https://doi.org/10.12685/px70k590


# Urbanisation in the North – Archaeology in Early Modern Finnish Towns

Marianna Niukkanen

*Finland; post-medieval; urban archaeology; towns; material culture*

## Founding and Building of Towns in post-Medieval Finland

Urbanisation is a fairly young phenomenon in Finland. In the Middle Ages (ca. 1150–1520 AD) only six towns existed. The oldest and largest town Turku was most likely established in the 1290s. It is probable that the first initiatives of town foundation were launched by the Catholic Church and the Swedish Crown. Due to economical, geographical, and political reasons, the degree of medieval urbanisation was very low compared to, for example, Sweden (Hiekkanen 1999; 2001).

The first post-medieval stage of intensive urbanisation began in the mid-16th century during the regime of Gustav Vasa and his sons (the so-called Old Vasa Period). An important aim of their politics was to control the trade in the Gulf of Finland and abolish the illegal commerce carried out by Finnish peasants. Tammisaari and Helsinki, established on the south coast in 1546 and 1550, were to rival the Hanseatic town of Reval (Tallinn). Pori was founded in 1558 as a successor to the medieval town of Ulvila on the east coast of the Gulf of Bothnia, where Oulu and Vaasa were also established in the first decade of the 17th century. The towns also had a defensive function, and therefore fortification plans were drawn up, although not put into final effect. Some attempts were made towards architectonic representation, but, nevertheless, they resulted in fairly irregular towns with narrow blocks and a winding main street. The new towns did not develop as expected, and their effects on trade remained insignificant (Lilius 1985, 152–154).

It was not until the period of Sweden's greatness in the 17th century that urbanisation finally broke through; however, less than 3% of the country's population lived in towns. The Crown established some 50 towns in total, 14 of which are situated in the current territory of Finland. Gustav II Adolf established four new coastal towns at the Finnish side of the Gulf of Bothnia between 1617 and 1620. The reign of Queen Kristina and Per Brahe's terms as a governor-general in the 1640s and 1650s was the period of culmination. Towns were usually established at important points of communication with markets, district courts, churches, castles, or crown estates. Towns formed a wide network reaching even the most remote areas of the realm, and their purpose was to develop administration and taxation as well as to improve handicrafts and trade in accordance with mercantilism. Finnish towns were divided into staple towns, which were allowed to carry out foreign trade, and rural-trade towns. The new towns remained quite small, and most of them had hardly a couple of hundred inhabitants. The weakest ones, Brahea and Kuopio, were revoked after only some decades of existence (Lilius 1985, 154 f.; Ahlberg 1998, 68–74) (Fig. 1).

## New Order in Towns

From the end of the 1620s every new town was built according to an approved grid plan or an official survey. The older towns were restructured according to a grid pattern – only Tammisaari, Porvoo, and the area adjacent to the Cathedral of Turku remained unregulated. The regulations were usually executed after a devastating fire. The primary intention of the

grid plan was not merely architectonic but had more to do with organising the towns in a functional and practical way in order to serve the finances and administration of the state (Lilius 1985, 155; Ahlberg 1998, 82; 88).

Town blocks usually consisted of wide lots in two adjacent rows. Single-storey dwellings were built with the long side parallel to the street, the houses opening out onto the yard that was enclosed with outbuildings. Keeping domestic animals and kitchen gardens in the yards was common. A public commercial square with a town hall was the centre of any town. Other public buildings consisted of a town mill, brewery, school, jail, and slaughterhouse as well as church and cemetery. Since 1622, the towns had to be surrounded by a customs fence with customs posts at the gates (Lilius 1985, 156–158). Land uplift has changed much of the topography, especially in the towns located in Ostrobothnia where the sites of many trade harbours are nowadays on dry land due to shore displacement. For the same reason, some towns (Ulvila in 1558; Helsinki 1640s; Vaasa 1852) were transferred closer to the sea in order to gain better harbour and fishing conditions.

A period called the Great Wrath began in 1713 when Russian troops started seizing Finnish territory during the Great Northern War. The Russians caused great damage in towns by demolishing buildings in order to obtain firewood and construction material for fortifications and for the new city of St. Petersburg. They also burned down a couple of towns, as did the Swedish troops when retreating. After the peace treaty of Uusikaupunki in 1721 many towns had to be rebuilt.

## Archaeology in Towns Founded in the Old Vasa Period (1550–1617)

Turku has the longest tradition in Finnish urban archaeology, and several hundreds of archaeological observations have been recorded in the town area since the second half of the 19th century. In other medieval towns, considerably less archaeological fieldwork has been done (see Keskiajan kaupungit/Medeltidsstaden 1–4). Since the end of the 1980s, the quantity of post-medieval urban excavations in secular town areas has also been in constant growth. The thickness of the cultural layer varies greatly between towns and different areas within them, the average thickness being about one metre in post-medieval towns.

The first excavation in a Finnish post-medieval town was conducted as early as in the 1930s at the old site of Helsinki at the mouth of the River Vantaanjoki, due to the construction of a highway. Since then, archaeological fieldwork has been conducted in all five Finnish towns founded in the Old Vasa Period. The most remarkable excavations have been carried out in Old Helsinki in 1989–1993, in an area that has been used for cultivation since the mid-17th century. Remains of some twenty wooden houses and cellars were unearthed as well as rubbish pits, wells, and ditches. The buildings were parallel to the streets, and they consisted of one to three rooms. Only some of them had complete stone foundations. The occupation layer was fairly thin and disturbed. Finds consisted of tons of red and white earthenware, German stoneware, majolica, window and vessel glass (passglasses, berkemeyers, roemers, façon de Venise, etc.), lead seals, Dutch clay pipes, coins, iron objects, and oth-

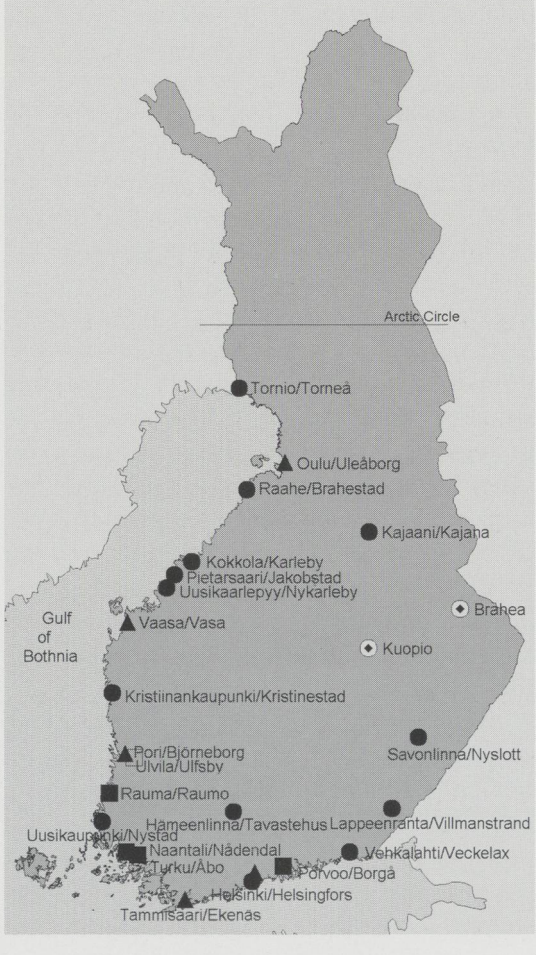


*Fig. 1: Finnish towns founded in the Middle Ages (squares), in the Old Vasa Period (triangles), and in the great-power period (circles). The names are given in both Finnish and Swedish. Brahea and Kuopio were revoked shortly after their establishment.*

*Fig. 2: Iso Kirkkokatu in Tammisaari in 1998. The archaeological monitoring of pipeline digging pointed out the location and thickness of cultural layers in different areas of the town (photo: National Board of Antiquities, M. Niukkanen).*

er items showing that the town was part of the common Baltic urban culture (Heikkinen 1989; Narinkka 1994). The excavation showed the enormous research potential of Finnish post-medieval towns in addition to the medieval ones.

Excavations in the effectively built centres of Oulu and Pori have revealed fairly similar disturbed cultural layers with poorly preserved wooden structures but quite massive stone foundations and cellars. The aim of the excavations at the Y.M.C.A. site in Oulu in 1986–87 was to define the plan of medieval type prior to the regulation, but that proved to be impossible. Nevertheless, the unearthed cellars, house foundations, wells, and fairly rich find material brought much new information on the material culture of the town in the 17th century (Mäkivuoti 1990). In Pori, some small-scale excavations were already carried out in the 1960s and 1970s (Tulkki 1998). The town burned down several times during its first 300 years of existence and building remains were cleared away. Nevertheless, in the excavations behind the Town Hall in 1998, some features of the oldest town plan could be reconstructed on the basis of the directions of stone cellars and burnt building remains. The finds included imported glass and pottery, but the prohibition on foreign trade from the 1630s onwards could be seen in the material (Niukkanen 1999a; 2000).

In Tammisaari, the archaeological monitoring of pipeline digging in the streets of the wooden old town in 1998 showed the significance of the method in defining the location and thickness of cultural layers. The documented information gives a good starting point in planning future archaeological work in the town. (Ehrstedt et al. 2000) (Fig. 2).

Vaasa was transferred to its present location after a fire in 1852. The old town area serves now for small-scale housing. The area was surveyed in the 1980s with the help of old maps, archival information on plot owners and vaulted cellars, and aerial photography as well as inhabitant interviews. The findings in the terrain were recorded (Spoof 1987). Proper archaeological excavations have not yet been made.

## Towns of the Great-Power Period (1617–1721)

The first excavations in a 17th century town were executed in Tornio at the site of the old town hall in 1966 (Koivunen 1968) and in Kokkola at the end of the 1980s. The quantity of excavations has risen rapidly in the 1990s, the archaeologically best investigated towns being (New) Helsinki, Tornio, and Kokkola at present. Smaller-scale excavations have also been carried out in the market places of Kajaani and Uusikaupunki (Haggrén 2001).

In central Helsinki, the preserved cultural layers are usually located in the courts of apartment and office blocks as well as under buildings founded without basements. Four excavations have pointed out the variation of preservation conditions in different parts of the city. In most areas organic material is poorly preserved, as it is usually the case in the acidic soil of Finland. However, an excavation carried out in 1999 next to the cathedral revealed two plots where cattle had been held, and dung had preserved wooden vessels, leather shoes, cloth, and plant remains exceptionally well. These finds telling about the life of a common

merchant in the late 17th century are so far unique of their kind. In the same excavation, remains of a military fortress built by the Russian army during the Great Wrath were unearthed (Niukkanen 1999b; Sirpaleita suurvaltaajan Helsingistä) (Fig. 3).

Tornio, situated at an earlier market place on an island at the mouth of the River Tornionjoki, was the northernmost town of the great-power realm. Several small-scale excavations were carried out in the area of the old town in 1999–2000. Wooden building remains were exceptionally well preserved, probably due to the humidity of the soil and a long yearly duration of ground frost. The occupation layer proved to be relatively thick, up to two metres. The diggings revealed, for example, a site of a smithy as well as a wooden draining system from the early 18th century, not documented in written sources nor found in any other towns of the same era yet (Ylimaunu 1999).

Large excavations carried out in the centre of Kokkola in 1988–90 are unreported for the time being. Recent monitoring of street improvement works has revealed some old street lines and building remains prior to the regulation in 1665.

*Fig. 3: Remains of a wooden dwelling with an oven (in front) from the late 17th century, found in the centre of Helsinki in the excavations at Snellmaninkatu 4–6 in 1999 (photo: National Board of Antiquities, M. Niukkanen).*

## Protection and Inventories of Finnish Early Modern Towns

Finland's Antiquities Act automatically protects the cultural layers in towns. The protection is being focused on layers formed prior to the Great Wrath (1713–21) and it is supervised by the state-financed National Board of Antiquities. Rescue excavations and monitoring are carried out whenever protection is not possible. The developer is responsible for the research cost. The excavations are mainly conducted by the National Board of Antiquities, provincial museums, and universities. At present, there are only a few permanently employed persons dealing with urban archaeology in Finland.

The four extant Finnish medieval towns were surveyed archaeologically and the results published in the 1980s (Keskiajan kaupungit/ Medeltidsstaden 1–4). A similar survey has been made at the site of Old Helsinki (Heikkinen 1989). The other post-medieval towns remained unsurveyed until the year 2000, when the National Board of Antiquities launched an inventory project. The aim of the project is to collect the available data in a uniform manner to be used in planning processes, in order to improve the archaeological research and protection in towns. At the same time, the policies and practises of Finnish urban archaeology are being defined. For the present, Tornio, Kokkola, Uusikaupunki, Tammisaari, Kristiinankaupunki, Kajaani, and Raahe have been surveyed.

The starting point and the most important source for the archaeological surveys are old town maps, dating from the 1630s and onwards. They include actual and geometrical town surveys, regulation plans, town plans, and fortification maps. (Kostet 1995, 184–187). Maps based on surveys that show the actual situation of the town plan and building sites are most useful. The chosen maps are digitised and fitted to a geographic coordinate system with the MapInfo program. The extent of the old town area and the locations of different structures can then be studied by overlaying the present town plan with the old ones (Fig. 4).

*Fig. 4: The present day plan of Kokkola overlaid with the plan prior to the regulation in 1662 (left) and after it in 1665 (right). The narrow bay right to the east of the town has dried up to be a ditch due to shore displacement (digitising: National Board of Antiquities, T. Mökkönen).*

Essential information, such as main features of the town's history, previous archaeological excavations and other observations on the cultural layer, the locations of pipelines, and the ages and foundation means of existing buildings are collected in a database. The old town area is surveyed superficially plot by plot – no trial excavations are included. Plots, parks, squares, and streets are divided into three categories according to the estimated state of the preservation of the cultural layers: a) destroyed, b) partially preserved, and c) well-preserved areas with a special archaeological interest.

## The Archaeological Research Potential of Finnish Early Modern Towns

Almost every urban archaeological dig in Finland is a rescue excavation. Many problems are associated with them: small excavation areas defined by the location and size of the building site, pressed timetables, use of untrained excavators, and limited possibilities for analyses and publication.

However, in different kinds of archaeological projects in the post-medieval towns a huge amount of material with great research potential has been collected. Constructions, such as dwellings, outbuildings, cellars, palisades, pavements, streets, wells, and rubbish pits offer possibilities for studying building techniques, the use of space, and the structures and functions of towns. Typical finds consist of imported and local red earthenware, stoneware, majolica, faience, porcelain, stove tiles, Dutch and Swedish clay pipes, vessel and window glass, lead seals, coins, iron objects, and animal bones. A deeper study of finds allows examining matters concerning trade, a town's relation to its environment, consumption of goods, socio-economic differences, spreading of ideas, as well as urban lifestyle in general. A special issue, for instance, is the history of manufacturing, such as the fabrication of pottery and glass, shoemaking, and smithery.

Since the mid-1980s, interdisciplinary studies have become more and more extensively used. Pollen and macrofossil studies are used to examine cultivation, nourishment, and the natural environment of a town. Osteological analyses of animal bones have given interesting preliminary information on keeping animals in towns, fishing and hunting, slaughtering, and livestock trade. The dendrochronological dating method is used if wooden building remains are sufficiently preserved. Radiocarbon dating has been less utilised at early modern sites because of its certain restrictions in dating material younger than the mid-17th century.

Historical sources form the basis of every urban archaeological excavation. Some of the most essential sources are old survey maps, tax rolls, church registers, inventories, and fire insurance records. The sources are, however, very limited especially with respect to the material culture. For instance, written documents concerning 16th and 17th century towns hardly mention glass or pottery, although large quantities of sherds of imported vessels are found in the excavations. 16th century written sources also are silent about wooden dwellings, but due to the town fires, no such houses from the 16th and 17th century have survived to the present day. In these cases, archaeology is the only way to gain new information.

## Bibliography


Ahlberg 1998 — N. Ahlberg, "Stadsgrundningar och gatureglerингar. Svensk stadsplanering under tre hundra år", in: T. Hall/K. Dunér (eds.), *Den svenska staden. Planering och gestaltning – från medeltid till industrialism*, Lund, 1998.

Ehrstedt et al. 2000 — G. Ehrstedt/M. Karjalainen/T. Lempiäinen/K. Majantie/T. Mikkola, "Kaupunkiarkeologisia tutkimuksia Tammisaaressa", in: *SKAS* 2/2000, 2000.

Haggrén 2001 — G. Haggrén, "Kaupunkiarkeologiaa Uudessakaupungissa", in: *SKAS* 3/2001, 2001.

Haggrén/Lavento/Niukkanen 1999 — G. Haggrén/M. Lavento/M. Niukkanen, "Kaupunkiarkeologia 1990-luvun Suomessa", in: *Muinaistutkija* 4/1999, 1999.

Haggrén/Niukkanen/Peltonen 2000 — G. Haggrén/M. Niukkanen/K. Peltonen, "Den historiska arkeologin i Finland under 1990-talet", in: *META – medeltidsarkeologisk tidskrift* nr 1/2000, 2000.

Heikkinen 1989 — M. Heikkinen, *Helsinki* (= Vaasa-ajan kaupungit 1), Helsinki, 1989.

Hiekkanen 1999 — M. Hiekkanen, *Finland* (= Report on the Situation of Urban Archaeology in Europe), Council of Europe, 1999.

Hiekkanen 2001 — M. Hiekkanen, "Keskiaika kaupungissa", in: I. Lounatvuori/L. Putkonen (eds.), *Rakennusperintömme. Kulttuuriympäristön lukukirja*, Hämeenlinna, 2001.

Koivunen 1968 — P. Koivunen, *Tornion vanhan raatihuoneenpaikan kaivaus ja esinelöydöt* (= Tornionlaakson vuosikirja), Tornio, 1968.

Kostet 1995 — J. Kostet, *Cartographia urbium Finnicarum. Suomen kaupunkien kaupunkikartografia 1600-luvulla ja 1700-luvun alussa* (= Monumenta Cartographica Septentrionalia 1), Rovaniemi, 1995.

Lilius 1985 — H. Lilius, *Suomalainen puukaupunki – Trästaden i Finland – The Finnish Wooden Town*, Rungsted Kyst, 1985.

Keskiajan kaupungit/Medeltidsstaden 1–4 — *Keskiajan kaupungit/Medeltidsstaden 1–4*. Porvoo/Borgå (Hiekkanen 1981), Rauma/Raumo (Hiekkanen 1983), Turku/Åbo (Pihlman/Kostet 1986), Naantali/Nådendal (Hiekkanen 1988) (English summaries), Museovirasto/Turun maakuntamuseo, Museiverket/Åbo landskapsmuseum.

Mäkivuoti 1990 — M. Mäkivuoti, *Oulun NMKY: n korttelin kaupunkiarkeologinen tutkimus* (= Faravid, Pohjois-Suomen historiallisen yhdistyksen vuosikirja 14), 1990.

Narinkka 1994 — Narinkka, *Helsinki 1550–1640* (Sammanfattningar i svenska, English summaries), Helsingin kaupunginmuseo, Jyväskylä, 1994.

Niukkanen 1999a — M. Niukkanen, "Elämää tulipalosta toiseen. Porvarina Porissa 1558–1852", in: M. T. Knapas (ed.), *Muistomerkki – rakennetun historian ulottuvuuksia*, Helsinki, 1999.

Niukkanen 1999b — M. Niukkanen, *The courtyard of the Presidential Palace* (= Monuments and Sites – Finland), Helsinki, 1999.

Niukkanen 2000 — M. Niukkanen, "Kolmesataa vuotta porilaiselämää Taidemuseon lisärakennuksen tontilla", in: *Sarka* 2000, 2000.

Niukkanen 2001 — M. Niukkanen, "Uusia kaupunkeja kauppaa varten", in: I. Lounatvuori/L. Putkonen (eds.), *Rakennusperintömme. Kulttuuriympäristön lukukirja*, Hämeenlinna, 2001.

Niukkanen 2002 — M. Niukkanen (ed.), *Sirpaleita suurvalta-ajan Helsingistä* (= Museoviraston rakennushistorian osaston julkaisuja 22), Hämeenlinna, 2002.

Spoof 1987 — L. Spoof, *Vanha Vaasa. Palossa säilynyttä kaupunkia – Gamla Vasa. Resterna efter branden*, Vaasa, 1987.

Tulkki 1998 — C. Tulkki, "Porin juurilla", in: *Sarka*, 1998.

Ylimaunu 1999 — T. Ylimaunu, *Palokerroksia, hirsisalvoksia ja kolikoita - kaupunkiarkeologisia tutkimuksia Lapin vanhimmassa kaupungissa* (= Tornionlaakson vuosikirja), Tornio, 1999.

*Address*

Marianna Niukkanen
National Board of Antiquities, Dept. of Monuments and Sites
P.O. Box 169, FIN–00511 Helsinki
marianna.niukkanen@nba.fi