

Acta Universitatis Agriculturae Sueciae
2005:94

ISSN 1652-6880
ISBN 91-576-6993-7
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Available on <http://epsilon.slu.se/eng>

Summary:

New Foundations and Changes of Plan. Swedish Town Planning 1521–1721

During the late 16th century, and even more so in the 17th century, when Sweden was a great power, the extent of Swedish town-planning activity was unparalleled in Europe. Large areas around the Baltic were under Swedish rule – including today's Sweden and Finland, which had been part of the kingdom since the Middle Ages and, for longer or shorter periods, Estonia and parts of Russia, Latvia, Poland and Germany. Swedish interests even reached as far as North America and the coasts of Africa. Many new towns were founded and old ones relocated. In already existing towns extensive changes of plan took place. Much more was envisioned but never carried out. The scale of these operations was matched only by the colonial towns of Latin America and the Far East.

However Swedish town-planning was based on the same principles as in the rest of Europe and its colonies. Foreign experts played a significant role in the town-planning projects of 'greater' Sweden. Swedish town-planning of the 17th century is therefore of international interest and many towns outside its present-day borders share a common cultural heritage. Most of the older towns in Sweden and Finland can be said to take their character from this era. In spite of the significance of this period, there has been a lack of detailed knowledge of key aspects and a need for a comparative study of town-planning in a wider context.

Aims of the book

The study aims therefore at the broader picture of Swedish town-planning of this period, based on a re-assessment of existing knowledge of individual towns, but adding new material and asking new questions pertinent to the period as a whole. It is intended this will provide opportunities for systematic

comparison with similar studies in other countries and thus enhance our understanding of urban development in early modern times.

Alongside this, the study seeks to help identifying the particular cultural values of individual towns and assist the conservation and future planning and design of the urban environment, both in terms of the overall layout, public spaces and buildings. It seeks to encourage a wider use of historic maps in urban research and advance the methodology and terminology of analysing town plans and these key documents. As a model therefore, it hopes to establish between researchers, managers of heritage sites, planners, architects and landscape architects in this field a better mutual understanding of the common cultural heritage in northern Europe.

Major questions raised concern different kinds of planning measures, the design of plans and how they were devised, to what extent functional demands were tempered by aesthetic considerations, the impact of great fires and the significant figures of the time. A general question has been what differences there were to the prevailing pattern across the kingdom as well as differences between towns relating to their function. It has also been a particular interest to, where information is obtainable, document what was carried out and how much of this survives today.

The scope of the work

The study covers all Swedish town-planning in the areas under Swedish rule 1521–1721, but also includes what were obviously places of interest to the Swedish Crown outside this. In Swedish history, 1521 marks the end of the Middle Ages with the foundation of the nation-state. 1721 is marked by the Peace of Nystad, when Sweden lost most of the territories on the eastern side of the Baltic, ending the period as a great power. The borders and names of the period have been used. As a general rule, the granting of a charter qualifies the town for inclusion, but other ‘urban-like’ settlements are discussed where aspects of contemporary town-planning have clearly had an influence.

Initially, almost 450 places were investigated for town-planning activity. Of this number, slightly more than 100 are in ‘core’ Sweden, just above 30 in Finland, and approximately 100 in what was known as the provinces. In addition, about 100 towns further away, in places which Sweden controlled for short periods or had a particular interest in, were also looked at. When no information on any town-planning activities was found, the town was removed from the list, leaving 175 sites in total. Since several different projects occurred in many places, the total number of projects included in this study numbers 338. In addition, the database contains some Danish projects in towns that later became Swedish and there is appended a list of places where it is believed activity might have happened but there is no certain information at present. Some maps show only fortifications or the outline of the town, sometimes

including extensions, leaving 295 projects with information on the design of the street-net. Since many of the projects have alternative or modified plans (just above 10 in exceptional cases) slightly more than 600 individual town plans in total are considered (about 560 of these have marked streets). All this information is registered on the database.

Sources for the work and structure of the investigation

A main source is the truly outstanding collections of hand-drawn historic maps in Swedish archives and libraries, but maps in Finland, Denmark, Latvia and Poland have also been consulted. Other sources are earlier research, reports resulting from the investigation of cultural heritage, monographs and other writings on individual towns, and further original historical documents. The present towns, their condition and physical fabric, are obviously also a key source. Towns have mostly been studied on an individual, site-specific level but it is hoped that this study brings these diverse sources together into a broader picture by identifying the things they share and applying techniques of investigation used for one place to another, and with some consistency.

The first stage of the work involved the scrutiny of individual towns; the conclusions form part III of the book. The next stage was to examine this material and establish firstly what was factually correct and then weave certain thematic concepts into what may be described as a hermeneutic whole. As themes were addressed and woven in, so the pattern became clearer and the context richer. Initial ideas for chapters took their final shape: types of town-planning measures, the design of the plans, the presence of certain important and dominant elements such as squares, streets and plots, historical factors behind the moves towards new town plans, the various people involved and their way of working. This forms part I of the book and in part II, this is summed up into a broader picture of the town-planning development. A separate volume contains some 370 of the most important maps and a few other images reproduced in colour.

The history of Swedish town-planning: some general developments

The overall picture of Swedish town-planning in the period following the Middle Ages up to its fall as a great power illustrates the political and economical development of the kingdom and the radical change of society that took place in this era. In this modernization process with its strong attempts to develop the administration and economy, the towns played a fundamental role, reflected in both the general urban policy and the physical form of the towns. In both general terms and in terms of particular characteristics there is a correlation between the town-planning and the political situation, the

fortunes of war, planning ideals and the views and interest of the monarchs and others in leading political positions.

Apart from a few early examples intensive town-planning activity starts in the mid-1500s and continues with a slow if irregular increase for the rest of the century. The major rise in activity begins in the early 17th century and reaches its peak in the 1640s and '50s. Then followed a fall in activity and a continuous decrease for the rest of the century, with the interruption of a small rise in the early 1680s.¹

Three main categories of town-planning measures

A first main category is **new construction** – the building up of a town from nothing. This includes both *relocation* of older towns and *new foundations*.² There are 100 all told, and of these are some 25 relocation projects and 75 new foundations. Among the latter there are about 10 small fortified garrison towns. Both relocation and new foundations follow the same pattern, directly continuing medieval town-planning, and they are initiated at all times up until 1680, with one somewhat different late-comer in the 1690s. The very first town-planning project in the study was a relocation in 1521, and to begin with this type dominated. The first new foundation took place in 1528, a group of 7 came in the 1580s, but the real peak was around 1620 and even more in the 1640s and 50s. The all-time high was in 1643 when 4 towns were founded in one year.

The second main category consists of **town plan changes** in existing towns. This group contains completely different preconditions and complications, especially concerning the *redevelopment* of plans in living towns, where new streets were laid out, plots shifted and houses moved. Another type of change is through *extension* of older sites and yet another one the creation of a separate *suburb*. Often these changes are *combined* in the same plan, especially redevelopment and extension. There are more town plan changes than new constructions, about 170 all together, but on the other hand they vary much more in size; a redevelopment can be anything from a new main street to a complete town. There are approximately 50 projects for redevelopments only, and about 60 more redevelopments included in the combined projects. Counting the same way there are some 40 separate extensions and in addition 60 within the combined projects, and 15 or so suburbs plus another 15. A few scattered examples of town plan changes occurred in the 16th century, but it was not until the 1610s they started happening in any great number, the peak years being the 1640s and '50s when there were more than 30 each decade. They then decreased, but some are recorded during the whole of the period and continued into the 18th and 19th centuries.

1 This and the type of planning is shown in the diagrams on pages 139, 145 and 153.

2 See table in Appendix 3.

Town-planning does not only concern the layout of streets, squares and plots, but the whole arrangement and use of the land, and as a third main category should be counted **measures relating to fortifications**. The arts of town-planning and fortification were closely linked, which is evident from all the ideal city plans, illustrating various theoretical works on the ideal form and function of towns. These measures include a small number of *demonitions* to create open land next to fortifications, and a great many *fortifications around the towns*, including some 65 projects for fortifications only and in addition 90 included in new constructions of towns and town plan changes. With a few early and late exceptions they all belong to the time from about 1610 to 1700.

This means that the various town-planning measures develop differently over time. The new constructions were a continuation from the Middle Ages and stopped at the end of the 17th century, the fortifications were concentrated in the 17th century and the town plan changes, on the whole, started at about 1610 and carried on into the 18th century. They also show different geographical patterns. The new constructions were mainly a concern for Sweden-Finland (more than 80 percent found here), the town plan changes are also concentrated in Sweden-Finland, but to a lesser extent (just above 65 percent), while the fortifications mainly belonged to the provinces (about 75 percent).

The early plans

The early town plans were irregular, medieval in type, and adapted to the topography of each site. Among these are a number of single-street plans. For the foundation of Helsingfors (Helsinki) in 1550 the king asked for straight streets and this suggests there was probably some knowledge of the new European planning ideals already by this time. The king's request had no impact however on the final plan. In the late 1560s a couple of plans are built-up with parallel long-streets but only short cross-streets through parts of the town area. They should be seen as an immature variant of the gridiron plan and could perhaps be called a 'quadrangular' plan since the streets form four-sided blocks but not a complete grid of streets. Proper gridiron plans, where the streets pass through the whole town area in both directions, creating a net of streets, first appear in the 1580s. However at this time they are still somewhat irregular.

For the new foundations the policy is already clear at this stage – to fill in with new towns along the coast of Northern Sweden and along a line diagonally through Central Sweden, including the important mining districts and the waterways to the west coast. Later would come new towns along the northern part of the Finnish coast and some in the areas on the

south and west coasts of Sweden that were captured from Denmark-Norway in 1658.

The first right-angled grid is a plan by the Dutchman Petter Nicolaus de Kemp in 1608 for the foundation of Göteborg. At the time this was the only Swedish piece of land on the west coast, and the city was of utmost military and commercial importance. The building of Göteborg was a deliberate attempt to attract Dutch immigrants and this is probably the reason for the sophisticated, semi-circular plan to a symmetrical design, with a protected harbour, surrounding fortifications, and what is probably a round church. The connection with the ideal city plans is obvious.

Gustavus Adolphus

In a war with Denmark 1611–13 several towns were burned. For the rebuilding of Kalmar, the border town on the east coast, the young King Gustav II Adolf (Gustavus Adolphus) ordered a modern plan “like in well-built towns in Germany”, which resulted in a radial layout drawn by the Dutch engineer Andries Sersander. For Jönköping, the border town in inland Sweden, a number of alternative plans were produced, either for redevelopment or relocation and the building of a very large, new town. In the end it was moved a short distance and built on a Dutch model of rectilinear grid plan with canals and fortifications. The same happened to Göteborg, which in 1619 was transferred to its present location.

The reign of Gustav II Adolf (1611–32) stands out as the most important period for town-planning and urban development, even if the peak years of activity followed a couple of decades later. It was in his time that principles were laid down, the path staked out and the work begun. It is also an experimental era when new ideas were brought in and tried before assuming more definite shape.

The right-angular gridiron plan

From the mid 1620s, new plans as a rule became right-angular gridiron plans. Generally a rectangular shape of the town was desired, and also symmetry and uniformity as far as possible, as well as streets of equal width throughout the town. The way of dividing plots also changed from an older system of one row of narrow plots straight through the blocks, to a double-row system. A more complex variant of the latter happens when a single row of plots in the other direction is added at the end of the block – a double-row system with two axes.

These plans have been described as simple, stereotypical and lacking aesthetic pretensions. And in addition to these a few sophisticated exceptions. This is however inaccurate. Even if there are common traits, there is a great diversity, reaching from small and simple plans to the most complex and

grandiose, and even among the simple, straight-forward examples there is a wide variety. Austerity and restraint of character does not necessary mean poor, without knowledge of the international models and lacking artistic ability. The ideal city plans of the time were consistently symmetrical and uniform, and some of them rather simple. It is also said that the plans were drawn up without much knowledge of the locality, paying little attention to topography and existing conditions. This is however contradicted by the numerous investigations of possible locations and the many survey maps made prior to the making of a decision.

From a morphological point of view the right-angular gridiron plans can be divided into three main groups, which however overlap to some extent.¹ The first one is the **simple, regular gridiron plan**. Most of these are middle-sized, but there are also a number of larger plans and quite a few plans for small towns or parts of towns. They mainly belong to the less important towns and towns of middling size and most of them date from the peak years in the 1640s and beginning of the 1650s. These form the largest of the three groups, making up some 40 percent, compared to the other two of about 30 percent each.

The second group could be called **pragmatic gridiron plans**. In these the street network is much more varied and adjusted to the individual prerequisites of the town. The span is much greater, from small towns to the largest and most important cities. They are particularly noticeable at the end of the 1630s, in the 1650s and in the 1710s. Typical features are an individualized treatment of various sections of the plan, a variation in size and direction of the blocks, and asymmetrical components in some parts.

The third group consists of the town plans closest to the ideal city plans and the models in the actual European town-planning of the time. These could perhaps be labelled **elaborate gridiron plans**. They are symmetrical, axial plans and regular polygons, but also some more complex layouts where the parts balance without being completely symmetrical. In this group are found most of the more developed canal plans and the symmetrical fortified towns. The great majority were, in fact, fortified. They are mainly made up of larger plans in the more important cities and towns, but also a number of small garrison towns fall into this category. They are, in proportion to the total numbers, relatively rare in the 1640s, but many more occur in the 1680s.

Politics and town-planning

The way that town-planning reflects political developments, with the policy of expansion and legal and administrative reforms, comes out clearly in the 1620s and '30s. In 1621–26 Riga, Livonia (northern Latvia and southern Estonia)

1 See figures in p 136, 139, 145, and 153.

and parts of the coastlands of Prussia were captured, and this was followed by a number of plans for extensions and fortifications that indicate a wish to remain permanently and develop the towns and their economy. For about a decade there were no projects at all in Sweden-Finland.

In 1630 Sweden entered the Thirty Years' War and in the first couple of years there were some 20 large projects in Germany, almost exclusively fortifications, which obviously shows a change in strategy – to secure a strong base in northern Germany as a first step and starting-point for further expansion. There was even a sizable new garrison town as far south in Germany as Mainz – Gustavsborg in 1632 – and a large project for extension with surrounding fortifications at Neuburg, close to Munich. On the eastern front Nyen was founded, a predecessor of St Petersburg.

The administrative reforms included the creation of a special National Land Survey in 1628 and the reorganization of the Fortifications Administration in 1635. Foreign military engineers had been hired since the mid-16th century, but from now on the leading officers were Swedish, with a large part of their training having been undertaken in the Netherlands. Head of the Fortifications Administration was Olof Hansson Örnehufvud, who had previously been in the army in Germany. It was he who made the drawings for Gustavsborg. A study of the maps demonstrates a many-sided way of working: surveys of enemy land and towns for battles and sieges, plans made to prepare quick reinforcements after a town's capture, spy maps, delineations, theoretical projects, outline plans for new constructions and town plan changes, sketches and finally approved plans, a great many alternatives and consecutive revisions, reports on work performed and so on. There are particularly magnificent specimens for presentation or propaganda, and what are obviously showpieces seeking employment. Some 15 town plan models in relief have also been preserved.

It has been taken for granted that the land-surveyors did most of the town-planning in non-fortified towns, which formed the great majority of settlements in Sweden and Finland. The first instruction of the National Land Survey clearly indicates this, and it also later proved the case. But the study instead shows that fortification officers or others with a close connection to the Fortifications Administration drew up almost 70 percent. All the most productive authors of plans also belonged to this group. Only some 20 percent of the town-planning originated from the land-surveyors. The remainder was carried out by a couple of leading architects or derived from the mining authority. The latter had no particular role in town-planning but under a very active leadership in the 1640s and early '50s land surveyors working for the authority produced a number of plans.

The peak period

After the death of Gustav II Adolf in 1632 town-planning activity more or less came to a stop for a number of years. What changed this was the redevelopment and enormous extension of Stockholm, which began in 1637. This is without any question the largest single project during the whole of the period studied. It is an evident expression of the growing strength of the young great power and the expansion of the administration and centralization in the capital. The population of Stockholm grew from estimated 9,000 in the 1610s, to 35,000 by the beginning of the 1650s and 57,000 by the 1690s. The town plan type for the capital can be labelled a pragmatic gridiron plan, with radial segments of right-angular grids on the north side of a medieval core on the central island, and one single grid system on the south side. It has been suggested that the radial structure is the result of a master plan from around 1620, with a polygonal outer shape and fortifications, and at the centre the main tower of the royal castle, but there is little concrete evidence for this, and other, more practical explanations.

The number of new plans culminated in the end of the 1640s and the beginning of the 1650s when just above 60 projects were produced in only 7 years, the bulk being town plan changes to existing towns. This is the period of the art-loving Queen Christina (1644–54), but there are no signs that she personally took any particular interest in the town-planning. The plans of this era were on the whole rather strict and restrained, and a great majority belonged to the group of simple, regular gridiron plans. The priority seems to have been the modernization of as many towns as possible, eventually hopefully all of them. From what was generated it is possible to read a special ambition to strengthen defence, administration and industrial enterprises in central parts of the kingdom, along an east-western axis with Stockholm in the middle. This was gradually widened to include other parts of the realm.

In Finland around 1640 there was a proposal for a large extension of the regional capital and second largest Swedish city, Åbo (Turku). Helsingfors was relocated to its present-day location, and in the eastern boarder town Viborg (Vyborg) a redevelopment was carried out, and a large suburb built. The fortification engineer and City Engineer of Stockholm Anders Torstensson drew up these plans and most probably also the Stockholm plan. In western Sweden the fortified town Vänersborg was added, and in the southeast Kalmar somewhat later relocated and built up on an island to a symmetrical, long and narrow plan. The final drawings were made by Johan Wärnschiöldh, who in 1645 was appointed head of Fortifications Administration.

From the end of the 1640s there were also many new constructions and town plan changes of smaller towns in remote parts of the country, above all campaigns along the coasts in the north of Sweden and Finland, affecting some 15 towns all together. The provinces can boast of large projects in Nyen,

Dorpat (Tartu), Narva and Riga, starting a series of recurrent projects in later decades. Following the Peace of Westphalia in 1648 large areas in Northern Germany also officially became Swedish, and a few projects were initiated here. In 1654 there was even a new foundation in the little New Sweden colony in North America – Christinehamn, the origin of today's Wilmington on the Delaware river.

Charles X

After a quick drop the numbers rose again under King Karl X Gustav (Charles X). During his short reign (1654–60) he was away in the wars in Poland and Denmark almost the whole time, but still a number of remarkable plans were produced, and most of them with direct connection to the king. Very little of this was, however, carried out and some of the projects have not been noticed before, which is probably why the king has not previously been highlighted as of any importance to town-planning. In the plans there is a noticeable new monumentality and more weight is attached to aesthetic and representative aspects, probably as an influence from baroque Rome, Paris and continental Europe, and brought in by, above all, two leading architects, Jean de la Vallée and Nicodemus Tessin the Elder.

As far away as Brest-Litovsk (Brest) in today's Byelorussia a large project for new fortifications was worked out in 1657. The same year there were plans for two new foundations of large fortified towns with strictly symmetrical, axial plans in the delta of the Weichsel (Wisła) – Danziger Haupt and Montauer Spitz – the first one with a system of interior canals. This was in the vicinity of Danzig (Gdańsk), the most important city along the Polish coast, which Sweden never managed to gain control over.

In central Sweden Jean de la Vallée executed a grand plan in 1658 for the foundation of Karl Gustavs stad, today's Eskilstuna, as a centre for extensive metal works. A cross of wide main streets met in a central square with closed corners, and there were two symmetrically placed churches. To get uniform buildings, model drawings were made for detached, combined houses and workshops with gardens. Along the side of the town there was an avenue of double rows of trees leading up to a royal palace with a large park.

In a peace made with Denmark in 1658 all the land along the south and west coasts became Swedish and in the new areas a series of inspections and town-planning measures were undertaken. In 1659 Nicodemus Tessin drew up two alternatives for Landskrona, which was discussed as a new chief town of southern Sweden. The plan included redevelopment, large extension and suburbs. There was a grid of canals, a number of splendid public open spaces and public buildings as well as fortifications and a new citadel. The same year a somewhat similar project for two large suburbs in Göteborg was made by Johan Wärnschiöldh.

Erik Dahlbergh

In the regency period of the infant King Karl XI (Charles XI) town-planning was kept to a low level; what was done was mainly related to fortification works in the new areas captured from Denmark and in the provinces. There were projects for instance at Nyen, Narva and Wismar, but the most remarkable one was the foundation of Carlsburg, a large fortified town by the mouth of the Weser north of Bremen, to control the trade on the river and hoping to attract Calvinist refugees and even compete with Amsterdam. In 1671–74 eight plans were produced by a number of people of different nationalities, including gridiron plans, radial plans and canals, and this was followed by new plans on a couple of occasions in coming decades, after the town had been destroyed in a war. Plans on a radial layout had been suggested several times since the first one in Kalmar in 1613; all together there are about 15 of them, with a certain concentration in the 1670s and '80s.

The reign of Karl XI (1672–97) started with a war, but was otherwise the longest period of peace during the whole 17th century. The king was concerned with the economy and defence matters but otherwise he seems to have had little interest in town-planning. Still, a number of remarkable projects came into being, especially in the first part of the 1680s, after the peace treaty of 1679 when Sweden regained the lost land in southern Sweden and Northern Germany. This is very much due to the new head of the Fortifications Administration, the engineer and architect Erik Dahlbergh, who then remained in this office until his death in 1703. These are the most grandiose projects in the whole of Sweden's period as a great power.

Once more under discussion was the idea to make Landskrona the chief town of southern Sweden, and a series of very large proposals were prepared for this. The finally approved plan is a middle-sized one. It is a combination of redevelopment and large extension – round, with a citadel at one side, a completely symmetrical layout and an H-shaped system of canals. The wide central street runs along a line beginning at the old castle, which forms the core of the citadel. It passes the medieval church, which together with the castle is the only remain of the older town, and then the main square with some kind of well, or little basin, perhaps with a fountain or monument intended in the middle, on its way to the gate. There were two symmetrically-placed churches on a Greek-cross design and a system where the width of the streets and the size of the blocks and plots gradually diminished towards the periphery of the town. A distinctive feature of Dahlbergh's is the very sturdy fortifications with particularly big bastions and series of ravelins and outworks.

Dahlbergh, with the assistance of Tessin, was also responsible for the new foundation and naval base Karlskrona, which was founded in 1680 and got its final plan in 1683. With the conquering of the southern parts of the

Scandinavian peninsula the strategic situation changed; the Swedish navy had previously been based in Stockholm but needed to get closer to the Danish enemy to secure the new position. For this a series of rocky islands with a good natural harbour was chosen, which made a fully regular plan impossible. This shows another side of Dahlbergh's work – his pragmatic attitude and ability to adapt to local conditions, especially when it came to fortifications. Again you find a grid plan, built-up around a central axis, with a series of monumental public open spaces and co-ordinated public buildings, but also with irregular parts towards the sides. The main street passes across the central square and ends in front of the palace-like Admiralty. A special feature here is the combination of radiating streets on each side of the main street, which is often said to be inspired by Piazza del Popolo in Rome or Versailles. But there could also be a practical explanation – that this was due to the topography.

Most of the '80s projects were, however, located in the provinces and almost all involved fortifications. The Dahlbergh plan for Carlsburg in 1681 contained an outstanding square in four parts around the crossing of two canals, those in Wismar, Stettin (Szczecin), Stralsund, Riga and others consisted mainly of fortifications, and in Narva in 1686 there was a large extension. In garrison town of Neumünde, close to Riga, and the Cathedral Hill of Reval (Tallinn) Dahlbergh used radial layouts.

Change and decline

By the end of the 1680s the production slowed down and stayed at a comparatively low level for the rest of the period studied, rising somewhat in the 1710s. One project, however, stands out clearly – the redevelopment of the surroundings of the royal palace in Stockholm. The old castle was burned in 1697 and a new, very large palace had been designed by Nicodemus Tessin the Younger, whom by then had taken over from his father as the leading architect. In 1700 Sweden under the seventeen-year old Karl XII (Charles XII) was attacked by Poland, Denmark and Russia. The king went to war, never to see his capital again. He was shot dead in 1718. In the Peace of Nystad in 1721 Sweden lost the provinces on the eastern side of the Baltic, marking the end of the period as a great power.

The final plan for the surroundings of the Stockholm Royal Palace was drawn up in 1713. It is different from normal town-planning, with its emphasis on the organization of activities and communications by way of streets, open public spaces and blocks. Here it is instead primarily a matter of meeting demands derived from Stockholm's position as the capital of a great power and the need to surround a great royal power base, concentrating on monumental buildings, coordination of public open spaces and the creation of an architectural 'urban room' for ceremony and display. However, the

means being used to achieve this still derive from other forms of town-planning, even if they have been taken much further. It is basically a gridiron system even though it is not uncompromisingly right-angled; and this time oblique parts as well as triangular and rounded shapes have been added. The basic design principles are axuality, symmetry, balance and contrast, but the contrast and its inherent sense of drama has been reinforced in a baroque manner. A series of magnificent 'urban rooms' were to be created with the help of new, grandiose buildings and the redesigning of others, but each one with a character of its own. By filling up land and building embankments and bridges, the surrounding areas of water, also meant as 'room' spaces were to be included. The visual effects at the sight of the city from the sea were exploited to the full, as was the use of eye-catching sights, views and careful perspectival effects. Advantage was taken of differences in level by the use of terraces, ramps and flights of steps.

Abstract:

During the late 16th century, and even more so in the 17th century, when Sweden was a great power, the extent of Swedish town-planning activity was unparalleled in Europe. Most of the older towns in Sweden and Finland can be said to take their character from this period. The thesis covers all Swedish town-planning in the areas under Swedish rule 1521–1721, and areas of Swedish interest outside this, including today's Estonia and parts of Russia, Latvia, Poland, Germany, and USA. 175 sites are studied and in total 338 projects and just above 600 town plans. Part I consists of thematic studies, part II a synthesis, and part III studies of the individual towns.

The study aims at the broader picture of Swedish town-planning of this period, based on a re-assessment of existing knowledge of individual towns, but adding new material and asking new questions. It seeks to assist the conservation and the future planning and design of the urban environment. Major questions raised concern different kinds of planning measures, the design of plans and how they were devised, functional demands and aesthetic considerations, the impact of great fires and the significant figures of the time.

The town-planning illustrates the political and economical development of the kingdom and played a fundamental role in the radical change of society that took place in this era. Intensive town-planning activity starts in the mid-1500s but the major rise begins in the early 17th century and reaches its peak in the 1640s and '50s. Three main categories of town-planning measures can be distinguished: new construction, which includes relocation of older towns and new foundations (100 all told), town plan changes in existing towns, including redevelopment, extension and separate suburbs (about 170), and measures relating to fortifications (some 65 fortifications only and another 90 included in combined measures). The right-angular gridiron plans dominate completely. They can be divided into three main groups: 'simple, regular', 'pragmatic', and 'elaborate'.

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