

When God came to Town – Urban Development and Religious Practices in Early Medieval Odense, Denmark

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ABSTRACT

This article presents a contextual approach to studying the role of the urban environment in introducing Christianity to Denmark between 900 and 1250. We consider sensory experience and apply the concept of lived religion to the highly varied and sometimes limited archaeological material from St Alban's church in Odense, its cemetery, and the surrounding settlement, to show that the urban environment played an active role in integrating Christianity into everyday life. The church and king used the urban environment to stage their authority. The message of Christianity was propagated through religious practices, such as celebrating Saint Cnut with spectacular processions, and dress accessories with religious motifs. These practices facilitated the transformation from an elite-oriented missionary religion promoted by the king and the elite to a widely accepted religion integrated into the everyday lives of Odense's inhabitants.

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Introduction

In Denmark, the transition from the Viking Age to the Middle Ages around the middle of the 11th century was marked by two defining events: the rollout of Christianity and urbanisation. Christianity significantly influenced the design of cities, with its establishment of churches, monasteries and cemeteries (Figure 1). However, religious life was not confined to official religious spaces, such as churches and cemeteries. Burial practices, baptisms, religious processions, and communal and individual religious practices made up a patchwork of religious expression that constituted religion during the medieval period. Even though these expressions were intangible or spiritual, medieval religion had a very concrete and material side. It affected the landscape, material culture (and its use), and even set people in motion as pilgrims. The materiality of religious practices was represented in texts, liturgical objects that survive in churches and museums to the present day, and archaeological evidence such as objects and structures. Mainly, the archaeological evidence can shed light on the religious practices of everyday life.

In this article, we examine the role played by the urban environment in the Christianisation of Denmark in the period c.900-1250. Although religious practices were also present in rural settings, we argue that the urban environment as administrative centres had specific attributes affecting the population and settlement density, which created a unique physical setting where religious practices may be studied on their own. Therefore, we present a contextual approach that includes archaeological evidence of religious practices related to the church, the cemetery and the city. We develop our argument by considering sensory experience and by applying the concept of lived religion to the archaeological record related to the first Cathedral in Odense, St Alban's church, its cemetery and the surrounding settlement during the period of c.900 to c.1250.

Research History

Religious expression was an integrated part of medieval life, but in Denmark it is rarely studied as



such. Often, studies of medieval religion are based on either religious objects (both secular and ecclesiastical) or ecclesiastical structures such as cemeteries, monasteries and churches (e.g. Christensen 2019; Jensen 2019; Søvstø and Knudsen 2021). In a recent overview of the Danish research on materiality and religious practice, Morten Larsen states that until the 1970s, these studies emphasised the descriptive presentation of objects and monuments (Larsen 2021). Only in recent decades have works with a contextual and interpretive focus gained a foothold. Archaeological studies of urbanisation have developed along the same lines (Bitsch Christensen 2004). Nevertheless, studies that combine religious practices and urban development – and consequently, objects and structures from both spheres – are rare (e.g. Tesch 2014). This lacuna is also rooted in the Danish research tradition, where disciplines such as church archaeology and urban archaeology are specialised branches. When the two have been combined, it has often been to draw overarching and general conclusions regarding urban *or* church history (Kristensen and Poulsen 2016; Nyborg 2004, 114; Wienberg 1993). One exception may be Lars Bisgaard's work on guilds and their role in medieval religious practice (e.g. Bisgaard 2001). However, as a historian, Bisgaard primarily draws on written sources, and less on material culture.

The lack of studies that take a more interdisciplinary and social approach to the relationship between early urban centres and the church may also be due to limited source material. The first churches in Denmark were wooden structures. Often, they are known only because they are mentioned in written sources, or as sporadic archaeological traces in rare and fortunate cases (Bertelsen 2016). In modern-day cities, the traces of the earlier town and the first churches are usually buried under several meters of later stratigraphy or still-standing churches. Moreover, early church organisation was characterised by great diversity until Svend Estridsen's church reform, around 1060. Churches could be private churches, magnate churches, missionary churches or cathedrals. This complex situation is also the reason a doctoral thesis on the church's organisation in medieval Denmark excludes the early churches (Kieffer-Olsen 2018, 12). Here, a broader and international characterisation of the

research history would be too extensive. However, a strand of research in archaeology that addresses Antiquity aims to integrate religion into urban studies, inspired by contemporary ethnographic studies of religion in modern cities (Lätzer-Lasar et al. 2021; Raja 2019; Rüpke 2020; Urciuoli and Rüpke 2018). This research is part of this study's theoretical background.

An interdisciplinary approach that bridges religion studies, church archaeology and urban archaeology is needed to meet the apparent challenges of limited source material, and to gain insight into the social aspects of the interplay between religion and the urban environment in the medieval period. This study does not attempt to fully map this subject. Instead, it focuses on an in-depth case study of Odense and St Alban's church. Comparing these with other examples in Denmark and elsewhere in Scandinavia will support more general conclusions. An empirically well-founded case study provides insights into the specific societal and social context of Odense's early medieval church and town. At a broader scale, such insights may contribute to an understanding of the dynamics between church and town – between religion, the urban fabric and people in the constitutive period of urbanisation and Christianity.

Theoretical Framework

In this article, religion is understood as 'lived religion', in contrast to institutional or state religion (Knibbe and Kupari 2020). Lived religion is defined as religion shaped by repeated daily practices encountered, expressed and experienced in various environments – public and private, sacred and secular – as it permeates every aspect of society. It is practised by individuals or groups of individuals, interacting with overarching structures and conditions. The way religion is practised is the key to understanding how religion affected and shaped people's lives and world views in the past. Consequently, the study of lived religion is part of an empirical approach to individual experience and practice, rather than official ecclesiastical rituals and liturgical texts (Heilskov and Croix 2021, 14; Knibbe and Kupari 2020, 7). The concept of lived

religion was developed in the 1990s, in the contemporary field of the sociology of religion, based on an interest in ordinary people as religious practitioners, and as a reaction to religious texts being the dominant source of information (Knibbe and Kupari 2020). Since then, it has been applied to a wide range of disciplines, including the study of urban religion in Antiquity (Rüpke and Raja 2015).

Lived religion draws on the same theoretical sources as another approach identified in recent archaeological research: social practice theory, promoted by Elisabeth Shove, Mika Pantzar and Matt Watson, and adapted to archaeology by Axel Christophersen (Christophersen 2015; Shove et al. 2012). Practice theory has its roots in social anthropology. As Shove et al. understand it, social practice theory offers a bottom-up framework for analysing societal change through the dynamics of everyday life. Shove and Pantzar (2010, 19) define practices as:

(...) something that actual and potential practitioners can participate in or from which they can withdraw. Equally, they also exist only so long as practitioners keep them alive, and it is through recurrent performance that the contours of individual practices are formed and transformed.

Axel Christophersen (2015, 2019) has advocated this approach to gain a different perspective on the study of medieval towns. Practices and materials connect people in the town, bind them together and establish a sense of community. Christophersen points out that we see the routinised or repeated practices as a material imprint in the archaeological record (Christophersen 2015, 118). Shove et al. have defined Material, Competence and Meaning (2012, 40) as the core elements of practice. Practices emerge, persist and disappear, as connections between these defining elements are made and broken.

The material focus is particularly relevant to the study of urban religion, as that religion was practised using a wide range of objects, spaces and structures (Heilskov and Croix 2021). Since Christophersen introduced Shove et al. to archaeology in 2015, it has been applied to various studies that have contributed new insights into social aspects of life in

the medieval town (Christophersen 2019, 2021; Haase 2019; Kjellberg 2021). However, it has not yet been applied to religious studies in archaeology, even though the concept has much in common with that of lived religion. Tracing practices related to the expression of religion in all aspects of the medieval town will lead to a broader understanding of how religion was integrated into medieval life and how it shaped life in the town. How did the practices of the town dwellers change in their encounters with Christianity and the Church?

An inevitable part of lived religion is the sensory experience related to religious practices, monuments and the urban environment. Sensory experience defines urban religion as much does the materiality of urban religion. Sensory experience is a physical reaction to visual, tactile, olfactory and audible stimuli. In most cases, these reactions are culturally independent. However, the emotions or reactions evoked by sensory experiences are affected by cultures (Fahlander and Kjellström 2010). Sensory experiences of the past may be understood through the materiality of the past. By examining sensory experience through a wide range of archaeological evidence, it is possible to understand the sensory impact of religion on urban life, and vice versa. However, our understanding of the sensory experience of the medieval town will probably remain general, as the personal emotional experience is very difficult to argue for based on archaeological evidence (see also Fahlander and Kjellström 2010).

The following case study of the early medieval period in the town of Odense on Funen, Denmark, will analyse religious practices and sensory experience in an urban setting. First, the site and the empirical data set are presented.

The Case of Early Medieval Odense

Odense is mentioned for the first time in 988, when a letter signed by the German emperor Otto III states the privileges of the bishop of Odense (Christensen and Nielsen 1975 I, I nr. 343). Odense and St Alban's church were the site of the martyrdom of King Cnut IV. The king was killed in 1086 while seeking refuge in St Alban's church

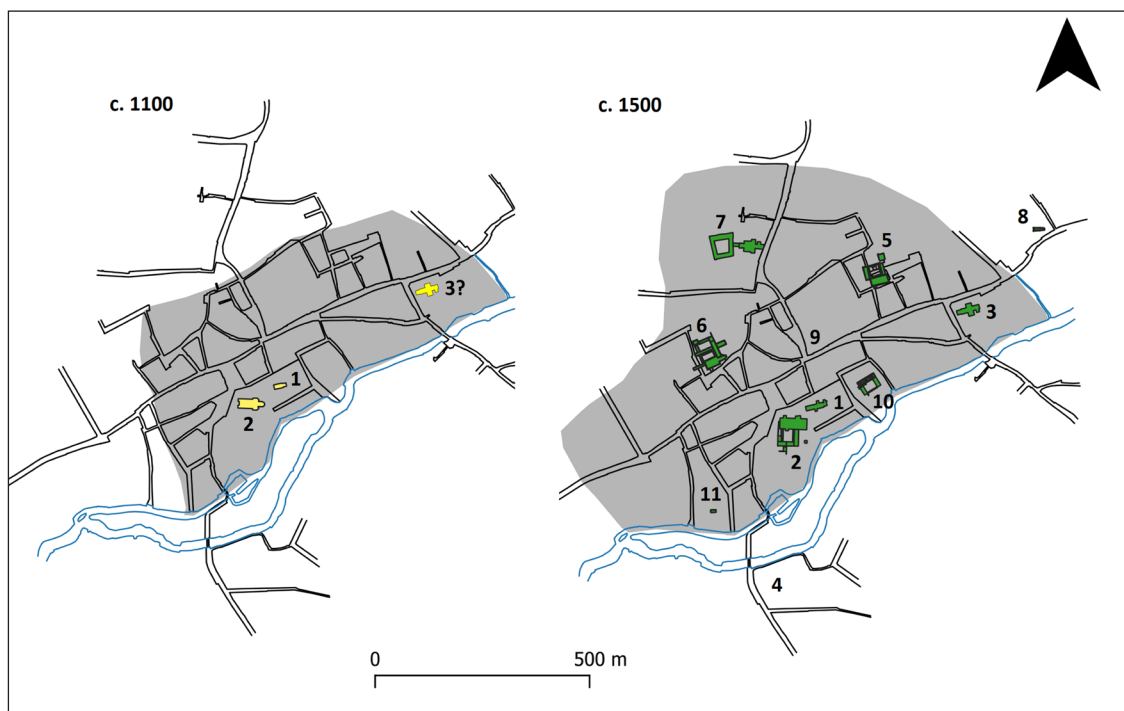


Figure 1. The development of the ecclesiastical institutions in Odense shown as the situation around the years 1100 (left) and 1500 (right). Note that the cemeteries are not shown. The grey area marks the approximate extent of the town, and the late medieval streets are shown as black lines. The river is marked with blue lines. The number of inhabitants probably grew to between 3000 and 4000 in the 16th century.

1. St Alban's Church. 2. St Cnut's Cathedral and Benedictine Monastery. 3. Our Lady's Church – possibly founded in the 12th century. 4. Benedictine Nunnery – the nunnery is mentioned 1193 but moves outside Odense before 1249. 5. Dominican Friary. 6. Franciscan Friary. 7. St Mikkel's Church/St John's Monastery (Knights Hospitaller). 8. St George's Church and Hospital. 9. Hospital of the Holy Spirit. 10. The Bishop's Palace. 11. St Clara Nunnery (founded 1521) (Graphic: K. Haase; Street layout based on Christensen 1988, 12).

in Odense after a failed raid on the British Isles. In 1100, King Cnut was officially canonised, and his bones were enshrined on the high altar in the newly built St Cnut's Cathedral (Figure 1, left). These events gave 10th- and 11th-century Odense a central position in Denmark's lengthy Christianisation (Christensen and Hansen 2017). Beginning in the 8th century, Denmark was a missionary field for foreign clerics, and King Harald Bluetooth's proclamation of Christianity as the Danes' official religion, around 965, on his runestone in Jelling is only a milestone in that process, which lasted at least another hundred years. In the 1060s, King Svend Estridsen stabilised the organisation of the Danish Church in eight dioceses, which in turn probably prompted the establishment of numerous parish churches across the country (Lund 2004; Sanmark 2004, 81-90).

In the 10th century, Odense was a royal and ecclesiastical power centre. In the 980s King Harald Bluetooth had a ring fortress built on the southern

side of the river running through Odense (Figure 2) (Runge 2018). North of the river was a contemporary settlement. Our knowledge of this settlement is scarce, as modern Odense covers it. However, Runge and Henriksen characterise it as urban from around 900 (Runge and Henriksen 2018; see also Christensen et al. 2019). The archaeological evidence indicates a settlement of approximately 10 ha, with large farmsteads, craft production and possibly trade. The settlement was oriented towards two main roads; the north-south oriented road, running past the ring fortress, crossing the river, and an east-west road that was the main road across Funen.

After the Protestant Reformation of 1536, St Alban's church was torn down, and the area on which it stood was transformed into a market square. A renewed interest in rediscovering St Alban's church emerged on the 800th anniversary of the slaying of Cnut IV, when a small excavation recovered the remains of the 12th-century stone church (Peter-



Figure 2. Map from *Civitates Orbis Terrarum* by Braun and Hogenberg showing Odense in 1593. The late Viking-Age ring fortress is visible near the lower edge of the map as circular ramparts (Braun and Hogenberg 1572-1617. Public Domain).

sen 1886). Over the next 150 years, there was periodic construction work on the church and cemetery site, and various archaeological observations were made. The most important discoveries were made in 1980-83 and 2015 (Arentoft et al. 1985; Christensen and Hansen 2017). In the 1980s, it was established that two wooden churches preceded the stone church, and in 2015 it became clear that St Alban's church was Odense's cathedral until around 1100, when the new church, St Cnut's, became the cathedral (Christensen and Hansen 2017, 24). This suggests that St Alban's church may be the cathedral mentioned in 988.

A recent research project has collected all the archaeological evidence regarding St Alban's cemetery and church, focusing on the period 900-1250 (Haase 2022). Next, the main results of this project are presented, as they comprise the empirical data for this article (for the full report, Haase 2022); contemporary archaeological material from the adjacent settlement is also presented (Bjerregaard 2020; Haase 2017).

Finds from the Cemetery – Finds from the Settlement

St Alban's Church(es) and Cemetery

Since 1886 there have been fourteen excavation campaigns of varying extent at St Alban's church and cemetery (Figure 3). The church and cemetery were founded in an existing settlement, possibly on its eastern periphery (Bjerregaard 2020; Runge and Henriksen 2018, 61-62). Written sources from the 12th century describe the church as close to the royal residence, which has never been located archaeologically (Runge and Henriksen 2018, 46). However, it was probably the king who donated land for the church, or it may have been built on land owned by a member of the elite (Haase 2019, 51).

The first cemetery was delimited by a ditch or a fence and seems to have covered an area of 9000 m². The early Christian cemetery in Ribe, Denmark, also measured about 9000 m² (Jensen 2017, 33). Other examples of cemeteries in medieval Denmark suggest that St Alban's cemetery was among the larger (Arentoft 1999; Bendtsen 2009;

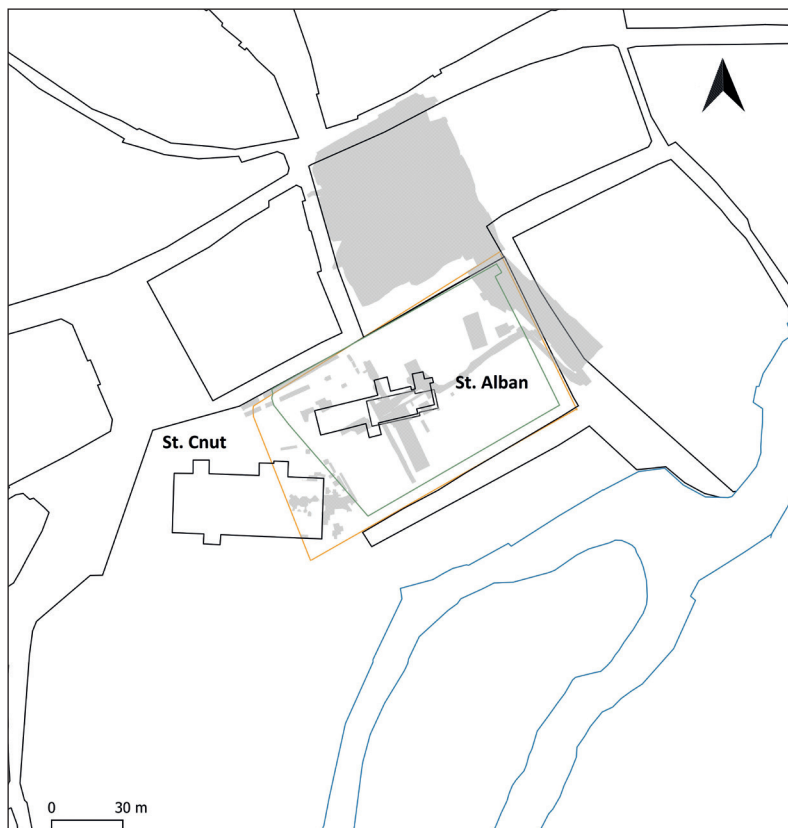


Figure 3. Map showing the central part of Odense with the medieval roads (black), the river (blue) and the excavated areas (grey). The extent of the cemetery in the 11th century is shown in yellow and the late medieval extent of the cemetery is shown in green. St Alban is shown as the outline of the youngest wooden church and the stone church (Graphic: K. Haase).

Kieffer-Olsen 1993). The medieval cemetery was usually dimensioned according to importance (Nilsson 1989, 123; 125). The size of the first cemetery may also be related to the church's possible status as a minster, which served an area larger than the town, as has been suggested as a model for the first church organisation in Scandinavia (Ersgård 2006, 54-57; Tveito 2011, 20-23). Whether this is the case for St Alban's remains unanswered, but the system required robust royal power, demonstrated in 10th-century Odense by the presence of a ring fortress on the opposite side of the river.

As mentioned above, the oldest St Alban's churches were two wooden churches built one after the other on the same site. The first was about 7 m wide and of unknown length. A bell casting pit was found below the church floor. The second church seems to have been a basilica with a choir and measured at least 28 m in length and 11.5 m in width (*Danmarks Kirker* 1998, 1737). For comparison, the largest wooden churches of contemporary Lund were 24 to 26 m long and between 10 and 11 m wide (Mårtensson 1983, 146-150). Remains of lime plaster were found at St Alban's, suggesting that the church was white either interior or exterior. A coin found in a posthole of the younger wood-

en church and radiocarbon dates indicate that the older wooden church was built in the late 10th century and replaced by the younger wooden church around the middle of the 11th century (Haase 2022, 31-39). The wooden church was replaced by a stone church, presumably in the 12th century. When St Cnut's cathedral was built in the late 11th century, just 40 m to the southwest, St Alban's cemetery was reduced to around 7600 m². The size may also indicate the church's changed status, from cathedral to parish church. The annexation of parts of St Alban's cemetery may also be symbolically related to the transfer of the role of cathedral from St Alban's to St Cnut's, and the transfer of St Cnut's bones from St Alban's to the new Cathedral crypt in 1095. Later in the medieval period, the cemetery was further reduced in size to the north and east.

A total of 844 burials have been recorded at St Alban's cemetery. Radiocarbon dates and a pendant made from a Cnut the Great coin (1014/18-34) (Figure 6s) found in a grave suggest that the cemetery was in use in the early 11th century (Bjerregaard 2020, 59). Based on stratigraphy, arm positions and other chronological information, 489 burials are dated to the period before c.1250 (Figure 4) (Gilchrist and Sloane 2005, 8-17; Haase

2022; Kieffer-Olsen 1993). All are supine burials with the head to the west. The dead are buried either with or without shrouds or in coffins, indicated by the remains of wood or coffin nails.

Of the 489 burials, 25 % were children, 25 % were women, 28 % were men, and the sex of 22 % could not be determined. They were distributed almost equally throughout the cemetery. It has been suggested that medieval cemeteries were divided according to sex, based on the Norwegian Eidsivating law, drawn up in the 12th century (Kieffer-Olsen 1993, 99-121). However, only a few cemeteries seem to display segregation according to sex, and St Alban's cemetery in Odense is not one of them (see also Jürgensen 2009 for a critique). Other towns, such as Lund (part of the old Danish realm, now in Sweden), Tønsberg, Trondheim (both in Norway) and Viborg (Denmark) also show an absence of cemeteries segregated according to sex, perhaps suggesting that this type of segregation was not common in towns (Mejsholm 2017, 167-169).

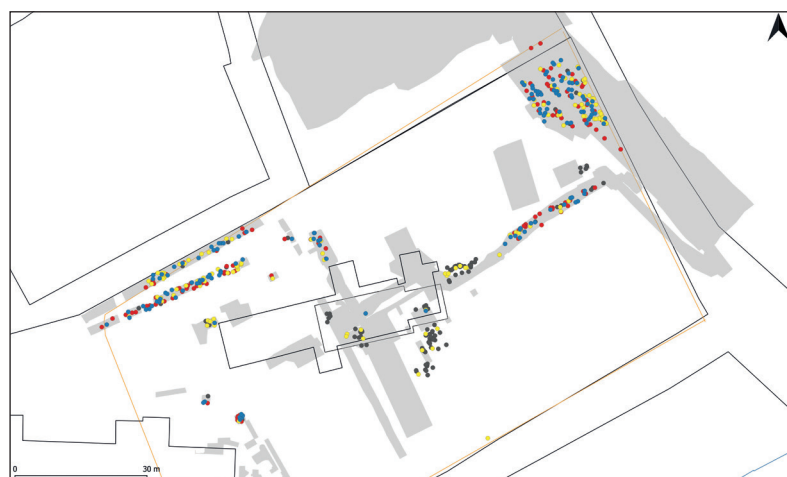
The location of two burials may be related to the social status or identity of the deceased. These are two men buried with scallop shells on their upper bodies, in the northern part of the cemetery, on the periphery (Haase 2022, 101). The scallop shells probably indicate a pilgrimage to the grave of St James in Santiago de Compostela in Spain, which was important from the 11th century on (Rasmussen 2021, 9). The pilgrims' graves may be close to the entrance or a pathway across the cemetery. This has not been established archaeologically, but gates and paths have a symbolic meaning in

the Christian tradition. They are 'conduits between the landscapes of the dead and those of the living' (Gilchrist and Sloane 2005, 35). Being buried here meant being close to the people's prayers, entering the cemetery or the church, and the processions that passed during the holidays. Passing by the pilgrims' burials may also have meant something for people entering the cemetery. They would pass close by someone who had made the sacred journey and therefore represented a deeper religious and spiritual connection to God and the Saints.

Inside the church, two stone cists have been excavated (Christensen and Hansen 2017): one in 1917 and one in 2015. These are also burials of people with high social status. The man found in 2015 was probably a bishop, as he was buried with a silver chalice and paten. The bishop's burial dates to the 11th century.

Before 1250, most burials at St Alban's did not include personal or symbolic objects. A total of six pins have been found, and these are probably from shrouds or headdresses. Only a few stand out, such as the pilgrims' burials and the stone cists. The burial with the Cnut the Great coin has already been mentioned, and there are four graves, east of the site of the oldest wooden church, with significant remains of charcoal or charred planks (Haase 2022, 91-93). According to the excavation report, charred planks and charcoal were lying on top of the skeletons and along the sides of the graves (Arentoft 1983). Charcoal in graves is seen in the early medieval cemeteries in Roskilde (one grave), Copenhagen (twenty-three graves), Lund (ninety graves), and in German, British and French cemeteries (Andrén 2000; Cinthio 2002, 88; Jensen

Figure 4. Map showing the distribution of burials from before 1250 according to sex and/or age in St Alban's cemetery in central Odense. Men (blue), women (red), children (yellow), and unknown adult (grey). The yellow line indicates the extent of the cemetery in the 11th century. The grey areas are the excavated areas. St Alban's church is shown as the outline of the youngest wooden church and the stone church (Graphic: K. Haase).



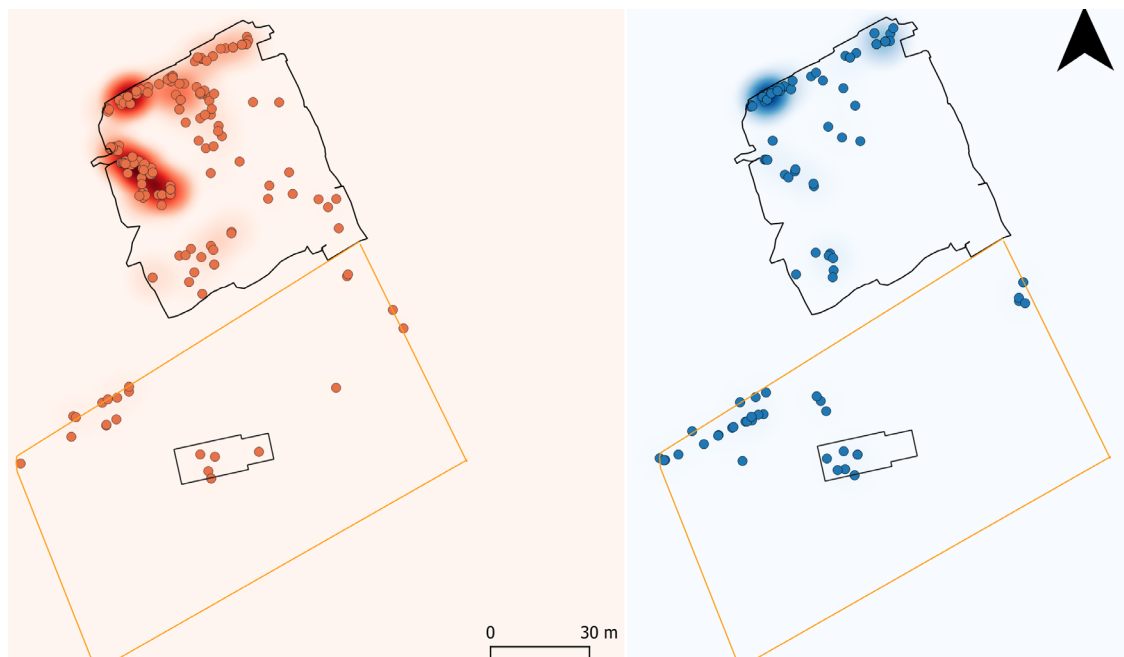


Figure 5. Heat maps showing the distribution of grey ware pottery (left) and finds related to non-ferrous metalwork (right) at St Alban's cemetery and the settlement area in central Odense to the north. The dots represent a finds assemblage (often containing more than one sherd or metal fragment), and the intensity of the colour indicates the number of individual objects (number of sherds/fragments). The black outline is the excavated area north of the cemetery. The cemetery is shown in its 11th-century extent (Graphic: K. Haase).

and Dahlström 2009; Jonsson 2009, 122-126; Kieffer-Olsen 1993, 166; Mårtensson 1981; Rensbro and Høyer 2014, 246). The British burials on beds of charcoal date to the late Saxon and early medieval periods and are usually related to high social status (Rodwell 2012, 310). This forms the basis for the suggestion that the charcoal burials in Lund were influenced by British tradition (Cinthio and Ödman eds. 2018, 60). The custom of using charcoal or charred wood is not yet explained, but there is a possible connection to monastic traditions of laying the dead on ashes (Gilchrist and Sloane 2005, 23). The explanation may also be aesthetic (the black colour), practical (charring preserves wood) or symbolic (representing resurrection). Given the examples just mentioned, and the location of the charcoal or charred burials at St Alban's in Odense, close to the high altar, it may be suggested that they were either priests of the church or people of high status. Apart from these few graves that stand out, the general impression is that burials prior to 1250 in St Alban's cemetery were very uniform, and individual regards or markers of social status and identity are absent.

Signs of a few other activities may be observed in the cemetery. Areas with the remains of what may have been paving have been recorded but are difficult to date with certainty. However, a group of deposits and features have been identified as older than 1250. There were finds usually related to domestic activities in these deposits, such as pottery sherds and whetstones. A total of 182 sherds have been recovered from this area. In contrast, over 5000 sherds have been collected from the contemporary domestic area north of the cemetery – the excavated area is twice the size as the excavated area in the cemetery (Figures 3 and 5). Moreover, most of the sherds were found on the cemetery's periphery, indicating the possibility of waste being deposited in an area where the cemetery's borders tended to shift, and thus, their being deposited during settlement activity. Pottery finds in other areas may come from activity that predates the cemetery, or from soil transported to the cemetery to fill in depressions.

A significant number of finds relate to metalwork. Most of these were found around the bell-casting pit, and some near the cemetery's borders. The lat-

ter may be explained in the same way as the pottery sherds. In a pit west of the church, there is a small concentration of objects related to metalwork. They are mainly debris, such as iron slag, smelted copper alloy and lead. None of the objects could be identified in detail, and it is difficult to say what activity they suggest. Some may be related to repair or construction work on the church. However, excavations in Ribe and Aalborg show that casting brooches with religious motifs close to churches and cemeteries was a known phenomenon. Still, similar origins of the metal debris in St Alban's cemetery remains a suggestion (Søvsø and Jensen 2020).

Finds from the Settlement

North of the cemetery, approximately 4400 m² have been excavated. As this area lies in the centre of the modern city, large parts were truncated by modern construction work. However, up to 3 m of archaeological stratigraphy were preserved in some areas. The earliest remains in this area date to the 8th-10th centuries, and mainly come from houses and pits (for a detailed description, see Haase 2017; 2019). The finds were mostly evidence of household activities, indicated by pottery sherds of local ware, iron nails and a whetstone fragment.

Several houses were built around 1000 to 1150, and to the north, a broad, paved market street was established as part of the overall street layout. Radiocarbon dates and dendrochronological analysis suggest that the street was used between the late 11th century and the early 12th century (Haase and Olsen 2021; Runge and Henriksen 2018, 46). The street debris reveal remains of leatherwork, non-ferrous metalwork (crucible fragments, copper alloys and lead) and bone/antler work (Haase 2017, 99; 132; Jouttijärvi 2015). No actual workshops are associated with the debris. Trade is suggested by lead weights, and was probably carried out during specific events, such as markets held to celebrate St Cnut. This may also be the case with some of the craft activities.

In the second half of the 12th century, the streetscape changed dramatically. Instead of the vast,

open area in front of the houses, twelve booths were built along the street's south side (Haase 2019, 59-61). The finds show that non-ferrous metalwork, leatherwork, and bone or horn work were carried out (Bjerregaard 2020; Haase 2017). Coins and weights have been found in the street debris, indicating the presence of trade, which is also suggested by the location of the booths lining the street. Behind the booths, the plots were still occupied by scattered buildings, stables, wells, workshops and pits. Furthermore, brick was introduced as a building material, resulting in the construction of a two-storey brick house, 7 m south of the street (Haase 2017, 119; 2019; Haase and Olsen 2021). The finds from this period are similar to those of 1000 to 1150. In contrast to the preceding period, the booths and workshops were located in the street.

Objects related to Religious Practices

A few objects from the two phases mentioned above – 1000 to 1150 and 1150 to 1300 – have been interpreted as religious objects or related to religious practices. These are mainly dress accessories (brooches) and amulets. There are eighteen of these objects (Figure 6). Eleven were found in the deposits associated with the street area, two were stray finds, and five were found in the domestic area between the street and the cemetery. Two were found in deposits younger than 1300, but the objects may be dated to the 11th through 13th centuries. Some objects indicate their religious association by being decorated with a cross, religious images or inscriptions, whereas others are less apparent. Among these are the Alsengems and rock crystals (Figures 6d, e, q and r). The Alsengems are made from black and blue glass layers with an incision that usually depicts a person or persons (Figures 6d, e). They are interpreted as imitations of Roman Intaglio, and the types found in Odense have been dated to the 11th to 13th centuries (Imer et al. 2017). Previously, they were believed to be pilgrims' badges associated with Cologne, but now they are usually understood as amulets (van Vilstern 2014). Intaglio and cut rock crystals often decorate liturgical objects such as The Cross of Mathilde, an Ottonian procession cross from the



Figure 6. Objects related to religious practices. a) Circular animal brooch, x1672, b) Urnes-style brooch, x4827, c) A ring brooch, x5661, d) Alsengem, x9683, e) Alsengem, x4912, f) Wooden runic amulet, x7300, g) Circular foil brooch, x10383, h) Circular foil brooch, x10385, i) 'Pseudo-coin' brooch, x11412, k) Circular foil brooch, x11970, l) Circular foil brooch, x11724, m) 'Pseudo-coin' brooch, x7683, n) Circular foil brooch, x5434, o) Circular foil brooch, x9044, p) Circular foil brooch, x12568, q) Rock crystal, x4468, r) Rock crystal, x7052, s) Cnut the Great coin pendant, x8969. All finds from site no. OBM9776. (Photo: N. Hasic, Museum Odense and K. Haase. Not to scale).

11th century (Falk 2008, 86). A similar oval fitting for a gemstone is seen on the shrine of St Benedict (Cnut IV's brother) in St Cnut's Cathedral, and dates to the 12th century (Bjerregaard 2019, 32). It was probably believed that when Alsengems and crystals came in contact with religious objects, they were imbued with their spiritual power, which persisted even when they were removed from those contexts, and they functioned as amulets (Søvsø and Knudsen 2021, 207-209). Moreover, it was believed that certain stones, such as rock crystal, had specific powers (Gilchrist 2020, 113). Among other things, rock crystal symbolised purity, water and baptism (Heilskov 2021, 160).

One group of finds with religious connotations comprises circular foil brooches with animal

motifs (Figure 6). The surface of most of these badges is very corroded; however, on one of them, a bird-like shape is visible (Figure 6n). This bird resembles the holy dove seen on contemporary coins (Malmer 2004, 83). At least two other circular foil badges resemble coins. These are also called 'pseudo-coin' brooches (Baastrup 2009, 217). A consecration cross, shaped by four double-lined bows, is shown in Figure 6m. This cross resembles the obverse of a Cnut IV coin from Odense, and other coins from the 11th century. The motifs on coins of this period were influenced by English coins, as Figure 6i shows, with a short-cross coin imitation (e.g. Æthelred II). In Figure 6i, markings along the rim are probably an imitation of writing. Three circular foil brooches were stray finds, but typologi-

cally they date to the 11th and 12th centuries. The remaining six circular foil brooches were found in the deposits from 1000 to 1150, and not later.

An Urnes-style brooch and a circular animal brooch were found in the domestic area between the street and the cemetery (Figures 6a, b). The circular brooch depicts an animal with its head looking backwards. These well-known types are interpreted as early Christian badges produced and sold in Danish towns (Søvsø and Knudsen 2021, 189). It is not known whether there was similar production in Odense. Although casting is indicated by metal debris and fragments of crucibles, the types of objects produced is unknown. Analysis of the residue in crucibles confirms that a copper alloy was melted, and the finding of a lead ingot may indicate that lead models were produced, as seen in the Ribe workshop (Jouttijärvi 2015; Søvsø and Jensen 2020, 8).

A fragment of a ring brooch (Figure 6c) dated to the period between 1150 and 1300 may also have religious decoration, as the frame is decorated with heads of bearded men alternating with chalices or trees (the tree of life?). However, it remains unknown whether this is an actual Christian reference, as a parallel to the ring brooch is not found. A rare religious object is a wooden runic amulet found in the street, dating to the 13th century (Figure 6f). The inscription is fragmented, but parts read, 'God's servant', a phrase often seen in apotropaic objects (Imer et al. 2017).

As demonstrated above, the religious objects found in the settlement area demonstrate that religious activities were not restricted to the consecrated area of the cemetery and the church. In the following we will examine the interplay between the religious objects, the practices they represent, the religious practices related to funerals and physical structures and how these interact with overarching societal structures and conditions.

Performing Urban Religion

Both church and king were establishing their position in early medieval Danish society in the 11th and 12th centuries (Engberg 2018, 66-88). The mon-

archy was electoral, and the king travelled about the country to establish alliances and legitimise his claim to the throne. The king would uphold his local authority by distributing privileges and rights to local magnates and the local church. Moreover, royal power in Odense was strengthened through the patron saints of St Alban's church, St Oswald and St Alban. *Passio Sancti Kanuti* describes how Cnut IV transported the relics of St Alban (an English proto-martyr) to Odense (Missuno 2019). Perhaps the relics of St Oswald were added to the narrative to draw a parallel between Cnut IV and St Oswald, who was also a royal martyr, legitimising Cnut IV as a royal Danish proto-martyr, and portraying him as an enthusiastic supporter of the Church.

The alliance between divine and earthly power is clearly illustrated on early medieval coins. Harald Bluetooth (958-985/87) was the first to use iconography on coins as a tool for promoting Christianity, and Svend Forkbeard (986-1014) illustrated the union between king and church by putting his name and image, as well as the cross, on coins (Moesgaard et al. 2015). With the monetisation process during the 11th century, coins were an effective form of propaganda, as they were small, portable items that would circulate on most levels of society. Furthermore, this is illustrated in the transformation of coins into jewellery, as seen with the Cnut the Great coin in the grave at St Alban's. It is possible that it was believed that wearing the symbols of the two most powerful forces in society – God and King – would serve as a potent protective amulet.

The pseudo-coin brooches found in Odense are mainly from 1000 through 1150. These brooches adopted the propagation properties from the coins. Being wearable, it was possible to demonstrate one's beliefs and display allegiance to the king and church. The foil brooches were probably quick and cheap to make, making them accessible to the majority of the population. They could be mass-produced for special purposes or occasions. The foil badges, with their resemblance to coins, would mediate between everyday life and the religious sphere. The Ribe workshop shows that the Church was the principal agent in this production, as it was located on land owned by the Church

(Søvsø and Jensen 2020, 25). The possible location of the workshops in Odense in the street area suggests that artisans, and not necessarily the Church, initiated production. However, it is also tempting to see these badges as baptismal tokens, or related to the celebration of Cnut the Holy, as their use coincides with the canonisation of Cnut IV. In that case, the king or the Church probably initiated the production of tokens. To establish and popularise the cult surrounding St Cnut, King Erik the Good (1095-1103) had to use all available tools to gloss over the legacy of Cnut IV, bearing in mind that he was an unpopular king who was killed by rebels. For Erik the Good, this was a matter of strengthening his position and claim to the throne. The establishment of a paved processional road (see below), the writing of hagiographies, and the official canonisation of St Cnut in 1100, authorised by the pope, may also be seen in this light, as the authorisation of the canonisation was not strictly necessary at the time (Hope 2019, 100).

Wearing ornamented brooches to display social status and social identity did not originate with Christianity. Manufacturing (pseudo) coin brooches dates back to the Roman Empire, and Carolingian 'pseudo-coin' brooches were known in Denmark since the 9th century (Baastrup 2009; Horsnæs 2017). The connection to past traditions may be even more evident in the circular animal brooches. Scholars agree that the Urnes-style brooch and the circular animal brooches display Christian symbols, but the motifs have their roots in late Iron-Age and Viking-Age art (Søvsø and Jensen 2020, 2). Thus, the animal motif may be seen as a vehicle for translating old Nordic thinking into a new Christian European tradition, and the pre-Christian religious connotations seem unproblematic (Bertelsen 1992, 249). Following Shove et al. (2012), the social practice of demonstrating religious affiliation through dress accessories comprises three elements: material, meaning and competence. As we have seen, material and competence were familiar from the manufacture of brooches, and the general meaning of the brooches as identity markers was also familiar to people in general. This emphasises that the dress accessories showed a continuity with pre-Christian religious forms, and their adaptation to Christian

ones, rather than revealing a break with, or change in practices.

Another example of a religious practice that would have been in evidence in Odense is the procession as a marker of holidays and celebrations. In the 12th century *Gesta Danorum*, King Svend receives King Cnut V with a procession that displays the relics of St Cnut the Holy, when they meet at St Alban's church (Saxo 2000, bk.17, 14, 10). Later sources describe how wax candles were donated for processions in Odense (Petersen 1886, 377). In Trondheim (Norway), processions for the celebration of St Olav in the 12th century are attested (Christophersen 2020). Processions were probably an essential part of St Cnut's rituals in Odense as well. Perhaps one of the purposes of the paved street dating to the late 11th century was to facilitate and guide religious processions (Haase 2019, 52-54). As in many cultures, ceremonial processions are also an old Nordic tradition, as illustrated in the Oseberg Tapestry (c.834) and the Gotland picture stones, and as described in Ibn Fadlan's accounts (Deckers et al. 2021, 50; Nygaard and Murphy 2017; Price 2022). Some of these processions are understood to have related to burials, as were Christian processions. A burial procession is depicted in the Bayeux tapestry, where the shrouded body of King Edward is carried on a bier to the church (Figure 7). Two boys with bells in their hands walk below the bier. Bells, candles, torches, and perhaps incense burners and singing were part of these processions, making them an elaborate sensory experience through sound, vision and olfaction (Lepine 2010). The experience would have been reinforced by it taking place on the paved street among the houses of the town, where sounds would be reflected, and light and shadow would create an intense atmosphere.

The bell casting pit found under St Alban's church evokes the way the introduction of Christianity dramatically changed the town's soundscape. Bell ringing would have marked out the day according to the ecclesiastical rhythm and events, celebrations and funerals would have been accompanied by sound, establishing a shared perception of time for the inhabitants, with a strong sensory impact associated with Christianity. In



Figure 7. The funeral procession of Edward the Confessor, from the Bayeux Tapestry, scene 26 (Wikimedia Commons, Public Domain).

contrast to the use of processions and dress accessories, bell ringing was a new religious practice that included a new materiality, competence and meaning.

The production of foil brooches, the establishment of a cult surrounding St Cnut the Holy, with processions and markets, and the involvement of the town and its inhabitants in religious rituals and practices, suggest that during the 11th century, Christianity was transformed from an elite-oriented to a more popular and widely accepted religion, a process primarily initiated by the king. By continuing pre-Christian social practices Christianity was recognisable and engaging to people.

Funerary Practices in the Viking Age and the Early Middle Ages

The introduction of Christianity changed the existing funerary practices dramatically. The funerary practices of the Viking Age were characterised by their variety (Ulriksen 2011, 163-164). As mentioned above, the burials at St Alban's cemetery in Odense showed a very high degree of homogeneity. The Christianity introduced to Denmark attained a high degree of consistency and prescription in its burial rituals, compared to those of 8th-century England, for example (Gilchrist 2015). The uniformity of burial rituals in Odense may be seen as the insti-

tutionalisation of burial practices, leaving very little room for individualisation. The only exceptions are the eight burials that include the bishop's burial, the charcoal burials, the men with pilgrims' badges, and the burial with a coin pendant.

Viking-Age inhumation graves with grave goods suggest that the tombs were open and its content visible to those who attended the burial. The use of either shrouds or coffins during the Christian period changed the visual aspect of the funeral. The last time the family saw the deceased was in the home when they wrapped the body in the shroud or put in the coffin. This marked a transition, and professional clergy performed the ritual when the procession arrived at the cemetery. The commemoration was professionalised, and the focus shifted from the body and grave to remembrance through masses in the church. Nevertheless, the body still played a role, as early Christianity included the idea of a literal bodily resurrection, which emerged in the 2nd through 5th centuries, and was formalised in 1215 by the Fourth Lateran Council (Gilchrist 2015, 379). However, enclosing the cemetery, and the spatial restrictions imposed by its being part of the urban environment meant that intercutting burials and post-burial disturbance became a common phenomenon, which seems to conflict with the idea of literal bodily resurrection (Cherryson 2007, 136). In St Alban's, the concentration of burials was high, and it is rare to find an un-

touched burial. In 1279-80, synods in Munster and Cologne made it mandatory to have a place (ossuary or charnel house) for excavated bones within the cemetery enclosure. Often, this was a simple pit, as seen in several cases of reburied human remains in St Alban's in Odense. Thus, the cemetery's location in the urban settlement made it necessary to find a practical solution, and compromise with Christian principles. In fact, the practical challenge of cutting into older graves may have swayed the Church from initially seeing the grave as a resting place for the body until its resurrection, to a belief that God would inevitably recompose the body for resurrection, regardless of how scattered or decomposed it was (Bynum 1994, 205-214; Christensen and Bjerregaard 2021, 251-252). Moreover, the close proximity of domestic spaces and cemeteries meant that people lived among the dead. This proximity would probably also have made death and the dead more present in everyday life, and may have changed the attitude to the dead, from fear to concern for their fate after death (Cherryson 2007).

The uniformity of Christian graves changed during the late medieval period, when death and burials became increasingly individualised – for example, rosaries were placed in graves and there were burials below the church floor. There was a rising concern with the persistence of the body and of social identity despite physical decay. This development may be explained by the concept of Purgatory gaining traction in the late 12th century, increasing the focus on individual salvation (Gilchrist and Sloane 2005, 215-216). This focus is also reflected by the presence of a runic amulet from 13th-century Odense (Figure 6f).

Structural Practices

In the 6th century, Emperor Justinian I renewed an interdict against burials within city walls, but by the 8th century this was discarded, in practice (Kolnberger 2018, 123). Locating graves and the place of worship within a settlement became a unique feature of Christianity, demonstrating a break with religious practices of the pre-Christian period (Andrén 2000, 8; Engberg 2018, 77; Hansen 2022,

Appendix 5; Nilsson 1989, 37). Although there are a few early examples of cemeteries without churches in Denmark (Grødby, Bornholm), and more in the Mälaren area of Sweden, these seem to be exceptions (Engberg 2018, 63; Tesch 2014). In the case of Sigtuna, where there are cemeteries without churches, Sten Tesch (2014, 116-118) has suggested that the religious rituals took place in main halls, locating settlement, place of worship and burial in close proximity, after all. Such examples are probably related to specific, local exceptions, and the transition from pre-Christian to Christian religion. It was not a general rule that a church and cemetery were part of the settlement. Still, this unique combination provided new potential for performance and practice, for the church and the inhabitants.

Religion became part of life in the town, where religious images on everyday objects, such as brooches and prayers in protective amulets worn by individuals, reveal how religion transcended the boundary between the ecclesiastical and secular worlds. On the other hand, mundane activities did not unfold within the sacred spaces of the church and cemetery. The consecrated cemetery was a separate area marked by a fence, ditches or a wall that identified its legal and spiritual status. In Odense, this space seems to have been generally respected, as the only traces of activity in the cemetery, apart from burials, are related to construction work on the churches. It is possible that fairs and holiday celebrations took place in the cemetery, as evident in other cases, but the evidence is hard to find (Gilchrist and Sloane 2005, 44-46). Coins found in the cemetery soil (twelve coins predating 1250) may be evidence of market activity, but they may also be offerings or accidentally lost coins (Haase 2022, 115). However, as the pottery sherds and metal debris patterns show, the physical boundary between the town plots and cemetery was contested (Figure 5). Over time, the more secular aspects of urban life indirectly influenced the church's position. Being located in the town came at a price, and the town encroached on the cemetery. A house was built in the northern area, on top of graves, and the cemetery wall was moved south sometime in the 14th century (Bjerregaard 2020). Moreover, the settlement area north of the cemetery became more densely

built, and in the early 13th century, a two-storey brick building was erected. Consequently, the view from the east–west main road to St Alban's church was obstructed. This may indicate the demise of, or a change in ecclesiastical influence and power, and the increased impact of secular society.

The church building itself was also a way of demonstrating the Church's status. The wooden St Alban's church did not distinguish itself much from the surrounding (mainly wooden) houses, but the new cathedral's size and materials were striking. In Denmark, the only cathedral larger than St Cnut's was the cathedral in Lund (Scania). The white travertine used as a building material added to its monumentality. Scholars agree that the cathedral in Odense was erected to provide a suitable burial site for the martyred King Cnut, with the canonisation and subsequent position as a shrine in mind (*Danmarks kirker* 1990, 133). It was the result of the Church's and the king's joint effort to strengthen their positions. In the Viking Age, kings or magnates would erect burial mounds or similar monuments as memorials, as the mounds at Jelling (Denmark) illustrate (Pedersen 2017). With the advent of Christianity, churches took over this role and locating the church in a town; they had a daily audience to behold the grandeur of the king and the Church. At the same time, the building style of St Cnut's Cathedral referenced a European building tradition, signalling a new cultural affiliation.

Discussion

In 11th-century Odense, Christianity was manifested outside the ecclesiastical sphere as a change in the motifs of dress accessories. Wearing dress accessories with symbolic elements was not new, but with the shift in motif, it becomes clear that Christianity was an integrated part of everyday life in 11th-century Odense. To the inhabitants, the impressive monuments and the religious processions realised by the king and Church were also recognisable elements, even though they represented a new religion.

Elements such as funerary practices moved away from earlier traditions. They represented a new materiality, and the uniformity with which fu-

nerals were initially performed suggests that it was institutionalised and prescribed by the Church. This change in burial practices emphasises that in Christianity, death had a different meaning than that of a pre-Christian worldview. Death was not the transition to an afterlife, but a liminal state where the soul waited for resurrection on Judgment Day.

To the king and Church, the town served as the perfect stage for displaying power and performing religious rituals. Markets held during holidays would attract trade, and processions could pass the streets, attracting the inhabitants' attention by stimulating their senses through sounds and scent. However, even though the church benefited from its urban setting by being close to a congregation and serving a larger public, this also meant a limited and sometimes contested space. As a result, the cemetery borders were not fixed, and post-burial disturbance had to be accepted as a fact of the existence of an urban church, inevitably leading to a less literal view of bodily resurrection. When established in an already occupied area, the church and cemetery also affected life in the house plots. These plots were reduced in size where the cemetery was located, and activities such as gardens and orchards were eventually relocated to the town's periphery (Haase 2019). Over time, domestic occupation in turn encroached on the cemetery. Houses blocked the view of the church, a metaphor for a shift in the power structure in favour of the secular world during the late medieval period.

Shove and Pantzar (2010, 22-23) have described social practices as either co-existing bundles or co-dependent complexes. Practice bundles share time and place as common resources and become entangled through the shared space. On the other hand, complexes of practices depend on the same competence, material or meaning; through this, they support and reinforce each other. Religious practices in early medieval Odense may be described as co-existing bundles. The co-existence of religious practices creates a synergy that strengthens the position of Christianity to a degree that it affects many aspects of daily life – from dress accessories to adding a new structure to the day through bell ringing.

There are indications that during the 13th century, religious practices became interdependent, as exemplified by the personalisation of religious practices through personal amulets and more personalised funerals (Gilchrist and Sloane 2005, 230). Such a transformation from practice bundles to practice complexes suggests that Christianity's formative years were over. It entered a more mature phase, with a closer integration of the official ecclesiastical rules and rituals, and the townspeople's perception of religion.

Approaching the archaeological data from a social-practice perspective has enabled us to see past the religious monuments, structures and objects, and to instead turn our attention to the actions and practices that took place in relation to these monuments and objects. By focusing on the relational aspects, it has been possible to study and draw meaningful conclusions about highly varied and sometimes limited data sets, such as those related to burials, dress accessories, remains of paved streets, metal debris and pottery. The data set and the theoretical approach have limitations, because it has been impossible to identify the individual actor. All levels of society engaged in religious practices. The material (dress accessories, church, streets, cemeteries etc.) discussed in this analysis was accessible to, or used by, most levels of society. For example, the burials represent all levels of society. Still, the absence of grave goods, the uniformity of burial practices and the very few identity markers (two pilgrim badges and a coin pendant) make it challenging to identify specific social groups or individuals. Therefore, discerning who the 'town-dwellers' were, and who the drivers of religious practices were as individuals is difficult. However, we may conclude that the King and Church played significant roles in creating the framework for religious practices. The churches, the paved street and funerary practices resulted from top-down processes. Still, within those structures, people practised their religion, including familiar elements that predate the introduction of Christianity. From the 13th century onwards, we see a secular social group – mainly the well-off burghers – proclaiming its position in society by encroaching on the cemetery and building houses that block the view of St Alban's church from the main street.

Conclusions

In this article, we have shown that focusing on the practices and performance of religion as reflected in objects or structures leads to a greater understanding of the impact of Christianity on medieval life, and specifically on urban life. The concept of lived religion has made it possible to meaningfully consider the highly varied and sometimes limited archaeological material. The evidence of religious practices in Odense shows that the urban environment played an active role in anchoring Christianity in people's everyday lives. The Church and King used the urban environment to stage their authority through monumental buildings such as St Cnut's Cathedral, secluded spaces, an infrastructure, and spectacular events, such as canonising and celebrating a royal martyr. These often-recurring events and celebrations would have attracted people to the town, creating opportunities for the inhabitants to manufacture and sell products such as dress accessories – perhaps prompted by the king. The inhabitants became active participants in propagating the message of Christianity through new motifs on brooches and the use of coins. At a more structural level, the introduction of Christianity meant that funerary rites changed dramatically, and the areas occupied or managed by the Church (and king) probably limited movement and activity in the town. This balance changed during the medieval period, when the town encroached on the cemetery, and burials became less uniform and more personalised.

Urban settlements were not essential to introducing Christianity to the Danes. Still, as the case of Odense suggests they may have played a role in influencing, and being accepted and integrated into, people's everyday lives. Moreover, this study demonstrates the potential of comparing religious practices observed in Odense to practices in other towns or villages with parish churches. Even though archaeological records will probably have different properties and present fresh challenges, the theoretical framework of lived religion will facilitate comparison with other cases and broaden our understanding of the impact of Christianity on the everyday lives of people in the Middle Ages.

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References

- Andrén, A., 2000. Ad sanctos – de dödas plats under medeltiden. *Hikuin* 27, 7-27.
- Arentoft, E., 1983. *OBM8541. Albani Torv Odense 1983. Udgravningsberetning*. Excavation report. Museum Odense.
- Arentoft, E., 1999. *De spedalskes hospital: udgravning af Sankt Jørgensgården i Odense*, Fynske studier 18. Odense: Odense Bys Museer.
- Arentoft, E., Brandt, V. and Grandt-Nielsen, F., 1985. *Albani kirke og torv*. Odense: Odense Bys Museer.
- Baastrup, M.P., 2009. Småfibler af karolingiske og ottonske typer i Danmark. *Aarbøger for Nordisk Oldkyndighed og Historie* (2005), 209-255.
- Bendtsen, N.H., 2009. *Hedensted Kirke. Forgængerbygningen af træ og efterfølgeren af sten*. Unpublished Master thesis. Aarhus Universitet.
- Bertelsen, L.G., 1992. Præsentation af Ålborggruppen, en gruppe dyrefibler uden dyreslyng. *Aarbøger for Nordisk Oldkyndighed og Historie* (1991), 237-264.
- Bertelsen, T., 2016. Kirker af træ, kirker af sten – Arkitektur og dateringsproblemer på Svend Estridsens tid. In: L.C.A. Sonne and S. Croix, eds. *Svend Estridsen*. University of Southern Denmark studies in history and social sciences 528. Odense: Syddansk Universitetsforlag, 109-132.
- Bisgaard, L., 2001. *De glemte altre: gildernes religiøse rolle i senmiddelalderens Danmark*, Odense University studies in history and social sciences 241. Odense: Syddansk Universitetsforlag.
- Bitsch Christensen, S., 2004. De danske middelalderbyers fremkomst, udvikling og udforskning – et bud på nogle hovedlinjer. In: S. Bitsch Christensen, ed. *Middelalderbyen*. Danske bystudier 1. Aarhus: Aarhus Universitetsforlag, 13-62.
- Bjerregaard, M.M., 2019. The Archaeological Sources on the Killing and Enshrining of King Cnut IV. In: S. Hope, M.M. Bjerregaard, A.H. Krag and M. Runge, eds. *Life and cult of Cnut the Holy The first royal saint of Denmark*. Archaeological and Historical Studies in Centrality 4. Odense: Odense City-Museums/University Press of Southern Denmark, 26-42.

- Bjerregaard, M.M., 2020. *OBM9776 I. Vilhelm Werners Plads, Odense sogn, Odense herred, tidl. Odense amt. Sted nr. 08.04.07. Sb.nr. 130. Kampagne: 13-01-2016*. Excavation report. Museum Odense. Available at: <https://www.kulturarv.dk/publicffdata/documentation/file/doc/215869/public>. [Accessed 30 September 2022]
- Braun, G. and Hogenberg, F., 1572. *Civitates orbis terrarum*. Coloniae Agrippinae.
- Bynum, C.W., 1994. *The Resurrection of the Body in Western Christianity, 200-1336*. Lectures on the History of Religions 15. New York: Columbia University Press.
- Cherryson, A.K., 2007. Disturbing the Dead: Urbanisation, the Church and the Post-Burial Treatment of Human Remains in Early Medieval Wessex, c.600-1100 AD. In: S. Semple and H. Williams, eds. *Early medieval mortuary practices*. Anglo-Saxon studies in archaeology and history 14. Oxford: Oxford University School of Archaeology, 130-142.
- Christensen, A.S., 1988. *Middelalderbyen Odense*. Projekt Middelalderbyen 5. Viby J: Centrum.
- Christensen, C.A. and Nielsen, H., 1975. *Diplomatarium Danicum. Udg. af Det Danske Sprog- og Litteraturselskab*. Copenhagen: C.A. Reitzel.
- Christensen, J.T., 2019. The Medieval Churchyard as an Urban Empty Space: Tracing Actors around the Churchyards of St. Alban and St. Canute, Odense. *Acta Archaeologica* 90(2), 97-110. <https://doi:10.1163/16000390-09002005>.
- Christensen, J.T. and Bjerregaard, M.M., 2021. Materiality in Medieval Burials. In: S. Croix and M.V. Heilskov, eds. *Materiality and Religious Practice in Medieval Denmark*. Acta Scandinavica 12. Turnhout: Brepols, 239-268.
- Christensen, J.T., Bjerregaard, M.M. and Runge, M., 2019. 'Odense before and after the canonization of Cnut'. In: S. Hope, M.M. Bjerregaard, A.H. Krag and M. Runge, eds. *Life and cult of Cnut the Holy The first royal saint of Denmark*. Archaeological and Historical Studies in Centrality 4. Odense: Odense City Museums/University Press of Southern Denmark, 10-25.
- Christensen, J.T. and Hansen, J., 2017. Graven og manden i domkirken Skt. Albani Odense – en kilde til overlevering af 1000-tallets bispehistorie. In: M.M. Bjerregaard and M. Runge, eds. *At være i centrum. Magt og minde – højstatusbegravelser i udvalgte centre 950-1450*. Kulturhistoriske studier i centralitet 1. Odense: Odense City Museums/University Press of Southern Denmark, 5-22.
- Christophersen, A., 2015. Performing towns. Steps towards an understanding of medieval urban communities as social practice. *Archaeological Dialogues* 22(2), 109-132.
- Christophersen, A., 2019. In the Street. On the Transformation of Spatial Practice in Medieval Trondheim. *Lund Archaeological Review* 23(2017), 61-76.
- Christophersen, A., 2020. *Under Trondheim: fortellinger fra bygrunnen*, DKNVS skrifter 2020: no. 3. Trondheim: Museumsforlaget.
- Christophersen, A., 2021. Medieval Urban Environment: Between Mental and Material Practices. *Environmental Archaeology* 1-10. <https://doi:10.1080/14614103.2021.1916374>.

- Cinthio, M., 2002. *De första stadsborna: medeltida gravar och människor i Lund*. Stockholm: Brutus Östlings bokförlag symposion.
- Cinthio, M. and Ödman, A., eds. 2018. *Vägar mot Lund: en antologi om stadens uppkomst, tidigaste utveckling och entreprenaden bakom de stora stenbyggnaderna*. Lund: Historiska Media.
- Danmarks kirker* 1990. *Odense Amt, 1. bind*. Herning: Poul Kristensens Forlag. Available at: http://danmarkskirker.natmus.dk/uploads/tx_tcchurchsearch/Odense_0075-0401.pdf [Accessed 12 December 2022]
- Danmarks Kirker* 1998. *Odense Amt, 3. bind*. Copenhagen: Gad. Available at: <http://danmarkskirker.natmus.dk/odense/odense-tidl-skt-albani-kirke/> [Accessed 27 January 2019].
- Deckers, P., Croix, S. and Sindbæk, S.M., 2021. Assembling the Full Cast: Ritual Performance, Gender Transgression and Iconographic Innovation in Viking-Age Ribe. *Medieval Archaeology* 65(1), 30-65. <https://doi:10.1080/00766097.2021.1923893>.
- Engberg, N., 2018. *Danmarks døde kirker: middelalderens nedlagte kirker*. Odense: University Press of Southern Denmark.
- Ersgård, L., 2006. Dödens berg och Guds hus: förfäderskult, kristnande och klostret i Alvastra i den tidiga medeltidens Östergötland. In: L. Ersgård, ed. *Helgonets boning: studier från forskningsprojektet "Det medeltida Alvastra"*. 5. Lund: Institutionen för arkeologi och antikens historia, Lunds universitet, 23-140.
- Fahlander, F. and Kjellström, A., 2010. Beyond Sight: Archaeologies of Sensory Perception. In: F. Fahlander and A. Kjellström, eds. *Making sense of things: archaeologies of sensory perception*. Stockholm studies in archaeology 53. Stockholm: Department of Archaeological and Classical History, Stockholm University.
- Falk, B., ed. 2008. *Gold vor Schwarz: der Essener Domschatz auf Zollverein; Katalog zur Ausstellung im Ruhr-Museum, Essen, 20. Oktober 2008 bis 11. Januar 2009*. Essen: Klartext.
- Gilchrist, R., 2015. The Significance of Bodily Resurrection to Medieval Burial Rituals. In: J.R. Brandt, M. Prusac-Lindhagen and H. Roland, eds. *Death and Changing Rituals: function and meaning in ancient funerary practices*. Studies in funerary archaeology 7. Oxford: Oxbow Books, 379-396.
- Gilchrist, R., 2020. *Sacred heritage: monastic archaeology, identities, beliefs*. Cambridge: Cambridge University Press. <https://doi:10.1017/9781108678087>.
- Gilchrist, R. and Sloane, B., 2005. *Requiem: the medieval monastic cemetery in Britain*. London: Museum of London Archaeology Service.
- Haase, K., 2017. *OBM9776 I. Vilhelm Werners Plads, Odense sogn, Odense herred, tidl. Odense amt. Sted nr. 08.04.07. Sb.nr. 130 – Kampagne: 16-05-2013*. Excavation report. Museum Odense. Available at: <https://www.kulturarv.dk/publicffdata/documentation/file/doc/185976/public>. [Accessed 30 September 2022].

- Haase, K., 2019. Building urbanity: spatial organisation as social practice in medieval Odense. *Acta Archaeologica* 90(2), 43-76. <https://doi:10.1111/j.1600-0390.2019.12212.x>.
- Haase, K., 2022. *Albani Kirke og kirkegård En oversigt over arkæologiske kilders udsagn til belysning af Skt. Albani Kirke og kirkegårds historie*. CENTRUM. Forskningscenter for centralitet. Rapport nr. 12. Odense: Odense Bys Museer.
- Haase, K. and Olsen, J., 2021. Building a high-resolution chronology of a medieval urban site through Bayesian modelling. *Archaeometry* 63(4), 860-877. <https://doi:10.1111/arcm.12651>.
- Hansen, J., 2022. 'Accumulating wealth in pre-Christian religious Scandinavia'. In: M. Runge, M.R. Beck, M.M. Bjerregaard and T.B. Sarauw, eds. *From Central Space to Urban Place Urbanisation processes in Odense and Aalborg, Denmark*. Odense: Odense City Museums/University Press of Southern Denmark, 242-253.
- Heilskov, M.V., 2021. Living Matter in Medieval Denmark. In: S. Croix and M.V. Heilskov, eds. *Materiality and Religious Practice in Medieval Denmark*. Acta Scandinavica 12. Turnhout: Brepols, 147-180.
- Heilskov, M.V. and Croix, S., 2021. 'Introduction: Materiality and religious practice in medieval Denmark'. In: S. Croix and M.V. Heilskov, eds. *Materiality and religious practice in medieval Denmark*. Acta Scandinavica 12. Turnhout: Brepols, 9-25.
- Hope, S., 2019. The Odense literature and the early liturgy of St Cnut Rex. In: S. Hope, M.M. Bjerregaard, A.H. Krag and M. Runge, eds. *Life and cult of Cnut the Holy The first royal saint of Denmark*. Kulturhistoriske studier i centralitet – Archaeological and Historical Studies in Centrality 4. Odense: Odense City Museums/University Press of Southern Denmark, 100-117.
- Horsnæs, H., 2017. 'Coins as non-coins: The use and meaning of Roman coins in religious contexts outside the Empire'. In: N.M. Burström and G.T. Ingvardson, eds. *Divina Moneta: Coins in Religion and Ritual*. London: Routledge, 111-124. <https://doi:10.4324/9781315577760>.
- Imer, L., Lauridsen, M. and Pedersen, K.R., 2017. Religiøse genstande. In: M. Runge and J. Hansen, eds. *Knuds Odense: vikingernes by*. Odense: Odense Bys Museer, 137-144.
- Jensen, J.J., 2019. The Medieval Urban Churchyard as a Meeting Place. *Acta Archaeologica* 90(2), 111-125. <https://doi:10.1163/16000390-09002005>.
- Jensen, J.J. and Dahlström, H., 2009. *Beretning for Skt. Clemens I og III. Udgravning af den nordlige del af kirkegården tilhørende den middelalderlige Skt. Clemens kirke, København – februar til juli 2008*. Excavation report. Copenhagen Museum. Available from: https://www.academia.edu/32245487/Beretning_for_Skt_Clemens_I_og_III [Accessed 23 July 2021].
- Jensen, M.A., 2017. *ASR 2391, Ribe Amt, Ribe Herred, Ribe Domsogn*. Excavation report. Museum of Southwest Jutland. Available at: <https://www.kulturarv.dk/publicffdata/documentation/file/doc/190230/public>. [Accessed 30 September 2022].

- Jonsson, K., 2009. *Practices for the living and the dead: medieval and post-reformation burials in Scandinavia*, Stockholm studies in archaeology 50. Stockholm: Department of Archaeology and Classical Studies, Stockholm University.
- Jouttijärvi, A., 2015. *Digler fra Thomas B. Thriges Gade (OBM 9776)*. Unpublished report. Heimdal-archaeometry.
- Jürgensen, M.W., 2009. Syddør, norddør og det kønsopdelte kirkerum. *Hikuin* 36, 7-28.
- Kieffer-Olsen, J., 1993. *Grav og gravskik i det middelalderlige Danmark: 8 kirkegårsudgravninger*. Højbjerg: Middelalderarkæologisk Nyhedsbrev.
- Kieffer-Olsen, J., 2018. *Kirke og kirkestruktur i middelalderens Danmark*. Copenhagen/Odense: Nationalmuseet/Syddansk Universitetsforlag.
- Kjellberg, J., 2021. *Den medeltida stadens dynamik : urbanitet, sociala praktiker och materiell kultur i Uppsala 1100-1550*. AUN series 51. Uppsala: Uppsala universitet. Available at: <http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-433853> [Accessed 31 July 2021].
- Knibbe, K. and Kupari, H., 2020. Theorizing lived religion: introduction. *Journal of Contemporary Religion* 35(2), 157-176. <https://doi.org/10.1080/13537903.2020.1759897>.
- Kolnberger, T., 2018. Cemeteries and urban form: a historico-geographical approach. *Urban Morphology* 22(2), 119-139.
- Kristensen, H.K. and Poulsen, B., 2016. *Danmarks byer i middelalderen*. Aarhus: Aarhus Universitetsforlag.
- Larsen, M., 2021. Materiality and religious practice in Danish research. In: S. Croix and M.V. Heilskov, eds. *Materiality and religious practice in medieval Denmark*. Acta Scandinavica 12. Turnhout: Brepols, 27-50. <https://doi.org/10.1484/M.AS-EB.5.123984>
- Lepine, D., 2010. High Solemn Ceremonies: The Funerary Practice of the Late Medieval English Higher Clergy. *The Journal of Ecclesiastical History* 61(1), 18-39.
- Lätzer-Lasar, A., Raja, R., Rüpke, J. and Uricuoli, E.R., 2021. Intersecting religion and urbanity in late antiquity. In: A. Lätzer-Lasar and E.R. Uricuoli, eds. *Urban religion in late Antiquity*. Religionsgeschichtliche Versuche und Vorarbeiten 76. Berlin/Boston: De Gruyter, 1-14.
- Lund, N., 2004. Mission i Danmark før Harlad Blåtands dåb. In: N. Lund, ed. *Kristendommen i Danmark før 1050 – et symposium i Roskilde den 5.-7. februar 2003*. Roskilde: Roskilde Museums Forlag, 20-27.
- Malmer, B., 2004. 'Kristna symboler på danska mynt'. In: N. Lund, ed. *Kristendommen i Danmark før 1050 – et symposium i Roskilde den 5.-7. februar 2003*. Roskilde: Roskilde Museums Forlag, 75-85.
- Mårtensson, A.W., 1981. *S:t Stefan i Lund. Ett monument ur tiden*. Gamla Lund föreningen för bevarande av stadens minne Årsskrift. Lund: Lund offset ab. Available at: <https://www.antikvariat.net/sv/ron106497-st-stefan-i-lund-ett-monument-ur-tiden-martensson-anders-w-ronnells-antikvariat-ab> [Accessed 23 July 2021].

- Mårtensson, A.W., 1983. Stavkyrkor i Lund. *Hikuin* 9, 143-162.
- Mejsholm, L., 2017. Kvinnor och män mellan himmel och jord. Segregering av de döda som kyrkopolitisk strategi. In: S. Tesch, O. Kyhlberg and G. Weman, eds. *Skiftet: vikingatida sed och kristen tro: ett mångvetenskapligt perspektiv på kristnadsprocessen i Mälardalenområdet*. Skellefteå: Artos.
- Missuno, M.B., 2019. From Cnut the Great to Cnut the Holy: England and Denmark in the eleventh century. In: S. Hope, M.M. Bjerregaard, A.H. Krag and M. Runge, eds. *Life and cult of Cnut the Holy The first royal saint of Denmark*. Archaeological and Historical Studies in Centrality 4. Odense: Odense City Museums/University Press of Southern Denmark, 90-99.
- Moesgaard, J.C., Guerra, M.F. and Ingvarsson, G.T., 2015. *King Harold's cross coinage: Christian coins for the merchants of Haithabu and the king's soldiers*. Publications of the National Museum Studies in archaeology and history 20:2. Copenhagen: Publications from the National Museum.
- Nilsson, B., 1989. *De sepulturis: gravrätten i Corpus iuris canonici och i medeltida nordisk lagstiftning*. Bibliotheca theologiae practicae 44. Stockholm: Almqvist & Wiksell International.
- Nyborg, E., 2004. Kirke og sogn i højmiddelalderens by. In: S. Bitsch Christensen, ed. *Middelalderbyen*. Danske bystudier 1. Aarhus: Aarhus Universitetsforlag, 113-190.
- Nygaard, S. and Murphy, L.J., 2017. Processioner i førkristen nordisk religion. *Religionsvidenskabeligt Tidsskrift* 66, 40-77. <https://doi:10.7146/rt.v0i66.26447>.
- Pedersen, A., 2017. Monumenterne i Jelling. Fornyet tradition på tærsklen til en ny tid. In: Bjerregaard, M.M. and Runge, M., eds. *At være i centrum. Magt og minde – højstatusbegravelser i udvalgte centre 950-1450*. Kulturhistoriske studier i centralitet 1. Odense: Odense City Museum/University Press of Southern Denmark, 44-61.
- Petersen, H., 1886. St. Albans Relikvier i Odense. *Aarbøger for nordisk oldkyndighed og historie* II. r. 3. bind. Copenhagen: Nordiske Oldskriftselskab, 369-402.
- Price, N., 2022. Performing the Vikings: From Edda to Oseberg. *Religionsvidenskabeligt Tidsskrift* 74, 63-88. <https://doi:10.7146/rt.v74i.132101>.
- Raja, R., 2019. *Outline*. UrbNet, Aarhus Universitet. Available at: <http://www.e-pages.dk/aarhusuniversitet/2042/html5/> [Accessed 26 February 2020].
- Rasmussen, A.M., 2021. *Medieval badges: their wearers and their worlds*. The Middle Ages series. Philadelphia: University of Pennsylvania Press.
- Rensbro, H. and Høyer, D., 2014. Birgittes kapel i Roskilde Domkirke – gravplads i 1000 år. *Nationalmuseets Arbejdsmark* (2014), 238-251.
- Rodwell, W., 2012. *The archaeology of churches*. Stroud: Amberley.
- Runge, M., 2018. New archaeological investigations at Nonnebakken, a Viking Age fortress in Odense. In: J. Hansen and M. Bruus, eds. *The fortified Viking Age: 36th interdisciplinary Viking symposium*.

Odense: Research Center Centrum/Odense City Museums/University Press of Southern Denmark, 44-59.

Runge, M. and Henriksen, M.B., 2018. The origins of Odense – new aspects of early urbanisation in southern Scandinavia. *Danish Journal of Archaeology* 7(1), 2-68. <https://doi.org/10.1080/21662282.2018.1475891>.

Rüpke, J., 2020. *Urban Religion: A Historical Approach to Urban Growth and Religious Change*. Berlin/Boston: De Gruyter.

Rüpke, J. and Raja, R., 2015. Appropriating Religion: Methodological Issues in Testing the 'Lived Ancient Religion' Approach. *Religion in the Roman Empire* 1(1), 11-19. <https://doi.org/10.1628/219944615X14234960199632>.

Sanmark, A., 2004. *Power and conversion: a comparative study of Christianization in Scandinavia*. Occasional papers in archaeology 34. Uppsala: Department of Archaeology and Ancient History, Uppsala University.

Saxo, 2000. *Saxos Danmarkshistorie*. Translated by Peter Zeeberg. Copenhagen: Det Danske Sprog- og Litteraturselskab & Gads Forlag.

Shove, E. and Pantzar, M., 2010. Temporal Rhythms as Outcomes of Social Practices. A Speculative Discussion. *Ethnologia Europaea* 40(1), 19-29. <https://doi.org/10.16995/ee.1061>.

Shove, E., Pantzar, M. and Watson, M., 2012. *The Dynamics of Social Practice: Everyday Life and how it changes*. London: SAGE.

Søvsø, M.H. and Jensen, C.V., 2020. Workshop production of brooches with religious symbolism around the year 1100 in Denmark. *Danish Journal of Archaeology* 9, 1-31. <https://doi.org/10.7146/dja.v9i0.115489>.

Søvsø, M.H. and Knudsen, M., 2021. Objects of Personal Devotion: Outer Markers and Inner Meanings. In: S. Croix and M.V. Heilskov, eds. *Materiality and religious practice in medieval Denmark*. Acta Scandinavica 12. Turnhout: Brepols, 181-216. <https://doi.org/10.1484/M.AS-EB.5.123990>

Tesch, S., 2014. Skilda gravar, skilda världar – tidigkristna gravar, kyrkor, stadsgårdar och storgårdar i Sigtuna och i Mälardalen. In: K. Olof and K. Jupiter, eds. *Medeltida storgårdar: 15 uppsatser om ett tvärvetenskapligt forskningsproblem*. Acta Academiae Regiae Gustavi Adolphi 131. Uppsala: Kungl. Gustav Adolfs Akademien för svensk folkkultur, 101-130.

Tveito, O., 2011. Etableringen av kirkegårder i norsk kristningstid. *Norsk Teologisk Tidsskrift* 112(1), 15-33. <https://doi.org/10.18261/ISSN1504-2979-2011-01-03>.

Ulriksen, J., 2011. Vikingetidens gravskik i Danmark – Spor af begravelsesritualer i jordfæstegrave. *Kuml* 60 (2011), 161-245. <https://doi.org/10.7146/kuml.v60i60.24527>.

Urciuoli, E.R. and Rüpke, J., 2018. Urban Religion in Mediterranean Antiquity: Relocating Religious Change. *Mythos. Rivista di Storia delle Religioni* 12, 117-135. <https://doi.org/10.4000/mythos.341>.

van Vilstern, V., 2014. Langs Assen en Kiev naar Keulen? Overpeinzingen bij een bijzondere. Alsengem uit Drentse bodem. *Nieuwe Drentse Volksalmanak* 128 (2014), 113-134.

Wienberg, J., 1993. *Den gotiske labyrint: middelalderen og kirkerne i Danmark*. Stockholm: Almqvist & Wiksell International.