

## RESEARCH ARTICLE

### New light on the early urbanisation of Copenhagen: with the Metro Cityring excavation at Rådhuspladsen (Town Hall square) as a point of departure

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Copenhagen's origin and early development have long been subject to study, and has since the nineteenth century resulted in numerous and sometimes conflicting theories. The dearth of large excavations in the old parts of the city in modern times has resulted in fragmentary archaeological evidence and a concomitant lack of synthesis of a more modern nature.

In connection with the current, large-scale, excavations connected to the Metro Cityring project (2009–), the Museum of Copenhagen has had the opportunity to conduct major excavations pertinent to the development of the medieval town. The site at Rådhuspladsen (the Town Hall Square) lies on the borders of the high and late medieval town, but in an area traditionally seen as located outside the earliest settlement. The preliminary results from this excavation, together with indications from excavations and watching briefs in recent years, enable us to update our hitherto knowledge and beliefs about the origins of Copenhagen. The discovery of a previously unknown cemetery at Rådhuspladsen, together with a large number of pits and wells backfilled with household refuse and waste from iron working, yields new information on the activities in the early town, and perhaps also clues to the organisation and power structure of the town's early phase.

This article sketches in broad outline the early medieval findings from Rådhuspladsen as well as some of the recent years' archaeological observations from around the city centre. Together, these form the background for a discussion on the organisation and character of Copenhagen in the early medieval period, and some preliminary hypotheses concerning the urbanisation process of the city.

**Keywords:** Copenhagen; early medieval; urbanisation; burials; iron working

#### Introduction

The question of how Copenhagen came to be is an old one, resulting in numerous and sometimes conflicting theories from historians and later on, archaeologists, from the nineteenth century onwards.<sup>1</sup> However, the source material has been scarce, both from a historic and an archaeological point of view (Frandsen 2001, p. 471ff.). A dearth of large excavations in the old parts of the city in modern times has kept the archaeological evidence fragmentary, a corollary of which is a lack of synthesis pertaining to the more recent archaeological evidence. Although archaeologists working in Copenhagen have been aware of the need to update the knowledge of the town's early history, this has not yet been done.

In connection with the current, large-scale Metro Cityring excavations (2009–) the Museum of Copenhagen has had the opportunity to conduct major excavations in areas pertinent to the development of the medieval town. The sites of Kongens Nytorv (*The King's New Square*; 2010) and Rådhuspladsen (*The Town Hall Square*; 2011–2012) lie on the borders of the high and late medieval town, but are traditionally seen as being located outside the earliest settlement (Gautier 1999,

p. 67ff., Fabricius 2006, pp. 16–17). The preliminary results of these excavations, particularly Rådhuspladsen, together with those from the 2008 excavation of St. Clement's cemetery and a number of indications from small watching briefs around the city, allow us to update the story of the early development of Copenhagen.

Since the material is still undergoing analysis at the time of writing, the complete data from the excavation at Rådhuspladsen is not yet at hand. Therefore, this article should be considered an early presentation of preliminary results, with its main aim being to demonstrate the potential this material holds to illuminate the early urbanisation process of Copenhagen. These early findings indicate that the city's early development is a complex process with more phases and involving more agents than hitherto asserted. At present, there is insufficient empirical data to fully investigate this. However, the results obtained thus far provide some interesting insights, albeit in a preliminary form. Questions that spring to mind are: *What kind of place was early medieval Copenhagen? When and how did the town start to develop? Why did it develop as it did? And who were the people who settled here and lived their lives in the new town?*

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Figure 1. Copenhagen and the Øresund (the Sound) area, with important towns marked.

This article is part of a forthcoming larger study, treating questions on urbanisation and urbanity in medieval Copenhagen on a broader framework. The potential that this new information holds for enhancing our knowledge of Copenhagen's role in the Øresund (the Sound) area in this dynamic period is invaluable. Moreover, it would further our understanding of the general historical development in the eastern part of Denmark in the early medieval period (c. 1050–1200) (Figure 1).

### Urbanisation and urbanity

The process of urbanisation and questions of urbanity are indeed topics central to the discipline of historical archaeology, as well as to other related disciplines, such as history, sociology and geography. It is a multidisciplinary research field, with a multitude of theoretical models and definitions attached to it.

'Urban', the key word utilised here, constitutes a central place both geographically and functionally (Andersson 2011, p. 370). A number of non-agrarian functions are placed in a specific location (a town), which has implications for the type of life and living conditions present in such a place (urbanity). Trade and craft are perhaps the most significant of these non-agrarian functions. The location of the town is based on its communication possibilities (Andersson 2011, p. 381). The settlement is usually also characterised as being dense and organised in plots (e.g. Carelli 2001).

The process that leads to the development of a place into a town (urbanisation) is complex and differs from case to case, just as the functions of the specific town

can vary (Carelli 2001, Andersson 2011). A common trait is that the town constitutes a centre of authority and organisation. Recent research has moreover focused on the possibility of urban functions, such as trade and administrative organisation existing, without a nuclear settlement which can be referred to as a town (Andersson 2011). A town also has to be considered in its wider context, as an actor in the landscape, interacting with its surrounding villages and countryside (Anglert 2006, p. 276ff., Andersson 2011, p. 371).

### Previous research on Copenhagen's early period

Numerous theories abound as to how, when and where Copenhagen originated (summarised in Gabrielsen 1999, p. 9ff., Frandsen 2001, p. 471ff.). A brief overview of these theories is presented here.

Traditionally, the founding of the town is said to have occurred in 1167, when according to Saxo Grammaticus, the Archbishop Absalon is said to have built a new castle on the island of Strandholmen (Saxo Grammaticus, p. 338). Another contemporary written source is the letter Absalon received from Pope Urban in 1186, stating that King Valdemar I had given him the castle in Havn (the early name for København/Copenhagen) and what is interpreted as an estate or village of Havn (Nielsen 1877, p. 26; Jørgensen 1878, p. 293; Heise 1880–1881, p. 517; Zander 2010, p. 29). The meaning of the passages have been scrutinised by historians over the years, but there is little consensus on what Absalon was actually responsible for building, and what type of place Havn was at this time (summarised in Zander 2010, p. 29). The dating as well as

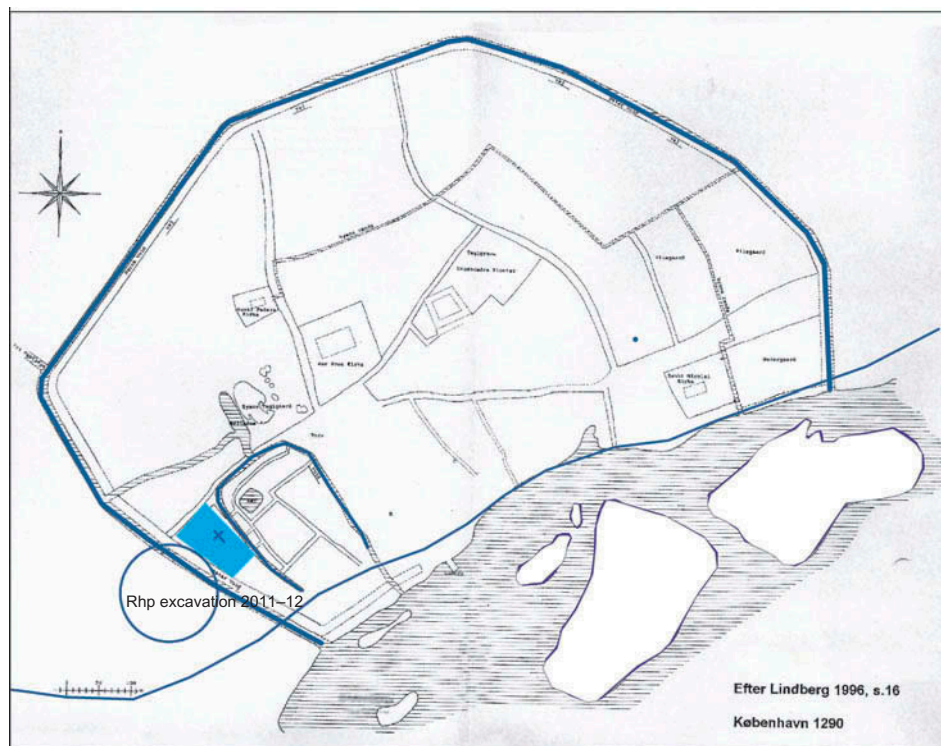


Figure 2. Small horseshoe-shaped enclosure and Skt. Clemens (St. Clement's) Church and cemetery on the background of the high/late medieval town.

the placement and function of the earliest settlement has also been subject to much debate. The general agreement though, among both historians and archaeologists, is that Copenhagen/Havn has a history predating Absalon (summarised in Gautier 1999, p. 67ff.). What kind of a place Havn was at this time, as well as the dating and placement of the earliest settlement/town, cannot however be said with certainty to have been agreed upon. The primary reason for this being the meagre archaeological source material.

The most established theory among scholars until recently has been that Havn was a seasonal marketplace, with fish as a main trading commodity, and that its importance grew during the twelfth century. The first settlement has been believed to have been located within a moat and rampart in a 2.5 ha area, with the church of St. Clement's placed outside (Skaarup 1999, p. 90ff.; Figure 2). Even with regard to these theories, however, much is uncertain: the date of the permanent settlement, the types of activities/functions, the existence of an eastern settlement and the dating of the earliest church in the town, for example.

#### New additions to the archaeological record

In the past 25 years, and particularly in the last 5–10 years, excavations and watching briefs around the city centre have piece by piece updated and added to the

archaeological record, providing new indications on the dating and topography of the early settlement. There are, however, reservations as to the extent to which these highly limited and scarce remains can be considered as clear evidence. It is often only an isolated radiocarbon date or a few finds that constitute the grounds for dating. It is also uncertain, in some cases, as to what the archaeological source material from these excavations represents, i.e. if deposits should be seen as remains from activities at the precise location, or if the material has been transported from other places in the vicinity, to be used as infill.

With these caveats, the following map (Figure 3) and list show some of the most important locations where there are limited indications of early medieval activity, from west to east:

- (1) Fredriksberggade, Vester Voldgade, Mikkel Bryggers Gade: Horseshoe-shaped ditch surrounding the enclosure: Recent  $^{14}\text{C}$ -dating of a deposit in the ditch suggests an eleventh century date (Wozniak 2009).
- (2) Vestergade 7, 1989: Clay floors and other cultural layers below the rampart – dated through pottery to the eleventh–twelfth century and stratigraphically older than the ditch (Skaarup 1999, p. 90ff.).

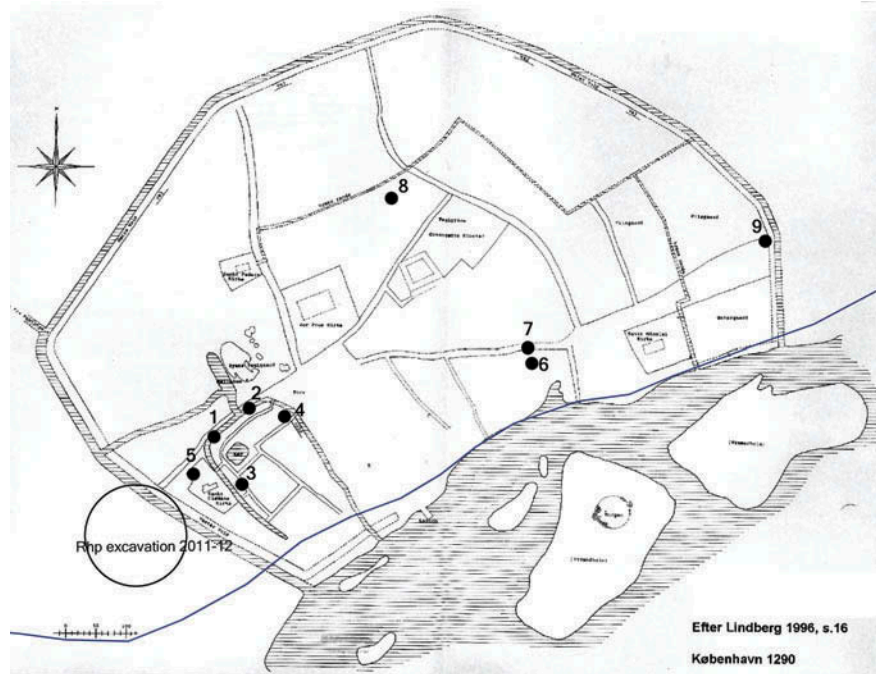


Figure 3. The medieval town. Shown here are some of the archaeological results that have enabled archaeologists and historians to rethink the dating and the extent of the early town. The map also marks the placement of the 2011–12 excavation at Rådhuspladsen (Town Hall Square).

- (3) Mikkel Bryggers Gade 11–13, 1989: Cultural layers with traces of settlement and large-scale fishing, dated through pottery to the eleventh–twelfth century (Skaarup 1999, p. 84ff.).
- (4) Gammeltorv 18, 2008: Cultural layers from the early medieval period, dated through  $^{14}\text{C}$  of a charred seed. KBM 3535 (Grumløse 2008).
- (5) Vestergade 29–31, 2008: Part of St. Clement’s cemetery with 1048 graves from the eleventh to sixteenth centuries. Also wells and smithing activities from the same period. Early dating based on a coin reused as necklace, arm positions on buried individuals and grave types. KBM 3620 (Jensen and Dahlström 2009).
- (6) Amager Torv/Højbro Plads, 1994: Cultural layers from the eleventh to thirteenth centuries, dated through finds of Baltic Ware (c. 1000–1200). They contained refuse from household and craft activities, and of animal husbandry. It is not certain, however, that the cultural layers were built up at the location. KBM 1213 (Johansen 1999).
- (7) Amager Torv/Læderstræde 8, 2003: Five street levels were found. The deposit above the oldest one was dated with the help of  $^{14}\text{C}$  to 1058–1156. It is, however, not certain if the layers were man-made or naturally deposited. KBM 2822 (Poilsen 2003).
- (8) Regensen, 2012: Pit with  $^{14}\text{C}$ -dating to 995 + –26 (Calendric Age, calAD; AAR-17445). At odds

with this result was metallurgical analysis of a copper needle in the same pit, with a dating to 1200–1400. KBM 3824 (Winther 2012).

- (9) Kongens Nytorv, 1999: Plot borders with backfills dated to 1055–1155 ( $^{14}\text{C}$  of animal bones). Containing refuse from large-scale animal husbandry. Find of a handle made of carved deer antler, typologically dated to the eleventh century (Kristiansen 1999, p. 100ff.).

### The excavation at Rådhuspladsen

Although the archaeological evidence listed above attests that the extent of the early settlement appears to be different from what was previously believed, the excavation at Rådhuspladsen has given this a new perspective or dimension. Due to the location of the site outside the medieval town, it was thought to offer little potential for finding evidence of early medieval inhabitation. Contrary to this, however, a good deal of early medieval material was indeed encountered, indicating that the extent of the early medieval town goes beyond the town’s later medieval borders towards the west. Yet perhaps more importantly, the excavation has produced empirical source material of such a scale that we now, with a new degree of certainty, have important information indicating the kind of place early medieval Copenhagen was.

The excavation area was placed in the north-western half of the square 'Rådhuspladsen'. It comprised of 1750 m<sup>2</sup> which was subject to excavation, and 2600 m<sup>2</sup> of watching briefs (see Figure 4). Due to intensive use of the area from the high medieval period onwards (for instance construction of multiple phases of moats and World War 2 air-raid shelters) a large part of the area was badly truncated, potentially removing early medieval

cultural layers. Thus, almost all traces of activities from this period that remained were deep cuts and their fills. Therefore, we know very little of the ground level from that time, and the information we have about activities in the area is fragmentary.

The features in question were spread across the excavation area (see Figure 4). They consisted of pits, wells, simple buildings, roads and graves. From finds and

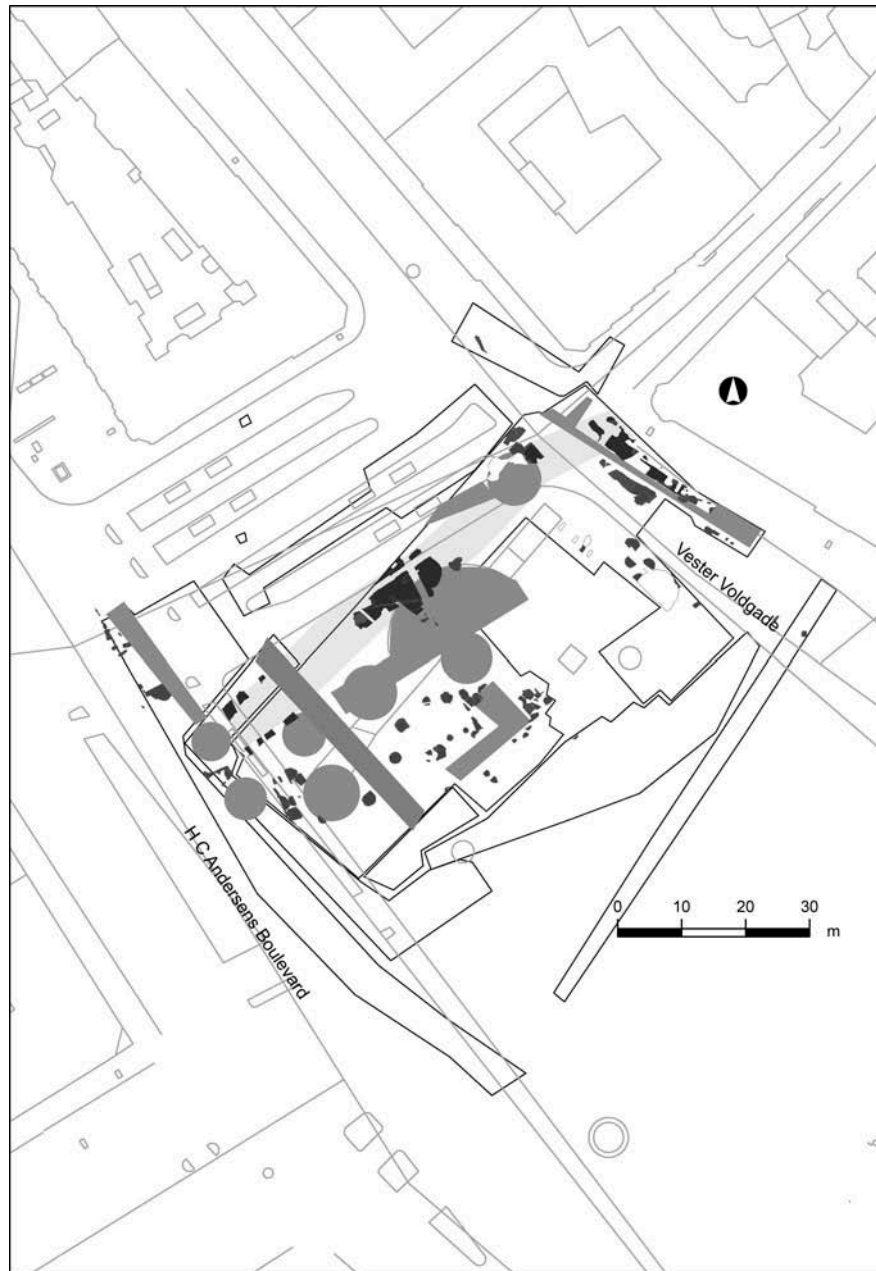


Figure 4. Plan of the excavation with all the early medieval findings highlighted in darker shading. The main truncations are marked with lighter grey. The circular, smaller, oblong features represent the WW2 air raid shelters. The diagonal lined feature in light shading is a reconstruction of the road discussed in the article, which is preserved in three different places (darker shading). The excavation trench is the large, central, rectangular figure where the modern toilet building makes up the missing piece. The watching brief trenches surround the excavation trench. It should be noted that, most of them had been dug up previously, and contained, to a large extent, disturbed soil.

stratigraphic relationships, we can date these features, in a preliminarily and broad fashion to the late eleventh–thirteenth centuries. From sometime in the fourteenth century, it is evident that most of the area has been used for other purposes. In the eastern part of the excavation area, the high medieval fortification with its moat and city gate ‘Vesterport’ were constructed, leaving huge cuts in the early medieval ground. No activity similar to the early medieval use of the area has been identified from the late fourteenth century onwards outside what is known as the town’s high and late medieval borders (Dahlström and Lyne in prep.).

### *Early medieval production and settlement area*

A large part of the area contained pits and well-like features that were preliminarily dated to the early medieval period through pottery and comb types found in their fills. The pits are believed to have been used for storage in connection with dwellings or productions – some might also have been used for specific purposes related to the iron production on the location (see below). There were 65 cuts interpreted as pits and 12 as wells, all but one located south of a possibly contemporaneous road running in a southwest-northeast direction across the excavation area. The road was preserved in, at least, two phases of usage, thus far broadly dated by pottery to the medieval period.

The pits and wells were situated quite close together, and contained similar fills. Some were subject to inter-cutting, which would suggest several phases of activity. Seen in plan view, it appears as though they were placed in a system, almost in rows at a certain distance from the road (Figure 5). This could suggest the idea of a pattern – for instance that they could be placed behind hypothetical houses that might have been located between the road and the pit/well area. This was one way of arranging

household activities in medieval towns, with houses for dwelling and/or workshops/booths closest to the road, and other activities, including places for refuse disposal, placed behind them (Carelli 2001, p. 106ff.). There is also evidence, for instance from Lund in the twelfth century, that in this period with less regulated craft activities, workshops were placed far back on the plots (from Christophersen 1980, Carelli 2001, p. 144). However, no plot borders have been recorded at Rådhuspladsen. Furthermore, since the area which hypothetically would have contained houses was, to a very large extent, truncated by later activity, we do not have any archaeological data from that area – the apparent pattern of pits and wells could merely be imagined. The evidence uncovered suggests, on the one hand, that the area was mostly utilised for production and craft, and as such it would perhaps be of a less regulated character (*ibid.*). On the other hand, due to the large truncations, we cannot rule out the presence of dwellings and regulated plots. The find material in the deposits of the pits, both refuse from craft production as well as household refuse, also suggests the area may have been used as a combined dwelling and craft area.

The features interpreted as pits were generally quite large – one to one and a half meters in diameter and up to a meter deep. Since the edge of the cut was rarely preserved, it is difficult to know the true depth of the pit or well. The general shape of a typical pit was circular or sub-circular in plan, with vertical or evenly sloping sides and a flat base. In the primary fills, the finds were scarce, quite different from the later backfills of the pits. In some cases, it was possible that the pit had been left open for periods of time during the stage of disuse. The pits and wells had been utilised as refuse pits after the primary use had stopped. Many of the backfills contained craft-related refuse, with iron slag as a significant component. Many backfills also contained a substantial amount of fish bone

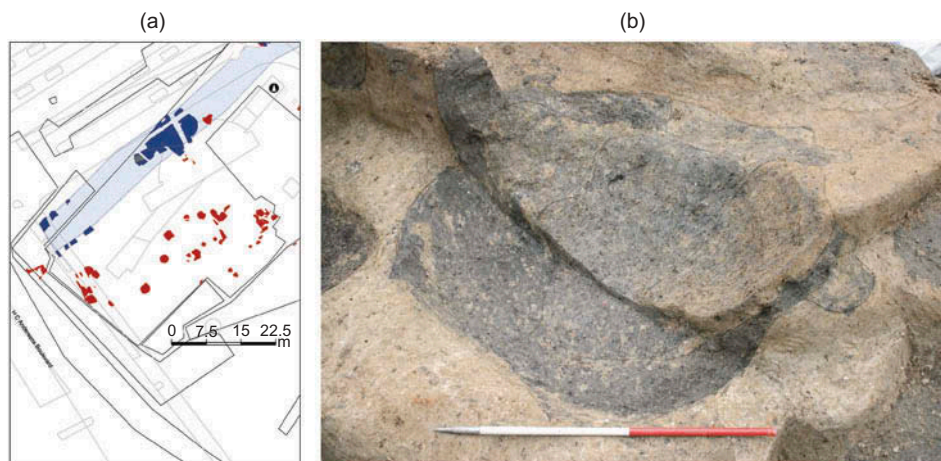


Figure 5. (a) Close-up of area with pits and wells. The reconstructed road is marked with diagonal lines. (b) Pit, pre-excitation. Photo: Museum of Copenhagen.



Figure 6. Part of a comb and sherds of Baltic Ware found in pit backfills at Rådhuspladsen. FO 200722 (a) and FO 220178 (b). Photos: Museum of Copenhagen.

and other bones. Other important find categories were pottery and bone combs (Figure 6(a) and (b)). The pottery was mainly Baltic Ware, which previously has been scarce in Copenhagen. Some pits also contained early redware and late greyware in the backfills. One pit contained a single Viking Age potsherd. Collectively, the backfills can be described as containing both craft-related and household material (Dahlström and Lyne in prep.).

The wells were between *c.* 0.6 m and 2 m in diameter, up to two meters deep and typically with vertical sides and flat bases. The distinction between pits and wells was hard to ascertain, and the interpretation was sometimes uncertain. In some of these features, the fills did not seem to be highly affected by water, and only one had an obvious lining in the form of a timber well lining. Alternative interpretations for some of these features could be some type of container – for instance a water cistern or a silo. Cisterns or silos were often placed in connection to dwellings or to other activities requiring the use of water or other storage, e.g. of grains (Karg and Lafuente 2007, p. 188ff.).

The key question concerning the original function of these finds is not conclusively answered, as yet. However,

from their attributes, and the spatial relations already known, some thoughts and theories regarding their functions can be proposed at this stage. The regular shape of the majority of the finds – more or less circular, with vertical sides and flat bases – makes it plausible that they have functioned as storage (although some are definitely wells; see discussion on silos and cisterns above). This signifies that they could have been related to dwellings, even though we do not have much evidence of such structures. Pits were generally used as storage for food supplies, and they could be placed either outside the houses or under the floor indoors. The pits and wells could also have been useful for storage or specific activities related to different types of craft or production, for instance to keep raw material in a controlled atmosphere, and obviously for water which was needed for many purposes (Karg and Lafuente 2007, p. 188ff.). Furthermore, if the backfills of the pits and wells were to be seen as traces of the activities taking place on the location, it is more likely that the finds in question have been part of craft production activities. The evidence indicates that the site has been the location of iron working and possibly also of fish handling and other crafts,

such as comb making. In the eleventh–twelfth centuries, craft activities were not very specialised, and generally spread across different areas around the town (Carelli 2001, p. 143, Scholkmann 2011, pp. 392–393).

As mentioned above, the pits and wells were situated south of the road running east-west. However, except for the burial area described below, almost no area to the north was available for the preservation of early medieval remains. Moreover, there were no borders or demarcations of the activities observed to the east or west in the excavation area. To the east, we know that St. Clement's Church and cemetery were situated, but we do not know how far towards the west the activities occurred.

The datings of these features rely on a combination of artefacts, stratigraphy and radiocarbon dating of seeds from primary pit fills and road layers. Since the early medieval period can be problematic to date via  $^{14}\text{C}$ , it has to be weighed against the artefactual and stratigraphic evidence. It should be kept in mind that, the bulk of the datable finds were collected from secondary fills in pits, while radiocarbon datings mostly derive from primary deposits. Having said this, some preliminary  $^{14}\text{C}$ -datings from primary fills of pits show a time span from the late eleventh century to the early fourteenth century. The oldest pits are dated to 1070 + –55 and thereabouts (Calendric Age, calAD, using 2 sigma; Lus 10669). The Baltic Ware pottery found in the backfills date preliminarily to the twelfth century (Figure 6(b)), while some later dated pits also had early redware and late greyware in their backfills. There are several combs of early medieval types, but they are, at this point, only preliminarily registered (Figure 6(a)). This gives an initial

usage period of this area to the late eleventh to mid-fourteenth century, with the first half of this time span as the main phase.

In the eastern sector of the excavation area, closest to the central part of the town, some traces of simple buildings were found together with pits as those described above. This area was less disturbed by later activities, possibly because the rampart of the later medieval fortification may have built on top of it. Thus, some cultural layers and original topsoil were preserved. The traces of buildings consisted mainly of postholes, beam slots and fragments of clay floors. Since the undisturbed area was quite small, no complete buildings were identified. From preliminary observations there seem to have been several phases of houses. Some houses could be contemporary with the pits, but some clearly belong to different usage phases. With regard to the discussion of the kind of activities the pit-and-well-area represents, it could be argued that the better preservation conditions seen in the eastern part of the area, give an idea of how the whole of the area has been used – for dwellings and production in several phases. In this area, the Vesterport city gate was later built. Below the gate's foundation, was a stone paved layer, possibly part of an earlier road. A  $^{14}\text{C}$ -dating from a seed found in between the stones dates to 1069 + –52 (Calendric Age, calAD, using 2 sigma; Lus 10635) (Figure 7).

### *Burials*

Perhaps the biggest surprise of the excavation at Rådhuspladsen was the discovery of graves in the north-

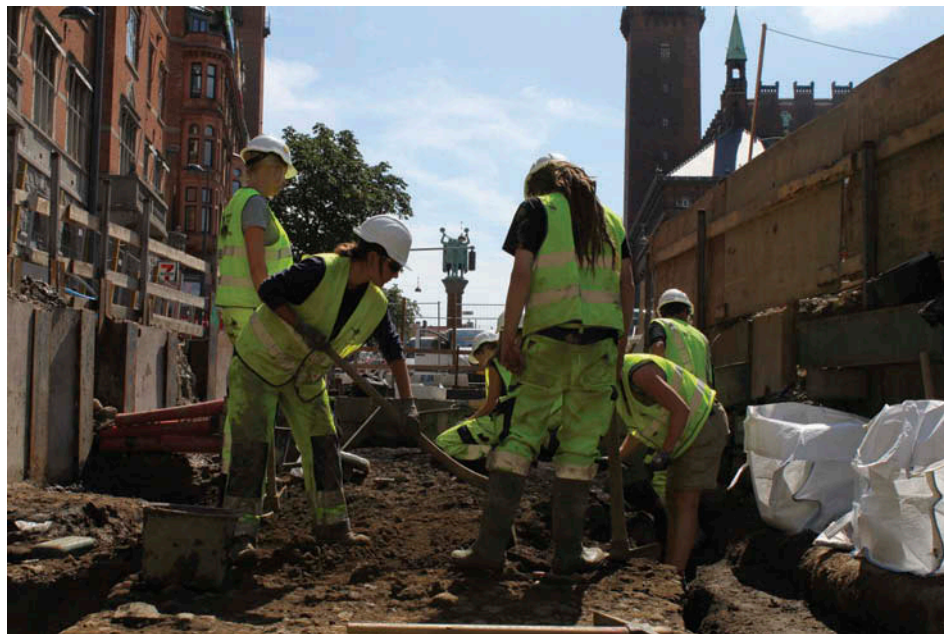


Figure 7. Archaeologists from the Museum of Copenhagen working on early medieval features in Vester Voldgade. Photo: Museum of Copenhagen.



western corner of the square. A total of 18 east-west-orientated burials, and 22 individuals were registered in an area of approximately 30 m<sup>2</sup>. The area was placed immediately north of the road which probably already at this point led into town. About 150 meters to the east, south of the same road, the church and cemetery of St. Clement's were situated from the eleventh century (Jensen and Dahlström 2009).

The graves at Rådhuspladsen were heavily truncated and disturbed by later activities. Of the 22 individuals, a total of 10 were recovered in situ, though none were complete. Some of the graves were seen only in the section towards the outer limits of the excavation area. This indicates that the burial area most likely continued both to the north and to the west.

The graves lay in up to three stratigraphic levels. On the basis of arm positions (A or B), a <sup>14</sup>C-dating of a coffin to cal AD 826 + -36 (Calendric Age, calAD, using 2 sigma; KIA 44988; in Dahlström and Lyne in prep.), as well as finds of Baltic Ware in the grave fills, the graves were preliminarily dated to the early medieval period. The early dating of the coffin timber was a surprise. Yet the wood used for the coffin could have had a considerable age when used, so no serious conclusions can be drawn from the date. At a later point, <sup>14</sup>C-samples were processed from almost all individuals (21), in order to provide more reliable information on the dating and usage period of the cemetery. The results of these confirmed the early dating of the coffin wood. It also called for further analysis of <sup>13</sup>C, to gain a more secure and relevant dating span. Depending on the amount of marine food intake by the individuals, the <sup>14</sup>C-datings need to be calibrated to be adjusted in this respect. The results of these are under analysis, but they point to a dating range of these graves to 1040–1126 (Calendric Age, calAD; preliminary report 1071, Institut for Fysik og Astonomi AMS <sup>14</sup>C Dateringscenter, Aarhus Universitet; in Dahlström and Lyne in prep.).

The remains of all individuals were analysed with regard to age, sex, height and basic pathology (Antropologisk Laboratorium, University of Copenhagen, report AS 37/2011). The analysis showed that the buried individuals consisted of women, men and children of all ages, suggesting this to have been a typical part of a settlement population. Nothing specific in terms of health or disease could be seen. The only information of particular note was the height of the two individuals where estimations could be made – a man of 179 cm, and a woman of 170 cm. No conclusions can be drawn from two individuals, but this indication is nevertheless curious in light of the fact that the individuals buried nearby in St. Clement's cemetery at about the same time were exceptionally small. Several women from the early phase of the St. Clement's cemetery (approximately dated to eleventh–twelfth centuries) were of a height of between 140 and

145 cm, and some individuals believed to be men were 162–165 cm tall (Harvig 2009). The average height of women during the Middle Ages was 160–162 cm, and the height for men 173 cm. During the Viking Age, the average heights were somewhat lower, for women 158 cm (Bennike and Brade 1999, p. 16). The individuals from St. Clement's cemetery and those from Rådhuspladsen are placed outside either side of this scale, although believed to be contemporary. The possible significance of this is worthy of investigation. Further analyses which could prove highly useful are isotope analyses which can provide information about diet, living environment and place of origin.

The layout of graves and the demographical indications can point to the burials belonging to a parish cemetery, most likely connected to a church or chapel. However, there is no information from written sources to suggest that a church was located here. In the historical records, there is no reference to more than one church during the early medieval period (KD IV, nr 125; in Zander 2009, p. 30, 76). The one church mentioned is interpreted as being the church of St. Clement's (Zander 2009, p. 76). From what we now know from the archaeological record, a new study of the references of the historical sources to churches during the medieval period would be beneficial.

The density of burials, which becomes higher towards the north, indicates that the centre of the cemetery is located in this direction, as well as the probable church. There are other indications of the full extent and placement of the cemetery. Approximately 25 m to the east, a pair of human shinbones was found at an earlier stage of the excavation, in a very small watching brief trench, which at the time was considered a stray find. Additionally, according to a note from 1954 in the museum's archive, skeletons were found outside the building which faces the north side of Rådhuspladsen, quite close to the graves found in 2011. The question then was if the skeletons should be considered as deriving from a modern murder or if they were historical (Archive note from 1954, KBM). After we checked with the police archives, it was evident that the skeletons were not modern. In view of this, it is likely that they may be a part of the newly discovered early medieval cemetery.

The stratigraphic conditions as well as the <sup>14</sup>C-results indicate that the usage period of the cemetery was fairly limited, but still more than a temporary feature. If the graves found at the Rådhuspladsen excavation were located towards the southern limits of the cemetery, and yet lay in up to three levels, that would suggest a well-established cemetery. Moreover, if these burials belong to the outer part of the cemetery, the central parts would be likely to have had a higher burial density and possibly older graves. However, since the cemetery, and its hypothetical church, is not known from written sources,

it is likely that it was taken out of use quite early in the medieval period. It is tempting to see the cemetery and the activities in the pit area as a contemporary phase of activity which came to an end at one point and instead the high medieval fortification was built running through this area. Its significance will be discussed later in the text.

In sum, the excavation at Rådhuspladsen has yielded crucial new information on the early history of Copenhagen. This information may be interpreted in the following way:

- Part of the settlement has been located further to the west than previously suggested, which could have several implications. The earliest town could have been larger in extent, or perhaps that the town's centre was located further to the west than previously believed – or that there were several settlement nuclei at this time.
- The findings seriously question the former theories about the horseshoe-shaped ditch and rampart east of St. Clement's and west of Gammeltorv as being the earliest extent of the town.
- It is likely that there has been a previously unknown church in the west – which was abandoned, possibly in the late twelfth or early thirteenth century. The presence of two churches points to social complexity, and the later abandonment of the cemetery and activity area suggests a change of organisation or power in the town (Andrén 1985, p. 33ff.; see discussion below)
- There is evidence of craft production – primarily iron working. Also significant is the occurrence of fish bone – which (depending on the scale of processing) could be seen in relation to trade.

### **The early settlement – or town – what type of place was it? What do the results imply about the early urbanisation of Copenhagen?**

What does this new archaeological data, both from Rådhuspladsen as well as the earlier indications from around the town centre, suggest of *the type of place* Copenhagen or *Havn* was in the eleventh and twelfth centuries? Long-standing questions, such as when the oldest settlement can be *dated* to, where it was *situated*, *who* initiated the new settlement, and *why*, can now have new light shed upon them. This new information also enables us to ask questions about the people who moved to the town – about who they were, and why they settled down here. This will not be discussed in any depth, here, but left for future enquiry.

### **Dating, topography**

Previously, it was assumed that the settlement developed possibly from the late eleventh century and onwards, but now we have more firm indications to suggest that Copenhagen could already have been a place with an urban character in the late eleventh century. The dates from St. Clement's cemetery, the ditch surrounding the horseshoe-shaped enclosure, dates from Mikkel Bryggers Gade and Vestergade as well as the ditch at Kongens Nytorv, all indicate substantial human activity already during this period, and over quite a large area. The <sup>14</sup>C-dates of the burials from Rådhuspladsen are, based on the preliminary analyses, among the earliest dates we have of activity in Copenhagen, and indicating a well-established cemetery at the turn of the twelfth century. Moreover, the dates from the production and settlement activities, starting from the late eleventh century add to the picture of Copenhagen as a busy place at the turn of the twelfth century.

The general picture of the topography of early Copenhagen may be interpreted in several ways. It may indicate that the early medieval settlement was placed along the beach in the rough shape of a long-stretched rectangle (Figure 8). Parallel to the beach, and later harbour, was a road running west-east, entering the location between the grave area and the production area at Rådhuspladsen, and ending at Kongens Nytorv. Along this road, the town developed. Alternatively, there could have been two or more nuclei, as nobleman's farms, each with its own church, cemetery and farm houses. These types of settlements from the late Viking Age and Early Medieval period have been brought to notice in recent Scandinavian research. These places often had different functions, some with specialised craft activities (e.g. Hedwall *et al.* 2013).

### **Towards a new 'map' of early medieval Copenhagen – a hypothesis**

With the archaeological data outlined above, together with the theories presented, a new map can be suggested for how the town might have looked in the early medieval period (Figure 8). The physical map, too, has significance for the 'map of power' in the town, which will be discussed later.

What earlier was believed to be the first fortification and extent of the town could instead have been a protected marketplace, or possibly a fortified/enclosed king's or nobleman's estate. Immediately to the west, the church of St. Clement's could have been built already in the eleventh century, or early twelfth century at the latest (Jensen and Dahlström 2009, p. 55ff.). And to the west of the church (at present-day Rådhuspladsen) there seems to have been a combined production/dwelling area. North

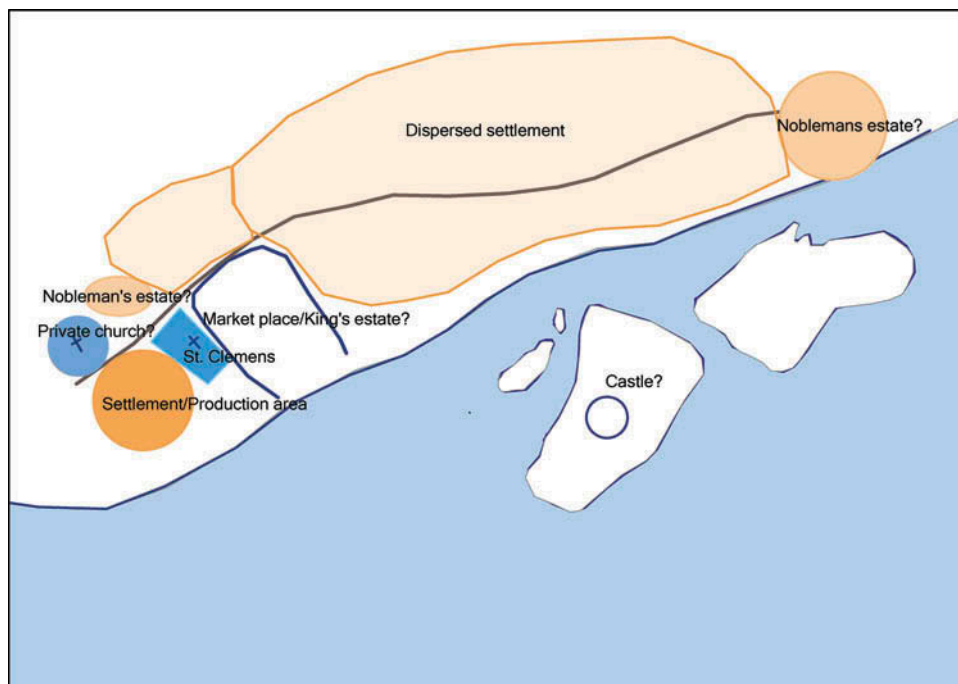


Figure 8. Map with suggested placement of different activities.

of these activity areas, a road ran in an east-west direction. North of the road adjacent to the production/dwelling area was a second cemetery. The possible church connected to the cemetery probably lay further to the north, since the grave density increased in this direction. Assuming this would probably be a private church, there could have been a nobleman's estate next to it – according to frequently used archaeological theories (Hedwall *et al.* 2013) – no archaeological evidence of this is presently at hand. In the area towards the east, from Gammeltovej all the way to Kongens Nytorv, the archaeological evidence attests that there has probably been sparse settlement activity here, much like farms, which constituted the typical layout of the early medieval town settlement, e.g. in Lund (Carelli 2001, pp. 107–108). Finally, in present-day Kongens Nytorv, plot borders and animal bones possibly from the eleventh century suggest a settlement or an estate at this location. Taking into account that this would be a logical place for docking ships coming to the town, it is also feasible that there would be some point of control here, monitoring the incoming ships. Considering the contemporary topography, the area of present-day Rådhuspladsen was then quite close to the shoreline, which could be another reason for the seemingly active use of this area – perhaps there was a second harbour or place for docking boats here?

An alternative hypothesis is the possibility of two – or more – centres in the area from present-day Rådhuspladsen (or even further towards the west) to Kongens Nytorv, in the form of several large nobleman's

farms or estates. This is seen in other comparable towns, like Viborg in Jutland (Carelli 2001, pp. 119–120), Wrocław in Poland (Andersson 2011, p. 376) and Skänninge in Östergötland, Sweden (Hedwall *et al.* 2013) amongst others. The centres in early Copenhagen could have had different functions, forms of organisation and rulers. These could eventually have grown together or been merged under a common town ruler.

### Activities

It has long been assumed that fishing was the dominant economic factor in the origins of Copenhagen, something which is all the more likely due to its placement by the coast and its proximity to the emerging herring market in Skanör and Falsterbo (Ersgård 1988). In many places in the town, archaeological material attests that fish was an important source of nutrition. At a few locations, for example Mikkel Bryggers Gade, fish bones have appeared in such numbers and in such a way as to suggest the handling of fish on a larger scale (Skaarup 1999, p. 88, El-Sharnouby and Høst-Madsen 2008). The clay-lined pits in Kongens Nytorv dating from the thirteenth century are another example of the economic importance of fish in Copenhagen in the medieval period (Jensen in prep.). At Rådhuspladsen, large amounts of fish bones were found in many of the pits, which initially have been interpreted as primarily storage pits, backfilled with household and production refuse. The current analysis of the type of fish bone refuse may help in assessing the scale and type of

fish handling represented, and thereby provide a more nuanced and well-founded interpretation of the role of fishing in the town's early urbanisation.

The excavation at Rådhuspladsen has also yielded information about other early medieval activities. The refuse in the many pits suggests a considerable amount of iron working. The iron working refuse material is presently subject to analysis. The preliminary report, however, reveals a versatile and non-specialised production, with several active workshops. Both primary and secondary smithing have been taking place. The quality of the iron and the skills of the smiths seem to be average. The raw iron has its origin in Norway or Sweden (Jouttijärvi in prep.).

Analyses of iron smithing in Lund have indicated a shift in metal working praxis and organisation sometime in the twelfth century, when it went from being less regulated and non-specialised, with workshops all over town – to becoming a more specialised profession with its activities gathered in the same area, close to the street with its trade facilities (Carelli 2001, pp. 150–151). Seeing the iron working activities at Rådhuspladsen in the light of this, one could argue that it is the first of these phases which is seen here – non-specialised production, probably not localised in any particular area and not in close proximity to trade facilities.

When the analysis is completed, it may reveal more about the scale of the production and changes over time. This could perhaps provide clues as to whether the production was only for local use in the town or for wider distribution. The results could be a key to understanding the kind of place that Copenhagen was in the early medieval period, and if iron working was something which helped decide the further development of the town. Iron may well have had an important role for the town, which could have been a place where the raw material was taken and distributed further to the rural surroundings or other towns in Zealand. A possible distribution route for the raw iron or iron ore could have been from Skåne, via Øresund (the Sound) to Copenhagen, where the raw iron was worked into artefacts and distributed further into Zealand. The indications that the raw iron at Rådhuspladsen derived from Norway or Sweden show connections to other regions, direct or indirect.

There is not much evidence of other craft-related activities in early medieval Copenhagen. There is, however, one pit at Rådhuspladsen that stands out in this respect. The pit was filled with what seems to be household refuse material, although it also contained at least six combs or parts of combs (Dahlström and Lyne in prep.). The pit also contained the only sherd of Viking Age pottery from the site, along with a fair amount of Baltic Ware sherds, (Langkilde 2013). The feature was placed in the western part of the excavation area, fairly close to the burial area. Could the deposits in the pit represent some

type of craft-related refuse? There was seemingly no typical production waste present, which might contradict this interpretation. Nevertheless, a find assemblage containing so many combs is unusual at the least.

### **Initiative and control over early medieval Copenhagen *Organisation, power and the significance of two churches***

How organised were the initial activities of fishing and craft, and what trade was there and how was it organised? How much centralised control was there in early medieval Copenhagen? What can the churches reveal about the organisation of the place? What reasons might there have been for the hypothetical second church to be never mentioned in written sources? Is it possible to interpret the archaeological remains as evidence for some type of competition or power struggle in the early medieval period? These are all questions that arise when dealing with the recently recovered archaeological source material for the early urbanisation of Copenhagen.

An important key to understanding the early urbanisation of Copenhagen naturally lies in its functions – what kind of a place was it, and what occurred there? It may be argued that early medieval functions in Copenhagen, such as production and distribution of iron as well as fishing would have been under the king's control. However, there would have been local noblemen involved, who were present in the town and kept the activities and income under control. It is their presence that might be revealed by the possible existence of two churches.

Churches dedicated to St. Clement are believed to have been built by the king sometime in the mid-eleventh century. Twenty six St. Clement's churches existed in Denmark, which is by far the most in Scandinavia. St. Clement is the saint of metalworkers, blacksmiths and seamen and the churches were often built in coastal towns and there placed close to the waterfront (Cinthio 1968, Crawford 2006, p. 238). The placement and dating suggestion for the St. Clement's Church in Copenhagen to the eleventh century would fit well with these theories. It can therefore be argued that the king was in control of Copenhagen at an early stage. But what about the hypothetical second church? All in all the <sup>14</sup>C-dates suggest that this church could have been older, but still partly contemporaneous with the church of St. Clement's. What does this mean in terms of power and control over early Copenhagen?

The finding of the graves belonging to a second church is significant for several reasons. Firstly, they indicate dates that show that there has been activity in this location possibly as early as the late Viking Age. This in turn has potential to provide new information about the process of the Christianisation of Denmark. More

importantly, the findings also reveal more about the type of place Copenhagen might have been during this period. If the hypothesis of two contemporary churches is correct, that would suggest more than one source of power present, with interests in the town in its early stage. This conclusion is drawn on the basis of theories that have been dominant in recent decades, which suggest that the early medieval churches were mostly private churches built by noblemen, or by kings and bishops (Carelli 2001, p. 235ff.). Moreover, when there is a reference to parishes in the Early Medieval period, many scholars believe that they should be seen in a social and economic context, rather than a territorial one, representing a group of people connected to a leader/person with power (Andrén 1985, p. 33ff., Carelli 2001, p. 235ff.). This could signify that before the king obtained control of Copenhagen, there might have been a nobleman present in the town. The nobleman might have built a church and was in that case most likely involved in the economic activities of the town at this time. However, there is nothing to suggest that there were not other actors like this in Copenhagen. Hypothetically, there could have been several different interests on several organisational levels present at the earliest stage of settlement.

Noteworthy in light of this, is the seemingly sudden change of use of the area which is now Rådhuspladsen sometime in the High Medieval period from being a busy area with craft/production activity, possibly dwellings and a church and cemetery, to a more or less unused place where the town's fortification is placed, leaving most of the former busy area outside the formal borders of the town. Could this abandonment have been the result of a decision made by the town's ruler? Should it be seen as a deliberate erasing of a competitor's territory? Is that also why the hypothetical church is not mentioned in any historical sources? Recent studies on the theme of abandoned medieval churches in Denmark show that a large number of churches possibly existed during this period which did not survive into the High/Late Medieval period (Kieffer Olsen in prep.). One example of a town with churches abandoned in this period is Slesvig (present-day German Schleswig). A historical source from the twelfth century speaks of two churches, which later did not exist, and there is archaeological evidence of even one more church, which is not mentioned at all.<sup>2</sup> It would be interesting to examine and compare the situation in Copenhagen in this context. The questions surrounding the churches and the role they may have played in the early urbanisation of Copenhagen is an aspect which is definitely worthy of further study before new theories can be properly formulated on the subject.

A hypothesis regarding the development of the early medieval churches in Copenhagen could be thus explained: The church to the north of Rådhuspladsen, possibly slightly older than St. Clement's, might have

been a nobleman's church, belonging to a nobleman who was in control of the trade or parts of the trade over the Sound prior to the king's involvement. This nobleman perhaps later continued to be a force in the town, allied with the king, and taking care of the king's interests. Sometime in the late twelfth century, perhaps when the town was given to Bishop Absalon, his services would no longer have been required, and he would have lost his power. This could be why the hypothetical church and the cemetery were abandoned, and the area for production as well. The new ruler of the town, Absalon and his successors then began the work of constructing a town fortification which went right through this area, symbolically and physically leaving the earlier lord's land outside town.

### *Copenhagen – a politically strategic place in the twelfth century*

It has been argued in this paper that the key to understanding the kind of place Copenhagen was, is the different activities we now have evidence for, or that from our current understandings we can assume to have taken place – craft, fishing, and most likely trade. It must be reiterated that the possibility of the existence of two mostly contemporaneous churches, too is highly significant. Combined with its central location in the Øresund area, it is quite possible that already by the early to mid-twelfth century, Copenhagen played a key strategic role in the region. It is likely that the town was some kind of hub for trade and travel, for instance between nationally important towns like Lund and Roskilde. Copenhagen was probably also a politically strategic location. It must have been increasingly important for the central powers in the early medieval period to have control over the passage between Sjælland and Skåne, both for political and economic reasons.

### *A town?*

When did Copenhagen become a town? There seems to have been a gradual and perhaps fluctuating development in the eleventh and twelfth centuries. The *process* is more interesting than an actual founding date, which would be a simplification. My view is that at a time when fishing, iron working and presumably trade were important functions in Copenhagen, and when there is likely to have been two churches in existence controlled by two different power figures, then there is an urban character to the place Copenhagen, with a primary function as a logistical, political and economic node in eastern Denmark.

The excavation at Rådhuspladsen has produced substantial empirical data to enable us to form new theories about the earliest phase of Copenhagen, as well as allowing us to re-examine old source material and established theories in a new light. Perhaps more importantly, it urges

us to raise more questions to help us further explore the society of early medieval Denmark.

## Notes

1. All radiocarbon datings presented in the article are calibrated using: <http://www.calpal-online.de/index.html>.
2. Jakob Kieffer-Olsen, personal communication, 31 May 2013.

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