 78–80.

⁶⁰³ Opladen, *Gross St. Martin*, 121–24.

affiliated with hospitals would have contained theoretical and classical medical literature to aid physicians.⁶⁰⁴

Joined through their Benedictine affiliations, these sites would have almost certainly exchanged and shared sources; at the very least they would have provided (privileged) access to their collections. The cloister of the Holy Virgins was included within this local network; Abbot Hermann (1082-1120) of St Pantaleon supervised the nuns – during a period that notably overlapped with the initial discovery of the *agar Ursulanus*.⁶⁰⁵ In addition to possibly furnishing this abbey with Holy Virgins' relics from an early date,⁶⁰⁶ this arrangement might suggest literature – possibly medical in content – was shared between the two centres.

Other notable Benedictines during this time were also likely to have contributed to the medical knowledge within the city. Abbot Rupert of Deutz (*c*. 1075-*c*. 1129), for example, was known for promoting the unprejudiced use of secular and ancient sources,⁶⁰⁷ which might have included medical texts, such as that by Galen. If this was the case, specialised scholarship would have been housed at the Deutz Abbey, and therefore accessible to the very community responsible for excavating, storing, translating, and possibly even assembling the Holy Virgins' skull relics during the twelfth and thirteenth centuries.

The contemporary visionary, Hildegard of Bingen (1098-1179), who shared direct links with the city through her visits, correspondences, and veneration of the Holy Virgins,⁶⁰⁸ also treated patients and composed medical treatises.⁶⁰⁹ Among her most notable works, in this respect, is the compendium *Causae et Curae* and the

⁶⁰⁴ For a partial historic account of the library holdings, see ibid., 88–96.

⁶⁰⁵ Wegener, St. Ursula in Köln, 52; Kracht, Geschichte der Benediktinerabtei St. Pantaleon in Köln 965-1250, 105.

⁶⁰⁶ See above, fn. 7.

⁶⁰⁷ Plotzek, "Kölner Dombibliothek," 41.

⁶⁰⁸ Hildegard of Bingen also served as a (visionary) mentor to Elisabeth of Schönau, and played a role in the twelfth century establishment of the Holy Virgins' cult. See above, section 1.6.b.

⁶⁰⁹ Recently, Hildegard of Bingen's advanced and unique contributions to medical literature have been explored by Glaze, "Medical Writer"; Wighard Strehlow, Gottfried Hertzka, and Karin Anderson Strehlow, *Hildegard of Bingen's Medicine*, Folk Wisdom Series (Santa Fe, NM: Bear & Co., 1988); Margret Berger, *Hildegard of Bingen: On Natural Philosophy and Medicine: Selections from Cause et Cure*, Library of Medieval Women (Rochester, NY: D.S. Brewer, 1999); Victoria Sweet, *Rooted in the Earth, Rooted in the Sky* (New York: Routledge, 2006).

complementary *Physica*.⁶¹⁰ Beyond simply copying, these highly sophisticated works integrated terminology and phrasing that reveal a refined knowledge of both ancient and contemporary medical sources including Constantinus' *Pantegni* and work by William of Conches. Glaze has explained Hildegard as a "medical thinker ... interested in the broader universal context ... [that] places her squarely in the company of the most advanced thinkers of her day";⁶¹¹ furthermore, her "effort to dignify medicine is unprecedented in monastic medical literature".⁶¹² Collectively, her works verify the presence of, or at least access to, such works in Bingen, and likely more widely within the Benedictine circles that were connected with the Holy Virgins' cult.

At the centre of such connections, it is worth noting that medieval Cologne operated within a vast geographic network that provided additional channels through which medical knowledge likely arrived in the city. For instance, following the close relations established in the eighth and ninth centuries between Cologne and the centres of Carolingian rule, Paris remained one of Cologne's closest intellectual and religious neighbours; many ecclesiastics, politicians, and merchants travelled between the two cities, and so facilitated the exchange of knowledge. Thus, in many ways, the Cologne Cathedral school embraced, but was also dependent on the ecclesiastical educational system in Paris, where, by at least the 1180s, the University offered a medical curriculum that, alongside those at Bologna, Montpellier, Salerno, and later Padua, offered the most prominent medical programs in medieval Europe.⁶¹³ During this period, Paris, together with Chartres, served as primary centres where medical knowledge arrived and circulated north of the Alps.⁶¹⁴

Important for this study, however, are the two textbooks integral to the medical education in Paris: *Ars Medicine,* a newly assembled textbook of Greco-

⁶¹⁰ Because the earliest copies of these date to the mid-thirteenth century, dating these works within Hildegard's lifetime has proven difficult. Glaze suggests they were begun at the end of her life (possibly as a draft), and were completed posthumously. "Medical Writer," 147. For a list of manuscripts containing Hildegard's medical writings, see, p. 148.

⁶¹¹ Ibid., 133.

⁶¹² Ibid., 138.

⁶¹³ O'Boyle, *The Art of Medicine*, 116–17.

⁶¹⁴ Ibid., 98–99.

Arabic sources, and, later, *Ars Commentata*. The former was a Latin compendium of medical sources that collectively promoted foundational medical texts.⁶¹⁵ During the 1250s, however, the curriculum at Paris underwent a fundamental re-working, as part of which the introduction of the *Ars Commentata* was key. This updated corpus included newly translated works and updated commentaries, some of which incorporated translations by Constantinus, thus further popularizing human anatomy, especially that of the head. The popularity of these texts, together with the close relationship between the cities, highly suggest that this specialized medical content, if not the books themselves, circulated within Cologne.

Put briefly, Cologne, during the eleventh through the thirteenth centuries, was a rich intellectual centre, and an environment where medical knowledge was composed, revised, and generated. The city was in close touch with other centres where such specialisms were being practised and taught, through the activities of individual writers and practitioners. One of the most celebrated of these was Albertus Magnus (1200-1280), who was active in Cologne for much of his lifetime, but also spent time in Paris. His works thus reveal both the prominent role Cologne played in such collaborations, and the calibre of medical knowledge circulating there in the thirteenth century.⁶¹⁶

3.3.a Albertus Magnus: Medical Writings in Cologne

As a young scholar and monk Albertus Magnus was sent to study theology and made his novitiate in Cologne. He then moved Paris to further his studies and later taught at the university and the Dominican *studium general* (later as regent master, 1245-1248). Albertus was sent back to Cologne in 1248 to act as regent master of the newly founded Dominican *studium generale* at Holy Cross - a position he held until 1254. Here, he implemented a progressive curriculum and taught many students, including Thomas Aquinas (who re-located from Paris with Albertus), Thomas of

⁶¹⁵ The key contents of this compendium included: the *Isagoge* (Johannitius), *Aphorism and Prognostics* (Hippocratic), *Urines* (Theophilis), *Pulses* (Philaretus), and the *Tengi* (Galen). For an extensive analysis: ibid., esp. 82-127.

⁶¹⁶ For a detailed yet concise discussion of the writings associated with Albertus Magnus, see: Kenneth F. Kitchell Jr. and Irven M Resnick, "Introduction: The Life and Works of Albert the Great," in *On Animals: A Medieval Summa Zoologica*, vol. I, Foundations of Natural History (Baltimore, MD: Johns Hopkins University Press, 1999), 18–22.

Cantimparé, Ulrich of Strassburg, and Amnrogio Sansedoni.⁶¹⁷ Not only did he influence a new generation of Dominicans, his activities also drew notable scholars to Cologne. For the next fifteen years, Albertus travelled across Germany, but he always returned to Cologne, and between 1269 and his death in 1280, he resided permanently in the city, probably within the Dominican monastery of the Holy Cross – situated in close proximity to the Church of the Holy Virgins – where he is believed to have composed and revised many of his works.⁶¹⁸

Albertus was not a trained medical physician, but throughout his career, he cultivated a profound interest in anatomical and medical topics.⁶¹⁹ As a Dominican, he was in a particularly privileged position to access current medical research. Like the Benedictines, there was a notable tolerance, and possibly even encouragement for medical education and practice within the order during the thirteenth century.⁶²⁰ Roland of Cremona (1178-1259), Giles of Portugal (1184-1265), and, not least, Teodorico Borgognoni (1205-1298), present a few from a long list of Dominicans who taught and composed surgical treatises,⁶²¹ and were otherwise actively engaged in the medical field. Collectively they highlight the florescence of the specialised literature that was generated from within, and which circulated throughout this particular religious order.⁶²²

Yet, in addition to such religious affiliations, Albertus also included practicing secular physicians within his intellectual circle in Cologne; this is evident in the conversational anecdotes regarding patient treatments set out in his works.⁶²³ Such exchanges reveal his dedication to understanding medical topics and might be

⁶¹⁷ For Albertus Magnus' academic contribution to Cologne's *studium generale* and Dominican curriculum, and the intellectual communities in Cologne during this period, see: M. Michèle Mulchahey, *The Use of Philosophy, Especially by the Preachers: Albert the Great, the Studium at Cologne, and the Dominican Curriculum,* Etienne Gilson Series 32 (Toronto: Pontifical Institute of Medieval Studies, 2008).
⁶¹⁸ On this much-studied topic, see, e.g.: Kitchell and Resnick, "Life and Works"; James Weisheipl A., "The Life and Works of St Albert the Great," in *Albertus Magnus and the Sciences - Commemorative Essays 1980,* Studies and Texts 49, ed. James Weisheipl (Toronto: Pontifical Institute of Mediaeval Studies, 1980), 13–52.
⁶¹⁹ Siraisi, "Medical Learning."

⁶²⁰ Montford, *Health, Sickness, Medicine*, esp. 1-90.

 ⁶²¹ For further reading, see: O'Boyle, *The Art of Medicine*; Montford, *Health, Sickness, Medicine*; McVaugh, *Rational Surgery*; Siraisi, *Taddeo Alderotti*.
 ⁶²² See further, Montford, *Health, Sickness, Medicine*, 45–47.

⁶²³ Siraisi, "Medical Learning."

interpreted as diversifying, while simultaneously enhancing, the authority of his work. They also underscore how medical content was being verbally shared – here between religious and secular scholars and practitioners. In most instances, oral exchanges are, of course, impossible to trace, but they nevertheless seem to have served as a significant means by which medical perceptions circulated in Cologne and elsewhere.

Albertus Magnus explored a variety of subjects pertaining to the natural sciences, which included human anatomy, physiology, and psychology.⁶²⁴ Most notably, as part of his investigation of all living things in *De animalibus*, he demonstrated advanced knowledge of medical topics and clearly recognized medicine as a scholarly discipline.⁶²⁵ He fully explored the human body and provided a detailed account of cranial anatomy by incorporating works from diverse scholars, perhaps most notably Aristotle's treatise of the same title, but also Avicenna and Averroës. *De animalibus* is typically dated between 1256-1264, yet, it is believed Albertus collected its content over a longer span of time.⁶²⁷ and, because it was composed primarily while he was active in Cologne, it demonstrates the presence of these specialized concepts within the city. It thus offers a valuable source that is both site-specific and contemporaneous with the creation of the first documented Holy Virgins' skull reliquaries from Cologne Cathedral (1280).⁶²⁸

⁶²⁴ Ibid., 379–80.

⁶²⁵ Ibid.

⁶²⁶ Kitchell and Resnick, "Life and Works," 35; "Medical Learning," 388.
⁶²⁷ For further sources accounting for copies of *De animalibus*, see: Kitchell and Resnick, "Life and Works," 34.

⁶²⁸ The original text, signed by Albertus, is housed in Cologne: W 259, Historisches Archiv der Stadt Köln, *Mitteilungen aus dem Stadtarchiv von Köln., Mitteilungen aus dem Stadtarchiv von Köln. Sonderreihe, Handschriften des Archivs.*, vol. Die theologischen Handschriften Teil 4, Sonderreihe, Handschriften des Archivs., IV (Cologne: Böhlau, 1986), 140–41. This manuscript is noted as W 258A elsewhere. It is suggested here that Albertus kept this manuscript with him during his lifetime, see: Kitchell and Resnick, "Life and Works," 34; When discussing the relics of Albertus Magnus, Merlo cites a seventeenth-century source documenting that two codices written in the hand of Albertus Magnus accompanied the sarcophagus. "Duos Codices B. Alberti Magni propria manu conscriptos". It seems quite possible that *De animalibus* was one of these, supporting this claim: Johann Jakob Merlo, "Die Reliquien Albert's des Grossen in der St Andreaskirche zu Köln," *Bonner Jahbücher* 38 (1865): 113.

The personal connection between Albertus and these reliquaries is strengthened by his close involvement with the Virgins' cult. As revealed by Caesarius of Heisterbach in the early thirteenth century, the relics of Cologne's virgins inspired considerable interest during Albertus' lifetime,⁶²⁹ but at a more immediate level, following the death of Archbishop Englebert in 1274, Albertus mediated between the pope and the city in a matter involving the abbess of the Holy Virgins.⁶³⁰ His relationship with the cult deepened when he (presumably) discovered and authenticated the body of Cordula - one of the group's most celebrated members – in 1278. He translated her remains to the church of St John and Cordula in Cologne.⁶³¹ According to an early modern note recovered while opening the tomb of Albertus Magnus in the mid-nineteenth century, he received the body of St Undelina (one of the Holy Virgins) together with 300 bodies of (unnamed) Virgins. These were the gift from the newly-appointed and wellconnected abbess of St Ursula, Elisabeth of Westerburg (1280-1298).⁶³² Although the latter two accounts post-date his death, they can be understood, at the very least, to build on contemporary evidence of his involvement with the cult and underline the (personal) link between Cologne's most notable scholar and its prized virgin martyrs. Overall, Albertus' medical interests, professional connections, and written works can certainly be regarded as having, in all probability, influenced the particular way in which those reliquaries were constructed.

⁶²⁹ As noted in fn. 11 and 12.

⁶³⁰ Wegener, St. Ursula in Köln, 68.

⁶³¹ Acta Santorum, October ch. 5 (581) and 17 (585); *Bibliotheca Hagiographica Latina Antiquae et Mediae Aetatis*, Nr. 1951. See pp. 106-08 for further discussion of Cordula's importance within the cult.

⁶³² Merlo, "Die Reliquien Albert's des Grossen in der St Andreaskirche zu Köln," 114. Here, Merlo explains that a text detailing the account was found with the body of Albertus Magnus in the mid-nineteenth century. He dated this note to 1479-1501 with the text reading: "Corpus sancta Undeline regine de societate beate Ursula que prefuit minibus virginibus. Item trecenta corpora virginum ex edam societate que contulit domina Abbatissa de westerberch venerabili domino Alberto magno quarum ossa in diuersis capsulis reposita ibidem visunter. Item eiusdem domini Alberti magni corpus in cuori medio requiescit." This is the earliest known account of this gift. Wegener notes that the abbess had a close relationship with the Dominican order. Wegener, *St. Ursula in Köln*, 68–69; Zehnder, *Sankt Ursula*, 30, 80.

3.4 Picturing the Head: Cranial Primacy and Anatomical Accounts

In this respect, it is likely that Albertus Magnus influenced the construction of the skull reliquaries through his meticulous discussion of the head, his terminology and (re)production of the layered composition of the head and its inner cerebral workings; these topics may well have played a part in the layered textile composition of those sacred objects. While his works were those of a (local) scholar of wide-spread renown, they also drew on long-standing textual traditions: they renewed and popularised that which was well-established. De animalibus, for example, is a significant work that incorporated a wide breadth of sources - both ancient and contemporary;633 it thus emerged from a well-established tradition that focused on the anatomical and physiological primacy of the head. Like other medieval treatises, its section on human anatomy was structured 'head to toe'. It was a structure that, first adopted by Greco-Roman scholars and followed by Arab intellectuals, prioritized cranial analysis. From a medical perspective, the head warranted distinct consideration due to both the heightened risk associated with cranial injuries and the fatalities that could result from such injuries. The head was understood, primarily, as the container of the brain, while intellectual curiosity pertaining to the internal senses and cerebral functions also fuelled scholarly consideration.⁶³⁴ Thus, wide-ranging accounts of the cranium filled the pages of encyclopaedias, medical compendia, and surgical treatises among other medieval texts; it is within this context that Albertus' work is best considered here.635

The fourth book of Isidore's *Etymologiae*, for example, presents an early (Latin) example which testifies to the primacy of the head; it sets out that:

⁶³⁴ During the twelfth and thirteenth centuries, the head featured prominently in philosophical debates that attempted to situate the soul in either the head (Plato) or heart (Aristotle). Although relevant to a wealth of classical and medieval discourse, these debates are noted here as relevant to the period, but not discussed further. Important literature can be found in: Cohen, "Meaning of the Head."
⁶³⁵ For other high medieval accounts detailing cranial anatomy, see e.g., Roger

⁶³³ Kitchell and Resnick, "Life and Works," 10–13.

Frugard/Frugardi (*Chirurgia, c.* 1180); Thomas of Cantimpré (*De natura rerum, c.* 1244); Bartholmeaus Anglicus (*De proprietabus rerum, c.* 1240); Teodorico Borgognoni (*Chirurgia,* mid-thirteenth century); Bruno Longobucco (*Chirurgia magna,* 1252); Lanfranchi Milano (*Chirurgia magna,* 1296); and Henri de Mondville (*La Chirurgie,* 1320).

The primary part of the body is the head (*caput*), and it was given this name because from there all senses and nerves originate (*initium capere*), and every source of activity arises from it. Whence, it plays the role, so to speak, of the soul itself, which watches over the body.⁶³⁶

In Isidore's view, the head is the locus of life and identity. Etymologically, he argues that the senses, which both originate from and feed back to the head, are key to the cranium's importance. In this he builds upon concepts presented by classical scholars and anticipates the treatment of the topic current during the twelfth and thirteenth centuries.

In the mid-thirteenth century, for example, the prominent Italian physician and surgeon, William of Saliceto (Guglielmo de Salicetum, 1210-1277) conveyed related sentiments in Book IV of his surgical treatise, *Chirurgia* (1275):

I will begin with the anatomy of the head and the brain and its derivative structures, because the brain is the basic organ for the rest of the body in its movements and sensations, without which the final animus cannot exist.⁶³⁷

Here, William identifies the significance of the head – and more specifically the brain contained within – as being the body's intellectual powerhouse that governs all bodily movement and decision-making processes.

Building upon such well-established views, Albertus Magnus was able to present comprehensive discussion of the human head and its various components,

⁶³⁶ "Prima pars corporis caput; datumque illi hoc nomen eo quod sensus omnes et nervi inde initium capiant, atque ex eo omnis vigendi causa oriatur. Ibi enim omnes sensus apparent". Lindsay, *Etymologiarum*, 1:XI.i.25; trans.: Barney, *Etymologies*, 232.

⁶³⁷ "Et quia caput et illud, quod intra ipsum existit vel cerebrum, est radix vel supponitur pro radice ad totum corpus et specialiter dicitur radix sensus et motus, sine quibus perfectum animal stare non potest". Christian Heimerl, *The Middle English Version of William of Saliceto's Anatomia: A Critical Edition Based on Cambridge, Trinity College MS R. 14.41; with a Parallel Text of the Medieval Latin Anatomia, Edited from Leipzig, Universitätsbibliothek MS 1177, Middle English Texts 39 (Heidelberg: Winter, 2008), 4; trans: Rosenman, William of Saliceto (1998), 181.*

in *De animalibus* (1.3.1) – entering into considerable detail. He engages with the anatomical aspects of the skull, justifies its spherical shape, and outlines the many bones that make up this essential part of the body. The physiological features (eyes, ears, nose, cheeks, jaw, lips, and mouth) are investigated and the complexities of the cranial nervous and arterial systems are explored. In this comprehensive account Albertus also considered the head's anatomical layers and the organization of the brain and its cognitive functions. As part of his precise and detailed account he cites numerous and diverse sources – both ancient and medieval – with commanding authority, which enable him to record the tiered construction of the head, from the hair moving inwards to the brain:

The first covering is the hair; the second, the skin; the third, the flesh; the fourth, the woven membrane (*pellis*); the fifth the bone of the skull; the sixth the *dura mater*; and the seventh, the *pia mater*.⁶³⁸

In his outline of the primary layers surrounding the brain, the human head is presented as an elaborate composite body part. Further to identifying each layer, Albertus orientates each one in relation to that which exists on either side, thus emphasizing the head's composite (layered) construction.

Visual representations of this very specific construct are rare during the high medieval period, yet a schematic image does accompany a fifteenth-century copy of Jehan Yperman's surgical treatise *Chirurgia* composed around 1310 (Fig. 3.1), articulating some of the cranial layers identified by Albertus Magnus and others. In this image, the brain is central and divided into three sections labelled "the front part", "the middle part which is mutual", and "the third part".⁶³⁹ Surrounding the

⁶³⁸ "cui postea superducitur cutis ex qua capilli oriunter, ita quod primum opertorium est capilli, secundum cutis et tertium caro et quartum pellis contexta et quintum os cranei et sextum dura mater et septimum pia mater". Hermann Stadler, *Albertus Magnus - De Animalibus Libri XXVII - Nach Der Cölner Urschrift*, vol. 1 (Münster: Aschendorffsche Verlagsbuchhandlung, 1916). trans.: Kitchell and Resnik, *On Animals*, 247.

⁶³⁹ English translation: Edwin Clarke and Kenneth Dewhurst, *An Illustrated History of Brain Function: Imaging the Brain from Antiquity to the Present* (San Francisco, CA: Norman Publishing, 1996), 10. The text within the cranium is not legible.

brain are three concentric rings representing the cranial layers: *pia mater, dura mater* and *cranium*. Six lines, which radiate out from the central brain mass to the edge of the skull, further subdivide these internal layers. Within this neatly organized composition, the anatomical terms referring to the layers of the head are repeated four times and their scholarly lineage is provided by the four figures surrounding the head who, from the top right moving clockwise, are identified as *"Lanfranc", "Meester Bruun", "Avicenna",* and *"Galen",* the names inscribed across undulating scrolls. The inclusion of these surgical forefathers visually reiterates that Yperman's knowledge is based on scholarship that incorporates earlier Greek, Arabic, and Latin sources.

3.4.a Weaving Threads into Fabric: The Terminology and Metaphors of Cerebral Meninges

With the cranial layers and structure established, and the structure of the skull reliquaries in mind, it is important to explore the specialized terminology used for describing (with precision) the complexity of the head's composition. Some of this technical language was coined in antiquity with the works of Hippocrates and Galen while other terms emerged during the translations from Greek and Arabic into Latin; in most cases, no Latin equivalents existed, and translators throughout the centuries working with scientific literature were thus often required to choose between transcribing the original terms and supplying a description, or inventing a suitable equivalent.⁶⁴⁰ Words also changed with subsequent textual versions, as for example, when works were translated from Greek into Arabic and then into Latin. Terms might have been further altered when scholars gained access to the Greek originals. Although these practices generated technical errors, they also gave rise to creative interpretations. Closer consideration of the emerging creation and codification of technical terms, specifically those describing cranial anatomy, reveal frequent references, both literal and metaphoric, to motherhood, clothing, and elements of cloth-making: threads, weaving, and fabric. As insightful indicators of

⁶⁴⁰ Gotthard Strohmaier, "Constantine's Pseudo-Classical Terminology and Its Survival," in *Constantine the African and 'Alī Ibn Al-'Abbās Al-Maǧūsī: The Pantegni and Related Texts*, ed. Charles Burnett and Danielle Jacquart (Leiden: Brill, 1994), 91.

cultural perceptions of cranial anatomy, such descriptions evoke, in the strongest possible terms, the materials and assemblage of the Holy Virgins' skull reliquaries.

A particularly revealing example of terminological appropriation is found when exploring the nomenclature associated with the meninges (the two cerebral membranes). As later illustrated in the Yperman image, these, identified as the *pia mater* and *dura mater*, were core elements of cranial anatomy that had been acknowledged and investigated in classical medicine, appropriated within Arabic texts, and finally adopted into the corpus of medieval Latin medicine. Many scholars took great care in thoroughly describing these anatomical elements, and closer investigation indicates that at each stage of translation they inspired the use of metaphoric language. For example, in *De animalibus,* Albertus explains:

There are, moreover, two pannicular-membranes (*panniculi*, lit.: little garments or cloths) covering (*cooperientes*) the brain. The upper one is raised up to the skull and is thicker and harder to withstand the harness of the bone and to ward off any damage that might come to the brain from the bone. Because of its hardness (*duritia*) and the maternal vigilance (*materna custodia*)... it is called the *dura mater*. The second pannicular-membrane is soft and thin/delicate (*subtilis mollis*), clinging (*adhaerens*) to the brain, holding (*excipiens*) it softly and guarding (*custodiens*) it ... like that of a devoted mother (*piae matris*), this pellicle (*pellicula*, lit.: skin) is named the *pia mater*. Thus because of the great softness of the brain and the great hardness of the skull, the brain had to be wrapped in a double medium (*duplici involveretur medio*).⁶⁴¹

⁶⁴¹ "Amplius autem duo sunt panniculi cerebrum cooperientes, quorum superior qui ad craneum elevatur, est spissior et durior, ut resistat duriciei ossis et prohibeat nocumenta quae ab osse veniunt ad cerebrum pervenire, et propter duriciam suam et maternam custodiam quam impendit cerebro excipiendo nocumenta ossis, dura mater vocatur. Secundus autem est panniculus subtilis mollis adhaerens cerebro et molliter excipiens ipsum et custodiens ne ad duriciem elevatum duriter impingat...et ob hanc piae matris custodiam pia mater haec pellicula nuncupatur. Propter nimiam autem cerebri molliciem et nimiam cranei duriciam oportebat ut

This account supplies a description of the meninges by delineating their materiality together with their position and relationship to neighbouring parts. It becomes clear that each layer is composed specifically in relation to their respective functions within the cranial structure, so that collectively and ultimately they exist to protect the brain. This account, moreover, reveals two pertinent terminological aspects that are essential to this study. First, the meninges are classified metaphorically as *mater* (lit.: mother) and differentiated according to their respective material composition: the hard vigilant mother and the soft devoted mother. These membranes are, furthermore, described as *panniculi*, which translates as small pieces of cloth or little garments. Following the works of Constantinus and William of Conches, both *mater* and *panniculi* become integral to Latin meningeal descriptions, and so can be understood as shaping the metaphoric and literal understanding of meninges as fabric mothers that envelop the brain. This is noted in the works of many high medieval scholars, importantly here, including Albertus Magnus, who can thus be seen as using the most current anatomical terminology in Cologne at the time the skull relics were first constructed. The linguistic evolution of these terms clearly illuminates profound cultural association, especially within Cologne, between the cranial layers with maternal protection as well as with various properties of clothing and fabric making.

3.4.b The Mothers of the Brain

For many, the cerebral membranes were invisible, and thus abstract, anatomical elements, and yet, as mothers of the brain they were particularly relevant to medieval perceptions of cranial anatomy. Knowledge of the meninges dates back to an ancient Egyptian text, the so-called Edwin Smith Surgical Papyrus (*c*. 1700 BCE),⁶⁴² yet Galen is credited with labelling them as '*pia*' (lit.: tender or pious) and

duplici involveretur medio". Book I, tract III, Ch. 1 (section 524); Stadler, *De Animalibus*, 1:187; trans.: Kitchell and Resnik, *On Animals*, 246. ⁶⁴² Larry W. Swanson, *Neuroanatomical Terminology: A Lexicon of Classical Origins and Historical Foundations* (Oxford: Oxford University Press, 2015), 7.

'dura' (lit.: harsh or hard).⁶⁴³ Although this terminology appears in the works of Albertus Magnus, the addition of *mater* originated with Arabic sources, and its etymology reveals the appropriation of a (poetic) colloquial metaphor into medical scholarship prior to entering Latin nomenclature.⁶⁴⁴ Of primary interest here is the presence of this terminology in Alī ibn al-Abbās' (Haly Abbas) tenth-century medical encyclopaedia, *al-Kitāb al-Malikī* (The Royal Book) wherein he explains:

The brain is enclosed by two membranes (غشاآن; *ghishāʾān*), which are called its two "mothers", the one, which is thick, is called the hard mother (the *dura mater*), whereas the other one, which is thin, is called the soft mother (the tender mother – *pia mater*).⁶⁴⁵

He reiterates the materiality of the meninges as set out by Galen, but departs from him by transforming them to "mothers" surrounding the brain. Their enveloping nature and physical proximity to the brain is well suited to express them as protective agents; the meninges were indeed perceived as vital anatomical features that ensured the brain's safety. In addition, classical scholars had established the concept that the membranes nourished the brain with blood and vital/animal spirits though their network of vessels, arteries; they were thus understood as ensuring the survival of the otherwise fragile and defenceless brain. Transforming them into mothers, fulfilling their duties to feed, nurture, and protect – associating these maternal aspects with the meninges and identifying them as *pia* and *dura mater* – was particularly fitting within this context.

⁶⁴³ Julius Rocca, *Galen on the Brain Anatomical Knowledge and Physiological Speculation in the Second Century AD*, vol. 26, Studies in Ancient Medicine (Leiden, Boston: Brill, 2003); for the *dura*, see pp. 91-103; for the *pia*, pp. 104-108.
⁶⁴⁴ Gotthard Strohmaier, "Dura mater, Pia mater: Die Geschichte zweier anatomischer Termini: Dem Andenken Hermann Lehmanns gewidmet," *Medizinhistorisches Journal* 5, no. 3/4 (1970): 202–7.

⁶⁴⁵ "ويحيط بالدماغ غشاآن يقال لهما أما الدماغ أحدهما تُخينَ ويقال له الأم الجافية والآخر رقيق ويقال له الأم الرقيق in transliteration: "wa-yuḥīṭu bi-al-dimāgh ghishā'ān yuqālu la-humā ummā aldimāgh aḥaduhumā thakhīn wa-yuqālu la-hu al-umm al-jāfiya wa-ākhar raqīq wayuqālu la-hu al-umm al-raqīq" Alī b. al-'Abbās al-Majūsī, *Al-Majūsī, 'Alī b. al-'Abbās, Kāmil al-Ṣināʿa al-Ṭibbiyya*, vol. 1 (Cairo: al-Maṭbaʿa al-Kubrā al-ʿĀmira, 1877), 95; trans.: Wiberg, 86. I am grateful to Harry Munt for his assistance in locating and understanding this text (18.10.21).

Although Haly Abbas is not credited with the first use of this terminology, his work has been suggested as a primary factor for its continued use within medieval Latin scholarship.⁶⁴⁶ Key to this process was Constantinus Africanus' translation of the *al-Kitāb al-Malikī* as the *Liber Pantegni* (1077-87) where he states:

This is the form of the brain, which is encompassed (*circundant*) by two layers of cloth/tissue (*panniculi*) that are called the mothers (*matres*) of the brain. Underneath the skull there is one that is thick/coarse, and this is called the *dura mater*. Underneath the *dura mater*, however, is the *pia mater* which is joined together with the brain and envelops (*circundat*) it all around and it spreads throughout the cranial cavity. It is softer in its substance than the *dura mater*.⁶⁴⁷

Here, the placement of these layers in relation to one another is specified, but otherwise this passage replicates that composed by Haly Abbas. Looking back at the *al-Kitāb al-Malikī*, Strohmaier has suggested the terms *dura* and *pia* referred to the meningeal materiality, thus conveying the sentiments of Galen; yet Constantinus' literal translation of *al-ummu l-gafiya* as hard mother, and correspondingly, *al-*

⁶⁴⁶ Haly Abbass' The Royal Book is considered to be a translation of Galen's *De* anatomicis administrationibus (On Anatomical Procedures) from c. 177 CE, vet when describing the meninges as mothers, Haly Abbas almost certainly indicates consultation of 'Isā ibn Yahyā's (d. c. 1010) medical encyclopaedia (al-Kutub al-mi'a fī l-sināʿa al-tibbiyya or the Hundred Books on Medical Art). As Avicenna's teacher, Isā ibn Yahyā's terminology is also noted in Avicenna's Cannon, which entered Latin scholarship after, and was not as quickly circulated, as that of Haly Abbas via Constantinus' Liber Pantegni. Strohmaier, "Dura mater, Pia mater," 202-7. ⁶⁴⁷ "Haec est forma cerebri quod circundant duo panniculi qui vocantur matres cerebri. Unus grossus qui dura mater vocatur, hic craneo supponitur ... Hec autem pia mater dure matri supposita est que cerebro coniuncta undique ipsum circundat et se spargit per concavitatem cerebri. Hec mollior est in substantia quod mater dura". Ynez Violé O'Neill, "William of Conches and the Cerebral Membranes," in Clio Medica, vol. 2 (Oxford: Pergamon Press Ltd., 1967), 14; trans.: Hanna Vorholt. See, ibid., fn. 12 for further information on locating Latin transcription of the Liber Pantegni.

ummu raqīq as soft mother obscure a literal or figurative meaning.⁶⁴⁸ Incorporating *mater* into meningeal nomenclature clearly introduced the concept that these served a maternal role within the cranial anatomy, and the wide and rapid circulation of *Liber Pantegni* disseminated this specialized terminology while also offering future scholars the possibility for adopting literal or metaphoric interpretations.

The first integration of this terminology into (original) Latin scholarship is found in William of Conches' encyclopaedic compendium *De philosophia mundi* (*c*. 1120-35), which was directly influenced by Constantinus' *Liber Pantegni*.⁶⁴⁹ Although pivotal in promoting the linguistic adoption of '*mater*', it did not elaborate on the maternal associations of the cranial layers. Nevertheless, the association is noted in subsequent works, including *Anatomia Magistri Nicolai* (late twelfth or early thirteenth century, likely from Salerno)⁶⁵⁰ that explained how: "the *pia mater* is called as such because it surrounds the brain like a devoted mother embracing her child [son]."⁶⁵¹ Here, instead of *pia* simply indicating the meningeal composition, the term is further explained with a metaphoric reference to a mother's gentle embrace of her offspring.

When returning to *De animalibus*, Albertus Magnus is notable for explicitly describing this maternal symbolism:

⁶⁴⁸ Strohmaier, "Dura mater, Pia mater," 209–12. Strohmaier also explores these terms as found in Gerhard of Cremona's translation, which differs from that of Constantinus.

⁶⁴⁹ Here it is argued that the most likely source for William's meningeal terminology as *dura* and *pia mater* in *Philosophia Mundi* are directly connected with his consultation of Constantinus' *Liber Pantegni*, but this was not his only source. O'Neill, "Cerebral Membranes," 13–14; see also: Joan Cadden, "Science and Rhetoric in the Middle Ages: The Natural Philosophy of William of Conches," *Journal of the History of Ideas* 56, no. 1 (1995): 1–24.

⁶⁵⁰ Corner suggested the date and origin of this text in *Anatomical Texts*, 32.
⁶⁵¹ "Pia mater ideo dicitur, quia ad modum piae matris amplectentis filium suum ista pellicula obvoluit cerebrum". Strohmaier, "Dura mater, Pia mater," 214; trans.:
Corner, Anatomical Texts, 69. For this, Corner used text from F. Redeker's unpublished dissertation Die "Anatomia magistri Nicolai phisici" und ihr Verhältnis zur Anatomia Cophonis und Richardi (Leipzig, 1917) p. 115-120. For this, Redeker transcribed CLM 4622 p. 22-25. Here, filium is translated as son, instead of child as seen in Corner's translation.

Because of its hardness (*duritia*) and the maternal vigilance (*materna custodia*) ... it is called the *dura mater*. The second pannicular-membrane is soft and thin (*subtilis mollis*), clinging (*adhaerens*) to the brain, holding (*excipiens*) it softly and guarding (*custodiens*) it ... like that of a devoted mother (*piae matris*), this pellicle (*pellicula*, lit.: skin) is named the *pia mater*.⁶⁵²

Here, Albertus clearly accentuates the maternal associations noted in the Persian texts. The hard, substantial composition of the *dura mater* is directly equated to "maternal vigilance" (*materna custodia*), suggesting pre-emptive, watchful attention. The *pia mater's* delicate composition, on the other hand, offers gentle and soothing protection, being elucidated as clinging to and holding the brain, a gentle envelopment that draws attention to the closeness of physical contact. Together these present the ultimate combination of maternal protective qualities, and the work of Albertus Magnus demonstrates that these associations were active and circulating within thirteenth century Cologne. It is by elaborating on these qualities that the ideas of wrapping, layering, protecting, and enveloping can be articulated.

3.4.c Cloaking the Brain: The Cerebral Meninges as Panniculi

Further to these associations introduced through the use of *mater*, the meninges were described as *pannicula/o/us/i* (lit.: small garment or piece of fabric) in *De animalibus* and other medieval medical sources. Closer consideration of these ubiquitous references, however, reveal a textual tradition that promoted cloth as an integral component within cranial anatomy, and more specifically, as the material responsible for protecting the brain. Furthermore, these accounts include literal references that were often enriched with figurative references to intertwined threads, woven fabrics, and fashioned garments. Collectively these can be seen as generating and reinforcing a profound association between cloth and cloth-making with the internal composition of a human head.

As with the history of the use of *mater* in medical contexts, the introduction and subsequent proliferation of the evocative terminology of *panniculi* within Latin anatomical scholarship is partially attributed to Constantinus' *Liber Pantegni*, where

⁶⁵² See above, fn. 642.

the reader is informed that "the brain is wrapped (*circundant*) by two pieces of cloth (*panniculi*)".⁶⁵³ This derived from Haly Abbas' passage in which the meninges were described as 'ān', which can be translated as two coverings or something that wraps; it is, however, unclear if this coveys associations with fabric,⁶⁵⁴ and thus unclear if Constantinus' use of *panniculi* indicates a literal translation of Haly Abbas' terminology or a creative equivalent. Stephen of Antioch's subsequent translation of the corresponding passage in the *Liber regalis* (*c*. 1127) that described the meninges as two lids/coverings (*operimenta*) around the brain⁶⁵⁵ suggests that Constantinus was responsible for introducing *panniculi*. Indeed, with reference to the *Liber Pantegni*, William of Conches reiterated that two cloths/garments (*duo panniculi*) surrounded/enclosed (*circundant*) the brain.

With this foundation, the term *panniculus* is used repeatedly in subsequent medieval medical texts. An interesting twelfth-century account, written by one Richard, possibly from England, incorporates a reference to common language when describing the meningeal layers as "two mothers, which are called meninges or 'vulgarly' fabrics, which knotted together, make three foldings".⁶⁵⁶ This passage reveals abundant literal connections between the meninges and cloth, as well as with the act of cloth-making and its use. Here they are tightly interwoven to yield a two-ply fabric that is then folded, an act notably associated with the handling of bolts of fabric. It also establishes the fact that the concept was familiar in oral practices suggesting that such ideas and perceptions were not restricted to

⁶⁵³ "Haec est forma cerebri quod circundant duo panniculi". O'Neill, "Cerebral Membranes," 14. trans.: author.

⁶⁵⁴ al-Majūsī, *Al-Majūsī, 'Alī b. al-'Abbās, Kāmil al-Ṣinā'a al-Ṭibbiyya*, 1:95 trans.: Harry Munt. I am very grateful for Harry's assistance in locating this text and engaging with this specialised Arabic terminology. (10.18.21).

⁶⁵⁵ "Circundant autem cerebrum operimenta duo que cerebri maters dicunter alterum spissum" O'Neill, "Cerebral Membranes," 14. trans.: author.

⁶⁵⁶ "Due igitur matres, que dicuntur miringe vel tele vulgariter, faciunt devexas tres plicaturas" (O'Neill interpreted "devexas" to read as denexas from de + necto). Ynez Violé O'Neill, "Diagrams of the Medieval Brain: A Study in Cerebral Localization," in *Iconography at the Crossroads: Papers from the Colloquium Sponsored by the Index of Christian Art, Princeton University, 23-24 March 1990*, Index of Christian Art. Occasional Papers 2, ed. Brendan Cassidy (Princeton: Princeton University, 1993), 97. trans.: author. I am grateful to Emanuele Lugli for bringing it to my attention that "vulgariter" can be interpreted as vulgarly.

intellectual Latinate circles by the twelfth century, but rather had permeated popular culture.⁶⁵⁷

Another intriguing use of the fabric metaphor surfaced in the thirteenthcentury translations of the *Canon* by Averroës, where the *pia mater* is described as *panniculus subtilis* (lit.: fine-spun, delicate garment)⁶⁵⁸ and the *dura mater* as *panniculus grossus* (lit.: thick, coarse garment).⁶⁵⁹ Here, the materiality of the meninges is evoked through literal references to different types of fabrics, thus underscoring their tactile nature. The terminology is noted in Gerard of Cremona's translation of the *Canon* when he respectively uses *panniculus subtilis* and *panniculus duris* (lit.: hard or harsh) to describe and differentiate the cerebral meninges from the other membranes found in the body.⁶⁶⁰

As already noted, Albertus Magnus embraced *pannicula* when describing cranial anatomy.⁶⁶¹ Although this nomenclature appears frequently in medical texts by the thirteenth century, his use is likely to reflect his close consultation of the *Liber Pantegni* and Averroës' *Canon*. A particularly revealing passage lies in his description of the *pia mater* where he sets out how:

The *pia mater* serves a specific function as well, namely as a binding agent (*ligamentum*, lit.: bandage) for the quiet and pulsing veins that come to the brain. Due to the softness of the brain there is no doubt that these could not be contained were they not contained/held together (*continerentur*) in their proper locations and places by the aforementioned tissue layer (*panniculo*), almost in the manner of a membrane (*secundina*). For this reason, too, this pellicle (*pellicula*, lit.: skin) enters into the brain's substance at

⁶⁵⁷ A later example of *panniculus* as a colloquial term is found in Henri de Mondeville's Latin surgical treatise, *Cyrurgia*, (1312). He described the cerebral meninges as *panniculus*, cognate with *pannus* (cloth). When translated into Old French during the surgeon's lifetime, *panniculus* became *pannicle*; *pan* implied "a piece of cloth cut from an article of clothing, and panel, a piece of cloth." Marie-Christine Pouchelle, *The Body and Surgery in the Middle Ages* (Cambridge, UK: Polity Press in association with Blackwell, Oxford, 1990), 99.

⁶⁵⁸ Swanson, *Neuroanatomical Terminology*, 544.
⁶⁵⁹ Ibid., 233.

⁶⁶⁰ Strohmaier, "Constantine's Pseudo-Classical Terminology," 95.
⁶⁶¹ See above, fn. 642.

various spots along its division and moves towards its ventricles.⁶⁶²

Here, the physical closeness of the *pia mater* engaging with the brain, along with its tactile qualities, are more clearly elucidated. It is designated a "binding agent" or perhaps more precisely, a bandage (*ligamentum*), that served to contain/hold in place (*continerentur*) the arteries (pulsing veins) on their way to the brain. In this role, *pia mater* is literally described as a 'cloth bandage' that surrounds, protects, and supports the vulnerable brain and the veins that weave between the two. When considered alongside the literal implications of *mater* and the long-established maternal associations, this surrounding protective cloth adds a further highly suggestive hint of swaddling. This thin and delicate "cloth" diaphanously adheres to, but also "enters" (*ingreditur*) the brain. In this intimate arrangement the *pia mater* serves to stabilize the arteries that enter the brain. In this way these thin threads lace together the meningeal cloth and the brain in a manner that evokes the act of stitching. This presents rich parallels between the materiality and functionality of the *pia mater* with that of cloth, or more specifically a garment that is neatly tailored around the brain.

Comparable to Albertus' interest in the relationship between the *pia mater* and the brain, medical professionals and philosophers expressed similar interest in the marginal space between the meningeal layers. Earlier, William of Conches believed interwoven nerves that originated from the meninges fused these respective parts; the *pia mater*, which generated sensory nerves, stretched out anteriorly, while the *dura mater* produced voluntary nerves of motion that extended inwards towards the *pia mater* in the direction of the brain.⁶⁶³ In this way, William

⁶⁶² "Specialem tamen praestat utilitatem pia mater, quia videlicet est ligamentum venarum tam pulsatilium quam quietarum ad cerebrum venientium, quae absque dubio continere non possent propter molliciem cerebri, nisi panniculo dicto quasi secundina quadam coninerentur in suis propriis sitibus et locis: et hac du causa etiam in diversis locis divisionum cerebri haec pellicula ingreditur in substantiam cerebri et tendit ad ventriculos ipsius"; Book I, tract III ch. 1 (section 525), Stadler, *De Animalibus*, 1:187; trans.: Kitchell and Resnik, *On Animals*, 246. The English translation here has been slightly amended from that found in Kitchell and Resnik. ⁶⁶³ William of Conches believed that the cranial nerves originated in the meninges. This opinion notably deviates from that established by Galen and repeated by many, including Constantinus, that cranial nerves originated in the brain. Ynez Violé

conjures an image in which numerous thread-like nerves reach in towards one another and mingle together – matrix-like – and thus simulate the process of weaving. These closely intertwined fibres might further suggest the creation of a thin veil or loosely knotted embroidery inhabiting the space between the meninges. The head is thus presented as a layering of anatomical garments stitched together with biological threads.

Continuing in this vein, Albertus adds five additional layers surrounding the brain following the description of the *dura mater* and *pia mater* – hair, skin, flesh, woven membrane, and bone. Like the meninges, these are couched in a rich set of metaphors relating to cloth, threads, and weaving:

nothing connects the two [meninges] except the pulsing and quiet veins which come from the thick one (*spisso*) and either come as far as the thin one (*subtilem*) or even penetrate it. The thick one is bound (*alligator*) by certain pannicular-membranous ligaments (*ligaminibus pannicularibus*) which arise from it and which come to the division of the skull ... these pannicular-membranous ligaments pass through the bone ... and reach the outside of the skull. Here a pannicular-membrane is woven (*texitur*) from them which envelops (*involvens*) the exterior of the skull. Over this pannicular-membrane (*panniculus*) is spread (*tendunt*) the flesh which surrounds (*involvens*) the skull and next over this is the skin (*panniculum*) from which the hairs arise.⁶⁶⁴

O'Neill, "William of Conches' Descriptions of the Brain," in *Clio Medica*, vol. 3 (Oxford: Pergamon Press Ltd., 1968), 211; see further, "Diagrams of the Medieval Brain," 96.

⁶⁶⁴ "non est aliquid continuans inter eos nisi venae pulsantes et quietae ex spisso venientes et usque ad subtilem pervenientes sive penetrantes: alligatur enim quibusdam ligaminibus pannicularibus quae ex ipso spisso panno oriuntur et veniunt ad cranei divisiones, de quibus in anathomia capitis diximus, et illa ligamenta pannicularia etiam per os in suturis et aliis coniunctionibus pertingunt ad exteriora cranei, et ibi texitur ex eis panniculus involvens craneum exterius, super quem panniculum diffunditur caro quae est circa craneum"; Book I, tract III, ch. 1 (section 1.525), Stadler, *De Animalibus*, 1:187; trans.: Kitchell and Resnick, *On Animals*, 246-247.

Here, the entire head, with all its various components, were imagined as a complex assemblage of layered fabrics made of various materials; a vast network of biological threads stitches skin and muscular tissues to scalp, and bone, before finally joining with the meninges and the brain. Of particular note is the fact that the *pia mater* is identified as *subtilem*, which translates as fine-spun and delicate, and so emphasises the idea of skilfully woven fabric, possibly that of silk. The meninges are presented as a pulsing and protective interweaving of anatomical threads that conceal the brain. Arteries, with their unique construct, become the carefully woven (*texitur*) fibres that construct these vibrant meningeal tapestries. The passage concludes by highlighting the other cranial layers – flesh, skull, and skin – that are similarly described as cloths that wrap (*involvens*) the skull. Taken together, this account is redolent with references to sewing, weaving, and cloth-making that applies not only to the meninges but to each cranial layer and the threading between.

3.4d Marvellous Net: The Rete Mirabile

Further to the internal composition of the head, the *rete mirabile* (lit.: marvellous net) presents another pertinent facet of medieval anatomical accounts. Despite being a mythical element of the human anatomy that was incorrectly identified by classical physicians and not disproven until the sixteenth century,⁶⁶⁵ descriptions of it filled medieval medical literature. Like the meninges, it was perceived as a complex arterial network and described as being comprised of interwoven threads, layered nets, and folded fabrics and tunics. Some twelfth and thirteenth-century sources situate this anatomical element at the base of the brain, following that established by Galen and repeated by his followers. Anatomical images and their accompanying texts from the same period, however, position the *rete mirabile* across the forehead. As such, this 'marvellous net' presents yet another pertinent element of cranial anatomy worthy of consideration.

Galen described the *retiform plexus* (later the *rete mirabile*) as an intricate arterial network situated in a small cavity at the base of the brain that facilitated the transformation of vital spirits, from the liver and heart, into animal spirits

⁶⁶⁵ Swanson, Neuroanatomical Terminology, 601.

(*animus*).⁶⁶⁶ For Albertus Magnus, this feature was most clearly explained through copious references – both literal and highly metaphoric – to threads, weaving, and cloth that was

[a] net (*rete*) of the brain ... woven (*texitur*) ... using many veins and tunics (*tunicis*), themselves folded (*plicatis*) over tunics until they resemble pleats (*rugarum*) and so that there is no way for a single tunic to be picked out from the others. Rather, each is connected to the other as if bound (*ligata*) to it in a net (*rete*). It spreads to the front, to the rear, and to the right and left, making as it goes a complete net (*complendo totum rethe*) ... The net is spread out beneath the brain ... [and] placed between the bone and the hard pannicular-membrane (*panniculum*) of the brain [the *dura mater*].⁶⁶⁷

Here, the *rete mirabile* is imagined as a fantastic woven network of delicate living threads that collectively weave tunics; these then fold together and gather strength by overlapping and interlacing with one another. In order to express its complexity, Albertus relied on a wealth of terms and metaphoric references relating to weaving and fabric. The tight interweave of many threads suggests a finely woven cloth – possibly silk – a fabric that renders it particularly challenging to isolate a single thread. Albertus also accentuates the multiplication of this fabric as it creates a net and spreads across the entire area at the base of the brain. Following Galen's assertion, he situates this arterial network beneath the brain: more precisely, as lying between the skull and the *dura mater*. In this way, he identifies the *rete mirabile* as an integral element within the cranium's layered composition.

⁶⁶⁶ For overview, see: Rocca, *Galen on the Brain Anatomical Knowledge and Physiological Speculation in the Second Century AD*, 26:202–19, 251–53; C.G. de Gutiérrez-Mahoney and M. M. Schechter, "The Myth of the Rete Mirabile in Man," *Neuroradiology* 4, no. 3 (1972): 141–58.

⁶⁶⁷ "Rete ex eo texitur ex venis multis et tunicis super tunicas per modum rugarum plicatis, ita ut nullo modo una sola ex eis apprehendi possit, nisi cum alia continua, sicut sit cum ea ligata sicut rete: et spargitur ad anteriora et posteriora et ad dextram et sinistram, et sic vadit complendo totum rethe ... sub cerebro autem non est expanssum rete ... rete autem de quo diximus inter os et panniculum durum cerebri est positum"; Book I, tract II, ch. 20 (section 389-390), Stadler, *De Animalibus*, 1:138–39; trans.: Kitchell and Resnik, 192-193.

Illustrations of the *rete mirabile* emerge within Latin medical texts from the twelfth century onwards, and they are especially helpful for exploring cultural perceptions surrounding this intriguing cranial feature. One of the earliest known examples is preserved in a medical compendium produced around 1165 in the Benedictine monastery of St George in Prüfening in Bavaria (Figs 3.2a-b). Here, the *rete mirabile* is depicted on the forehead of a figure displaying the arterial system; this was one of five figures that formed part of an anatomical series – previously termed the Five-Figure Series (*Fünfbilderserie*) – that illustrated the veins, arteries, bones, nerves, and muscles of the human body.⁶⁶⁸ Each of these is represented within a human template, a schematic squatting figure with outstretched arms and forward-facing palms. The page is centrally divided, and the arterial figure is accompanied by a display of the veins to the left. Both figures gaze to the right and thus permit viewers to inspect their bodies without making eye contact. The image is accompanied by pseudo-galenic text, which frames the upper portion of the body. The text around the head and shoulders varies in size, and some words spill into the margins. This suggests that figure and frame were drawn prior to inserting the accompanying text, underscoring the visual material as integral to fully articulating this complex system. Text also appears within the figural template to identify

⁶⁶⁸ See: "Anatomische Zeichnungen (Schemata) aus dem 12. und 13. Jahrhundert und eine Skelettzeichnung des 14. Jahrhunderts," Studien zur Geschichte der Medizin 1 (1907): 49–65; "Der Text der anatomischen Bilder aus Prüfening (Prüfling) und Scheyern in weiterer handschriftlicher Überlieferung," Ein Beitrag zur Geschichte der Anatomie im Mittelalter speziell der anatomischen Graphik nach Handschriften des 9. bis 15. Jahrhunderts. Studien zur Geschichte der Medizin 4 (1908): 5–10; "Abermals eine neue Handschrift der anatomischen Fünfbilderserie," Archiv für Geschichte der Medizin 3 (1910): 353–58; "Weitere Beiträge zur Geschichte der Anatomie im Mittelalter," Archiv für Geschichte der Medizin 7 (1914): 372–74. Upon further investigation, Ynez Violé O'Neill discovered the "complete" series included nine systems. See: "The Fünfbilderserie Reconsidered," Bulletin of the History of Medicine 43, no. 3 (1969): 236–45; "The Fünfbilderserie - A Bridge to the Unknown," Bulletin of the History of Medicine 51, no. 4 (1977): 538–49. More recently, Taylor McCall has explored the Nine-Figure-Series in "Reliquam Dicit Pictura: Text and Image in a Twelfth-Century Illustrated Anatomical Manual (Gonville and Caius College, Cambridge, MS 190/223," Cambridge Bibliographical Society XVI, no. 1 (2016): 1–22; and "Illuminating the Interior: The Illustrations of the Nine Systems of the Body and Anatomical Knowledge in Medieval Europe" (Cambridge, Cambridge University, 2017).

important aspects of the arterial system, and thus presents an intriguing interplay between words and images.⁶⁶⁹

The text is further linked to the image with the use of the same dark brown ink to outline the body, face, and internal organs. These are distinguished from the arterial system that is articulated by bright red lines that present a striking contrast to both body and text. The arteries spread from head to foot and from limb to limb; they flow in and out of the liver (the conch shell organ to the left of the navel), the heart (the teardrop organ to the right of the thorax), and the gallbladder or spleen (on the lower right). The longest two red lines, which stretch from shoulder to foot, display delicate, feather-like hairs. With this arrangement they reiterate galenic textual accounts.

The text explaining the *rete mirabile* is situated above the figure's head, in close proximity to the anatomical feature it describes. It states that:

[The pulsing veins (arteries)] reach the jaw and the palate and appear on the face and come together from each side above each temple and across the entire forehead (*totam frontem*). And again they rise up to the brain and weave (*texunt*) themselves over it like a net (*rete*). This net guards (*custodit*) over and governs (*gubernat*) the brain.⁶⁷⁰

This passage describes the pathways of the arteries that make up the *rete mirabile* and clearly position it on the forehead. The woven nature of the edifice is stated, but this is further underscored by the image it creates: the arteries, which originate on either side of the head and stretch across the forehead. They then interlace to form a

⁶⁶⁹ The unique relationship between word and image within the "Gonville and Caius" anatomical is explored by McCall in "Reliquam Dicit Pictura." The figure displaying the arterial system (and *ret mirabile*), here Fig. 3.4, is considered below, p. 253. I am grateful to Taylor for clarifying that 'Vein Man' does indeed display the arterial system; pers. comm. email, 18 August 2016.

⁶⁷⁰ "Et veniunt ad fauces et palatum et apparent in facie et colligantur ex omni parte super utrumque tympus et per totam frontem. Et iterum ascendunt ad cerebrum et texunt se supra illud ut rete. Quod rete custodit et gubernat cerebrum". Sudhoff, "Anatomische Zeichnungen," 56; trans.: Hanna Vorholt.

protective net over the brain. In addition to the *rete mirabile's* frontal position, the text also specifies it as occupying the entire forehead.

In the associated image, the arterial edifice is displayed across the figure's forehead and configured as a grid-like net with a central rectangular area left blank; it traces the arches of the eyebrows and disappears under the hairline, and so covers the whole forehead (Fig. 3.2b). Like the text, the red arteries are depicted rising up from the body to terminate at the temples; across the forehead, individual lines crisscross over one another and overlap to form a complex grid. The thin lines express a series of delicate nature of arteries, and the grid-like pattern – which differs from the rest of the arterial system – represents the complex, interwoven network of the *rete mirabile*. Upon closer analysis of the illustrated edifice, the arterial lines are not straight, but rather they slightly curve in the area near the temple, and so suggest that the head of this two-dimensional figure was in fact round. Instead of a flattened surface, this arterial net wraps around the curvature of the cranium, indicating a soft, pliable composition of delicately woven nets or carefully folded fabrics.

The prominent frontal position of the *rete mirabile*, as drawn here, presents a notable departure from most written anatomical accounts, such as that by Albertus Magnus who situates it "beneath the brain" (*sub cerebro*).⁶⁷¹ In this position, however, the *rete mirabile* would have been hidden from sight in this image. Illustrating the network over the forehead exposes it for the viewer, and perhaps this explains the discrepancy between this visual account and its location, as established in textual accounts. Yet, considering the (perceived) importance of the *rete mirabile* to the functioning of the human body, the forehead – a site associated with being a prominent place of display⁶⁷² – presents an ideal place to relocate this significant anatomical feature.

In addition to this alternate placement, the blank rectangular area found in the middle of the *rete mirabile* presents a notable curiosity. Although it is not addressed in the text, this feature is repeated in later anatomical images, for example, in the nearly identical sequence found in a manuscript by one monk Konrad, from the nearby Benedictine monastery of Scheyern, (Figs 3.3a-b), dated to

⁶⁷¹ See fn. 668.

⁶⁷² See above, section 2.8.

around 1240.⁶⁷³ The *rete mirabile* is again positioned over the forehead and articulated as a grid of interwoven arteries with a central rectangular area that is left blank (Fig. 3.3b). Here, the articulation of this blank space is particularly significant for the striking comparisons to the many *fenestellae* incorporated into the Holy Virgins' skull reliquaries – a signature aspect of their composition.

Both Prüfening and Scheyern abbeys were known centres for manuscript production,⁶⁷⁴ and these images can evidence the continued importance of anatomical imagery within religious settings. Such networks were widespread. Two English manuscripts present similar anatomical imagery (Figs 3.4a-b, 3.5a-b), and are believed to be indicative of the extensive geographic circulation of the material.⁶⁷⁵ Instead of five systems, these two manuscripts present a nine-fold series with a single page devoted to each element. Although both of the arterial figures situate the *rete mirabiles* on the figures' foreheads, the visual representation of this anatomical feature is different from the two German examples previously discussed.⁶⁷⁶

The earlier of these anatomical images (Figs 3.4a-b) is dated to the late twelfth century, and so predates Scheyern's image. It is believed to have been composed by an English scribe associated with the Premonstratensian Abbey of St Thomas the Martyr in Hagnaby, Lincolnshire.⁶⁷⁷ The figure displays a smaller *rete mirabile* that occupies the top half of the forehead near the hairline (Fig. 3.4b). It is furthermore framed by two veins that originate from the torso, outline the cheeks, and join each other at the crown of the head. This *rete mirabile* itself is constructed with many evenly spaced and rectilinear lines - notably more than the German examples – that are similarly suggestive of densely intertwined arteries, and perhaps even of several nets folded together; it certainly conveys both the delicate

⁶⁷³ It is almost certain that the Prüfening series served as the prototype for these images. Recently, McCall has suggested that it might not have been the original, but rather a copy of a now-missing prototype. For more regarding the origins of the Five- and Nine-Figure series, see: "Illuminating the Interior," 37–42.

⁶⁷⁴ Robert Herrlinger, *History of Medical Illustration, from Antiquity to A.D. 1600* (London: Pitman Medical, 1970), 11.

⁶⁷⁵ See again, McCall, "Illuminating the Interior," 37–42.

⁶⁷⁶ There exist only a few images of cranial anatomy that date to the high medieval period, and two examples from part of the nine-fold series. See further, O'Neill, "Diagrams of the Medieval Brain."

⁶⁷⁷ Ibid., 50–53.

and complex composition of the anatomical feature. In this image, however, the lines of the network are notably denser and remain contained within the larger veins that frame the face. Further to appearing smaller in size, these straight lines express a flat surface, and are not suggestive of wrapping the figure's head as noted in the Prüfening image. Instead of a central rectangular blank space, this rendition presents a semi-circular shape at the apex of the *rete* that is filled with fine brown lines.

By comparison, the Oxford figure dated to 1292 (Figs 3.5a-b) presents notable differences to the earlier examples alongside some striking similarities. Comparable in its schematic design, representation of internal organs, and arterial arrangement, this figure is by far the most ornate and vibrantly illustrated. The bright blue arteries deviate from their customary red counterparts and the organs are highlighted in pale gold. An elaborate vegetal frame surrounds the figure; the vines on either side grow towards the figure's head; the upper horizontal border, which is itself bisected by the figure's cranium. Here the vines stretch towards the forehead, and focus the viewer's attention on the *rete mirabile*, which is further accentuated by the upper frame. The scrolling vines with their vibrant green leafy branches further intertwine with this outer frame and they stretch in towards the arterial net, thus mirroring both the interwoven composition of the *rete mirabile* and its nourishing qualities.

Like the Cambridge example, the *rete* is smaller in size, situated in the upper half of the forehead, and contained within an arterial border (Fig. 3.5b). The complexity of the network is again emphasised with copious cross-hatchings, although here positioned at an angle. Closer inspection reveals the lines on both right and left are drawn closer together suggesting the presence of a round surface below. In contrast to the Cambridge example, but similar to those in Germany, this image incorporates a central, blank rectangular area. Here, however, this space is rendered in a brilliant white, brighter than the figure's skin tone, and matching only the white of the eyes. It is plausible that this space received no pigments, and so reveals the parchment below. In this way, it could be seen as providing a window to what lies beneath.

The continued textual descriptions of the *rete mirabile*, together with its visual representation found in anatomical imagery, certainly speaks to the canonical

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status of galenic teaching in high medieval medicine. It continued to be promoted as a complex interweave of threaded arteries. These accounts embrace rich language, similar to that of the meningeal descriptions, which promote both literal and metaphoric references to threads, weaving, and tunics. As such, these accounts present an additional example where the materiality of cloth and cloth making is situated within the human head. As investigated here, the grid-like rete mirabile certainly convey its delicate, complex, and interwoven composition. Yet, these present notable differences to textual accounts, namely in the re-positioning of the rete on the forehead and the integration of a smaller space delineated within. The relocation of the *rete mirabile* from the rear of the brain to the forehead ensures that it was clearly visible to viewer, and so underscoring its anatomical importance and visually verifying its existence. This positioning might furthermore indicate a strategic intention to harness the power of the forehead – a site associated with being a prominent place of display.⁶⁷⁸ The repetition of these visual articulations suggest the emergence of a visual tradition that, although related to textual accounts, institute notable changes, and are strikingly similar to that of the material and structural assemblage of the Holy Virgins' skull reliquaries.

3.5 The Construction of Sacred Anatomy: Considering the Holy Virgins' Skull Reliquaries with Textual and Visual Cranial Accounts

As established, the discussion of the human head featured prominently within high medieval scholarly literature, much of which was produced by and circulated within religious communities. The detailed accounts composed by Albertus Magnus confirm that this knowledge was present in thirteenth-century Cologne, where it was likely complemented by other sources. It is, therefore, highly probable that those responsible for assembling the textile reliquaries were familiar with medical perceptions of human cranial anatomy. Certainly, the remarkable resemblance between these scholarly accounts and the textile reliquaries can be regarded as significant, and it is in this light that the structural, material, and spiritual aspects of these objects can now be further explored.

While a direct correlation between reliquary materials and cranial layers is inviting, a like-for-like comparison is not feasible; the material and structural

⁶⁷⁸ See above, section 2.8.

compositions of the relics vary greatly from one to the next, and so make it impossible to establish correlations in a consistent manner. Furthermore, the textile reliquaries fundamentally blur the lines between interior and exterior, and thus problematize a precise correlation of materials with cranial layers. The forehead bone, for example, might be seen as the skull, and so function as cranial layer between the *dura mater* and the scalp; yet the preciousness of the sacred bone might also render it comparable to the value associated with the brain, suggesting its position nearer to the internal core. It is more likely, therefore, that these shaped reliquaries reflect a complex conceptual relationship informed by the medical sources accessible to the religious. As creative, symbolic interpretations of the human head, they might indeed be considered to present material and visual echoes of the cranial construction expressed in medical texts and images.

3.5.a Layers and Structural Composition

Given that the skull reliquaries are composite and layered constructs,⁶⁷⁹ they can clearly be regarded, from a structural perspective, to embody cranial anatomy as it was set out in the textual accounts. As noted, these reiterated layering as fundamental to the configuration of the human head. Albertus Magnus, for example, identified the layers surrounding the brain as: hair, skin, flesh, a woven membrane, bone, *dura mater*, and *pia mater*.⁶⁸⁰ When underscoring those closest to the brain, he draws attention to the presence of multiple layers, most notably the *panniculi* (lit.: cloths or small garments;⁶⁸¹ he similarly expanded on this configuration, in a separate passage, by stating that the skull, which surrounded the *pia* and *dura mater*, was covered (from above) in a soft membrane, flesh, and skin respectively.⁶⁸² These layered components, each with a unique function and material composition, contributed to the overarching role to protect the brain. The comparisons between reliquary and cranial layers are made even more remarkable when considering both incorporated fabrics: metaphoric and literal references together with actual cloth layers.

Indeed, enveloping the sacred relics within layers of fabric was a method

⁶⁷⁹ See above, sections 2.6 and 2.7.

⁶⁸⁰ See above, fn. 639.

⁶⁸¹ See above, fn. 642.

⁶⁸² See above, fn. 665.

universally observed in the construction of these reliquaries.⁶⁸³ It is worth remembering that the composition of skull C.SMA.1 (Figs 1a-k) consists of five distinct layers: an internal linen pouch, plant fibres, fine white linen, fine salmon linen, and finally a silk 'hood' and a velvet 'mask'. Others, such as skull C.GK.4 (Figs 2.38, 2.39a-h), present a similar number of original layers, while additional fabric covers that were applied in subsequent centuries have further enhanced this effect.

The layered design of the reliquary, like that of the human head, was effective for containing, supporting, and protecting its contents, and so they fulfil one of the principal objectives of a reliquary. Relics were perceived as highly precious and 'activated', and so vulnerable to earthly threats. In this light, relics present similarities with the soft and delicate brain, which despite its physiological importance was rendered defenceless. Together with providing structural fortification, and in some cases maintaining structural integrity, this design offers physical safeguarding. Like the human head, the multiplication of textile layers of the reliquaries protect the precious contents within. When wrapped within layers of fabric, the extensive re-constructive efforts of skull L.HVA.1 (Fig. 2.49), for example, (convincingly) presented a whole cranium.⁶⁸⁴

These various layers of the textile reliquaries were assembled in ways that wrap, surround, and contain the sacred material within. Each tier was composed by carefully tailoring materials to fit the individual shape of the skull or cranial reconstruction, and in this way they embody the perception of the human heads as being composed of many layers. Constantinus and William of Conches both explain the brain as being "encompassed/enclosed" (*circundant*) by the meninges. Constantinus repeated this term when, for example, he expounded on the specific relationship between the *pia mater* and the brain.⁶⁸⁵ Similar terminology is noted in *De animalibus*, when Albertus used the term *involvens* (lit.: wrap (in), cover, and envelop) to indicate the way that each layer enveloped that which lay beneath.⁶⁸⁶ He furthermore explains the *pia mater* as "clinging" (*adhaerens*) to the brain and

⁶⁸³ See above, section 2.6; see further, section 2.10.

⁶⁸⁴ See above, 2.7b.

⁶⁸⁵ *Liber Pantegni*, as quoted above, fn. 654; William of Conches, see above, fn. 648; both passages are the result of translating Haly Abass' terminology, which implies the same envelopment; see fn. 646.

⁶⁸⁶ See above, fn. 665.

holding (*excipiens*) it".⁶⁸⁷ It is the *pia mater's* "soft and thin" (*subtilis mollis*) composition that facilitates this gentle, adhesive wrapping. The language in these cranial accounts emphasises a structured arrangement where each layer is all encompassing, and so every layer envelops but is itself covered.

Furthermore, although the entirety of some reliquaries were wrapped within textiles, as evidenced in, among others, skulls C.GK.5 and C.GK.8 (Figs 2.34, 2.35), the majority incorporate a *fenestella*. Despite exposing the 'foreheads', these form-fitting textile compositions were nevertheless designed to contain and support the relics within. In fact, this area frequently exhibited extensive stitching, pleating, and other manipulation of fabrics, ensuring that the openings were structurally secure, in addition to being ornately decorated. For example, skull C.SMA.1 shows that the silk 'hood', salmon linen, and metal ribbon were delicately pleated to fit around the arches of the frame (Fig 1a); the materials were tailored with care to embrace the curvature of the forehead and contain the sacred material within. As visible here, the *fenestella* was framed with a decorative ribbon that likely 'fortified' the edges, in addition to providing material finery for this liminal space. Other examples, such as skulls C.SMA.2 (Fig. 2.31g), C.GK.2 (Fig. 2.32g), and C.GK.3 (Fig. 2.33i), incorporate ornate bands across their *fenestella*, which offer additional structural reinforcement for fractured or 'fused' bones.⁶⁸⁸

As we have seen, the *fenestella*, consistently situated over the forehead, constitutes one of the signature features of the Holy Virgins' skull reliquaries. The opening provides a point of access where the sacred matter is exposed. Although this feature has already been explored in this study, it requires additional consideration in light of the anatomical illustrations of the *rete mirabile*. The texts do not explain the blank rectangle illustrated in the diagrams, but it presents a remarkable resemblance to the textile wrapped skulls and the positioning of the *fenestella* over the forehead. Indeed, the nets of the *rete mirabile* were textually and visually expressed as overlapping and folding in the same manner as cloth, and in this way they present strong parallels to the construction and materials of the Holy Virgins' reliquaries. The blank spaces found in the anatomical images present a significant visual disruption to the grid-like webs that spread across the figures'

⁶⁸⁷ See above, fn. 642 and 653.

⁶⁸⁸ See also, pp. 160-61.

foreheads. Like the reliquaries' *fenestellae*, the blank space is situated in the middle of the forehead, with the exception of the Cambridge image that displays a semicircular area at the top of the crown. The accompanying texts specify that the *rete* spread *over* the brain, and so suggest that the brain is situated *behind/under* this arterial net. The positioning of this blank space in the middle of the otherwise dense interweave of biological threads might be suggestive of an opening to that which lay beyond – in this case, the brain. In addition to their visual and material similarities, these curiosities might also function in a manner analogous to the *fenestella* as a site of revelation. Like the activated potency and precious value of relics, a human brain was perceived as one of most valuable body parts, and this is reiterated by the complex layered composition of cranial anatomy – all of which was designed to protect the brain.

3.5.b Material Comparisons

The numerous structural similarities between text and reliquary become all the more apparent when the language used to describe the anatomical features is considered. As noted, the description of cranial layers frequently employed literal and metaphoric references to cloth, garments, and the act of weaving and sewing. Of particular note here is the term *panniculus* (lit.: small garment or piece of cloth) that was often used to describe the meninges and other cranial layers. The nomenclature is present, for instance, in Constantinus' eleventh-century translations when he states that the brain was wrapped by two *panniculi*; it was frequently repeated and promoted in the subsequent scholarship, particularly that of William of Conches and Albertus Magnus. Indeed, its constant repetition in high medieval medical works and encyclopaedic entries strongly suggests that the meninges were widely perceived as layers of fabric that surround the brain at that time.

The prolific incorporation of fabric is one of the most defining characteristics of the Holy Virgins' skull reliquaries, and thus in the most direct sense, they render these objects as embodiments of scholarly perceptions of cranial anatomy. Although textiles were frequently used to wrap sacred bodies and body parts or secondary relics, the use of fabrics in the textile reliquary arrangements of the Virgins' skulls was unprecedented at the time of their creation. Given that cloths and textiles served as both internal fortification and external ornamentation in these

arrangements, it is possible that several factors influenced this construction. Some reliquaries involved an extensive material fusion by which cloth and bones were rendered indistinguishable from one another. They present the skilful manipulation of cloth that was cut, arranged, folded, and sewn together and otherwise fashioned to fit each 'skull' relic, thus echoing the understanding of *panniculi* as tailored 'garments'.

The meninges were furthermore differentiated by their respective materiality, as conveyed in translations of Averroës' *Canon*, in which the *dura mater* is described as *panniculus grossus*, a thick, coarse garment, and the fine-spun, delicate *pia mater* as *panniculus subtilis*.⁶⁸⁹ Albertus Magnus invokes a similar terminology when explaining the meninges as "thick" (*spisso*) and "thin" (*subtilem*) respectively.⁶⁹⁰ These textual descriptions articulate the perceived differing materiality of the meninges and evoke strong tactile sensations. Like the meningeal composition, the Holy Virgins' textile reliquaries incorporated a host of materials that varied in composition and that also functioned in relation to their materiality. Further to the symbolic interpretations, materials such as linen might be seen as embodying another function. Skulls C.SMA.1 and C.GK.4 (Figs 1, 2.39), for example, present numerous materials that included coarse plant fibres, plainly woven linen, together with delicate, bleached linen, silk, and velvet. The construction of the Holy Virgins' reliquaries can be understood as physical manifestations of these descriptive metaphors.

Of particular note, the two-fold meninges, which both gently embraced and structurally supported their contents, developed linguistically as the 'mothers' of the brain as we have seen. In this way, the layering of fabrics around the 'skulls' performs the same function, by cradling the delicate bones, but also offering structural support. Bone and fabric were strategically arranged, sharing direct contact; in many cases – especially when concealed beneath external layers – it was impossible to differentiate bone from fabric. These instances were further exaggerated when cloth substituted for bones by enveloping them within pouches, or being rolled and shaped into jaws, cheeks, noses, and even entire skulls. This conflation of material and maternal associations becomes more profound when

⁶⁸⁹ Swanson, *Neuroanatomical Terminology*, 233, 544.

⁶⁹⁰ See above, fn. 665.

considering Isidore of Seville's etymological explanation that "a mother is so named because something is made *from* her, for the term 'mother' (*mater*) is as if the word were 'matter' (*materia*).⁶⁹¹ Here, like cloth fashioned into a garment, a mother's life-giving quality is related to material, drawing attention to the organic union between mother and offspring. As noted in the the reliquary construction, they swaddle and are often indistinguishable from the bones they envelop, embodying the same protective, maternal, and material qualities of the meninges.

Within the cranial accounts, descriptions and imagery associated with arteries (termed pulsing veins) and sensory/voluntary nerves present further intriguing parallels with the act of sewing and weaving. These delicate and thin fibres were understood to unite the *dura mater* with the *pia mater* and join them to the brain; Albertus Magnus notes arteries as being bound and stabilized by the *pia mater* before lacing it to the brain.⁶⁹² In this way, they stitch together the layers of 'small garments' around the brain. Another notable similarity is noted in William of Conches' description of the sensory and voluntary nerves mingling together between the meninges, and so suggestive of the act of weaving.⁶⁹³ In these ways, evocative parallels of stitching, weaving, and fashioning clothes are presented. Arteries, like strands of thread, are delicate and frail, yet strengthen through the act of weaving; both serve as fundamental elements of cranial anatomy and relic assemblages.

As essential components of the *rete mirabile*, arteries also featured as 'biological' threads, strands of different compositions that were interlaced and knotted together to form a "marvellous net", a process that is notably similar to that of creating *Filetstickerei*, the delicate and elaborate silk embroidery that has been noted as decorating the Virgin's holy heads (Figs 2.70-2.84).⁶⁹⁴ According to Albertus, the elaborate arterial tapestry was overlapped, folded, creased, and situated at the base of the brain. It is a description that evokes rich associations of woven threads, which culminate as in intricate fabric, all occurring within the human head. The skull reliquaries were fashioned by joining together several

⁶⁹¹ "Mater dicatur, quod exinde efficiatur aliquid. Mater enim quasi materia". Lindsay, *Etymologiarum*, 1:Book IX, iv, v; trans.: Barney, *Etymologies*, 206.

⁶⁹² See above, fn. 663.

⁶⁹³ See above, fn. 664.

⁶⁹⁴ See above, pp. 171-72.

materials – many folded, rolled, stretched – that were all joined by thread. The *rete mirabile*, furthermore, was believed to supply the brain with life-giving spirits, and was thus a crucial to sustaining life, and it too was articulated by means of rich textual references to cloth, and the acts of weaving and threading. The function of this woven net might therefore be considered comparable to textile reliquaries that similarly reconstructed, restored, and otherwise imbued the relics with life.

When considered together with the popular textual and visual tradition of describing cranial anatomy through literal and metaphoric references to threads, weaving, nets, cloth, and small garments, the Holy Virgins' skull reliquaries demonstrate a conscious and complex process of design. Their construction embodies a sophisticated engagement with the most current anatomical scholarship that promoted the head as a construct involving successive layers of fabric. In these ways, the reliquaries are strongly suggestive of re-creating 'realistic' cranial anatomy, which together with the addition of other 'living' features, appear to reconstruct their sacred anatomy.

3.6 Threading Bones and Cloth: Surgical Assembly of Relics

Indeed, as explored here, the Holy Virgins' skulls were deliberately modelled in the likeness of human anatomy. The re-creation of 'living' and 'complete' heads thus involved the acts of 'creation', and so might also suggest connections with cranial surgical treatments that likewise sought to restore heads to a healthy state of being. In this light, relic assemblers might have been perceived to be performing as surgeons, who, with each 'divine' operation, mended the Virgins' 'ancient' injuries and restored their earthly presence. In fact, exploration of a surgeon's role, as promoted in surgical treatises, of the imagery of cranial treatments, and of the materials used in surgery, illuminate further parallels between the treatment of human and saintly bodies.

A surgeon's primary objectives, according to Teodorico Borgognoni (1205-1298), the prominent Dominican surgeon and contemporary of Albertus Magnus, were: "the joining of broken parts; the separation of parts unnaturally joined; and the removal of whatever is superfluous."⁶⁹⁵ He also believed that the term *chirurgia* (surgery) derived from the Greek *cyros* (hand), but also emphasized decisive *agia*

⁶⁹⁵ Borgognoni, *The Surgery of Theodoric ca. A.D.* 1267, 5–6.

(action).⁶⁹⁶ Historically, surgery was deemed a manual profession generally associated with barbers, and many of the associated (negative) perceptions persisted in the high medieval period. Yet, it eventually emerged as an intellectual profession, largely as a result of the wider medical developments of the late twelfth century, and increased in prestige during the thirteenth and fourteenth centuries. Among the many skills required by these emergent surgeons was primarily the knowledge of human anatomy and physiology. Promoting these subjects, surgeons composed surgical treatises that reveal the contemporary understanding of cranial anatomy and the corresponding treatment of head wounds. In fact, in composing their technical compendia, surgeons effected a resurgence of a particular medical subject area, and so served to bridge the gap between learned academics and technical 'crafts'.⁶⁹⁷

In the late thirteenth century, Lanfranchi of Milan (active in Lyon and Paris) declared surgery a branch of medical science that required the treatment of a patient's body with one's hands "be that cutting and dissecting what was whole, or be it uniting as best as one can that which is separated by cutting or by fracture, and by removing what is in excess." ⁶⁹⁸ He thus underscores specific ways in which a surgeon physically manipulates a patient's body. Later, reiterating these three objectives, Henri de Mondeville (*c*. 1260-1316) specified that separated elements should be "restored ... as neatly as possible to their original state",⁶⁹⁹ emphasizing the need for skilled dexterity, and a 'cosmetic' approach.⁷⁰⁰

⁶⁹⁶ Namely he specifies Hippocrates and Galen. Ibid., xv–xvi.

⁶⁹⁷ The complexity of the surgical movement is explored in great detail by McVaugh in *Rational Surgery*.

⁶⁹⁸ "Est scientia medicinalis qua docemur operari cum manibus in humano corpore, continuitatem solvendo, et solutionem continuitatis ad statum pristinum vel priorem qua[ntu]m possibile fuerit reducendo, et superfluitatem extripando secundum intentionem theoricae medicinae". Ibid., 59; trans.: Rosenman, *Lanfranchi of Milan*, 30–31.

⁶⁹⁹ This is a translation of E. Nicaise's French translation of the Latin manuscripts in Berlin, Paris, and Erfurt. Leonard D. Rosenman, *The Surgery of Master Henry de Mondeville*, vol. I (Philadelphia, PA: Xlibris Corp., 2003), 195. Latin text not accessible.

⁷⁰⁰ Herni de Mondeville did not advocate for cosmetic surgery, *per se*, yet he did prefer to suture as neatly as possible. McVaugh explores these topics in *Rational Surgery*, 98–102, 218–22.

Like the 'repairs' performed on human patients, many of the Holy Virgins' skulls underwent similar 'surgical' treatments – cleansing, cutting, uniting, and reconstructing – all with the aim of producing an anatomically 'complete' cranium. Textiles were cut, parchment (skin) was dissected then folded and stitched in place, and fractured bones were 're-set' and bandaged. The manipulation of bones within some textile reliquaries, which was extensive in some cases, accentuates such associations with 'reconstructive' surgery. These spiritually activated objects were believed to embody the Holy Virgins' living essence, who, as promoted in their hagiographic texts, were brutally martyred. Although the vitae did not specify that the heads of the Virgins were wounded or that they were severed from the body, skull relics that display the "sign of the martyr" nevertheless emerged as particularly prized within the cult. As noted, a 'wounded' bone was strategically positioned within the *fenestella* of Skull L.AA.1 (Fig. 2.48), while other reliquaries display similar markings (Figs 2.62-2.65).⁷⁰¹ It seems the practice of exhibiting wounds occurred alongside 'divine surgical' operations, which sought to reassemble and to 'heal' the holy heads without leaving evidence of cranial 'treatments' or 'scars' (Fig. 2.49).

These comparisons become yet more suggestive when examining the illustrations of cranial treatments found in a French translation (*c*. 1300) of the surgical treaties by Roger of Salerno (Roger Frugard/Frugardi, before 1140–*c*. 1195) that was originally composed in Latin around 1180 (Figs 3.6-3.9),⁷⁰² and so contemporary with the excavation, authentication, and circulation of the Holy Virgins' relics; the later surgical imagery corresponds closely to Cologne's earliest known textile reliquaries (1280). In the French manuscript, a total of 144 images are arranged within grids of nine panels spread across sixteen pages preceding the accompanying text. The top row illustrates the Christological narrative while surgical treatments are detailed in the lower two rows;⁷⁰³ these correlate with Roger's textual explanations, yet they were likely intended to elaborately

⁷⁰¹ See above, 167.

⁷⁰² The medical compendium is found in the British Library, Sloane 1977 *c.* 1300. This original surgical treatise, which was glossed by Roger's student, Roger of Parma, circulated widely. During the late thirteenth century there existed both Latin and many vernacular transcriptions. Karl Whittington, "Picturing Christ as Surgeon and Patient in British Library MS Sloane 1977," *Mediaevalia* 35, no. 1 (2014): 85. ⁷⁰³ See further, Whittington, "Picturing Christ as Surgeon and Patient."

demonstrate the 'holy' nature of the surgeon's skills. Indeed, in a recent study of this unique manuscript, Whittington revealed iconographic parallels between the surgical and Christological imagery; within this framework, he also considered the *Christus medicus* archetype and explored comparisons between Christ as surgeon/physician and Christ as patient. Despite being an isolated example, this further reflects the long-established associations between high medieval religion and medical practices. The miniature concluding the surgical series, for example, presents a monk tending a bed-ridden patient (Fig. 3.10). While this may well reference the seven acts of mercy, it may also indicate that the manual was made for or used within a monastic community.

Of the ninety-six surgical scenes, nearly 30% (24) deal with cranial operations, conveying the cranium's primacy within a medical context. Although these are challenging to identify with certainty, the treatments of three cranial injuries seem to be featured. The first surgical series opens in the middle left image, situated beneath the Annunciation (Figs 3.6a-b) and concludes on the following page (Figs 3.7a-b); here, a surgeon holds a scalpel-like tool towards an incision on the patient's upper forehead. In the opening scene, the jars on a shelf in the upper right corner situate this within a 'medical' space; although this detail is absent from the remaining scenes of cranial treatments, it is suggested these operations were also carried out within this designated space. The surgeon is then depicted using pliers to remove an object from the patient's head (the removal of which is superfluous) and displays a notably enlarged incision.

The following four images on this page detail post-operative care that include: the application and removal of a large cloth, possibly a poultice; the application of another cloth pad – possibly one that was soaked in an ointment contained with the surgeon's bowl; and finally, the application of another pad or bandage. This sequence continues on the next page (Figs 3.7a-b) where the surgeon wraps the patient's forehead within a long strip of fabric (Fig. 3.7c). He then unwinds and removes the bandage used to envelop and protect the patient's head (Fig. 3.7d). The sequence concludes with the next two images where, from an open jar, the surgeon sprinkles a white powder or liquid over the cranial wound before applying the final cloth dressing (Fig. 3.7b).

The second cranial operation begins in the lower centre of the third register of fol. 2v and continues on fol. 3r (Figs 37-38). To begin, the surgeon uses a large knife to cut an X-shaped incision into the patient's head before inserting a tool into the opening (Fig. 3.7e). On the facing page (Figs 3.8a-b) he appears to apply an ointment or powder to the patient's head with great force, after which he dabs the wound with a cloth while holding an additional piece of fabric (Fig. 3.8c) – possibly the long bandage that is wrapped around the patient's head in the next image (Fig. 3.8d). Here, the surgeon, who has wrapped the cloth strip across the patient's forehead and crossed it at the base of the skull, is shown about to complete the bandage by binding the head with the remaining cloth. He then tends to his bedridden patient, who displays an elaborate cloth bandage (Fig. 3.8f).

The next eight images are spread across fols 3r-3v (Figs 3.8-3.9) and present a complex operation that required the use of several tools, including scalpels, knives, and pliers. The series begins in the centre of the third register where the surgeon incises the patient's forehead from ear-to-ear, and then lifts the scalp as if hinged at the back of the skull (Fig. 3.8g). The following five images depict the surgeon inserting tools into the wound, applying ointments, and finally concluding with wrapping the repaired head within an elaborate cloth bandage (Figs 3.9b, c).

Collectively, these images articulate the manual manipulation – with bare hands and tools – required for treating cranial injuries. With the exception of the bedridden patient, the figures are conscious and alertly gesticulate while slightly leaning their head towards the surgeon performing the medical procedure. These are highly constructed scenes and they offer particularly helpful points of comparison with the construction and display of the Virgins' textile reliquaries and the wooden busts. For instance, the scenes frequently position the patients' wounds on the forehead; in the case of the patient with the cross-shaped incision this is particularly noteworthy (Figs 3.7e, 3.8c). It is here that the surgeon cuts the patients, where tools were inserted, foreign objects removed, and ointments applied. The forehead is thus visually promoted as the primary site for surgical operation, but also as the place where the internal anatomy of the head was accessed. Clearly, in the skull reliquaries, the *fenestella* served as the access point; it is where the sacred material was displayed. Indeed, analysis of the reliquaries repeatedly indicated this as a site of extensive manipulations: here bones were

selected and purposefully positioned; it was also where fabrics and lavish textiles were cut, situated, and finally tailored to encircle the opening. Ornate metal ribbons frequently framed the *fenestella* and so dematerialized the definition of boundaries between bone and fabrics. It is also important to remember that the wooden busts were 'incised' across the forehead, and designed to hinge open, in a way similar to that presented in this cranial surgery (Fig. 3.8g). It was through this opening that one could access the textile wrapped skull that was cradled within the hollowed out cranial cavity, and so presents a corresponding 'point of entry'.

The ubiquitous use of fabrics within the surgical treatment of cranial wounds is particularly relevant to this study, as it suggests notable similarities to that found in the composition of the Holy Virgins' skull reliquaries. In several images, cloth featured as the material for staunching wounds, applying ointments, and for binding the head (e.g. Figs 3.7c-d, 3.8c-f, 3.9c). It was clearly understood that cloth played an integral and multifaceted role in the preparation and execution of surgical procedures. It was also rendered as the material responsible for mending and supporting a repaired cranium. While these images underscore the various ways in which cloth was used within surgical contexts, historically it seems that linen was the material of choice;⁷⁰⁴ furthermore, varying linen weaves were employed for different medical purposes: loosely woven linen was utilised for staunching the application of herbal remedies and poultices, while finely woven materials were required for bandages.⁷⁰⁵

The use of linen in surgical procedures is captured within high medieval treatises, for example by Teodorico Borgognoni who specified that soaked linen (tow) bandages were used to dress cranial wounds.⁷⁰⁶ This is also noted by William of Saliceto who, when treating a head injured by a direct blow, instructs his reader to "fill the scalp wound with pledgets of oakem or linen wet with yolk. Then lay on a linen compress, thick and wide, wet with anointing oil, and cover the entire region

⁷⁰⁴ Christina Lee, "Threads and Needles: The Use of Textiles for Medical Purposes," in *Textiles, Text, Intertext : Essays in Honour of Gale R. Owen-Crocker*, ed. Maren Clegg Hyer and Jill Frederick (Woodbridge, Suffolk: Boydell Press, 2016), 103–17. Lee's consideration of Anglo-Saxon medical practices was instrumental for understanding the materiality of medicine in the era leading up, but also likely continuing throughout the high middle ages.

⁷⁰⁵ Ibid., 109–12.

⁷⁰⁶ Borgognoni, *The Surgery of Theodoric ca. A.D. 1267*, 117 (Book II, ch. 5).

with a larger pad or pads."⁷⁰⁷ Layers of linen and other materials are here arranged in manner that aids in the healing of a cranial wound. Here, linen is described as being inserted *into* the scalp and as directly *touching* the injury. Before being completely bandaged a linen compress was applied with a larger pad placed over it. In this arrangement linen occupies a liminal space between the cranial wound and other cloths, and thus mirrors the placement of linen as directly touching the bones of the Holy Virgins' 'treated' skulls.

In addition, several scenes within the surgical sequences illustrate the application of ointments, powders, and poultices. Of particular note, wine was often used in surgical procedures and as part of the aftercare of wounds.⁷⁰⁸ These topical treatments suggest parallels to the handling of relics, as recorded by Caesarius of Heisterbach, who stated that the recently-excavated bones were washed in wine and left to dry on sheets of white linen at Altenberg Abbey. In this way, it seems the sacred bones were similarly 'prepared' for assemblage after applying a designated liquid and then dried on white linen.⁷⁰⁹ Although this is as a rare account of relic treatment prior to being wrapped in textiles, it is likely that the Holy Virgins' relics received such treatments on other occasions. In this way, surgical procedures and topical treatments – many of which called for the use of wine – for the living were analogously enacted for the sacred.

Within the manuscript scenes the five that feature fabric head bandages are particularly relevant to this study (Figs 3.7c, d, 3.8d, f, 3.9c). The surgeon is shown in the process of wrapping long strips of fabric around his patients' skulls in three instances; one patient presents a complete cranial bandage while another is shown as the strips are being removed. After having undergone internal and surface operations, the injured heads are shrouded within linen and left to heal. Fabric that was administered through elaborate bindings are thus associated with containment, protection, and restoration. In the final bandaging scene (Fig. 3.8d) the surgeon wraps a long strip of white fabric – possibly linen – around the visibly injured head; the crown is bisected by a jagged line that might indicate a cranial fracture or a sutured wound (Fig. 3.8e). The fabric is first set across the patient's brow, bound

⁷⁰⁷ Rosenman, *William of Saliceto*, 91.

⁷⁰⁸ See, e.g. William of Saliceto, Teodorico Borgognoni, Lanfranchi Milano, and Henri de Mondeville.

⁷⁰⁹ As noted above, pp. 134-35.

around the sides, and crossed at the back; there is a long strip of remaining fabric which emphasises the copious amount of material that was required in such cases.

Further to the surgical use of linen mentioned thus far, this material also served as suturing thread. When discussing the practice of stitching together face wounds, Teodorico explained that: "if a wound penetrates deeply you should begin from each side with linen (thread) and likewise bind it tightly, skilfully, and with nicety."⁷¹⁰ Again reiterating the importance of professional skill and aesthetic reconstruction, he also emphasises the act of sewing – with linen threads – as the ideal method of repairing a surface wound. Other sources mention silk, which was delicate yet durable, as ideal for medical stitching.⁷¹¹ In this role, linen and silk were clearly the materials of choice for re-joining separated skin and for maintaining stability while it heals.

A marginal image situated in an early fourteenth-century medical compilation, now part of the Wellcome Collection, provides another intriguing image of a surgeon suturing a cranial wound (Fig. 3.11a). The patient, possibly a hybrid creature and depicted as an over-sized bust, exhibits two large and jagged lesions across the crown of its head. The wounds are accentuated with bright red ink, and judging by the patient's expression, appear to be a source of great pain. The surgeon is notably smaller in size, positioned at the patient's back and shown kneeling on his shoulder. He wields a disproportionally large needle threaded with a bright red string. His right arm is lifted, the needle pointing towards the injury; it is the act of sewing that is thus accentuated. His other hand is positioned on the patient's head; his bent fingers suggest a pinching together of the lacerated skin while also holding it in place before administering the sutures. There are faint red lines on the patient's neck and the back of the skull, which might identify other, less serious lacerations, or possibly ones that had already been stitched together. On the same page, a neck-length bust of a bearded onlooker glances sideways with an expression of dismay (Fig. 3.11b). Unlike the cranial operations in the transcription of Roger of Salerno's surgical treatise, this image presents a surgeon in the act of repairing a cranial wound with a needle and thread.

⁷¹⁰ Borgognoni, *The Surgery of Theodoric ca. A.D. 1267*, 19 (Book I, chap. 4).

⁷¹¹ Lee, "Threads and Needles," 112.

The careful suturing of cranial and facial wounds requires the expertise of a practised surgeon, and in this way comparisons can be made to those stitching together the Holy Virgins' skull reliquaries. Like injured skin, the fabrics surrounding the Holy Virgins' 'skulls' were arranged, and cosmetically sewn together. Although displaying visible stitches, these objects were assembled by joining pieces of textile with uniform 'sutures', and 'aesthetically' repair the surface layer and that which lay beneath (see, e.g.: Figs 1h, 2.31b, k, 2.35c, 2.42b, 2.46d, f). Indeed, when considering the authority associated with the act of sewing in medieval Europe, Kathryn Rudy stated: "stitching often calls attention to itself as a means of attachment, as if the ritualised form or attachment were being showcased in the resulting object."⁷¹² In this way, the uniform stitches visible on Holy Virgins' skull reliquaries not only reveal the skill of the assembler, they might also indicate an intentional display of the attachment and reconstruction of sacred surgery.

High medieval surgical imagery and textual accounts of cranial surgery together suggest numerous intriguing parallels with the reconstruction of the Holy Virgins' skull reliquaries. Many of the sacred heads were manually 'restored' with the same materials and by performing the same procedures associated with surgery. Like the treatment of a living patient, the Virgins' bones were cleansed and, in varying degrees, repaired to fully-formed heads. Bones were manually re-set then wrapped with linen dressings; as demonstrated by some foreheads, bones were 'fused' together and otherwise re-formed to generate realistic features and spherical shapes. Linen, which is found in abundance in the Holy Virgins' textile reliquaries, was the material associated with bandages and so embodied restorative properties. In this way, those responsible for assembling the Virgins' sacred remains acted as surgeons who 'restored' the sacred anatomy of these martyrs with the surgical operations and materials used for treating the living.

⁷¹² Kathryn Rudy, "Sewing as Authority in the Middle Ages," in *Zeitschrift Für Medien* - *Und Kulturforschung* (Hamburg: Felix Meiner Verlag, 2015), 117. This discussion centres on sacred objects, and, in this regard is particularly relevant to the Holy Virgins' textile reliquaries; additional parallels can be seen in the practice of sewing and prayer, especially demonstrated by stitching found in manuscripts; see further, Hanneke van Asperen, "Praying, Threading, and Adorning: Sewn-in Prints in a Rosary Prayer Book (London, British Library, Add. MS 14042)," in *Weaving, Veiling, and Dressing*, vol. 12 (Turnhout: Brepols Publishers, 2007), 81–120.

As established here, there are many similarities between the acts of surgeons and those assembling the Holy Virgins' skull relics; the consideration of a passage from Henri de Mondeville's *Chirurgia* (1306) suggest the possibility of a more direct relationship between the two. He stated that:

Anyone who wants to demonstrate (*ostendere*) the anatomy of the head, inside and out (*intus et extra*), perfectly and in detail (*sensibiliter*), should – if he cannot obtain a real head – employ an *artificial skull* that can be *opened*, separated to show the commissures and separable into four parts, so that after he can demonstrate its external anatomy he can open it and let the anatomy of the *pannicles* and the brain be seen in detail. Such a skull ought to be furnished on the outside with things to represent the hair, the skin, muscles, and the pericraneum; inside it there should be something to represent in detail the form of the *panniculorum* [cloth meninges] and the brain.⁷¹³

Here, de Mondeville strongly advocates for an intimate knowledge of cranial anatomy, one which requires a 'hands-on' approach. When a human head was not available, he advises to investigate an artificial head, a true-to-life replica. Of the many specifications, he outlines that the model should include the many cranial layers, especially something to replicate the cloths/small garments (*panniculorum*) surrounding the brain. He is explicit that the model is designed with the capability to open, and so to better reveal the extensive cranial layers. There is no known example of such an anatomical model, yet the limited access to human cadavers at this point in time could suggest that anatomically accurate cranial replicas, as

⁷¹³ "Quicunque vult antatomiam ostendere capitis intus et extra, sensibiliter et perfecte, si non posset habere verum caput humanum, ipse debet habere craneum artificiale, aperibile, serratum per commissuras, divisum in 4 partes, ut cum anatomiam extrinsecam ostenderit, illud aperire possit, ut sensibiliter anatomia panniculorum et cerebri videatur. Et debet dictum craneum exterius esse munitum aliquibus, quae capillorum et cutis et carnis lacertose et panniculi ossa ligantis vices gerant. Similiter debent interius aliqua esse ficta, quae sensibiliter formam panniculorum et cerebri repraesentant". McVaugh, *Rational Surgery*, 72 (Latin and trans.); italics used here for emphasis.

described here, were used in the education of surgeons. Henri de Mondeville was active in Paris at various stages of his career, it is thus highly possible that he was, at the very least, aware of Cologne's many reliquaries of the Holy Virgins. The skull reliquaries – with their reconstructed bones and tailored fabric layers – and the wooden busts – with their moveable lids that permit access to the internal skull – present striking resemblances Henri's account; it suggests the possibility that the Holy Virgins' reliquaries – especially the fabric-enveloped skulls made in the likeness of human anatomy – might have inspired just such an object intended for medical purposes.

3.7 Summary

The creation of the Holy Virgins' textile reliquaries and the materials used within them were unprecedented in high medieval culture. As explored here, the use of cloth as the primary structural and decorative medium for these reliquaries was not arbitrary; the consideration of the many similarities between these reliquaries and the scholarly accounts of cranial anatomy presents an additional explanation for their unique materiality: to re-construct the Holy Virgins' sacred anatomy. The extent to which these textile reliquaries resemble scholarly accounts of cranial anatomy is significant, and they thus present a highly sophisticated engagement with the expanding awareness of the human form and of the evolving language used to describe it.

In this way, the reliquaries additionally draw attention to the unique reciprocity between medical discourse and religious communities that was present within the very fabric of high medieval Cologne. Indeed, throughout the medieval period, religious communities and their wider networks served a central role in the preservation, translation, and circulation of medical literature. The increase in the availability of original Greco-Roman and medieval Arabic sources inspired a corresponding increase in Latin translations and transcriptions of this material that was primarily carried out by religious figures. As part of the medical expansion, religious institutions contributed to but were also furnished with 'up dated' descriptions of the human anatomy.

High medieval Cologne, home to many religious communities – which themselves housed prominent scriptoria and hospitals – was a city of that fostered

far-reaching intellectual networks. The anatomical accounts of the head found in Albertus Magnus' De animalibus clearly demonstrate the city's rich scholarly environment. Together with his contemporaries, Albertus demonstrate an intellectual synthesis of classical and medieval-Arabic literature together with their new Latin translations. Albertus employs rich vocabularies that draw on translations, mis-translations, and creative interpretations. Guiding this terminology are the long-standing and ever-unfolding associations that link cranial anatomy with maternal protection, fabrics and garments, threads, weaving, and ultimately clothmaking. He eloquently expressed the intellectual ideas and cultural perceptions of cranial anatomy that were percolating in Cologne and across Europe in the midthirteenth century. Indeed, Albertus fostered a diverse and expansive network - of religious and practicing physicians alike - that spread across the continent, but that remained anchored in Cologne. It is, therefore, highly probable that this text, or at the very least the concepts it contained, were shared within the Dominican order, and likely within Cologne's other religious communities, potentially situating it within the hands and minds of those involved with the Holy Virgins' relic assembly and decoration.

The increased engagement with human anatomy, physiology, and psychology that resulted in the written accounts and medical illustrations came to define this period of history. Collectively these ventures reflect a heightened interest in and an awareness of the human body and its inner workings. These reliquaries can be seen as active participants in this collective movement, as they similarly invite engagement with and reveal the inner workings of the human body. Through 'surgical' operations the injured cranial remains of the Holy Virgins were restored to complete bodies, and these were intrinsically fused with sacred identity of medieval Cologne.

Conclusion

This thesis has explored the medieval phenomenon of Cologne's Holy Virgins' textile skull reliquaries by investigating their structural, material, sacred, and anatomical significances. It has established that the Virgins' relics – more specifically their wrapped skulls – were integral features that indelibly shaped the medieval cult, revealing these objects to be highly complex, 'cerebral' articulations that, like their layered configurations, embody a wealth of cultural sources and layered meanings. They thus speak to the spiritual, intellectual, and medical fabric of medieval Cologne and its wider networks of exchange.

In many ways this study echoes the composition of the Holy Virgins' textile skull reliquaries themselves: themes and questions have been unfolded; fragmentary evidence mended while concepts were arranged; ideas and arguments were layered over each other and stitched together to produce a bespoke investigation of these multi-faceted objects. It became evident during my initial encounter with the Holy Virgins' skull reliquaries that this project required the consideration – both literal and metaphoric – of that which is visible and that which resides beneath the surface. This study has thus involved a process of peeling back and searching within the physical and conceptual layers of these objects.

Although often challenged by accessibility, and indeed the tension arising from the accumulation of surfaces, this study, nevertheless, concluded that the earliest assemblages were constructed by methods that honoured the Virgins, but which also served to structurally support 'their' remains. The combination of an internal pouch and a form-fitting cover ensured the bones remained stationary and protected. These measures were especially important for those 'skulls' that were reconstructed to replicate the appearance of a forehead and sometimes an entire cranium. Such practical measures were complemented by the incorporation of materials that communicated and celebrated the relics' sacred value: silk, velvet, gold, silver, glass beads, metal sequins, together with other relic fragments, linen vestments, and the psalms written on parchment. The *fenestella*, the ornate window constructed to reveal the 'forehead', was an area of heightened elaboration that demarcated the space around the sacred bodies and served to facilitate the visibility of and access to the sacred remains.

Deeper consideration of the Holy Virgins' exposed foreheads pointed further to the wider theme of authenticity, which has emerged throughout this study. The presentation of sacred matter in this way not only notably departed from contemporary customs of concealment or mediated visibility, the select exposure of foreheads offered visible 'proof' that these were indeed the remains of the Holy Virgins. Further investigations demonstrate these to be elaborate and highly manipulated constructions, which in turn reveals larger efforts to produce and multiply the Virgins sacred remains while simultaneously maintaining their 'authenticity'.

Considerable efforts, most notably demonstrated by Elisabeth of Schönau and Thiodericus of Deutz, ensured that the bones excavated from the agar Ursulanus were verified as the Virgins' 'true' remains. These figures were the spokespeople of a greater movement involving an expansive network fervently committed to solidifying the credibility of the remains that ultimately vouched for the sanctity of Cologne. Indeed the cult's circuitous development leading up to the twelfth century revealed a similar involvement of many minds and hands that saw to the codification of the Virgins' hagiography. Reaching back to the Clematius Inscription, whose 'ancient' engraved words demanded proper veneration, historicized the cult, and physically connected the Virgins' with their titular church and the city of Cologne. Subsequent evocations of this text, as noted in the tenth-century Sermo in Natali and Thiodericus' twelfth-century codex, evoked the stone's authority and credibility to further solidify the Virgins' cult. The composition and revision of the Virgins' vitae likewise harnessed the power of the written word and provided the cult with a firm foundation prior to the discovery of the agar Ursulanus. Differing from the vita recorded the in Legenda aurea (c. 1260), these texts, predating the Legenda by two centuries, charted a circuitous path, a series of problematic situations and their resolutions, which ultimately ensured the survival of Christianity's largest cult.

Another facet of authenticity was explored through the consideration of the Holy Virgins' skull reliquaries as participants within the expanding field of medicine and the development of its corresponding language. Among the notable scholars

involved, the commanding authority of Albertus Magnus exemplified the thirteenthcentury understanding of the head's internal structure. His cranial anatomy was ultimately an accumulation of many sources, including Greco-Roman and medieval Arabic scholarship, together with Latin translations, mis-translations, and the creative invention of specialized terminology. The human head was understood to be an elaborate arrangement of layered materials - more specifically fabrics and tailored garments. Each layer was regarded as being composed of different materials that correlated with their respective roles and ultimately united in protecting the brain. Together with the elaborate arterial network of the rete *mirabile*, the anatomy of the head was created through the weaving together of arteries, the layering of cloth, and the stitching together of these layers. In their materiality and their tiered structure, the Holy Virgins' skulls present elaborate embodiments of visual and textual accounts of human anatomy, and can be seen as reconstructing the Holy Virgins' earthly anatomy with unprecedented verisimilitude. While these efforts can be understood as memorialising the Virgins with a complete and anatomically 'accurate' body, they also invite the deeper consideration of sacred corporality and embodiment during the medieval period.

Investigating the reliquaries as expressions of cranial anatomy additionally illuminate the juxtaposition of 'interior' and 'exterior', but also the fluidity between the two. Like the schematic figures that illustrated the internal anatomical systems, the Virgins' skull reliquaries present expressions of the inner constructs of the human body that nevertheless remained partially concealed. The incorporation of a fenestella provides access to that which resides beneath the surface, and thus becomes a 'point of entry' between these respective spheres. Together with the articulation of 'living' features that disrupt the smooth surface of the Virgins' 'masks', the *fenestellae* furthermore invite viewers to oscillate between that which is visible and that which is generated within the 'mind's eye'. The act of external 'seeing' and internal revelations emerged in relation to the many visionary figures associated with the cult. Whether it was those of Clematius, Ursula, Helmdrude, or Elisabeth of Schönau, private divine encounters were eventually externalized through the medium of engraved stone, etched bronze, and ink on parchment. Finally, the reliquary's use of fabric as the primary external material furthermore has been explored as inverting the contemporary methods of enshrining sacred

remains – the bones of which were buried beneath the site of the Virgins' martyrdom, excavated, enshrined, and eventually openly displayed.

The Virgins' textile reliquaries were the most abundant, and arguably the most potent, visual articulation of Cologne's martyrs; these existed in far greater numbers than the 'famed' wooden busts and indeed have been seen as engaging with sacred material through revolutionary developments. These creative structures with their rich materiality reveal much about the sacred culture from which they originated; their characteristic 'design' that originated in the medieval period and became the template that was reproduced for centuries to come. In this way, these holy heads define the presentation of the Virgins, and might even be considered as Cologne's ambassadors in the numerous sacred spaces that they inhabited.

Overall, therefore, this thesis will hopefully assist future studies that will further expand our understanding of Cologne's holy heads, but also facilitate a deeper consideration of sacred objects. There are several hundreds of these skull reliquaries – in Cologne and across Europe. Indeed, some of the greatest challenges of this study involved selecting a reasonable number of case studies from the many that were investigated, together with establishing their material and structural similarities. Although these belong to a lager sacred collective, each one presents a richly unique creation. The prospect for future study thus remains equally plentiful. While this thesis addressed the multivalent significance of fabrics, textiles, and linen, the magnitude of this material, both ornamental and structural, leaves much else to be considered. Elaborate local embroideries, together with Chinese silks, Persian textiles, and even early modern clothing donations are just some of the material treasures discovered while analysing these reliquaries; the restoration of the reliquaries from the Golden Chamber is on-going; new discoveries are inevitable. Further investigations of these and other materials would further illuminate aspects of Cologne's commerce, politics, and sacred practices. The possibility of a visual network associated with the Virgins' skull reliquaries, which might have united the cloisters in possession of these objects, near and far, with the city of the Virgins' passion is an equally rich and enticing subject for future studies. This line of inquiry could further address the local assemblages and relic production, which presumably involved Cologne's cloistered communities.

In closing, the discovery of these holy heads as transcending the dichotomy of 'relic' and 'reliquary' enables a new category of sacred objects to be forged in which 'container' and 'contained' are fused. While this was perhaps one of the most notable outcomes of this study it also identifies an arena that richly deserves further investigation. In addition to revealing another significant 'layer' of Cologne's Holy Virgins' textile skull reliquaries, the reframing of these complex relationships present the posibility to alter the trajectory of scholarship dedicated to exploring sacred objects from the medieval period and beyond.

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