KERSTIN SÖDERLUND

STOCKHOLMIA ESSÄ

Slussen through the ages



Stockholmia förlag www.stockholmia.stockholm.se

Copyright © Kerstin Söderlund and Stockholmia – forskning och förlag 2016 Cover: Slussen with the Outer and Inner Gate towers. Detail from Vädersolstavlan painted in 1535. Foto Göran Fredriksson SSM. Översättning: Aidan Allen Editor: Ann Pålsson, Redaktörspoolen Design and typesetting: Gunnar Palmgren ISBN 978-91-7031-298-4

Introduction

Slussen has always been an important focal point, a place where land and water routes meet. Over the centuries the area has seen many great changes and now stands on the verge of another major redevelopment. In advance of this work, large-scale archaeological excavations are planned, which will allow us to learn more about the early history of the Slussen area. Excavations have already begun at Södermalmstorg square, where the remains of buildings and streets that once stood on the site have again seen the light of day. What do we know today about the early history of the area?

Slussen in the world of the sagas

The earliest description of the Stockholm area before the emergence of the town is by the Icelandic author Snorri Sturluson (1178–1241) who wrote about the adventures of King Olaf of Norway. The saga, recounting events in the Viking Age, states that an isthmus (a narrow strip of land) connected Södermalm and Gamla Stan.

King Olaf was born in 995. He tried brutal means to convert the population of Norway to Christianity before he died, aged 35, at the Battle of Stiklestad in 1030. Miracles were soon attributed to him and he became the patron saint of Norway. Snorri describes him in less saintly terms when he visited our part of the world. The saga tells how King Olaf sailed eastwards along the coast of Svitjod and into Lake Mälaren where he raided along its shores. He ventured as far up as Sigtuna where he set up camp at Old Sigtuna. In the meantime the Swedish King, Olof Skötkonung had drawn iron chains across the waters of Stocksund (present-day Norrström). His aim was to stop the Norwegian king from sailing through the channel and escaping out to sea. A tower protected one side of Stocksund and an army guarded the opposite bank. Learning that the Svea king lay in wait with many ships, King Olaf dug his way through a narrow strip of land and sailed out to sea to avoid him. Scholars have identified the location of this isthmus as modern-day Slussen. Snorri tells us that due to heavy rain at the time:

Over all Svitjod all the running waters fall into the Mälar lake; but the only outlet of it to the sea is so small that many rivers are wider, and after much rain or in a thaw the water rushes in a great cataract out by Stocksund, and the lake rises high and floods the land. It fell heavy rain just at this time; and as the canal was dug out to the sea, the water and stream rushed into it. Then Olaf had all the rudders unshipped and hoisted all sail aloft. It was blowing a strong breeze astern, and they steered with their oars, and the ships came in a rush over all the shallows, and got into the sea without any damage. Now went the Swedes to their king, Olaf, and told him that Olaf the Great had slipped out to sea; on which the king was enraged against those who should have watched that Olaf did not get away. This passage has since been called King's Sound; but large vessels cannot pass through it, unless the waters are very high. Some relate that the Swedes were aware that Olaf had cut across the tongue of land, and that the water was falling out that way; and they flocked to it with the intention to hinder Olaf from getting away, but the water undermined the banks on each side so that they fell in with the people, and many were drowned: but the Swedes contradict this as a false report, and deny the loss of people.

Scholars have debated the degree of truth in the ancient Icelandic sagas, yet many of Snorri's details are quite plausible. These include his claim that rapidly thawing snow causes the waters of Mälaren to rise, threatening a wide area with flooding. This happened last in 2000, when the rising water level of Mälaren nearly submerged the quays of Riddarholmen, forcing the authorities to consid-



Fig. 1. In spring 2000 Lake Mälaren nearly flooded the quays of Riddarholmen. Photo: Göran Fredriksson SSM SF-2000-000151-08L.

er closing Gamla Stan Metro station. His observation about the shallow waters of Söderström, the Konungsund of the saga, is also true. For example, according to a record of 1594 the outflow was so slight that ships would run aground in Söderström. Some of a cargo would then need to be unloaded or, in an emergency, a vessel might instead navigate through Norrström. The first lock, which opened in 1642, could accommodate a ship with a maximum displacement of 5 feet (1.5m).

In addition, Snorri records how the Swedish King Olof Skötkonung built a barrier of some kind in Norrström to prevent the Norwegian king from escaping out to sea. The bed of Norrström has yielded driven stakes, squared posts and stray timbers. These may have formed part of a barrier. Dendrochronology (tree-ring dating) of the oak timbers showed the trees that produced them were felled in the period 970–1020. Only a few had been cut down in the 10th century and the majority dated from the first decades of the 11th century, with a concentration around 1010. Interestingly, these dates tally with the lifespan of Olaf the Holy and Olof Skötkonung, and the finds support Snorri's claim that Olof built a barrier in Stocksund.

Archaeology and quaternary geology are important sources of information for understanding early history and the interaction between mankind and the landscape we have inhabited and adapted. Because the Slussen area has seen huge changes in the form of human intervention, geological land rise and erosion, it is hard to imagine today what the area looked like a thousand years ago. What we do know is that the steep north side of Södermalm already existed. It forms part of a fault scarp that extends along the south side of Lake Mälaren and continues far below the present-day water surface. Between the steep slopes of Mariaberget and Katarinaberget, the Stockholm gravel ridge extends north in the form of a spur. Gamla Stan is part of this ridge, which stretches northwards to Norrmalm where it is known as Brunkebergsåsen. Do we have any evidence that the isthmus of the saga ever existed?

When Slussen was redeveloped in the 1930s, many boreholes were dug in the area to map the subsurface conditions. These tests revealed that the Stockholm

ridge here is thin and steep, and extends from Södermalm, past the present-day Slussen lock, and onwards to Gamla Stan. From the Gamla Stan side, the ridge was found to jut southwards from Järntorget in the form of a small spit, suggesting that a narrow isthmus may indeed have connected Södermalm and Gamla Stan for a short period in about 1000. We hope that forthcoming analysis in connection with the Slussen redevelopment will add to our knowledge of the landscape changes that have affected the area. In addition to the question of the isthmus, important Stockholm-related matters include land rise and the date when Norrström and Söderström channels were formed.

Land rise and dumping along the shoreline made the water's edge recede. In *c*.1000 the water line was roughly four metres higher than it is today, and at the turn of the 13th/early 14th century it was two metres higher. Dumping along the Stockholm shoreline was partly planned, to create new land, and partly unplanned in the form of the town's inhabitants throwing their waste into the lake. In the Slussen area dumping had already begun by the 13th century, and at Slussplan in Gamla Stan, for example, present-day buildings rest on dumped deposits more than ten metres deep.



Fig. 2. Topography and defences at Slussen, with Gamla Stan to the right and Södermalm to the left. The shoreline in 1300 is marked in yellow, with the present-day lock in blue. After civic geologist Carl Caldenius, 1931.

War and peace at Slussen

Waterways, until quite recently, were our most important form of communication. By some time in the 11th century, because of land rise, the sole remaining navigable route between the Baltic Sea and Lake Mälaren passed by Stadsholmen, the island on which Stockholm would be founded. The island became a place that travellers had to pass on their way to or from the Baltic Sea. From the island sea traffic could be monitored and controlled. Its increasingly strategic location is often cited as being a key factor when the island was chosen for the foundation of Stockholm. By around 1300, land rise had transformed Mälaren from a deep bay of the Baltic Sea to a lake. Strong currents had developed in the waters north and south of Stadsholmen. These hindered water traffic to and from Mälaren, and cargoes now needed to be trans-shipped on the island.

In all probability water traffic was monitored from the two towers that Olaus Petri mentions in his Swedish chronicle from the first half of the 16th century. He describes the foundation of Stockholm as follows:

Two towers were built first, one by Norrström where the stronghold is now, a second by Söderström where Blackfriars priory now stands, for there close by flowed Söderström at that time, and so two walls went out from the tower by Norrström and to the tower by Söderström. The one wall to the west and the other to the east, and between the walls was the town.

The tower that watched over Norrström was later incorporated within the medieval stronghold, and survived until the fortress was destroyed by a great fire in 1697. The tower by Söderström was situated just uphill from Järntorget square, although no definite remains of the South Tower have ever been found.

For those travelling north-south by land, the shortest crossing of Mälaren was situated at Stockholm. In the Middle Ages the start of the Göta highway, the



Fig. 3. Lead seal, with an image of a cog, once attached to a bale of cloth, a vital medieval import. This early 16th-century seal shows the cloth came from Amsterdam. It was found in Söderström during the building of the Metro in the 1950s. Photo: SSM 18968.

road leading southwards through the province of Götaland, was located at present-day Södermalmstorg. To the north an extension of the road led across Söderbro bridge and along Västerlånggatan before crossing Norrbro bridge. Building and maintaining Stockholm's bridges demanded huge resources of labour. It was a national concern as early as the 13th century and provided for in medieval law. If required by the sheriff of Stockholm, the townsfolk, and the people of a wide area of Uppland too, were obliged to provide their labour. We do not know the exact date the bridges were built, but the written sources first mention Norrbro and Söderbro in 1288 and 1289 respectively. In 2014, excavations at Södermalmstorg uncovered the remains of a carp pond and jetty of late 13th- or early 14th-century date. A smithy was established a little later and the earliest paved street surface dated from 1330–50.

One of the earliest burghers of Stockholm whom we know by name is Godeke van Memel. This merchant, a German by birth, lived in the 1280s at Slussplan near Söderström. It was probably no coincidence that he lived here, beside the economic hub of the medieval town and the large domestic and international ports of Kornhamn and Kogghamn. The latter was situated a little way back from the south end of present-day Skeppsbron. During the 15th century, when the written sources start to flow in abundance, this area was home to the majority of the town's wealthiest merchants. In the early 14th century the Söderström tower became obsolete in defence terms. From around this time onwards the bridge area, the important south entrance to the town, was defended by two gate towers. The Inner South Gate stood on the Gamla Stan side at Slussplan, south of the line of Järntorgsgatan. The Outer South Gate stood on the northernmost point of Södermalm, just south of the present-day lock. These gate towers are first mentioned in 1409 and 1427 respectively but were probably built some time earlier.

The Söderström area was ravaged by the many conflicts around Stockholm in the 15th and 16th centuries. The inhabitants of Södermalm led a precarious existence as the Crown reserved the right to burn down or demolish their homes. In addition, people living just outside the gates were urged to construct 'light buildings'. This probably means structures that could easily be moved, such as corner-jointed timber buildings, which could be dismantled and re-erected elsewhere in the event of war. At certain times buildings were forbidden altogether in the areas north and south of the town, a decree intended to prevent enemy troops from finding cover in the area just outside the gates.

The Södermalmstorg excavations have shed light on how the continual threat of war influenced people's lives. Archaeologists uncovered the remains of several phases of timber buildings that bore witness to these troubled times. The earliest buildings, among them a probable warehouse, date from the 1540s. At the time when these buildings were destroyed by fire, few objects were left lying on the floor. This suggests people had time to empty the buildings before they were torched deliberately, perhaps by royal decree before an impending attack. Extending between the south wall of the warehouse and an adjacent building was a narrow elongated paved surface, which perhaps marked a property boundary.

Buildings of an earlier phase, dating from the 1520s, were unburnt. On the site of the later warehouse was a small building, its floor marked by square postholes, suggesting it had been divided into stalls. The floor was covered with dung, which strengthens the idea that the building was a cattle shed.

The paved surface was present in this phase too. To its south lay a hearth that was probably once part of a dwelling, although no traces of the actual building



Fig. 4. Excavation of medieval buildings at Södermalmstorg, 2014. In the foreground is the cattle shed, with holes for the square posts that divided the stalls. Photo: Matthias Ek, SSM10001446L.

Fig. 5. Troops of Kristian II enter Stockholm through the South Gate following the town's surrender in September 1520. Siege cannon fire has destroyed the rooftop of the Outer South Gate. Detail from Blodbadstavlan (the Bloodbath Painting) by Dionysius Padt-Brügge, 1676. The engraving is a copy of an original, now lost, from the 1540s.



were found. Perhaps, under threat of war, the buildings of this phase were moved rather than burned. The results of the analyses from the excavations have shown that the dung in the cattle shed comes mainly from sheep. Tree-ring dating has demonstrated that the building timbers came from trees that were felled in the winter of 1523–24.

Armed conflicts at Stockholm culminated in the 1520s. After three sieges, and with the promise of amnesty for everyone in the town, Stockholm surrendered to the Danish King Kristian II on 5 September 1520. He was crowned in Storkyrkan (Stockholm parish church) in November that year. At his coronation banquet at Stockholm castle, Kristian seized and imprisoned his enemies. They would be executed at Stortorget square between 7 and 9 November 1520. This incident – when over 80 people were murdered – became known as the Stockholm Bloodbath.

A rebellion soon broke out, in which Gustav Vasa played a leading role. Stockholm was besieged once more and by autumn 1522 the lack of food was so acute that 'deacons, old priests, friars, hired hands, burghers, maids, farmhands ... harlots and every kind of riff-raff' were urged to flee the town. In just a few years the number of tax-paying inhabitants had dropped from roughly 1000 to 308, nearly half of whom were women. This proportion, which was far greater than normal, shows that especially women stayed on in the town during these troubled years.

When Gustav Vasa rode through the South Gate 'with great ostentation' at ten o'clock on Midsummer's Day, 24 June 1523 he was met by a town that had suffered terribly during many years of long sieges. Every second house stood empty and many timber buildings had been chopped up for firewood because no fuel had reached the town. Gustav Vasa's seizure of power marked the end of decades of war in which Stockholm had been the focus.

To strengthen his position, and that of Stockholm, Gustav Vasa began intensively to repair and improve the defences surrounding the stronghold and town. At Söderström a new tower and moat were built on the Södermalm side, and the old Outer South Gate began to be known as the Middle Tower. Work on



Fig. 6. South Gate c.1570s. By this date a complex of walls and towers protected the town's south entrance. The outermost defences consist of Gustav Vasa's new gate tower, Bastion and moat. Detail of a coloured engraving by Frans Hogenberg. Photo: SSM 0011839L.

the new tower and moat took many years and consumed much labour. In one year alone, 1548, records note over ten thousand days' work. The huge scale of moat digging was seen at the recent Södermalmstorg excavation, where a spoil layer of gravel up to two metres thick sealed the burnt buildings from the first decades of the 16th century.

Another new feature was Gustav Vasa's Bastion, a substantial cannon tower located to the east of the new square gate tower. When Slussen was redeveloped in the 1930s, substantial remains of the Bastion and the stone-lined moat were recorded and removed. To this day a small section of the once-mighty moat wall can be seen from the Green line of the Metro as the northbound train departs Slussen station. The Bastion was situated where the round blue building stood



Fig. 7. Large limestone block engraved with the national coat of arms, including the shield of the Vasa dynasty, supported by flanking lions. The stone, which following Continental tradition crowned the new outer gate tower, dates from the reign of Johan III. It was unearthed by workmen at the east of Södermalmstorg in 1932. Photo: Mariann Odelhall SSM.

until recently at the centre of the Slussen interchange. The building was called Kolingsborg but its block name, Södre torn (South Tower) was given in honour of its predecessor. Kolingsborg was demolished in autumn 2015. The Slussen redevelopment of the 1930s also unearthed a stone, engraved with the national coat of arms, which was erected in the 1570s by Johan III above the entrance to the new outer gate tower.

At the same time as Gustav Vasa built the new tower and the moat, the entrance to the town was relocated. This can be seen in the orientation of the stone building and paved streets uncovered during the Södermalmstorg excavations, which were aligned differently to their earlier counterparts. The stone building, which dates from the very late 16th or early 17th century, was in municipal ownership and inhabited by a farrier. The kitchen had a paved limestone floor and two ovens, the lower and larger of which had been walled up and replaced by a smaller oven. Both ovens contained large numbers of chicken eggs and a small number of goose eggs. Quite why the eggs were left in the walled up ovens remains a mystery.

The new city emerges

Street regulation in the 1630s and 1640s brought about great change, mainly to Norrmalm and Södermalm. Old winding streets and alleys were straightened, and many old buildings were demolished and replaced by new ones. In this century Södermalmstorg square and the streets of Götgatan and Hornsgatan assumed their present form, and many of the present-day buildings in the Södermalmstorg area were built.



Fig. 8. Street-regulation map of 1642 showing the old and the new street networks. Photo: SSM.

One of these buildings, which was designed by Tessin the Elder and Tessin the Younger, has since the 1930s housed the Stockholm City Museum. The building was completed in 1670, probably at the same time as the well-built cobbled surface that archaeologists recently uncovered at Södermalmstorg. The surface formed part of Brunnsbacken, an extension of Hornsgatan, and led to a well (*brunn* in Swedish) at the north-east side of the north wing of the City Museum building.



Fig. 9. The north wing of the City Museum is visible to the left. The trench contains the remains of the stone building and its ovens, and a stone-paved surface aligned along the early street network. Photo: Johan Stigholt SSMDIG024313.

The old defences became redundant too. In 1637 the two earliest towers were demolished, partly to make room for the first lock, or *sluss*, the Kristina lock. Built by Dutchmen, it opened in 1642. In the Middle Ages the Weigh House, where iron ore destined for export was weighed, was situated at Järntorget in Gamla Stan. In 1662 weighing was moved to the outer moat at Södermalm, which now became known as Järngraven or the 'Iron Moat'. At the Mälaren end of the moat, boats from the Bergslagen region unloaded their cargoes of iron bars. Porters would then carry the bars along the moat to wharves on the Baltic side where they were loaded onto ships for transport to the Continent.



Fig. 10. Iron porters taking a break. The porters carried iron bars on their shoulders using a cushioned support. Early 19th-century painting of Järngraven attributed to Johan Fredrik Julin. Photo: SSM 0001209L.



Fig. 11. A train on the new connecting line passes the wings of the City Museum building. Oil painting by Karl August Tholander, 1898. Photo: SSM 0030896L.

Much later, in 1871 when the Stockholm railway connecting line opened, a new use had been found for the old moat. Just next to Riddarfjärden bay, the railway entered the moat, continued past the wings of the City Museum building and then entered a tunnel, which still exists today, before re-emerging at Medborgarplatsen.



Fig. 12. The Red lock during the spring floods of 1780, when the level of Mälaren rose to 2.81m above that of Saltsjön. Oil painting by Anders Holm. Photo: SSM 0004526L.

Kristina lock was replaced by a succession of locks. In 1755 the Polhem lock opened. It was deeper than its predecessor and its two pairs of red-brick towers, housing the drawbridge machinery, gave rise to the name the Red lock. Both locks lay to the south of their modern-day counterpart, and some of Polhem's construction survives to this day. In 1852 it was time to inaugurate the next lock, built by Nils Eriksson. Situated nearer Gamla Stan, the new lock was even bigger and wider than its predecessors in order to meet the needs of steamboat traffic. This lock also quickly became too small and in 1895 a new, bigger lock was proposed. Yet it was never built and the problems for larger vessels entering Mälaren remained until Hammarby canal opened in 1926. The major 1930s redevelopment included yet another lock, the Karl Johan lock, built to the south of the Nils Ericson lock. Much of the latter still survives, hidden beneath the steps that lead up from Karl Johans torg to Slussplan. Since 1935 it has served as an additional outflow channel for Mälaren.

The first decades of the 20th century saw a huge rise in road traffic. Large numbers of trams, buses, cars and pedestrians soon congested the streets and bridges around Söderström. Road vehicles had to negotiate the steep incline from Gamla Stan to Södermalm, and compete with local water traffic, which needed road bridges to be opened. The result was a continual traffic jam, or Slussen Misery as it was called. After much discussion and many suggestions, one of which proposed the demolition of the City Museum building, the problem was solved by the ingenious 1930s clover-leaf traffic interchange designed by Tage William-Olsson and Gösta Lundborg.

The interchange – which was probably the first of its kind in Europe – along with the Cooperative Union head office and Katarina lift comprise the first large-scale, functionalist urban environment to be conceived as a single entity. It now stands on the verge of great change.



Fig. 13. Slussen redevelopment of the 1930s. Photo: Oscar Blad SSM E 519.





SLUSSEN

has always been an important hub in Stockholm. Throughout the city's history and up to the disputed transformation the site currently is undergoing, it remains a central topic. In this essay, rich in illustrations, Kerstin Söderlund points out the changes over time and the traces of its past that Slussen holds. Read about fires and sieges, threats of war, trade, everyday life and various traffic solutions dating back to the 13th century – all in a place that evokes more emotions than many other places ever have.

KERSTIN SÖDERLUND

Archaeologist with specialization in historical archaeology at the Stockholm City Museum.