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From the Farm of Oslo to the Townyard of Miklagard

Archaeological research on the medieval town of Oslo from 1970 and onwards has resulted in profound changes in the understanding of the origin and earliest development of the town. The description by Snorri Sturlasson in Heimskringla of the foundation of Oslo by King Harald Hardrada around 1050 was for a long time the main source providing a chronological basis for the origin of the town (Hkr. vol. 3, 153; Fischer 1950, 3-4). Archaeological excavations of areas with ordinary urban habitation and the discovery of graves dated to around AD 1000 have given evidence of earlier occupation (Eide 1974; Schia 1987a; Molaug 2007; Nordeide & Gulliksen 2007). The identification of the king's palace and the king's church, St Mary's, in the south of the town has given a topographical basis for the idea that the town developed towards the north from a primary centre in the south (Christie 1966). The excavations in 1987-1989 on the site Oslo gate 6 in the north of the town, however, shows that the earliest development of the town was much more complicated (Schia 1991a; Molaug et al. 2000; Molaug 2008) (Fig. 1). This article presents some of the evidence from these excavations, along with evidence from other excavations in the northern part of medieval Oslo, primarily the ones in the modern street of Oslo gate just west of Oslo gate 6 in 1987-1988 (Smedstad 1991) and in Arups gate 30 m north of Oslo gate 6 in 2007 (Martens 2010). Based on this presentation, some theories on the role of this area in the late Viking Age and early medieval period are discussed, as well as the background of the nature of habitation from this period.

The site Oslo gate 6

Medieval Oslo lies in an area built up by fluvial layers of clay and sand on top of post-glacial marine clay. Bedrock outcrops are only to be found outside the town, to the north and south. To the west lies the bay of Bjørvika with rather shallow waters close to the shore. To the southeast, the river Alna meanders along the bottom of a river valley. The town area is virtually a peninsula sloping gently towards the bay to the west and a bit more steeply towards the river to the southeast. To the north, a little stream called Hovinbekken constituted the traditional border of the town. The terrain slopes down towards this stream too (Fig. 2).

The site Oslo gate 6 is situated on the slope towards Bjørvika to the west and Hovinbekken to the north. The natural ground was at elevations ranging from 8.6 metres above sea-level (MASL) and 10.5 MASL on the 730 m² site, and it sloped down towards the north and the northwest. The ground at the site of the early 12th century St Halvard's Cathedral to the south of the site Oslo gate 6 lies at an elevation of 13-14 MASL. The eastern end forms the highest point of the terrain, except for the ridge towards the northeast with the road leading out of the town.

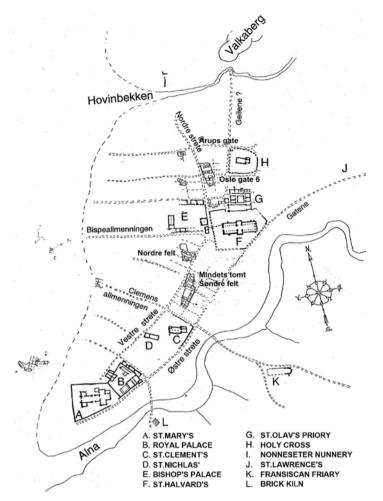


Figure 1. Oslo in the high middle ages. Major excavation sites marked.

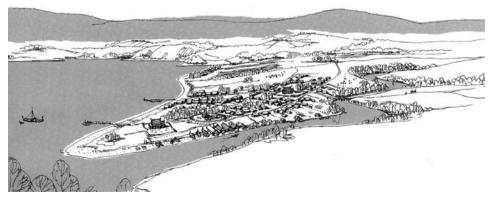
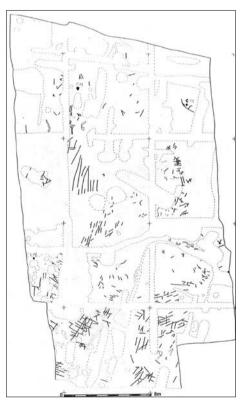


Figure 2. Oslo around 1050-60 seen towards the North. (Drawing Marianne Brochmann. After Schia 1991, 145)

The agricultural phase

During the excavations, a single-context method with individual numbering and description of layers and constructions was used, and there was heavy reliance on sections. In the postexcavation work, the material was divided into successive chronological phases: two pre-urban phases and seven phases of urban settlement. The lowermost archaeological layers consist of humus mixed with sand deposited in plough-marks (Fig. 3). These marks are from crossploughing, involving the use of an *ard*, the simple type of scratch-plough without mouldboard. In one area, two different phases of ploughing could be observed, separated by a period with presence of trees. Plant materials from the plough-marks have been C14-dated to AD 965-1015 and AD 1015-1225. Lavers just above the plough-marks have C14-dates to AD 885-1000 and AD 975-1150 (Molaug 2008, 76, 77). 30-50 cm underneath the top of the sand layer is natural clay. The size of the field measured 33 m north-south and 18.5 m east-west, but there were no clear borders in any of the directions, so the field might have been considerably larger. However, no plough marks were found in the ditch excavated in Oslo gate just west of the site. A section drawing, made by Cato Enger in the 1920s at a site on St Halvards plass, shows clear indications for plough marks (Fischer 1926; 1929). The distance between the two sites with plough marks is 75 m, which would thus be the minimum length of the field – if it was continuous. No plough marks were observed at the excavations in Arups gate to the north of Oslo gate 6 (Martens 2010). This means that the field can hardly have stretched more than 30 m further northwards.



In addition to the field, meaning agriculture, there was also some evidence of pre-urban habitation at the Oslo gate 6. A building oriented east-west had two rows of post holes. The distance between the centre of these posts was c. 3.5 m. If they are interpreted as wall posts, this should be the width of the building. The length must have been at least 7.5 m. The orientation is the same as for buildings in the later urban phases on the site, and corresponds with the ground's natural slope. East of the house were some ditches, of much the same type as those of the early urban settlement. There were also some small pits, and some pole holes from fences. All these structures are presumably connected with agriculture.

The nearest known Iron Age farm is Volin, lying c. 650-1,200 m to the east. Today, the name is preserved in the name Vålerenga, meaning the meadow of Volin. There are also some grave mounds there. The distance from

Figure 3. Oslo gate 6. Ploughmarks.

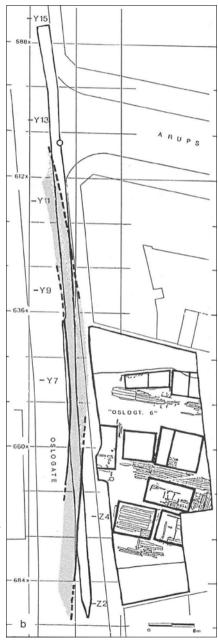
the Volin farm could indicate that there was a separate farm in the Oslo gate 6 area. This farm may have had the name Oslo, subsequently transferred to the medieval town. Oslo means 'the low pasture located by the hill' (nearby Eikaberg) or 'the low pasture of the Norse gods' (Æser) (Falk & Hægstad 1918).

The earliest town habitation

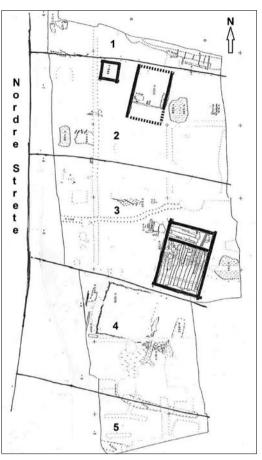
The relative chronology of the excavated area at Oslo gate 6 is based on fire layers and burnt habitation remains, the absolute chronology is mostly based on the dating of pottery, combs and shoes. Each of the seven phases ends with a fire. They are numbered from bottom to top. Dendrochronological analyses have been done on a number of samples, but it turned out that a high proportion of the dated timbers, mostly logs, must have been reused, thus yielding a too-old age for the construction of which they were a part. There are also some C14-datings that are especially valuable for dating the oldest phases (Molaug et al. 2000; Molaug 2008, 76-79).

The settlement area encountered by the Oslo gate 6 excavations is divided in five tenements whose boundaries remained comparatively stable throughout the phases. They are numbered 1-5, starting from the north. The three middle ones, tenement 2, 3 and 4, could be excavated in their whole width, while only small portions of tenements 1 and 5 lay inside the site's limits. Towards the west, all the tenements must have ended at a street (Smedstad 1991), probably Nordre strete, a street known from late medieval written sources (DN IV, 322; DN V, 1021), and which follows today's Oslo gate, roughly speaking (Fig. 4). There was a few meters distance between the ditch with the medieval street and the site Oslo gate 6. The tenements' eastern part was not excavated, being outside the excavation site. Thus, the excavation gave a kind of cross-section through five tenements in the northern part of medieval Oslo.

Figure 4. Oslo gate 6, 12th century habitation (right) and the street Nordre strete shaded grey (left). (After Schia 1991b)



The earliest urban settlement on the site, dating back to the 11th century, is quite sparse, and most of the area was without buildings. However, the presence of fences or ditches clearly shows that there have been boundaries between the tenements. The ditches did not stretch across the whole site, but were usually shorter. But they never crossed the supposed boundaries between the plots (Fig. 5). The three tenements excavated in full width could be measured to 11-13 m. Many of the fences marking the plots were of the skigard type. The same type of fence has also been found on the Arups gate site (Martens 2010, 21, 34, 39) and on the sites further south in the town (Schia 1987a). The skigard (simple wooden fences) was, and still is, a traditional fence type in rural Norway, referred to in the Laws of the old, major thing regions and in King Magnus IV Haakonsson's code of laws (Frimanslund 1961, 290; Øye 2002, 299-300). According to the latter, the type was called *skigarðr* and was to be used in areas of the country where wood was abundant. The fences mentioned in the law of the *thing* region of Frostating were of two functional types: stodugarðr to Figure 5. Oslo gate 6. Habitation late 11th century. divide between home fields and outfields Townyards 1 to 5. and the traðargarðr, used for making enclosures for animals etc. This fits well with the Oslo finds, where wattle-anddaub fences dominate in enclosures.



The partitioning of land into parcels clearly demonstrates a link with Viking Age trading and handicraft settlements in Northern Europe, such as Kaupang (Skre 2007) and Gokstad (Bill 2013) in the county of Vestfold, Haithabu in Schleswig (Maixner 2010) and Ribe in Jutland (Feveile 2006), as well as with traditional Iron Age village patterns, for instance in Denmark (Kristiansen 2005). In Norway, there is no strong tradition of such village or hamlet habitation in the medieval period, although some Western Norwegian tun settlements, such as Aga and Havrå, might be classed as hamlets, bearing great similarity with Swedish *byar* (hamlets) (Øye 2002, 290-291). However, these Norwegian hamlets have no history of having individual fences around each individual farm.

In every one of Norway's medieval towns where modern archaeological excavations have been carried out, such divisions of the area into plots/tenements have been found (Lindh 1992;

Christophersen & Nordeide 1994; Hansen 2005). There are also several written sources describing the division of a town area into plots. In Trondheim in 997, the procedure was as follows, according to Snorri Sturlasson: 'He (King Olav Tryggvasson) gave people plots to build houses upon and then he let build the royal manor (*kongsgard*).'(Hkr. Vol. I, 386). The town of Borg (now Sarpsborg) is another example. It was probably founded by Olav Haraldsson in 1016 and the incident is described by Snorri as follows: 'There he let build a royal manor and a St Mary's church and he let mark the sites/plots (*tufter*) of other yards (Norw: *garder*) as well ...' (Hkr. Vol. II, 94). It is likely that the tenements, or the permission to use the tenements exclusively, were given by the king to chieftains, wealthy landowners or other favoured persons; still, this does not necessarily mean that these persons intended to reside there themselves.

It is likely that most of the new inhabitants who settled down in the plots made available by the king came from the countryside. It is also likely that they brought traditional ideas with them to the town, for instance about fences, house building and organization of occupation and activities within the individual property. The tenement was turned into an urban 'farm' (Norw: *gard*), usually called a townyard (Norw: *bygard*). It is also likely that ideas and models were taken from towns abroad. The hypothesis is that the first structures on a plot were built rather quickly, often with little effort and planning. In order to build houses, there were two possible methods: To dismantle a building standing somewhere else and transport and rebuild it on the plot is one solution; log-built structures with corner notches (*laft*) lend themselves very well to this. The other solution is to build simple houses whose construction requires relatively little effort.

Archaeologist Gitte Hansen has characterized the occupation and use of the tenements in the first settlement phase in Bergen as an initiative from below (Hansen 2005; Hansen 2008, 223). The tenements at Oslo gate 6 fit well with such an idea. There were few buildings, along with open areas with post and wattle fences, manure from livestock and areas with pits and ditches (Molaug et al. 2000). This is not so very dissimilar to rural habitation. Also on the site Arups gate, there were several holes from poles and some ditches in the natural soil, showing activity on the site before the earliest conclusively urban building phase (Martens 2010, 212-13).

The oldest dwelling house on the Oslo gate 6 site was standing parallel to and east of the street interpreted as Nordre strete (DN IV, 322; Schia 1991b, 181). The building was nearly 10 m long and 5.5 m wide. Because of poor preservation conditions, only parts of the walls were preserved and none of the corners of the house. Since no corner posts or postholes were found, it is likely that it was a log building with corner notches (*laft*).

Very few of the buildings from the period covering the late 11th and early 12th centuries at the Oslo gate 6 site were standing close to Nordre strete. One such building was found, measuring 4.5 m north-south. It had posts dug into the ground. This was, probably, a house used for storage. None of the buildings with fireplaces, interpreted as dwelling houses of the *stue* type, were found standing near the street. This is paralleled in other early medieval towns, such as Sigtuna. Here the dwelling houses in the tenements never were the ones standing nearest to the street, but were situated further back, being the second or third house from the street (Tesch 1990).

The oldest dwelling houses were standing with their longitudinal axis parallel to the street. In one instance, a wattle fence was built and later replaced by such a building. This was of the two-room-type *laft* building with entrance in the smaller room and fireplace in the corner of the largest room. More such buildings have been dated to the second part of the 11th century, since they are antedating a house of the same type probably erected c. 1100, according to dendrochronological analyses (Molaug 2008, 82). Sometime later, around 1100 and in the early 12th century, the dwelling houses were oriented perpendicular to the street. At the Arups gate site, the oldest house was a two-room habitation building of the stue type with corner notching (*laft*) (building III). It is dated to the middle or last half of the 11th century and is oriented with one gable towards the street (Martens 2010, 13, 20-21). There are no dendrochronological datings, but several C14 datings of the oldest houses and lavers (T-20117 from a post hole in building II, AD 965-1035 and AD 990-1160 from a layer in house II, TUa-8095 form house 3 AD 1025-1155) (Gulliksen in Martens 2010, 147-148). On other sites further south in Oslo, the oldest buildings of the two room type with corner fireplace can be dated to the second part of the 11th century. All of these were oriented with one gable facing the street. On the site 'Søndre felt', the oldest such building is from phase 14b, believed to be older than 1070/1080 (Schia 1987a, 156-162); the oldest buildings at this site were of post construction.

In townyard number 3 at Oslo gate 6, in the middle, there were many pits dug down in the natural ground, especially in the western part. Burnt clay was found in some of these, likely to be from the lining of kilns used for metal working, probably iron smithing and melting copper alloys. There is a profusion of finds associated with handicraft, especially smithing, in layers from the 11th century, in all three of tenements 1, 2 and 3. In tenement 4 and 5 to the south, there were no such finds. When making allowance for the relative sizes of the excavated areas, it is the northernmost tenement, no. 1, that has most finds of this type. This is paralleled with the ditch dug in Oslo gate with finds of crucibles west and northwest of the northern part of Oslo gate 6. The distribution indicates that metal working was an activity taking place in the northern part of the town (e.g Schia 1991b, 183; Smedstad 1991, 60). At the Arups gate site, however, no remains indicating such activity were found in the earliest phases.

It is tempting to view metal working as a kind of activity likely to be located on the outskirts of a town. However, it is also possible that we are dealing with an example of a gradual transition from agriculture to typical urban activities such as handicraft and trade. Thresh of barley was found during the archaeological excavations at Oslo gate 6, and nearly 40 per cent of the analysed layers contained more than 10 per cent animal dung. This evidence may reflect either regular animal husbandry or that livestock was brought into the town for slaughtering etc. This may also illustrate such a gradual transition from agriculture.

If we look at other objects from this oldest phase (phase 1), townyard 4 in the south differs from townyards 1, 2 and 3. Townyard 4 has more finds of household items, personal items, objects associated with games and play, more whetstones and more textile implements than the three townyard to the north. Textile implements are mostly associated with domestic crafts. There are very few pieces of worked leather. The finds from townyard 5 are all of the same type, but these were not collected in the same thorough manner as the finds from the other townyards and the numbers are much lower and thus less representative. The southernmost townyards

were dominated by functions associated with living and not handicraft or agriculture. This might be interpreted as the result of the southernmost townyards having a more central urban location than the others.

The earliest division of a settlement into more or less regular plots, marked off by ditches or fences, seems to have been common to many early towns in Scandinavia, but has a general history reaching well back into the Iron Age in rural villages. Whether the early use of log-built houses with corner notching was an urban phenomenon in Norway, for instance drawing inspiration from eastern Viking-age towns towns such as Staraja Ladoga (conf. Hauglid 1980), or is a case of a building type introduced into the towns from the countryside, is uncertain. The earliest example of a *stue* type building in Norwegian towns is a log from Trondheim, Folkebibliotekstomten, dated through dendrochronology to c. AD 970 (Christophersen & Nordeide 1994).

The shoemakers are coming

In phase 1 – the first urban phase – at Oslo gate 6, there are few finds of leather offcuts deriving from shoemaking, compared with later phases. These pieces might be from domestic handicraft, or perhaps from itinerant shoemakers. In townyard 4, there are only three offcuts, in the other three around 1,200. This corresponds well with finds of leather offcuts from the 11th and most of the 12th century in townyards in other parts of the town (Molaug 2006). Shoemaking was a handicraft performed in most townyards in this period.

Phase 1 ended with a fire dated to the middle of the 12th century, probably around 1140. In phase 2, which ended in the middle of the 13th century, there was a huge increase in the amount of leather waste. The increase started probably in the very late 12th century, the total number of offcuts being around 10 times as high as in the preceding phase. This time, tenement 4 in the south had the largest amount of waste, while the incidence was decreasing towards the north – with clearly the smallest amount in tenement 1. The quantity of leather refuse strongly suggests the presence of professional, sedentary shoemakers. It is reasonable to think that this may indicate that the craft had become organized and regulated, or that at least professional shoemakers were settling down in this area north of the St Halvard's Cathedral and the bishop's castle (Schia 1987b; Tørholm 1998; Molaug 2006). The by-far most frequent type of leather waste comprised simple offcuts, although there were also many pieces that had just been torn off, and many others with seam holes. The large quantity of shoe parts on the site can best be understood as the result of cobblers working there. Shoes were repaired, and worn-out parts, such as soles, were thrown away. Other parts were used as raw material for straps and other minor pieces of shoes.

Towards the north, few offcuts relative to the number of shoes were found at Arups gate (Martens 2010, 21). This largely agrees with the northern limit of concentrations of leather waste in the ditch in Oslo gate, just south of Arups gate (Smedstad 1991, 55). Just as at Oslo gate 6, these concentrations cannot be dated further back than to the end of the 12th century (Schia 1991b, 182). There were few concentrations of leather offcuts found on the Oslo gate 7 site west of Nordre strete, these finds dating from around 1200 and later (Schia 1979, 58). Towards the south, at St Halvards plass, thick layers of leather offcuts were found by Gerhard Fischer in 1926 (Schia 1975, 179-180); there were also cisterns used in connection with the tanning of leather (Fischer 1929; 1950, 138-140).

In Sverri's saga, it is related that King Sverri came riding from the North and passed by the *sutarebu*ð*er* (the shoemakers' booths) to make a direct approach on to the cathedral during the battle in Oslo in 1200 (Sverris saga Ch. 164). Such a specific mention of these *sutarebuðer* may indicate that the shoemakers were concentrated in just the one area at that time.

The distance from the northernmost part of the area with concentrations of leather offcuts to the southernmost part, at the churchyard fence of the St Halvard's Cathedral, is 130 m. It is likely that there was a medieval street to the east of Oslo gate 6, as Erik Schia has suggested (Schia 1991a, 93). The distance between the presumed street and Nordre strete is c. 38 m in the southern part, 56 m in the northern part (just south of Arups gate), and around 47 m in the middle (level with Oslo gate 6). The area occupied by the shoemakers must have been around 6 da. It was divided into plots as in the first building phase, and the three that could be measured were between 11.5 and 13 m wide. There were far more buildings than before: 50-60 per cent of the area was covered with houses (Fig. 6). The structure was the same in all the tenements. Along Nordre strete, there were both houses with two stories. The selling of shoes probably took place on the ground floor. Between adjacent buildings, or possibly running underneath the floor of the upper storey, was the entrance to the townyard, the inner yard paved with wooden planks. On one or usually both sides of the yard, inside the entrance, were rows

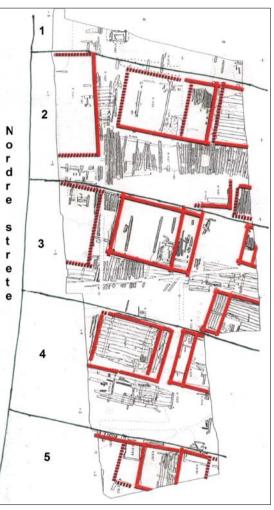


Figure 6. Oslo gate 6. Habitation late 12th century. Townyards 1 to 5.

of log-built houses, all with gables pointing towards the street. Between the tenements, there were usually no fences. These townyards were of just the same type as in southern part of medieval Oslo (Lidén 1977; Schia 1987a) and also similar to townyards in other medieval Norwegian towns, such as in Trondheim (Christophersen & Nordeide 1994) and Tønsberg (Lindh 1992). There were probably 11 townyards with shoemakers, with an area ranging between 450 and 650 m² each, the average 550 m².

The shoemakers remained situated in the same area throughout the Middle Ages. It was called *Miklagard* – the big (town) yard, although we know from the archaeological excavations that the area consisted of many separate townyards of approximately the same size. In 1304, the German shoemakers were given privileges for shoe production, and it was stated that they should keep to Miklagard (NGL III: 86, Nedkvitne & Norseng 1991, 272).

The development of the townyards in the northern part of Oslo from the late 12th century onwards is very much the same as in the southern part of the town, with the houses being built higher and becoming more tightly packed as time passed, at least until the late Middle ages. The concentration of shoemakers in the area is a result of greater regulation of the trade in the town.

Conclusions and a hypothesis

The traditional view of the development of the town of Oslo has been that it was a case of expansion of settlement from south to north, starting from the area of the king's castle and the royal church of St Mary's (Fischer 1950; Christie 1966; Lidén 1977). In this view, the building of St Halvard's Cathedral and the bishop's residence in the early 12th century would then have taken place on virgin ground. The dating of the Holy Cross Church to the second half of the 13th century was believed to be a good illustration of this direction of expansion. Holy Cross church was a parish church for the northern part of the town, and since it was not mentioned as being among the churches where soldiers took refuge at the end of the battle between King Håkon Håkonsson and Count Skule in 1240 (*Håkon Håkonssons saga*, 208-210), it was presumed that the church was not standing at that time. However, the church itself, with its rectangular nave and a smaller chancel, is not different from churches of the 12th century, indicating a time of erection in this century. Moreover, the church is mentioned in a runic inscription found in Oslo gate 6 in layers from the early 13th century (Nedkvitne & Norseng 1991, 223; Molaug et al. 2000). This clearly demonstrates that the church is much older than 1240.

The excavations at the Oslo gate 6 and Arups gate sites have now shown that the earliest ordinary urban settlement in the northern part of Oslo is from the 11th century, and therefore from approximately the same time as the settlement in the southern part. The two areas share the same kind of development early on. At first, it was the division of the land in building plots, followed by a dispersed type of occupation with many traces of activity, such as postholes, pits, enclosures with fences, layers with manure and a very few buildings, and thirdly follows the appearance of some solid two-room dwellings of *laft* construction, equipped with benches along the walls and a fireplace (*stue*).

The field and the oldest habitation remains at Oslo gate 6 indicate that there has been a farm here before this part of the later town was established. The nearest known farm existing in the Middle Ages is Volin. There is no continuous farmland between the field at Oslo gate 6 and the farm of Volin in this period. The two were separated by the little hill of Marterstokker, the place of the gallows, now named Galgeberg. Thus, it is not likely that the field was part of Volin farm. Still, if the field belonged to a separate farm, it ought to have been larger. No plough marks were observed at the sites in the southern part of the town, excavated in the 1970s and 80s. On the site 'Søndre felt', there were many roots of alder trees, indicating that

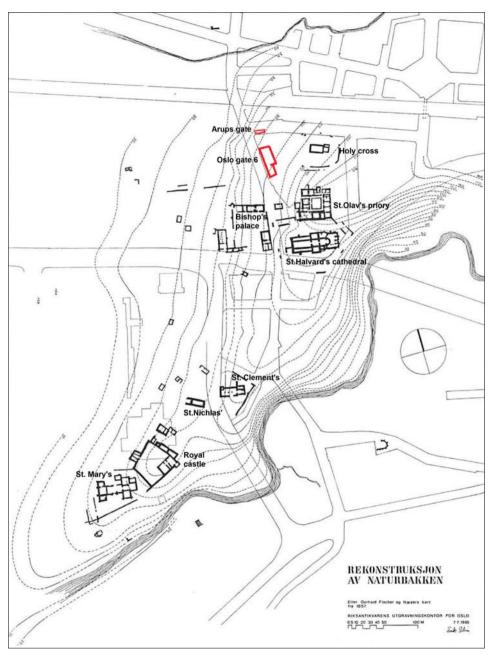


Figure 7. Medieval Oslo. Topography with monumental buildings. Equidistance 1 m.

there had been no ploughing. However, planks from a well found on that site C14-dated to the 8th century (Schia 1987a, 163) strongly indicate human activity in the area in the Viking Age or even before.

In the area of the later bishop's residence and St Halvard's Cathedral, north of the excavation sites of the 1970s and 80s, no plough marks have been found, but the archaeological excavations in these areas were carried out in the 1920s and earlier (Fischer 1921; Fischer 1950; Dahlin 1990), and it is not likely that some few remains of a possible older farm would have been observed by the excavators, even assuming that such remains were present (Fig. 7). Layers of ancient topsoil were, however, found just above the natural ground during excavations in 2014 south of the bishop's residence. An interesting question is what type of occupation the area may have had prior to construction of St Halvard's Cathedral in the early 12th century, and also before the bishop's residence west of the cathedral was built, probably not earlier than 1100. It may have been settlement divided into tenements just as in the south and in the north. If so, it is likely that all traces of it would have been destroyed by building activities (levelling and/or excavation) connected with the cathedral and bishop's residence.

An alternative hypothesis is that the central parts of the farm of Oslo were situated in this topographically dominating place in the 10th and 11th centuries. This might explain two street names of the high-medieval town: *Geilene* (Eng. cattle road), leading to the north; and *Gatene*, leading to the northeast, from the area of the later St Halvard's Cathedral. Both are common Norwegian terms for animal tracks leading out from a farm, usually equipped with fences along each side to prevent animals from entering the infields. This might also explain the finds pattern in the oldest phase of habitation at Oslo gate 6. The finds in the townyards in the south were very different from the others, indicating a more central position e.g. near to the supposed farm buildings, perhaps still standing at that time.

The early traces of metal working demonstrate a concentration of this type of handicraft to some of the tenements. This cannot be interpreted as an activity situated in the outskirts of the 11th century town, considering the lack of such finds at Arups gate even further north. During the 12th century, the northern and southern part of the town developed much in the same way, with an increasing densification of settlement. Handicrafts, especially shoemaking and smithing, were moved out of the many townyards and concentrated in certain areas. As regards the shoemakers, their workshops and habitations were located to the north of St Halvard's church and to the east of Nordre strete.

The excavations in the northern parts of medieval Oslo have certainly changed our perception of the oldest history and development of the town and its environments. But Oslo is well inside the common pattern of early Scandinavian towns with the town area divided in plots as an initial act by the landowner, probably the king. The later development is one of densification of the settlement and greater regulation of the handicraft and trade.

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