The situation was different in Sweden. When the great king and military leader Gustavus II Adolf was killed in the fighting at Lützen in 1632, his daughter Christina was only six years old, and Sweden was ruled by a regency, dominated by Count Axel Oxenstierna, for 12 years. Her abdication in 1654 left the throne to the cousin whom she had named her hereditary successor, Charles X. His brilliant military career was cut short six years later by pneumonia when he was only 38. That left his little son, aged four years, to a regency until 1674. In 1697 at the age of 42 Charles XI died, leaving the throne to his son, who became Charles XII at the age of 15, the Riksdag having decided that a regency was not necessary.

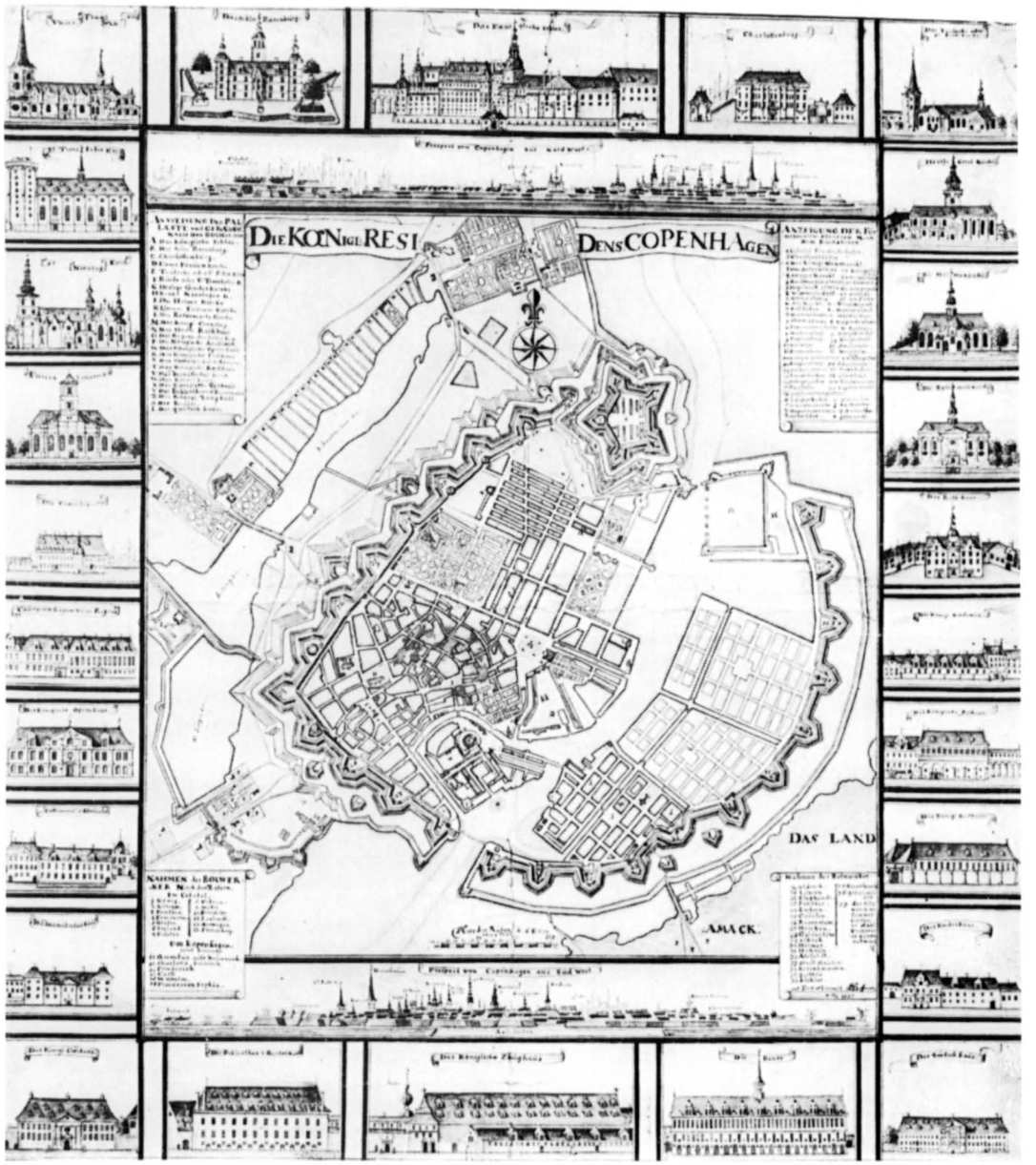
Meanwhile Frederik III in Denmark was faced with losses from the wars, and war broke out again in 1657, ending in 1658 with the loss of Skåne, Blekinge, Halland, Bornholm, Ven, and Trøndelag to Sweden. Another war resulted in the return of Bornholm and Trøndelag to Denmark in 1660, and internal politics forced the Council of State in that year to declare the Danish monarchy hereditary. In both Denmark and Sweden the stage was now set for large-scale building programs under absolute monarchies, and neither country was to be disappointed.

These wars meant that town planning was still very much directed toward defense. The fortifications surrounding Copenhagen shown on the map of 1659 (figure 3.48) were besieged by Charles X, and the inner bastions of the citadel were completed by the Dutch engineer Henrik Rüse in 1662–1664.[1] He also laid out the major streets connecting Kastellet with the older portion of the city. Christian IV had intended a new plaza, Kongens Nytorv, to be octagonal with radiating streets, but Rüse evidently thought a grid system to be more efficient (figure 4.1).

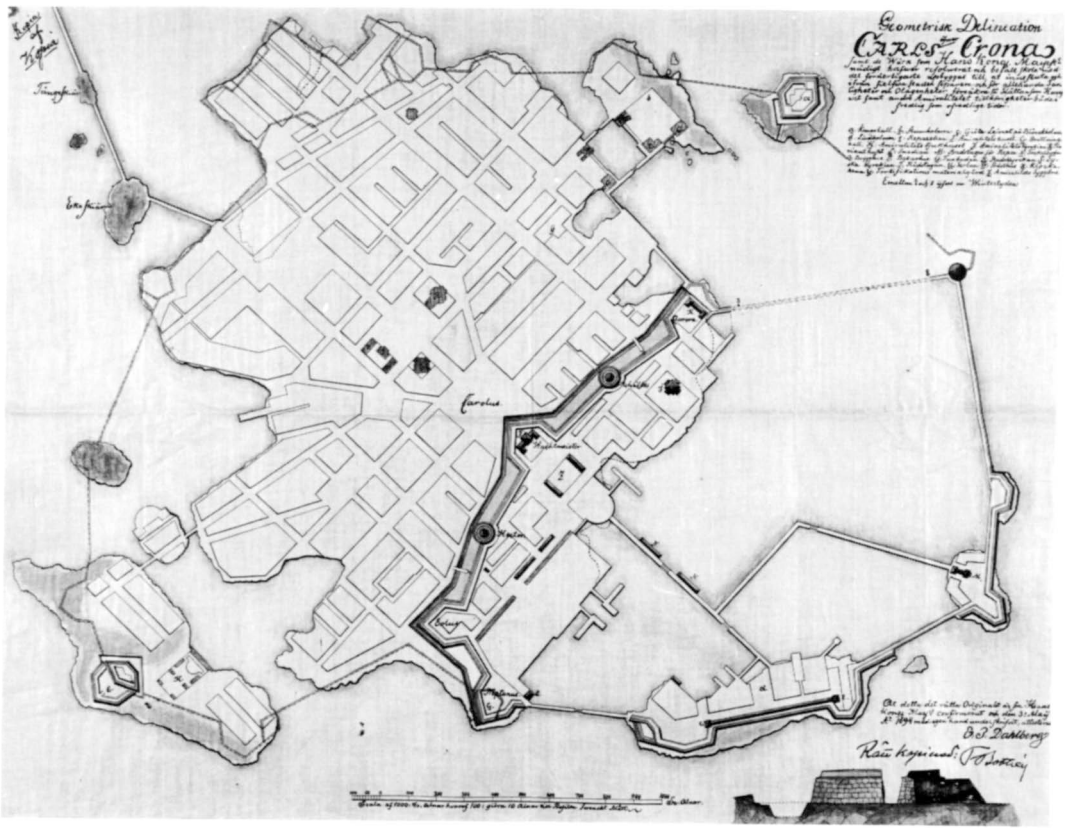
A different system was used by Nicodemus Tessin the Elder in his plan for the new Swedish naval base of Karlskrona, Blekinge, in 1680, for which Erik Dahlberg designed the fortifications in 1683.[2] Dahlberg had been trained as a military engineer in Germany and had assisted with Charles X's remarkable march from Jutland across the frozen waters to Copenhagen in 1658. Immediately after the Swedish victory he had strengthened the defenses of Karlshamn, a seaport town in the newly won province of Blekinge. Then in 1680 he built the fort at Landskrona, across the Sound from Denmark. But Karlskrona, founded as a naval base in 1679 and named for the king, was the most forward-looking project of the three.

Whereas Karlshamn and Landskrona had grown from medieval towns with churches and central market places and streets more or less on grid plans, a newer opportunity was presented at Karlskrona. The islands surrounding the town were to be fortified. Tessin's plan for the town itself had the basic elements seen on the plan for fortifications by Dahlberg (figure 4.2). The fortress was to be on the south side of the island, its main building facing a square. Then a principal street was to lead to a second square, and diagonal streets were to lead off the north corners of the first. These, with further diagonal streets, would provide the vistas already adopted in such plazas as the Piazza del Popolo in Rome. Tessin had probably intended a church in the center of the main plaza. Dahlberg's plan, however, shows a church at the east side (the Fredriks Church later designed by Nicodemus Tessin the Younger in 1697), the Town Hall opposite on the west side, and the Church of the Holy Trinity, also by Tessin the Younger, on the south. These streets and buildings form the basis of Karlskrona today.

A plan less ambitious but incorporating some Baroque elements was adopted at Trond-



4.1 Copenhagen. Plan by G. Hartmann. c. 1680. (Copenhagen, City Museum.)

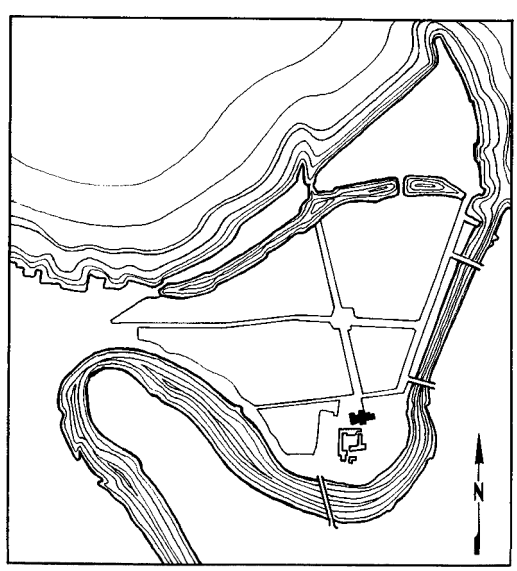


2

4.2 **Karlskrona. Plan by E. Dahlberg. 1694. (Stockholm, Krigsarkivet.)**

4.3 **Trondheim. Plan by Cicignon and Coucheron. 1681. (After Kavli, *Norwegian Architecture*, p. 59.)**

4.4 **Møgeltønder, Jutland. Slotsgade. 1680.**



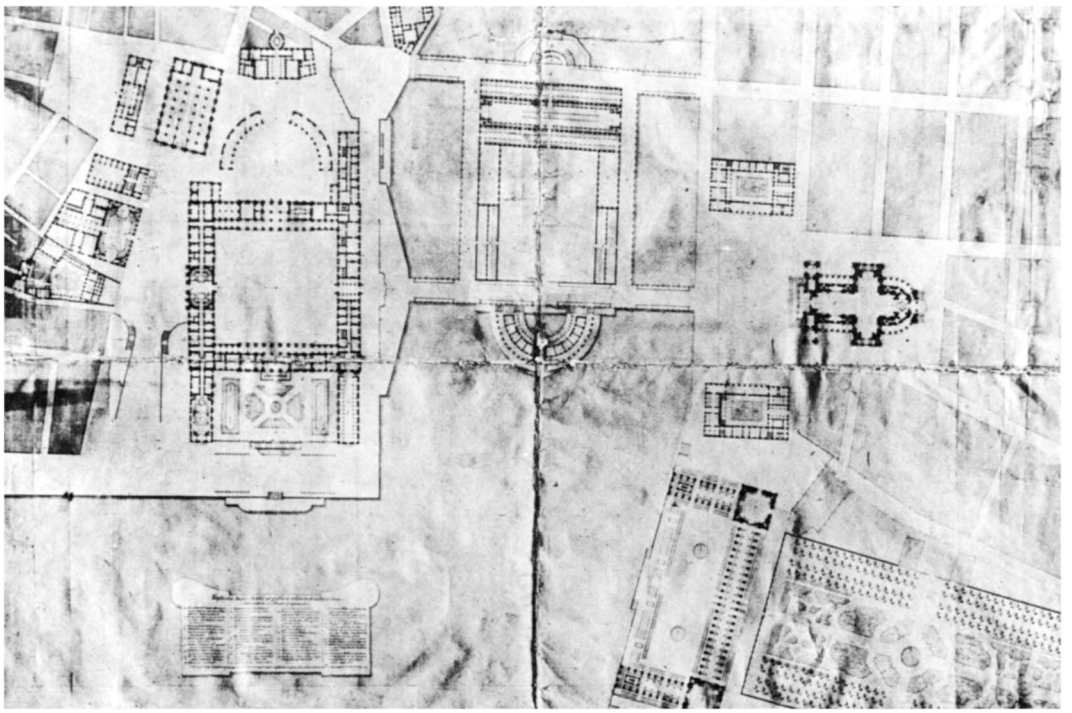
3

heim after a fire in 1681 (figure 4.3).[3] The old city was surrounded by water except for a narrow connection with the mainland on the west. Military considerations were foremost in the plans for rebuilding by Johan Caspar Cicignon and Wyllem Coucheron. From the west gate in the wall a broad street was laid across the town, with a central plaza crossed by another broad street, not quite at right angles. The remaining streets were laid out grid fashion, with blocks of varying sizes, the whole much resembling the plan of Fredrikstad from c. 1570 (figure 3.17). The north-south street was laid out to give a line of sight from the Cathedral in the southeast sector of the town through the central square and out toward the island of Munksholmen, where the abbey had been converted to a fortress after the Reformation. If Cicignon's plan did not depend on fully developed Baroque theory, it yet had a certain grandeur of conception.

From this period also dates a small but well-known street, Slotsgade in Møgeltønder on Jutland. General Hans Schack, who had led the defense of Copenhagen against the Swedes in 1659, purchased the medieval castle of Møgeltønder in 1664, razed it, and built a new country house, Schackenborg. In 1680 a street was laid out from the manor house westward beyond the church.[4] Shaded by rows of lime trees on either side, the little brick one-and-a-half-story houses now date from the 1730s at the earliest but still preserve order and tranquility (figure 4.4).

Before the seventeenth century was over, however, at least one truly grand city plan emerged. In Stockholm there had been some regularizing of streets after a fire in the Old Town in 1625. With Nicodemus Tessin the Younger we encounter a strong personality, this time less of a military engineer and more of civil architect. Son of the Royal Architect

4



5

4.5 Stockholm. Plan by N. Tessin II. 1697. (Stockholm, Royal Palace Collections.)

4.6 Hamina. Plan by C. A. Blaesingh and A. Löwen. 1681. (After Richards, *800 Years*, p. 72.)

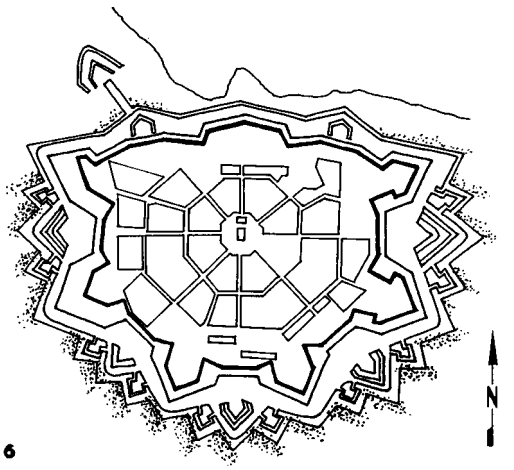
Nicodemus Tessin the Elder, to whose work at Drottningholm we shall return and who had been a pupil of the French architect Simon de La Vallée, he had gone to Italy in 1673 and worked in Denmark in 1678. On his return to Sweden he was appointed Royal Architect after the death of his father in 1681. The major task before him was to modernize Stockholm Castle. As it turned out, a new palace was soon to be required, in connection with which Tessin the Younger developed a plan for a royal city much less dominated by military considerations than Christian IV's plans for Copenhagen. The differences in character between these two cities were doubtless in part brought about by their different geographical locations. Copenhagen lay on the Sound, open to hostile as well

as commercial traffic between the North and Baltic Seas. Stockholm, on the other hand, in spite of salt water in her harbor, lay back behind an archipelago, with Sweden's naval defenses in the coast towns like Landskrona and Karlskrona.

A major fire in Stockholm Castle in 1697 provided a clearly welcome challenge for Tessin the Younger, who had seen Rome, Paris, and Versailles. His drawings show a new palace on the site of Stockholm Castle, a rebuilt North Bridge leading to a new square, Normalmstorg, with a massive royal burial church on the central axis, flanked by lesser palaces. To the west, arsenals and government offices were planned symmetrically at the water side, behind which a formal garden, nearly as large as the Royal Palace, extended to the main cross street of the newer city (figure 4.5).[5] Not all the buildings planned were built, but the bridge, the plaza beyond it, and the gardens were carried out and, although modified, are part of the modern city.

One of the last formal town plans of this period appeared in Finland, which was also involved in the wars of this period. The Swedish coastal town of Vehkalahti, near the Russian border, was occupied by the Russians and virtually destroyed from 1713 to 1721. It was then returned to Sweden by the Treaty of Nystad. Renamed Fredrikshamn, or Hamina, it was laid out by the Swedish engineer Carl A. Blaesingh on an octagonal plan with eight main streets radiating from a central plaza, a rare surviving example of an ideal city (figure 4.6).[6] The elaborate bastions on the land side were designed by Axel Löwen, and some traces of them still remain.

While these town planning projects were intended to protect the interests of Denmark and Sweden during many years of strife, the kings and nobles found opportunities to build



6

4.7 Drottningholm. N. Tessin I. Begun 1667.

4.8 Copenhagen. Old Amalienborg. A. Mathiesen. 1667. (Thurah, *Danske Vitruvius*, volume 3, plate 13. Copenhagen, Academy of Art Library.)

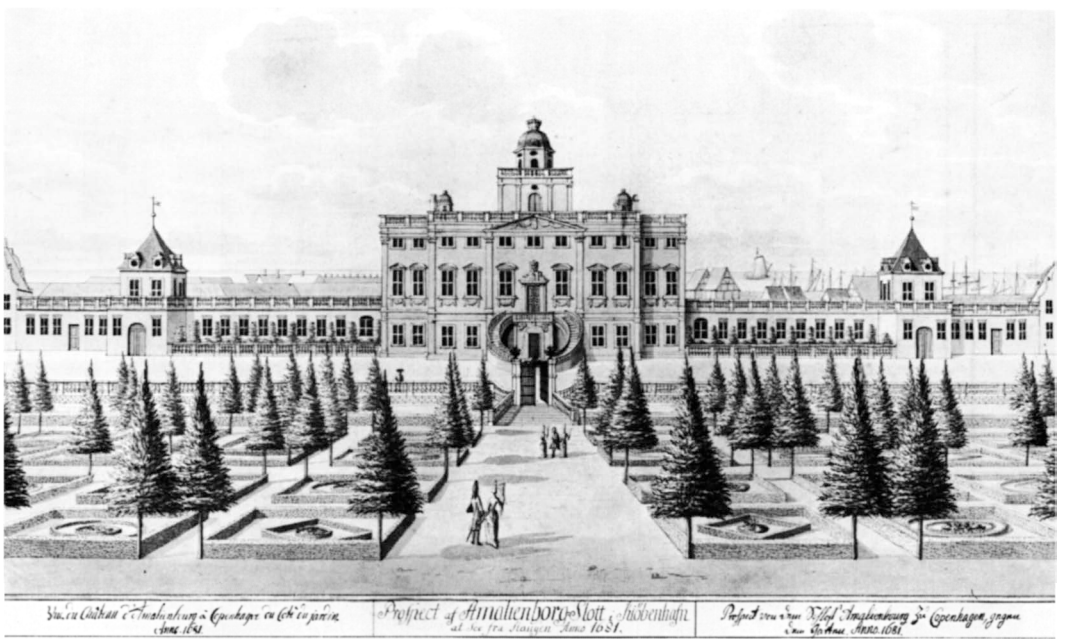
for themselves in the grand manner. One of the earliest and still most impressive of the royal works is Drottningholm Palace on Lake Mälar near Stockholm, built for Dowager Queen Hedwig Eleanora, widow of Charles X (figure 4.7).[7] It was begun by Nicodemus Tessin the Elder in 1662, and the wings were heightened by Carl Hårleman in 1744. The palace was designed in the symmetrical French style that characterized Tessin's smaller palaces for the nobility. The principal entrance is on the west, or garden side, approached by a double stair. The three large portals give access to an entrance hall with a grand staircase. The State Bedroom and Banqueting Hall lie on either side in the main block, with private residence chambers in the four corner pavilions. The basement story is rusticated, while the walls above have strips of stone between the windows, with a triglyph and metope frieze above. The säteri roof is used on the side portions of the central block and also on the pavilions. Originally the color was pale red with gray trim, very differ-

ent from what it is now. The state rooms were finished with much grandeur. Built on the site of an earlier manor, Drottningholm Palace with its extensive gardens has been called the "Versailles of the North."

Within the next decade two palatial residences were built for members of the Danish royal family, one of which survives, now put to a different use. In 1667 Frederik III's Queen Sophie Amalie of Brunswick-Lüneberg had seen to the planning of a more agreeable palace on a tract of land in the new part of the city, between Kongens Nytorv and Kastellet. The palace is generally attributed to the builder Albertus Mathiesen and was much like an Italian villa in design, with a three-story central block and low wings terminating in pavilions on either side (figure 4.8).[8] The grand curving staircase was also Italian in origin, but the pilasters of the second and third stories, the window surrounds, and the balustraded roof may have been closer to the Dutch Palladianism of Jacob van Campen. The palace was named Sophie Amalienborg for the queen. A fire destroyed her palace in 1689, four years after her death, but the name was kept for the later palaces proposed for the site.

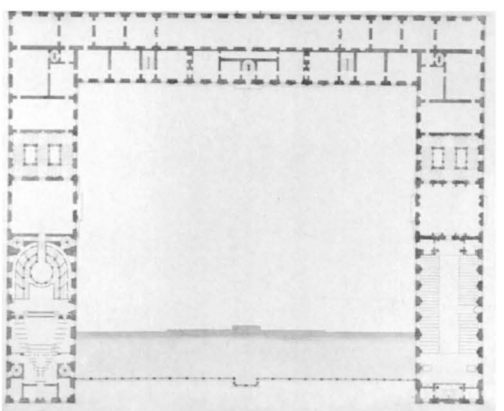
The city palace built for Ulrik Frederik Gyldenløve, natural son of Frederik III and Governor of Norway, was more fortunate (figure 4.9).[9] It was begun by the Dutch builder Evert Janssen, and some reflection of the Town Hall in Amsterdam has been seen in it. Brick with stone trim, it rises in three stories, with four wings around a courtyard, covered in part by low hipped roofs. Special features are a monumental staircase on the entrance side and a ceremonial hall overlooking the garden. In 1700 Dowager Queen Charlotte Amalie, widow of Christian V, purchased the property, for whom it was then named Charlottenborg. It is now the main building of the Royal Danish Academy of Fine Arts.

After the shock of the Sophie Amalienborg disaster another attempt was made to provide the Danish court with a fashionable



8

9



10

4.9 **Copenhagen. Charlottenborg. E. Janssen. 1674–1683. (Thurah, *Danske Vitruvius,* volume I, plate 42. Copenhagen, Academy of Art Library.)**

4.10 **Copenhagen. Amalienborg. Plan by N. Tessin II. 1693. (Stockholm, Royal Palace Collections.)**

4.11 **Stockholm. Royal Palace. N. Tessin II. Begun 1697.**

modern residence. Lambert von Haven had prepared plans for a new palace to replace Copenhagen Castle, but Christian V was evidently not pleased with them. Ulrica Eleanora, sister of Christian V, had been married to Charles XI of Sweden in 1680 in hopes of strengthening the then more peaceful relations between Denmark and Sweden. Her Royal Architect, Nicodemus Tessin the Younger, was called to Copenhagen in 1693 to plan another palace.

The palace was again to be on the Amalienborg site, in the Italian manner with a central courtyard (figure 4.10).[10] The entrance wing was planned to face Kastellet on the north, and there was to be a chapel in the west wing and a theater in the east, with the main residence on the side toward the castle. A noteworthy feature was the inclusion of a permanent court theater, whereas heretofore the Scandinavian monarchs had had to make do with temporary structures or remodeled halls.[11] Tessin's project came to nothing. He returned to Stockholm and went to work on remodeling the north wing of the castle there. Christian V died in 1699, another war with Sweden started in 1700, and we shall see that Frederik IV had other ideas about royal palaces.

In Stockholm Tessin began the remodeling of the Castle as commissioned by Charles XI. The king, however, died on April 5, 1697, with the work only partly completed. On May 7 a fire broke out and left the whole castle in ruins. Tessin now had the task of building a new palace worthy of Sweden's strength and the confidence of the young new king, Charles XII. The grand urban design that Tessin envisaged with this opportunity was only in part realized, but the Royal Palace itself is still fundamentally as he planned it (figures 4.5 and 4.11).[12]

The palace is composed of four wings around a central nearly square courtyard. The main entrance is on the west from a plaza formed by the curved barracks of the palace guards. The central portion is emphasized in granite with a rusticated Doric applied colonnade on the ground floor, then herms against rusticated pilasters on the next level and Corinthian pilasters and elaborate window pediments on the third level. On the south side the portal leads to the Hall of State on the west and the Chapel on the east. Here an even more imposing effect is created by a triumphal arch motif using six giant Corinthian applied

columns with niches for statues between and more statues on the attic story (figure 4.12). The central portions of the east and west facades in the courtyard are also in stone, a rusticated arcade at ground level and Corinthian pilasters through the second and third levels. For the overall grandeur of his conception Tessin owed much to his experiences in France and Italy, where with the help of former Queen Christina he met Bernini.[13] So large a project took time to build, and there was an interruption during the Nordic War from 1700 to 1721. Tessin died in 1728, and the palace was completed and furnished under his successors. For the most part his designs were followed, with the notable exception of the court theater intended for the southeast wing but never built. The success of the Royal Palace as it rises above the water of Stockholm Harbor lies in its proportions and the dignity with which the broad walls and the horizontal balus-

4.12 Stockholm. Royal Palace. South façade.

4.13 Frederiksberg Palace. E. Brandenburger. Begun 1703.

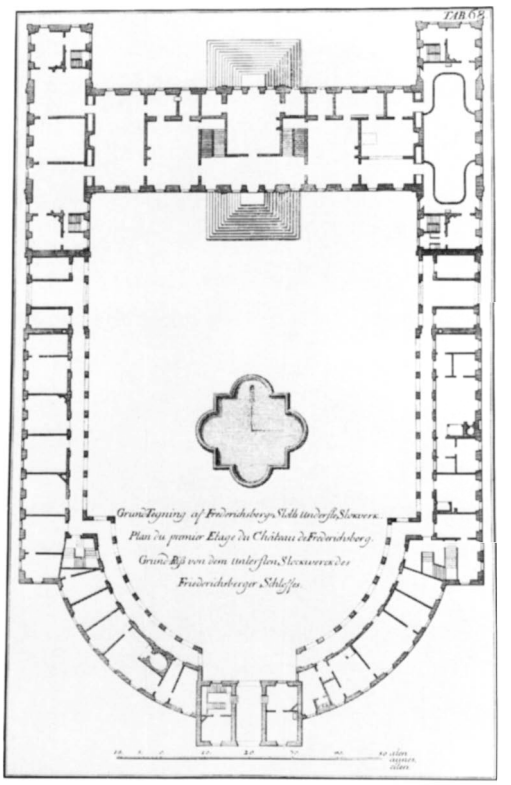
trade of the roof hold the richness of the eastern, western, and southern facades in check.

Shortly after this great work was begun in Stockholm, on the death of Christian V in 1699 Frederik IV succeeded to the throne of Denmark. As Crown Prince he had already acquired a half-timbered summer house on land west of the city. He now enlarged the gardens and began a new palace on the hilltop, inspired by the villas he had seen in Italy. The architect of Frederiksberg was the royal building inspector Ernst Brandenburger, who had it essentially complete by 1703. Then in 1708 Johan Conrad Ernst made designs for additions at the ends of the main block, which was built after changes by the general building master Wilhelm F. Platen (figures 4.13 and 4.14).[14] The building is three stories high, with emphasis on the middle story through the addition of triangular and segmental pediments over the windows. On both garden and court facades, the three central bays have the third-story windows heightened and are marked off by pilasters rising to an entablature at the top. Otherwise the exterior is rather soberly finished. Lauritz de Thurah provided the plans for the side wings, built 1733–1738 when the palace was needed to house the royal family during the construction of the new Christiansborg Palace. The original portal to the grounds was rebuilt in 1929. Much of the interior was richly furnished with painting and stucco decorations, especially in the chapel in the east wing.[15] The palace was taken over by the state in 1849 and has been in use as a military academy since 1868. In 1834 the English traveler John Barrow remarked of Copenhagen that "the inland views are also striking, and the palace of Frederiksberg, standing on a well-wooded hill, adds much to the beauty of the scenery."[16]

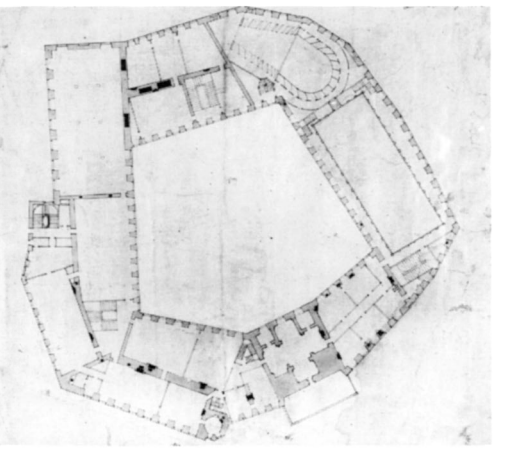
Mention of Christiansborg Palace is a reminder that the old Copenhagen Castle was

still in use. It had not been much changed since the time of Christian III and still had the gables and balconies that had been added for a touch of Renaissance fashion in the 1550s (figure 3.25).[17] Frederik IV was not partial to city living, but he made an attempt to convert the castle to something more regular. The whole complex was enlarged and the gables and irregularities abolished or concealed as much as possible (figures 4.15 and 4.16).[18] The work was done in stages, from 1710 to 1714 under the builder Christopher Marselis and from 1720 to 1727 under Johan Christian Ernst and Johan Cornelius Krieger. While this was all at best a makeshift solution, one noteworthy detail was the inclusion of a theater, the first to be installed permanently in a Scandinavian royal palace.

The contrast between what Frederik IV was able to do with Copenhagen Castle and what he could do with a fresh start is well demonstrated by comparing the bird's-eye view of the castle with a bird's-eye view of the palace of Fredensborg (figure 4.17).[19] North of Copenhagen and a little beyond Hillerød was a royal hunting park east of Esrom Sø, where Christian V had laid out a radiating system of avenues. Here in 1719 Frederik IV began a new summer palace, whose name (meaning "Fortress of Peace") commemorates the treaty ending the Nordic War between Denmark and Sweden, signed here in 1720. The architect Johan Christian Krieger began with the main block crowned by a dome, which covers a high central hall, the major interior space. The four corner pavilions were added by Niels Eigtved in the 1750s, and the minaret-like turrets were added by Lauritz de Thurah. The buildings of the octagon were raised a story higher by Caspar F. Harsdorff in 1774–1776, and he also opened an entrance to the originally enclosed octagon, making a closer connection between



14



15

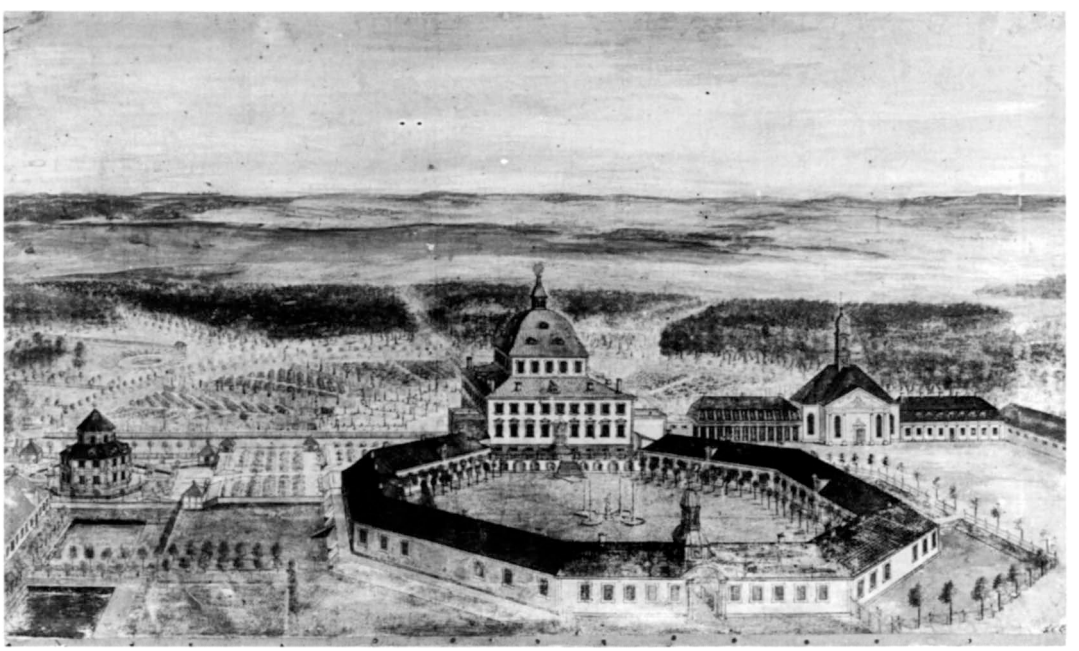
16

4.14 **Frederiksberg Palace. Plan. (Thurah, *Danske Vitruvius,* volume 2, plate 68. Copenhagen, Academy of Art Library.)**

4.15 **Copenhagen Castle. Plan of 1728. (Copenhagen, National Museum.)**

4.16 **Copenhagen Castle. View by J. J. Bruun. c. 1728. (Copenhagen, National Museum.)**

4.17 **Fredensborg Palace. J. C. Krieger. Begun 1719. Bird's-eye view by H. C. Lønborg, c. 1730. (Copenhagen, National Museum.)**



17

4.18 Fredensborg Palace. Chapel. Interior. (Copenhagen, National Museum.)

4.19 Rosendal, Hordaland. 1661–1665. (Oslo, Riksantikvaren.)

the main palace and the eight small houses lining the main avenue of approach.

The interior of Fredensborg was provided with a series of painted and stuccoed decorations by several artists through the 1770s. Especially fine is the chapel in the east wing, completed in 1725, with its hipped roof, tower, and elaborate southern entrance. The royal box is in the west end, accessible from the palace. Although economy dictated marbleized wooden columns rather than any more expensive materials, the altar and pulpit by Johan Friedrich Ehbisch provide the appropriate splendor (figure 4.18).[20]

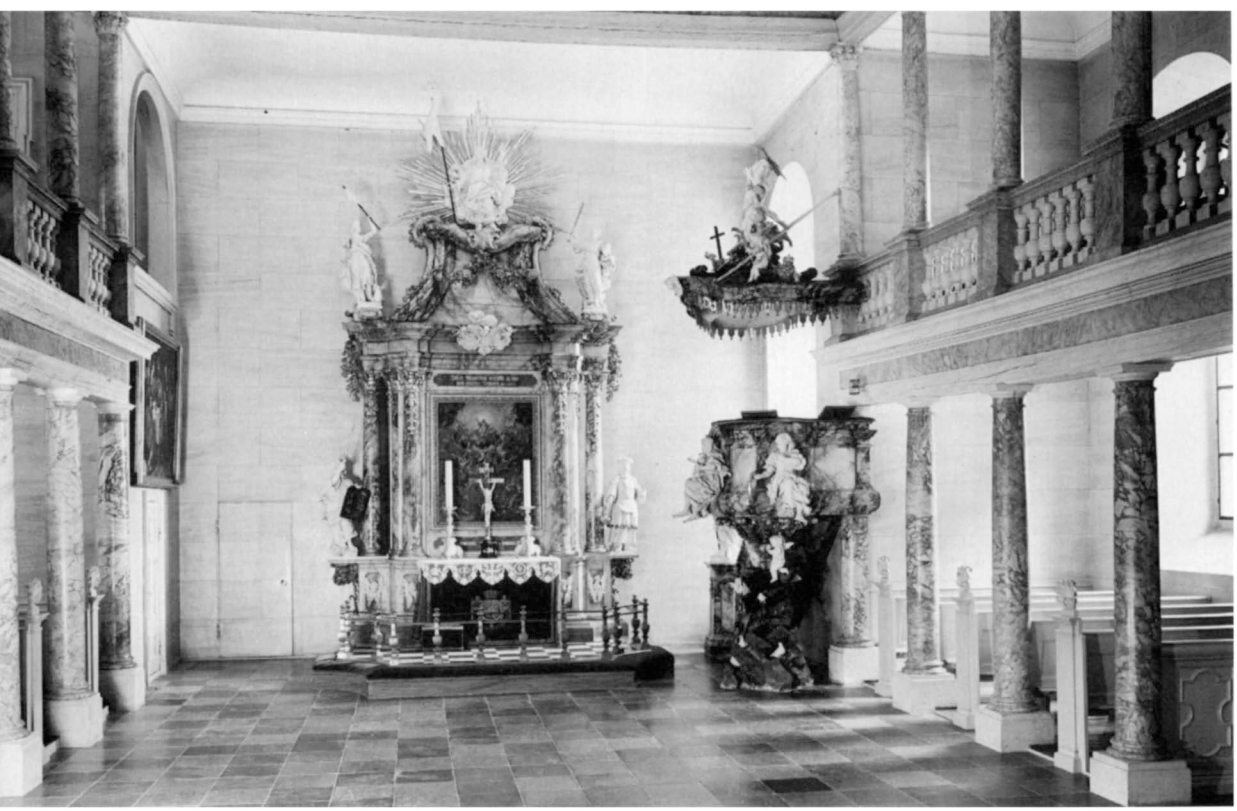
Unlike Copenhagen Castle, Rosenborg, and Frederiksborg, Fredensborg was never isolated fortresslike by water. Krieger used the hunting avenues to link the palace with the Sø and forests and to make a basis for the formal gardens on the south. Much of this has been retained, with the addition of several sculpture programs. In its ease of setting and spaciousness Fredensborg has much in common with Drottningholm, and it is interesting that for a variety of reasons these royal country estates preceded the first great urban palaces in both Denmark and Sweden.

By the time Fredensborg was begun, the new palace in Stockholm was already under construction, interrupted by the same Nordic War from which the Danish estate derived its name. Before turning to the new palace that shortly was begun in Copenhagen, however, we should note first some residences built for less exalted individuals and also some churches.

In 1661 a barony had been created in Norway that was first held by the Danish aristocrat Ludwig Rosencrantz, who had married into a wealthy Scottish trading family. He laid out his manor farm called Rosendal near Malmanger Peak in Hordaland in 1661–1665 (figure 4.19).[21] The residence was built symmetrically around a courtyard, with a grand curving staircase in the central portion and a large knight's hall in the north wing. Some of the original wooden paneling of the interior remains, but some rooms were subdivided by later owners. The property was willed to the University of Oslo in 1923. As at Fredensborg, a coherent plan was possible, unlike the earlier piecemeal construction at Austråt.

The comparative modesty of Rosendal in Norway is not surprising in view of its distance from the center of court life. In Sweden and Denmark a number of much more ambitious manor houses remain, attesting to the wealth and position of their owners. For a good Swedish example we can look at Skokloster in Uppland on an inlet of Lake Mälar, northwest of Stockholm (figure 4.20).[22] Like Tidö earlier, it was built by a powerful nobleman, this time General Carl Gustav Wrangel, who contributed his own ideas after seeing castles during his

19



18

20

4.20 Skokloster, Uppland.
J. de La Vallée. 1679.

4.21 Clausholm, Jutland.
E. Brandenburger.
1693–1699.

campaigns in Germany and Poland. The architect was Jean de La Vallée, who also had Nicodemus Tessin the Elder working with him. Partly because of the owner's inclinations, the plan of the castle around a courtyard with octagonal towers projecting at the four corners gives the mass of the building a conservative medieval shape. The abundance of large window openings, especially on the ground level, belies any fortress character. The exterior walls are rusticated, with strong horizontal stringcourses and shallow panels surrounding the windows. On the interior, which has been restored, little expense was spared in furnishing with tapestries, stuccoed ceilings, and elaborate tiled stoves.

In Denmark a similar formality was observed at Clausholm on Jutland, built in 1693–

21

1699 by Ernst Brandenburger for Chancellor Conrad Reventlow. (figure 4.21).[23] This is a large manor house, with a central block and wings that form a wide courtyard on the north, or entrance, side. The shorter wings on the garden side were added in 1722–1723. Here the portal, which was redesigned by Tessin the Younger, leads to a wide vestibule with stairs at either end. The rooms in the wings are served by a corridor on the courtyard sides, the doors between them set *en filade*. The dining salon overlooking the garden and the salon above have some of the finest stucco decorations in Denmark (figure 4.22). The gracious family chapel in the west wing was restored in 1931.[24]

Among the city houses of the period, the mansion that Tessin the Younger built for himself in Stockholm across from the Royal Palace reveals something of his own sense of importance (figure 4.23).[25] It is three stories high, the lowest one rusticated. The second and third stories are framed by corner pilasters between which runs a bracketed cornice with an attic story above. A triple-arched portal leads into a columned vestibule across the lower story, which in turn opens out to the garden. Tessin was able to secure enough land to lay out an imposing effect in very little space. The garden walls were purposely slanted to give a perspective effect, with curved elements, niches, columns and pilasters, balustrades, symmetrical planting beds, and sculptures. Since 1772 the house has been the residence of the Governor General.

22

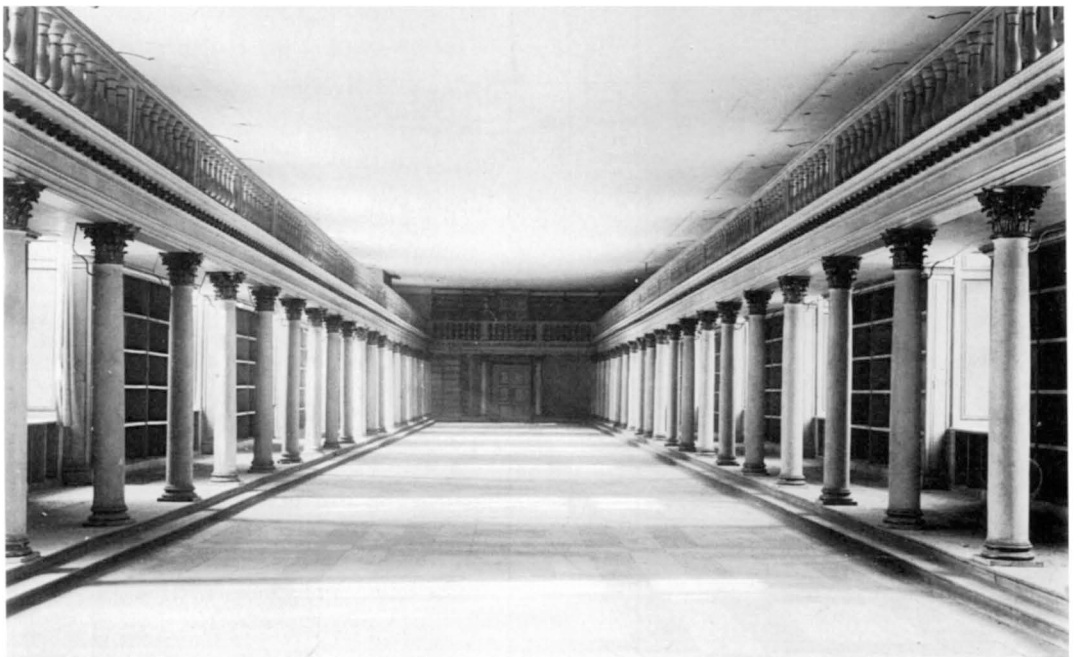
23

4.22 **Clausholm, Jutland. Stucco decoration.**

4.23 **Stockholm. Tessin House. N. Tessin II. 1697.**

4.24 **Copenhagen. Library of Frederik III. A. Mathiesen. 1665. (Copenhagen, National Museum.)**

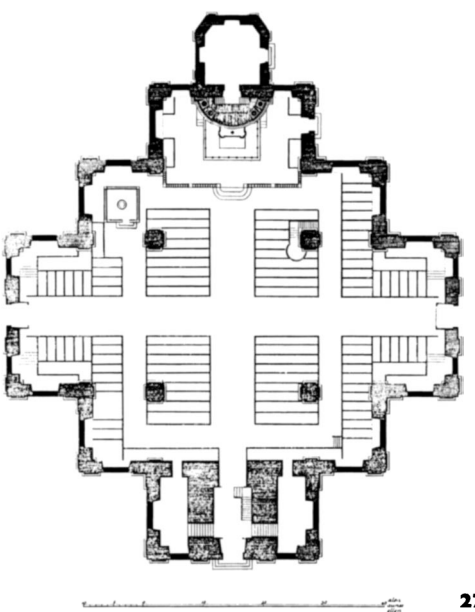
4.25 **Kalmar, Småland. Cathedral. N. Tessin I. Begun 1660. (Kalmar Museum.)**



24

25

26



27

While the Baroque period was primarily notable for palaces, manor houses, and some churches, one building remains in Copenhagen that was built for a more specialized purpose. In 1665 Frederik III decided to build a library and museum to house the royal collections.[26] The builder was Albertus Mathiesen, on whose death in 1668 the work was completed by Thomas Walgenstein, the city building master. It is of brick, three stories high, located on Slotsholmen on the east side of the former naval harbor, which is now the Royal Library garden. The ground floor was for the storage of field artillery, with the library on the second level and the *Kunstkammer* on the third. A beautiful room was created for the library, paved with marble and lined with galleries carried on gilded Corinthian columns (figure 4.24). All this lasted until 1908, when the building was remodeled to house the State Archives. The paving was salvaged for the floor of the Great Hall in the present Christiansborg Palace.

Baroque church building in Denmark and Sweden was not extensive but partook of the regularity of planning and frequent grandeur of expression that characterized the palaces and manor houses. At Kalmar the old city with its winding medieval streets lay inland north of the castle. Military considerations c. 1640 prompted a decision to relocate the city on the nearby island of Kvarnholmen, offshore to the east, which was fairly well accomplished by 1658. The new city was laid out after several years of planning and was of course regular in design, with a central plaza that was to contain the cathedral. For this Nicodemus Tessin the Elder provided the design. The construction, which took over forty years to complete, was begun in June 1660. The rising land of the island provided a majestic setting above the harbor, although as at Kalundborg the effect is now somewhat obscured by modern buildings. The

cathedral is the only major ecclesiastical work by Tessin the Elder, and on it he lavished ideas gleaned from his observations of Baroque Rome (figure 4.25).[27]

To meet the requirements for the congregation-oriented Lutheran services of the time, Tessin began with a Greek cross plan. As it developed, the plan was given east and west extensions, ending in apses. The four massive central piers may have been intended to carry a dome, but one was never built. The principal entrance is on the south side, the upper story with pediment and scrolls perhaps recalling Il Gesù in Rome. The cathedral is colorful, with Tuscan and Ionic pilasters against the pink stuccoed wall surfaces and the copper-green roofs and turrets above. The broad south facade gives a majestic backdrop to the plaza. The interior is made stately by a giant order of paired Ionic pilasters. The pulpit against the northeast pier first captures the attention of those entering from the plaza. The cathedral is not entirely centralized, however, because the main body is clearly on the east-west axis, with the seating directed toward the altar in the eastern apse.

A comparison with Kristianstad, founded in 1614, is instructive here. There the fortified town was laid out in grid fashion, with two principal squares, but the site along the water ran northeast to southwest so that Holy Trinity Church had to be built on a diagonal in relation to the town (figure 3.38). It was not given a central location and its principal entrance was planned on the traditional line with the altar rather than in relation to a major part of the town plan. Entirely apart from the differences in ornamental vocabulary of the two buildings, we can see that forty years later at Kalmar a new concept had been formulated for planning town and church.

In Denmark a modified Greek cross plan was chosen for an important new city church in

28

4.26 **Copenhagen. Vor Freisers Kirke. L. von Haven. Begun 1682. (Thurah, *Danske Vitruvius,* volume 3, plate 61. Copenhagen, Academy of Art Library.)**

4.27 **Copenhagen. Vor Freisers Kirke. Plan. (Thurah, *Danske Vitruvius,* volume 1, plate 82. Copenhagen, Academy of Art Library.)**

4.28 **Copenhagen. Vor Freisers Kirke. Interior. (Copenhagen, National Museum.)**

29

4.29 **Copenhagen. Vor Frelsers Kirke. Organ. C. Nerger. 1698. (Copenhagen, National Museum.)**

4.30 **Copenhagen. Reformed Church. H. Brockam. 1688–1689. (Copenhagen, National Museum.)**

4.31 **Rennebu, Nord-Trøndelag. Church. 1668–1669. (Hvalsted, Sigurd Muri.)**

1682. Founded under Christian V as the church for the Order of the Elephant, Vor Frelsers Kirke was built in Christianshavn in Copenhagen by Lambert von Haven and completed except for the spire by 1696 (figures 4.26 and 4.27).[28] The view illustrated here is from *Det Danske Vitruvius* by Lauritz de Thurah, who was justly proud of the spire he added in 1749–1752, based on that of Borromini's S. Ivo della Sapienza in Rome. On the exterior, brick Tuscan pilasters rise the full height of the building, with tall round-headed windows between and an entablature above encircling the church. On the interior four central piers rise to support the roof, and the eastern, northern, and southern projections from the main square are shallow enough to give the effect of a hall church (figure 4.28). The magnificent Baroque altarpiece was designed by Tessin the Younger in 1695 but not finished until 1732.[29] In contrast is the neoclassical pulpit by Caspar Frederik Harsdorff, designed in 1773. From the original period of building comes the famous "Elephant Organ," carved by the royal sculptor Christian Nerger in 1698 (figure 4.29).[30]

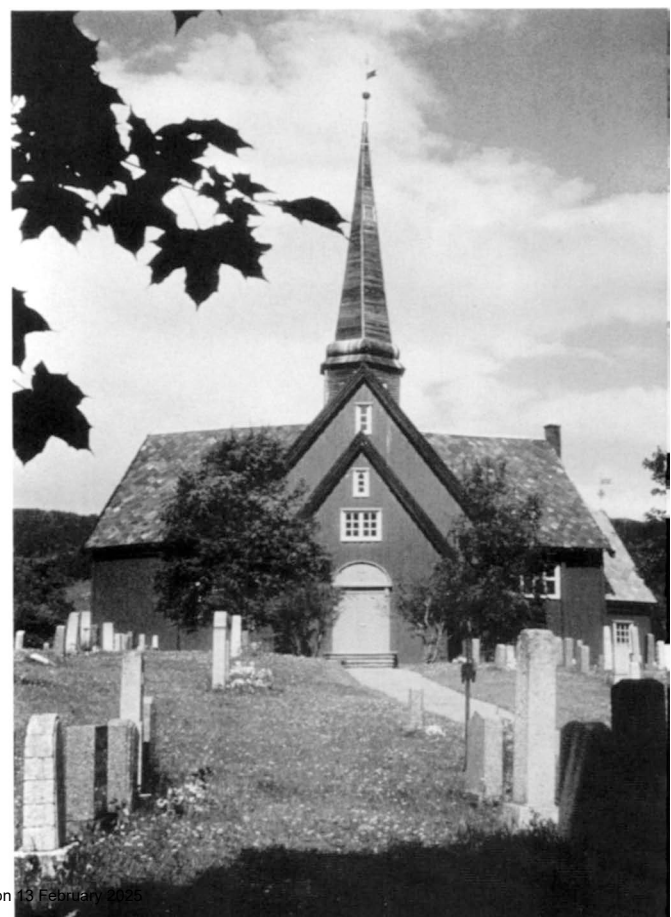
Contemporary with Vor Frelsers Kirke is the Reformed Church in Copenhagen (figure 4.30).[31] The German Reformed worship was permitted by Christian V in 1685, in response to the religious preferences of Queen Charlotte Amalie of Hessen-Kassel, and the church was built by Heinrich Brockam, from Germany or Holland, in 1688–1689. Unlike the Protestant churches we have seen in the Lutheran tradition, the Reformed Church was planned with the principal axis across the breadth rather than the length of the building. This is expected on the exterior, where the main entrance is on the center of the long northeast side. As at Vor Frelsers Kirke, there are pilasters, here Ionic, rising the full height of the building, with an entablature and a pediment

over the entrance bay. The hip roof has dormers and is crowned by a turret. The interior is arranged in the German/Dutch Calvinist manner with the altar and pulpit opposite the door.[32] The original scheme was repeated in rebuilding after the fire of Copenhagen in 1728.

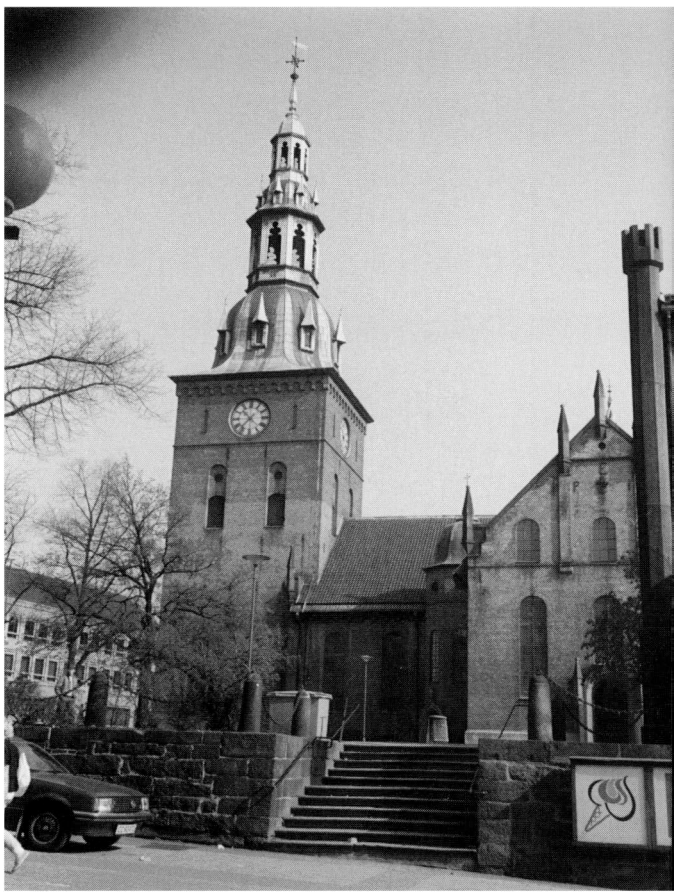
The late seventeenth century was not a time of extensive church building in Norway. A small number of wooden parish churches were built in an experimental manner, using a Y-shaped plan. One example is the church at Rennebu in Nord-Trøndelag, 1668–1669 (figure 4.31).[33] From the southwest the entrance wing of the church recalls something of the stave churches, with its successive gables, turret, and spire. The interior is arranged with two wings for seating and the third for the sanctuary. This plan did not, apparently, prove to be entirely satisfactory and gained little acceptance.

For the new cathedral in Oslo by Jørgen de Wiggers in 1697 a cruciform plan was chosen (figure 4.32).[34] In 1850 the spire was added by Alexis de Chateauneuf, the west tower having originally been lower with a pyramidal roof. The wide cross-arms make a spacious interior, where the pulpit and altar dating from 1699 dominate. Their design by an anonymous Netherlandish master was important in bringing to Norway the acanthus ornament that spread over the country in the next century in carved and painted decorations for churches and houses (figure 4.33).

30



31



32

4.32 Oslo. Cathedral. J. de Wiggers. Begun 1697.

4.33 Oslo. Cathedral. Pulpit. 1699. (Oslo, Riksantikvaren.)

33

Late Baroque and Rococo, c. 1730–1800

The accession of Christian VI in 1730 brought Denmark a monarch who was somewhat paradoxical in his approach to the arts and architecture. In the years following, the grandeur of the late Baroque and its lively transformation into the Rococo were part of another paradox. Along with an apparent climax of stylistic richness in the visual arts and music went the beginning of major political, economic, and industrial change, some effects of which can be detected in Scandinavian architecture from c. 1730 to c. 1800.

The early years of this period in Denmark were dominated by the building of the first Christiansborg Palace in Copenhagen.[35] The alteration of Copenhagen Castle under Frederik IV placed too great an additional load upon the old foundations, and by 1730 it was clearly time to make a major change. Furthermore the now hopelessly unfashionable irregularity of the castle plan could not be concealed, and the monotony of the new exterior must have been even more forbidding than the castle in medieval times. As Crown Prince, Christian VI had already been involved with the building of

Hørsholm Palace, begun for his future queen Sophie Magdalene in 1728, and the rebuilding of a mansion across Frederiksholms Canal from the castle.[36] Although J. C. Krieger was one of the architects for both projects, when it came to a new royal palace the new king chose Elias David Häusser as the general building master.

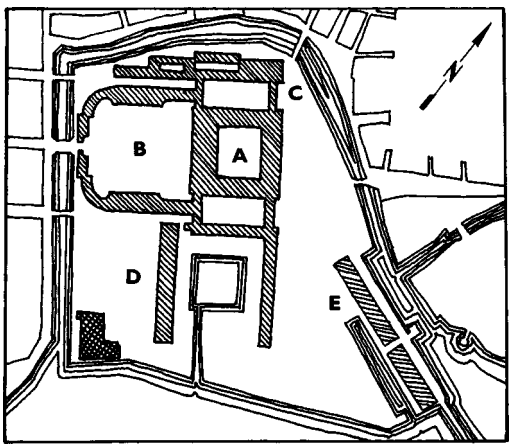
Häusser was a military engineer, trained in Germany, and had given Christian VI some instructions in architecture. In 1731 his first proposal for the palace was submitted, but it was dull and heavy. A second proposal, dated May 10, 1732, met with more approval, and in the same year the final project was begun. The royal family moved to Frederiksberg, and the old castle was pulled down.

Whether Häusser was the author of the final design is a matter of some question. He wrote on the drawing that it was a copy of one that the king had given him as a model.

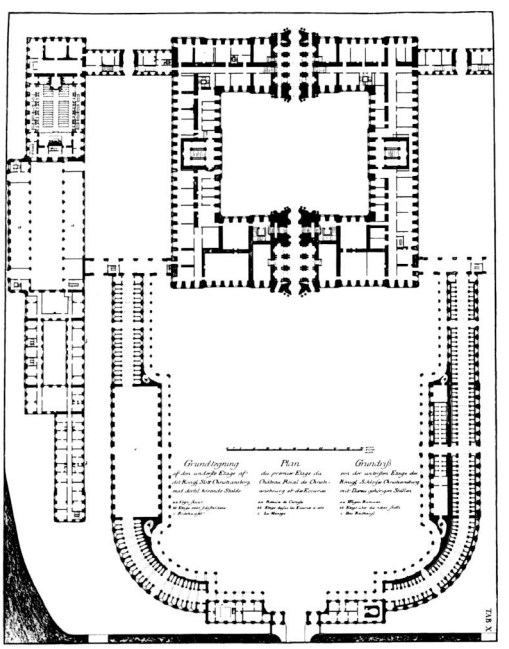
4.34 **Copenhagen. Christiansborg I. E. Häusser. Begun 1732. (Thurah, *Danske Vitruvius,* volume I, plate 23. Copenhagen, Academy of Art Library.)**

4.35 **Copenhagen. Christiansborg I. Site plan. (After Faber, *History of Danish Architecture,* p. 74.)**

4.36 **Copenhagen. Christiansborg I. Plan. (Thurah, *Danske Vitruvius,* volume I, plate 10. Copenhagen, Academy of Art Library.)**



35 A. Main Palace
B. Riding Ground
C. Chapel
D. Arsenal
E. Bourse



36

Here the overall scheme of the palace facade was established. It was divided horizontally by rusticated basement stories, two principal stories, plus an attic, crowned by a balustrade behind which rose three mansard roofs and a central tower.[37] The vertical divisions were marked by three bays at each end separated by giant pilasters rising through the two main stories, and a central portion of nine bays with a modified triumphal arch motif for a projecting portico rising in the center of the basement story. A curved pediment over the central bay and triangular pediments over the end bays, as shown on the drawing reproduced here, were replaced by a triangular pediment in the center and segmental pediments at the ends on the building itself. In the final version the roof line was also made continuous. With its chapel and administrative wings the palace could now overlook its square with a grandeur deriving from the south German and Austrian princely palaces (figure 4.34).

Whoever the designer may have been, the new palace was also laid out so as to form a monumental complex (figure 4.35). The main building consisted of four wings around a central courtyard, with a grand entrance hall on the east, or square, side, another on the west side in connection with the tower, and additional entrances and stairs on the north and south sides of the court (figure 4.36). This plan may have owed something to Lambert von Haven's project for a royal residence or to Tessin the Younger's plan for the Amalienborg (figure 4.10). As at Fredensborg the Chapel was built separately to the north; the Chancellery had already been built by J. C. Ernst in 1715–1720 to the south.[38] Both were connected to the main palace by two-story gallery wings. The west facade looked out to the Riding Ground, which was flanked by the stable wings, ending in curved portions leading to a bridge over the

canal. The symmetry that no amount of remodeling could bring to the old castle was now achieved and the whole spatial setting for courtly splendor much enlarged.

So large a project required considerable time for execution, and the palace was in fact not entirely complete in all details when the main building and the chapel were destroyed by fire in 1794. Häusser was primarily a military engineer who undoubtedly used the surveying techniques for fortifications in laying out the plan. He was responsible for the Riding School building in the center of the south wing. He also planned a monumental gatehouse for the entrance to the bridge over the canal, but this was not built. Construction of the main building had risen except for the two top stories by 1736, when Lauritz de Thurah and Niels Eigtved were appointed for the interiors. Häusser was gradually superseded, finally dismissed in 1742, and sent to take command of the fortifications at Nyborg. In the meantime enough had been completed that the royal family was able to move in by November 1740, and the name "Christiansborg" was officially adopted in January 1741. On the departure of Häusser, Eigtved, who by then was much in the king's favor, was appointed the chief architect.

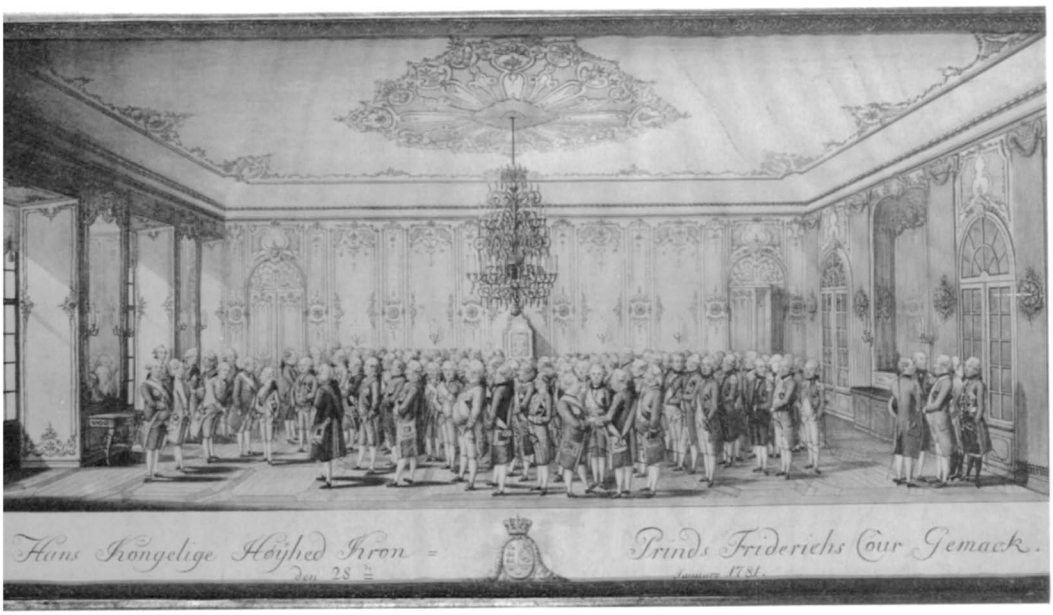
For the nature of the interior designs we may consult a drawing of 1781, which shows the dining salon with its decorations designed by the sculptor Louis-Augustin Le Clerc (figure 4.37). The room overlooked the Riding Ground, and the narrow walls between the windows were echoed by pilasters on the interior wall opposite. The end wall visible in the drawing was rhythmically adorned with alternating wide and narrow panels, with rich pediments over the doors at either side. The cartouches on the pilasters and in the narrow end panels were not placed at the midpoint but just above head level in such a way as to stabilize the height of the room.

How Eigtved and Thurah treated the residential suites we do not know, but in his book *Den Danske Vitruvius* Thurah illustrated the interior of the chapel.[39] This was the work of Eigtved. He combined the French arrangement of the royal boxes at the east end, connected to the main palace as at Versailles, with the German Reformed placement of the pulpit with organ above in the center of the west end, as at the Reformed Church. To the west beyond the chapel lay the coach house and the stables for the horses of the guard and the Crown Prince.

The whole establishment reflected the kind of court life that Christian VI intended. Erecting the palace chapel as a separate building set forth court religious observances as more than private devotions. Further, the importance of horses and riding skills as entertainment is well demonstrated by the broad Riding Ground and surrounding buildings, which survived the fire of 1794. The exterior of the wings is treated soberly, with rustication on the lower

4.37 Copenhagen. Christiansborg I. Salon. Drawing by J. W. Haffner, 1781. (Copenhagen, Rosenborg Palace Collections.)

4.38 Copenhagen. Christiansborg I. Stables. (Copenhagen, National Museum.)



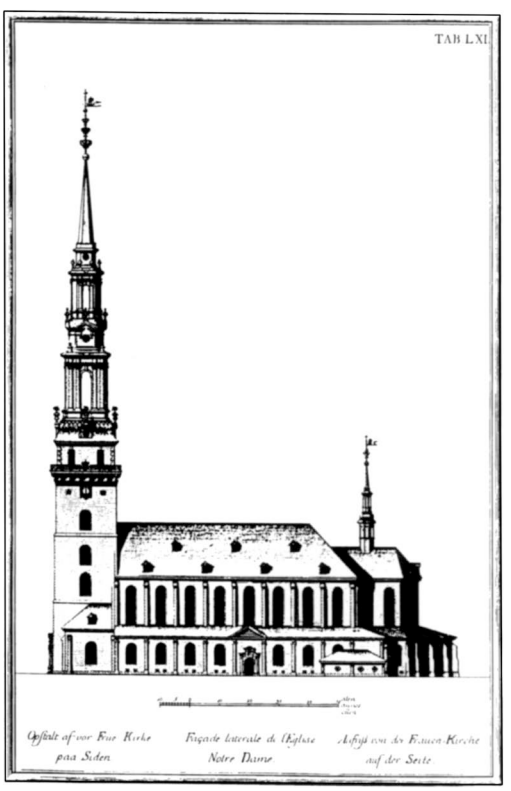
37

38

level and pilasters between the windows above. As shown on Thurah's plan, a colonnade surrounded the Riding Ground, still a welcome shelter from sun or rain. On the north side the lower level was made into stables throughout, with the saddlery in the raised central section. Even the horses were splendidly housed in their marble stalls (figure 4.38). On the south side the Riding School occupied both stories, with the royal box at one end and surrounding galleries carried on curved brackets.

Here was a paradox in the nature of Christian VI and his queen, Sophie Magdalene of Brandenburg. Amid receptions, banquets, balls, musical events, and equestrian entertainments there was no place for theatrical performances, which had been part of Copenhagen Castle's festivities since the time of Christian IV.[40] The king's religious convictions led to the prohibition of all theater in Denmark and Norway in 1738.[41] No theater was included in the palace, in contrast to what Tessin had proposed for the Amalienborg and Stockholm palaces, and in this respect Christiansborg was out of step with the princely palaces of the Continent.

One other major building project came during the reign of Christian VI. The fire of 1728 also devastated Vor Frue Kirke. After several proposals for its rebuilding had been made, that of J. C. Krieger was chosen and the major portion of the work done between 1731 and 1742 (figures 4.39 and 4.40).[42] The church was rebuilt on its former basilical plan but with the side aisles now raised to the height of the nave and separated from it by square piers with flat pilasters. Light came from two ranges of windows in the aisles, the upper range being the taller. The spectacular western tower and spire were built from drawings by the court Master of Ceremonies Vincent Lerche, who based his design on plates in *A Book of Architecture*, published in London by the English archi-



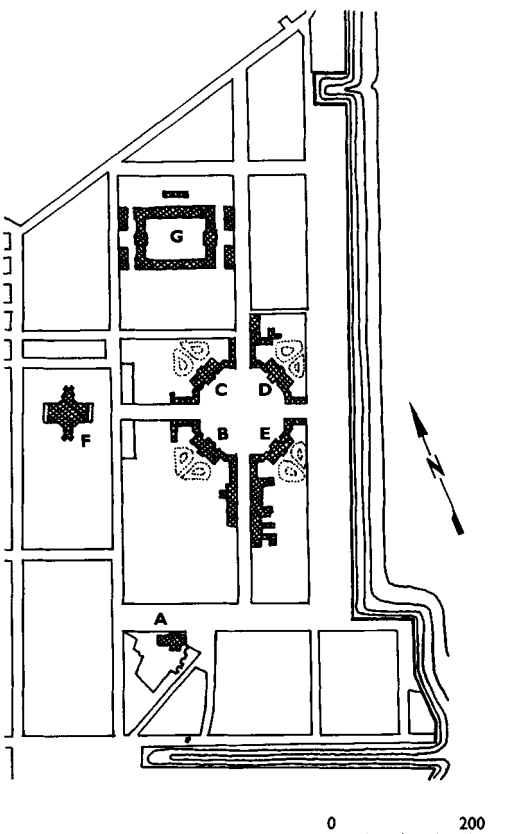
39

4.39 **Copenhagen. Vor Frue Kirke. J. C. Krieger. 1731–1742. (Thurah, *Danske Vitruvius*, volume 1, plate 61. Copenhagen, Academy of Art Library.)**

4.40 **Copenhagen. Vor Frue Kirke. Interior. Engraving by J. Haas. (Copenhagen, National Museum.)**

4.41 **Copenhagen. Frederiksstad. Site plan. (After Faber, *History of Danish Architecture*, p. 80.)**

40



A. Garnison Church
B. Moltke's Palace
C. Levetzau's Palace
D. Brockdorff's Palace
E. Schack's Palace
F. Frederik's Church
G. Frederik's Hospital

41

tect James Gibbs in 1728. As to the furnishings, the pulpit and altar were by Johan Friedrich Ehbisch, who had done those at Fredensborg. As finally completed about 1747, the church stood until the English bombardment of Copenhagen in 1807.

On his death in 1746 Christian VI had had only five years to enjoy his new palace. His son, Frederik V, was more fortunate, and further significant contributions to art and architecture in Denmark were made during his reign of twenty years. Born in 1723, he had seen the great fire of Copenhagen in 1728, the demolition of the old castle, and the building of the palace. It was for him that Eigtved had built a new Prince's Palace on the site of J. C. Krieger's remodeled mansion in 1743–1744.[43] Almost immediately on his accession Frederik V revoked the 1738 ban on theaters, and several places in Copenhagen were at once fitted up

42

with stages.[44] One of Eigtved's first projects in the new reign was the Royal Theater in Kongens Nytorv, built in 1748, remodeled several times, and finally demolished in 1874.[45] Then in 1749 a new project was begun, in the three hundredth anniversary year of the House of Oldenburg.

Where the gardens of the ill-fated Sophie Amalienborg had provided space for military exercises, a new section of the city was laid out and called Frederiksstad (figure 4.41).[46] From the present Sankt Annae Plads to Kastellet, the area between Bredgade (then called Norgesgade) and the harbor was divided by a new street, called Amaliegade, and crossed by another new street, called Frederiksgade. At the crossing a monumental square was created, at the corners of which four prominent noblemen built mansions in 1750–1754. An eques-

4.42 Copenhagen. Frederiksstad. Engraving by J. M. Preisler after drawing by L.-A. Le Clerc, c. 1740. (Copenhagen, National Museum.)

4.43 Copenhagen. Levetzau's Palace. N. Eigtved. 1754–1756.

43

trian statue of the king was planned for the center of the square, and a church was planned to be the climax of the ensemble as viewed from the harbor (figure 4.42). The attribution of the designs for the site plan and its buildings has not been definitively established for lack of documentary evidence. The German architect Marcus Tuscher and Eigtved both worked on the project; probably Tuscher's role was more with the planning of streets and squares, with Eigtved designing the buildings themselves. Part of the original scheme was to have Amaliegade lined with houses of uniform requirements for façades, but this was not fully observed. On Bredgade the area was given a strong accent at the south end by the Bergentin mansion (now the Odd Fellows Palace) and at the north end by Frederik's Hospital (now the Museum of Decorative Arts), while the beginning of Frederiksgade opposite the church site was flanked by the Bernstorff and Dehn mansions. Perhaps this concept owed something to Tessin the Younger's proposal for a burial church in Stockholm (figure 4.5).

The four palaces with their pavilions surrounding the square comprise the finest expression of the Danish Rococo (figure 4.43).[47] Each palace consists of a central block three stories high, placed diagonally at the corners of the square and flanked by pavilions whose wings partially enclose a garden at the rear. Above the shallow rustication of the basement story the main and upper stories are embellished with a giant order of Ionic pilasters between the windows and crowned by a low balustrade before the hip roof. The three central bays are brought forward, forming a balcony enobled by coupled columns framing the

central bay and surmounted by a richly carved gable. There is no longer a grand entrance, as at Christiansborg. Instead, the entrance is now through the short wing connecting palace and pavilion.

At the main level on the interior of Moltke's palace the rooms are arranged *en filade* behind the façade, with similar extension into the pavilions. This is the least altered interior of the four and includes the great salon designed by Eigtved with stucco work and painted and gilded panels between a series of paintings by François Boucher (figure 4.44). Small wonder that when Christiansborg burned in 1794 the royal family under the leadership of Crown Prince Frederik purchased the Amalienborg palaces for their enforced new residence. In the splendor of the palace built by Count Adam G. Moltke, high steward to Frederik V, we see an ornament to the city that was encouraged by the king, a situation contrasting with the jealousy that Nicolas Fouquet's magnificent Vaux-le-Vicomte had provoked in Louis XIV nearly a century earlier.

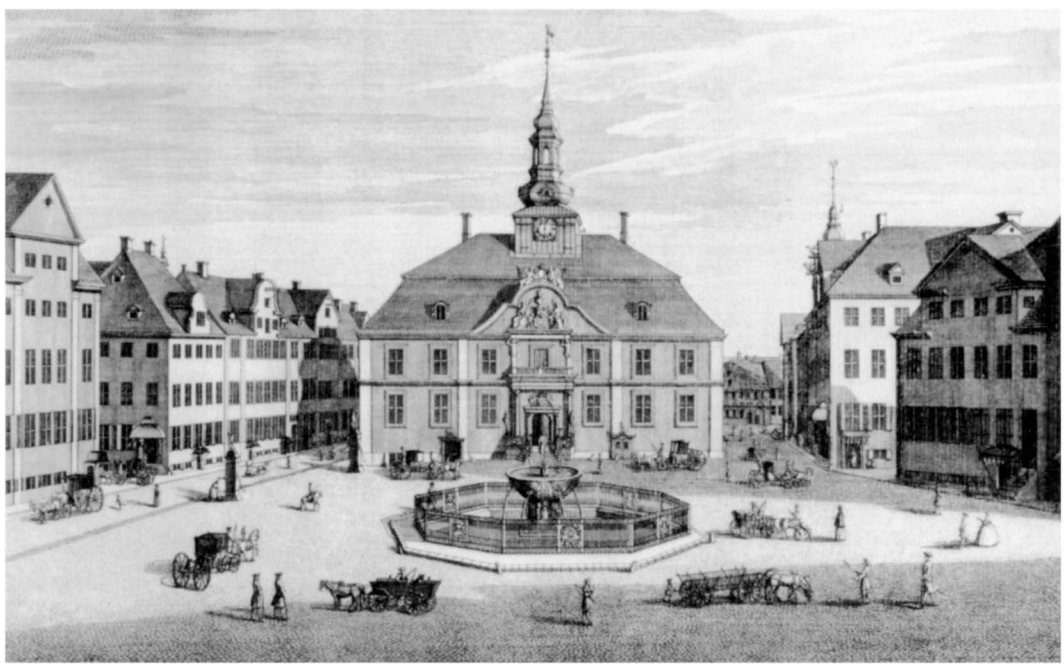
Two of the principal architects of Christiansborg and Amalienborg were involved with major projects other than their work in design. In addition to the work at Christiansborg, Lauritz de Thurah had designed the palace at Hørsholm, 1728–1744, and the Eremitage in the Deer Park in Copenhagen, 1734–1736. In 1735 Christian VI commissioned him to prepare an illustrated book on the architecture of Denmark.[48] *Den Danske Vitruvius* appeared in two volumes, the first in 1746 and the second in 1749. Materials assembled for additional publications were still in manuscript form at Thurah's death in 1759 and were published as a third volume in the modern edition of 1967. Unlike earlier publishers of maps and views, Thurah presented most of the buildings as architectural rather than topographical subjects, with elevations, plans, and sections, together with descriptions in Danish, French, and German. These illustrations are especially valuable for buildings that have since been lost or altered. Christian VI had in mind to memorialize the splendors of his reign, but it is probably more Thurah's contribution than the king's that commands our attention today.

The other project was the location of the Royal Danish Academy of Art in the Charlottenborg Palace in 1754.[49] Founded in 1738 and variously housed, the Academy had become the training school for young painters, sculptors, and architects. Eigtved had been named Director in 1751, and on his death a few weeks after the move to the new quarters (which are still occupied by the Academy), the French sculptor Jacques-François-Joseph Saly was chosen to replace him.[50] Trained in the French academies of Paris and Rome, his great work was the equestrian statue of Frederik V for the Amalienborg

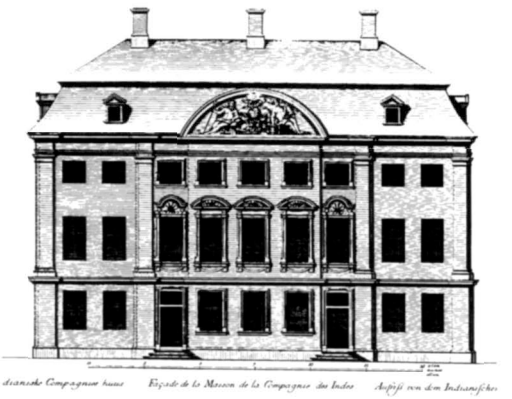
4.44 Copenhagen. Moltke's Palace. N. Eigtved. 1754–1756. Salon. (Copenhagen, National Museum.)

4.45 Copenhagen. Town Hall. J. C. Ernst. Begun 1729. (Thurah, *Danske Vitruvius*, volume I, plate 94. Copenhagen, Academy of Art Library.)

44



45



46

47

4.46 Copenhagen. Asiatic Company Office. P. de Lange. 1738. (Thurah, *Danske Vitruvius*, volume 1, plate 107. Copenhagen, Academy of Art Library.)

4.47 Damsholte, Møn. Church. P. de Lange. 1743.

square, 1755–1771. Under his leadership Danish art students were brought into an international setting, with strong ties to France. Formal education in architecture was now more firmly established and included the necessary techniques of draftsmanship, lectures from professors, competition in exhibitions, and, if the means could be found, travel in Europe, especially to Paris and Rome. Measured drawings and sketches from ancient monuments and modern buildings followed upon careful observation and gave the young architect a storehouse of models for his own choosing.

Among other notable buildings in Denmark from the reign of Christian VI were the Town Hall begun in 1729 and the Asiatic Company Office of 1738. The former has not survived, having burned in 1795, and is known from Thurah's illustration (figure 4.45).[51] Built on the foundations of the old Town Hall, lost in the fire of 1728 (figure 3.32), it was planned by J. C. Ernst with gables designed by J. C. Krieger. A strong resemblance can be seen to the curved gable and crowning tower of the 1732 design for Christiansborg, and both are thought to be derived ultimately from the works of the Austrian architect Lucas von Hildebrandt.[52] As houses and shops were rebuilt after the fire, this mansion of the city must have added to pride and determination in recovery.

Surviving, on the other hand, is the Asiatic Company Office, built in 1738 from designs by the Dutch architect Philip de Lange (figure 4.46).[53] Built of brick with sandstone trim, it has a ground-level story above which the principal and attic stories are framed by a giant order of Tuscan pilasters. The central segmental pediment above has sculptures of Neptune and Hermes, patrons of the Company, and the building is covered with a mansard roof. The manner here is Dutch, rather than German as at the Town Hall. Located across the harbor on Christianshavn, it does not occupy a dominant position and is hardly distinguishable from a large mercantile or noble residence.

This points up a contrast between these two nonresidential buildings. The Town Hall fitted in with what was by then a fairly normal pattern: a symmetrical blocky building, distinguishable from a residence by site, ceremonial entrance, and tower. For an individual commercial organization the precedent would be the guild hall, in form similar to the town hall. The merchant's house with shop on the ground floor and residence above, two to three windows wide, with gable end to the street, was familiar enough, such as the houses in Copenhagen and Stockholm that we have already seen (figures 3.35 and 3.50). The Bourse in Copenhagen had been built to accommodate a large number of individual merchants (figure 3.33). But a building for offices was another matter, and Lange's solution is essentially domestic in its outward appearance. This is an early example of the dilemmas that architects in the coming industrial ages were to face in designing appropriate expressions for a whole new set of building programs.

The pilasters framing the principal salon of the Asiatic Company Office also appear on the elegant parish church that was completed in 1743 at Damsholte on Møn from Lange's only complete designs for a church (figure 4.47).[54] It consists of a rectangular nave with a polygonal projection on the west for a porch and another on the east for the pulpit and altar. The roofs of these projections are hipped and set into the hip roof of the nave, with an onion-domed turret over the porch. The brick walls are painted yellow, and the corners are accented with white Tuscan pilasters. The central window in the south wall is further accented with rusticated pilasters and a pediment, carrying the emblem of Christian VI, who provided some of the funds for the church. Damsholte Church is a surprising note of the baroque in a rural landscape more characterized by medieval churches, such as those at Elmelunde, Keldby, and Fanefjord nearby.

Damsholte Church is one of several, starting perhaps with the Reformed Church in Copenhagen, built in 1689 and rebuilt in 1731, whose sources may lie in earlier seventeenth-century Dutch designs, such as those of Pieter Post. Other churches and chapels built in early eighteenth-century Denmark had this characteristic broad façade and hipped roof with central turret. In the Reformed Church the pulpit is on the broad wall opposite the entrance. In other examples the pulpit and altar are on the long axis, as at the Fredensborg chapel. Damsholte Church seems to be a variation, having no entrance through the central bay of the south side and the turret displaced to mark the entrance on the west.

The churches and chapels with entrances on the long sides, hipped roofs, and central turrets resemble nothing so much as town halls, and indeed for some branches of English Protestantism the town hall or market hall was

4.48 **Sigtuna, Uppland. Town Hall. 1744.**

4.49 **Helsinki. Sveaborg. A. Ehrensvärd. Begun 1745. (James A. Donnelly.)**

49

probably the inspiration for church design.[55] Certainly the Town Hall of 1729 in Copenhagen was the grandest to be built, and it had its imitators. The type was familiar, and one much more modest example survives at Sigtuna in Uppland, built in 1744 (figure 4.48).[56] One story high, with a massive säteri roof and dominating turret, the building stood for authority in the town. The turret was much more than a decorative climax, for it could be a watch tower, house the town bell, and also sometimes the town clock. Communication by watchman's cry, by lantern, and by bell were all still needed in the eighteenth century.

A last great fort was nearly contemporary with the Town Hall at Sigtuna. The military engineer Augustin Ehrensvärd was called upon to design new defenses for Helsinki, Finland, then still under Swedish rule. Begun in 1745 on a group of islands at the mouth of the harbor, Sveaborg (Suomenlinna) was completed several years later and became known as the "Gibraltar of the North" (figure 4.49).[57] Ehrensvärd had journeyed to Denmark, Germany, France, Holland, and England in 1736–1738, studying fortifications, and for Sveaborg he followed the principles of the military engineer to Louis XIV, Sebastian de Vauban. The bastions, outworks, and casements withstood bombardment by the British and French in 1855, during the Crimean War, although the governor's residence and officers' quarters were destroyed. Today the fortress is largely a park, with museum, restaurants, and many walkways winding among the high heavy walls. For the visitor to Helsinki who has no time to venture into the country-

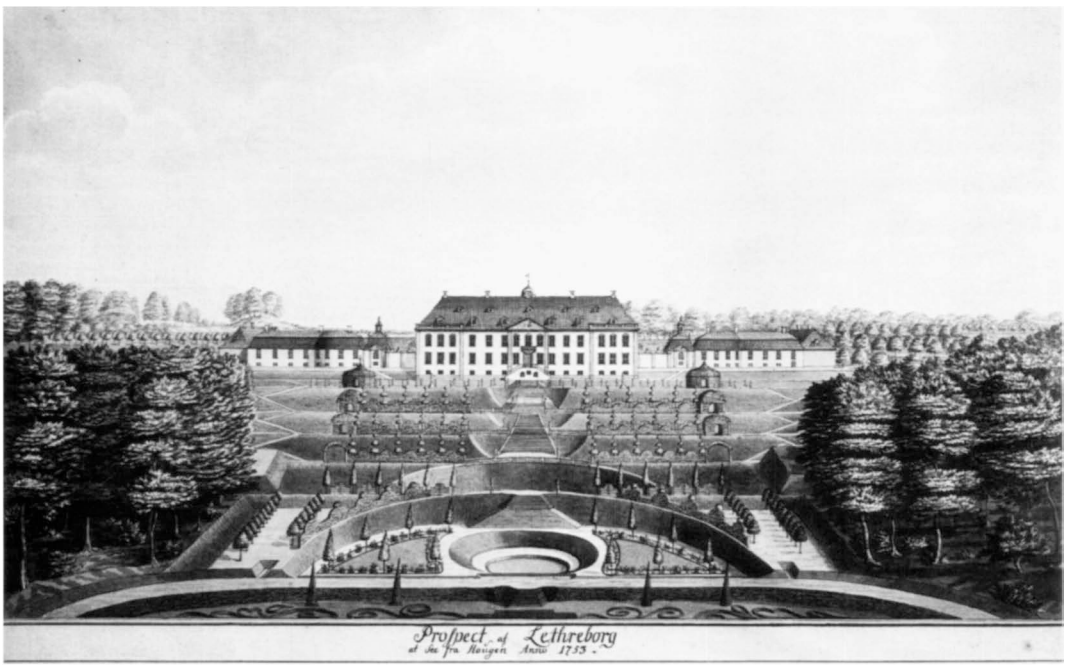
side, Sveaborg offers a rich opportunity to see the wide variety of color available in native Finnish granite, here with the different colors of stone juxtaposed at random, yet forming a harmonious total picture.

After the Frederiksstad project it was many years before any further large urban designs were carried out in the Scandinavian countries. For the work of various architects and some of the changes in taste that occurred during the remainder of the eighteenth century, we may look briefly at several houses and also churches.

At Svartsjö in Uppland, for example, a sixteenth-century castle was rebuilt for the owner, Fredrik I, in 1735–1739 by the Swedish architect Carl Hårleman. He was then in charge of decoration for the Royal Palace in Stockholm, where work had been resumed. For the new manor house he created a compact building in two stories with a mansard roof and rusticated exterior, the main salon projecting from the garden (figure 4.50).[58]

4.50 Svartsjö, Uppland. C. Hårleman. 1735–1739. (Stockholm, Läns Museum. Photo: Ingvar Lundkvist.)

4.51 Ledreborg, Zealand. J. C. Krieger. c. 1743. Engraving by J. J. Bruun, 1753. (Copenhagen, National Museum.)



51

Another rebuilding took place at Ledreborg near Roskilde (figure 4.51).[59] Bruun's view shows that a desire for pomp was by no means restricted to the royal family. Here and at other great noble estates, such as Lerchenborg and Bregentved, the main buildings and their dependencies, much like Palladian villas, presided over great tracts comprising formal gardens and large forests and plantations. About 1743, J. C. Krieger remodeled the old manor of Lejregård for its new owner, Councillor Johan Ludwig Holstein. The long garden façade is rhythmically divided by giant pilasters forming five bays, the central one emphasized by a shallow balcony over the door and a segmental pediment above. The end bays are accented by balustrades at the roof line. Holstein was a bibliophile and collector, and Thurah added pavilions for his private library and museum, connecting them to the main building with curved wings. A third hand, that of Eigtved, is seen in the decorations of the interior. All in all it had become a splendid estate, including the majestic tree-lined allée, six kilometers long, leading from the main road beyond the gates that originally belonged to the Amalienborg gardens.

A third remodeling was begun in 1759 on a property acquired in 1758 by Chancellor Moltke and later named Marienlyst, in Helsingør (figure 4.52).[60] Frederik II had built a summer house called "Lundehave" on the strand there north of Helsingør, and Moltke had it substantially enlarged by the French architect Nicolas-Henri Jardin. The latter had been called to the Academy by Saly after the death of Eigtved in 1754 and was at work on the Frederik's Church project, to which we

4.52 Helsingør, Zealand. Marienlyst. N.-H. Jardin. Begun 1759.

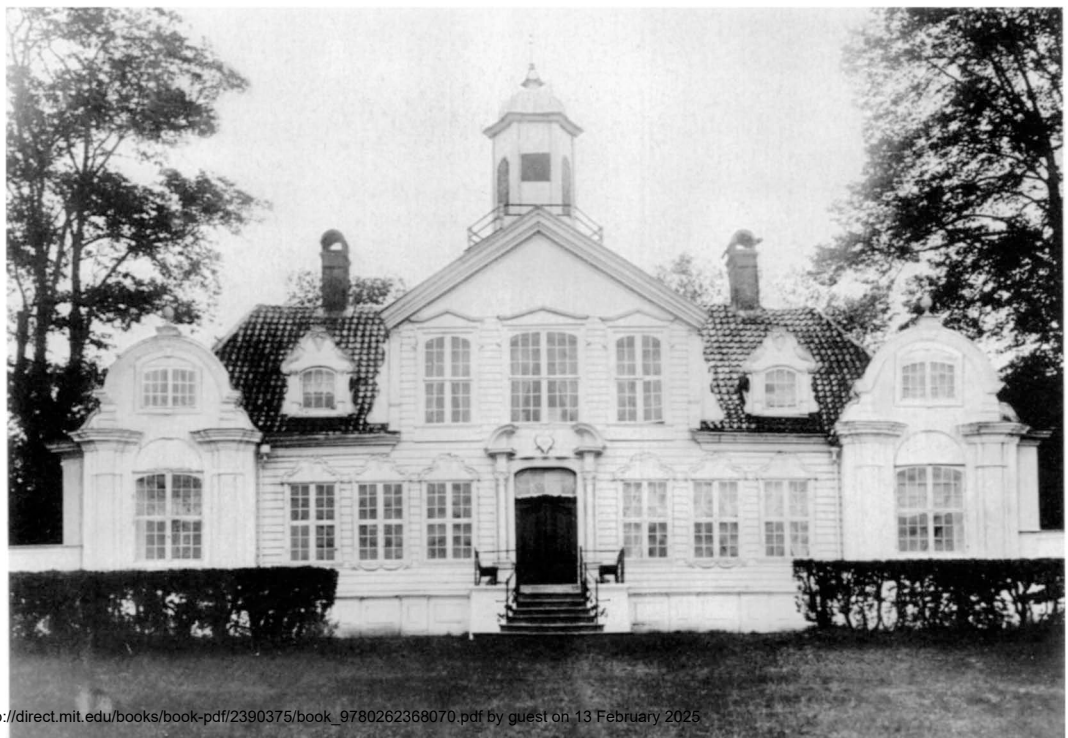
4.53 Copenhagen. Harsdorff House. C. F. Harsdorff. 1779–1780.

4.54 Bergen. Damsgård. 1770–1795. (Oslo, Riksantikvaren.)

shall return. He brought to Denmark the new classicism of French architecture, promulgating its ideals in his teaching. These are clearly stated at Marienlyst, with its simple blocky mass, clear division of stories, restrained use of ornament, and low-pitched roof virtually hidden behind the crowning balustrade. The surface energy of the Rococo has been replaced by a quieter and more dignified statement, a great contrast to Moltke's palace in Amalienborg.

The French taste now dominant in the Academy was continued by Jardin's student Caspar Frederik Harsdorff, whose teaching emphasized even more the correct use of classical details. As a demonstration of his ideas he was able to build a double house on Kongens Nytorv next to the Academy in 1779–1780 (figure 4.53).[61] The smaller unit, next to the Academy, has a five-bay façade with rusticated ground level, entrance in the central bay, and segmental pediments over the end bays at the second level. The larger unit, intended to house a wealthy owner's offices as well as residence, has a three-bay façade, marked by an applied

53



54

55

56

temple-front motif with giant Ionic pilasters and a pediment filled with sculpture above. On the interior Harsdorff made use of the curved walls in salons and staircases that were also becoming popular in France and England at this time. Although some of his proposals aroused controversy, the classicism of Harsdorff and his pupils became even stronger in the town houses of Copenhagen, especially those built after the next great fire, in 1795.

While the French classical taste was taking hold in Denmark, the Rococo was more persistent in Norway, where major postmedieval contributions were yet to come. The most striking of the late eighteenth-century Norwegian manors is Damsgård in Bergen, as rebuilt in 1770–1795 (figure 4.54).[62] The original wooden house was enlarged by brick wings on either side of the front and by the addition of a central roof platform and turret. The rather astonishing gables and pediments were undoubtedly inspired by designs in pattern books. Much less exuberant but certainly commanding is the contemporary Stiftsgården in Trondheim, built 1774–1778 for the Commandant's mother-in-law (figure 4.55).[63] Said to be the largest wooden building in Scandinavia, the main building is laid out symmetrically with a central reception salon and flanking lesser salons and chambers. Service quarters extend as wings at the back. It is a northern château in wood. The main façade, seventeen bays long, is potentially hopelessly monotonous in spite of the pilasters and pediment framing the entrance and above these a pediment interrupting the roof line and extending over the three central bays. An illusion of greater height than is actually the case was achieved by building a 6-foot space between the ceiling of the ground floor and the floor timbers of the next level. Then the eight bays on either side of the central element are subdivided into four units each by the alternation of two triangular and two segmental pediments over the windows. From this relatively decorous exterior one passes to an interior enriched with lively stucco ornament.

4.55 **Trondheim. Stiftsgården. 1774–1778.**

4.56 **Drottningholm. Chinese Pavilion. C. J. Cronstedt and C. F. Adelcrantz. 1763–1768.**

If we turn from Norway to Sweden we encounter a different aspect of late eighteenth-century taste, that of fascination with Chinese art and design. The Swedish East India Company was established in 1731, with its headquarters in Gothenburg, and Chinese goods were pouring into Sweden as into other European countries. Sir William Chambers, who in 1774 became a knight in the Order of the Polar Star, was the son of a Scottish merchant in Gothenburg and as a youth sailed on his father's ships to China. In 1757 he published *Designs for Chinese Buildings,* which was a source of ideas for Carl Fredrik Adelcrantz when he designed the second Kina Slott, or Chinese Pavilion, at Drottningholm in 1763 (figure 4.56).[64] It is set in a wooded area of the park, some distance from the palace, and provided a private retreat for the royal family. It is like a tiny Palladian villa, with central block and dependencies, cheerfully decked out with Rococo and Chinese motifs. Jean Eric Rehn provided designs for some of the interiors in his light and elegant fashion. Carefully restored, it is one of the most perfectly preserved Chinese pavilions in Europe.

Among other Chinese interiors of this period in Sweden is the tower room at Tyresö in Södermanland, decorated in the 1770s. Of even more interest, perhaps, is the setting of Tyresö, for here there is much less emphasis on formal gardens and a greater preference for a country landscape in the new English manner (figure 4.57).[65] The designer was Fredrik Magnus Piper, who also did parks in the English style at Drottningholm and Haga.

A similar park was laid out at Liselund on Møn, attributed to the Dane Andreas Kirkerup, who built the charming little country house for Antoine de la Calmette in 1792–1795 (figure 4.58).[66] Its symmetrical plan and refined interiors are not apparent at first glance, the thatched roof, turret, and adjacent pond giving exactly the bucolic impression that was intended. A Chinese pavilion, Norwegian house, and gardener's lodge complete the pastoral assemblage. Liselund is perhaps the most complete expression of Romantic Naturalism in Scandinavia.

In church design, the side-entrance and centralized plans continued in popularity in the eighteenth century. At Kongsberg in Numedal the church planned by Joachim Andreas Stuckenbrock in 1739 and completed by 1761 is entered on the long side through a projecting porch that carries the bell tower (figure 4.59).[67] The interior is furnished with double balconies and an exceptionally rich complex of altar, pulpit, and organ, one above the other opposite the entrance. Later at Røros in Sør-Trøndelag the church built in 1784 by Sven Aspaas is an elongated octagon in plan, two stories high, with a central entrance tower and belfry, and galleries on three sides within. Although octagonal in plan, the Røros church is arranged on the interior as at Kalmar, with the altar on the long axis opposite the entrance, which is not apparent on the exterior (figure 4.60).[68]

Another approach was that of the cruciform plan, which Adelcrantz adopted for Adolf Fredrik's Church in Stockholm in 1768 (figure 4.61).[69] With its applied orders, pedimented windows, and details of carving, this building has a much richer exterior than the smaller Norwegian examples. Ornamental details were originally supplied by the French artists Adrien and Jean Baptiste Masreliez, who also worked at the Royal Palace in Stockholm. The altar was designed by Sweden's prominent sculptor Johan Tobias Sergel, who also designed the monument to Descartes, who was buried in the old churchyard there on his death in 1650. Adelcrantz had traveled extensively in France and Italy, and the great domes of late seventeenth-century Parisian churches and the recently completed Superga in Turin had clearly inspired him.

Adelcrantz was not alone in his admiration for the splendors of Continental churches. We have already noted that Frederik's Church in Copenhagen was planned as the climax of the short axis of the Frederiksstad project, at the end of Frederiksgade opposite the harbor. There is indeed a church there now, and the history of how it got there marks one of the most frustrating episodes in eighteenth-century Scandinavian building.[70] Eigtved, who had earlier proposed a large centralized church to be built under Christian VI, drew up several designs for the church in Frederiksstad, and these too owed much to the Continental churches that Eigtved had seen. It is perhaps worthwhile to emphasize once more that for these Protestant state churches in Sweden and Denmark, there was no hesitation in drawing upon the grandest designs of the Church of Rome. The cornerstone of Eigtved's Frederik's Church was duly laid in 1749.

Eigtved's proposal was for a round church with a massive dome and flanking towers. On

4.57 **Tyresö, Södermanland. F. M. Piper. 1770s. (Stockholm, Nordic Museum.)**

4.58 **Liselund, Møn. A. Kirkerup, attr. 1792–1795.**

57

58

4.59 Kongsberg, Numedal. Church. J. A. Stuckenbrock. Begun 1739. (Oslo, Riksantikvaren.)

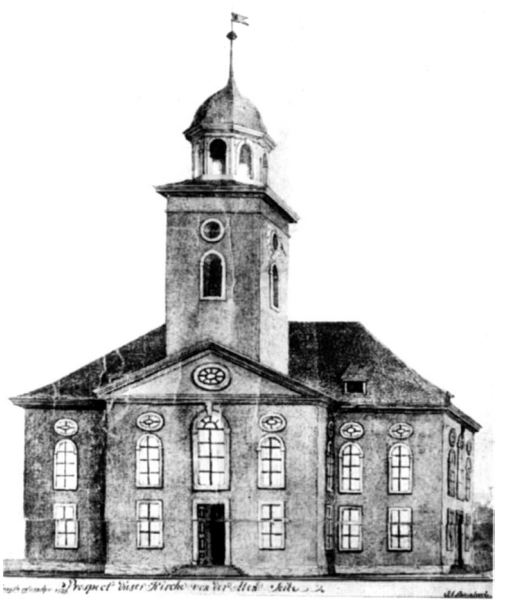
4.60 Røros, Sør-Trøndelag. Church. S. Aspaas. 1784.

4.61 Stockholm. Adolf Fredrik's Church. C. F. Adelcrantz. 1768.

his death in 1754 Thurah proposed changing the plan to a square church with a dome and no towers. Thurah had left Copenhagen for his second wife's estate of Børglum Kloster in Jutland in 1750, partly to pursue his literary work and partly because of dissatisfaction with his position after a reorganization of the official building administration in 1742. Whatever the merits of his proposal may have been, it is not surprising that the building commission sought instead to continue the church in the French academic tradition, with the Royal Danish Academy of Art newly relocated and the late Eigtved its first director. Through Saly's influence Nicholas-Henri Jardin was called from his native Paris to prepare further designs.[71]

We have already seen Jardin's work at Marienlyst. In the proposal that was approved in 1756, Jardin kept Eigtved's round domed church and flanking towers but lowered the dome to broader proportions and simplified the surfaces by omitting much detail and unifying the stories with strong giant orders. The fate of Jardin's project was linked to economics and court intrigue. By 1770 the building was far from complete, the marble pillars of the central portico standing alone, 30 feet high. Count Johan Friedrich Struensee, who was then approaching the height of his power in Denmark, decided that the work had become too costly, had Jardin dismissed as architect to the king, and imposed a new constitution upon the Academy without consulting either Jardin or Saly. Funds for Frederik's Church were cut off, and Jardin resigned his professorship in the Academy and returned to France in 1771, generously proposing that his former pupil Harsdorff be his successor.[72] And so there stood the marble pillars (figure 4.62), the statue of Frederik V left gazing up Frederiksgade at the unfinished church that was to have borne his name and made a visual link between church and king. No effective attempt to complete the building was made until a century later, and that is another story.

The last eighteenth-century church to be considered has also had a somewhat unusual history. In 1785, after months of severe earth-



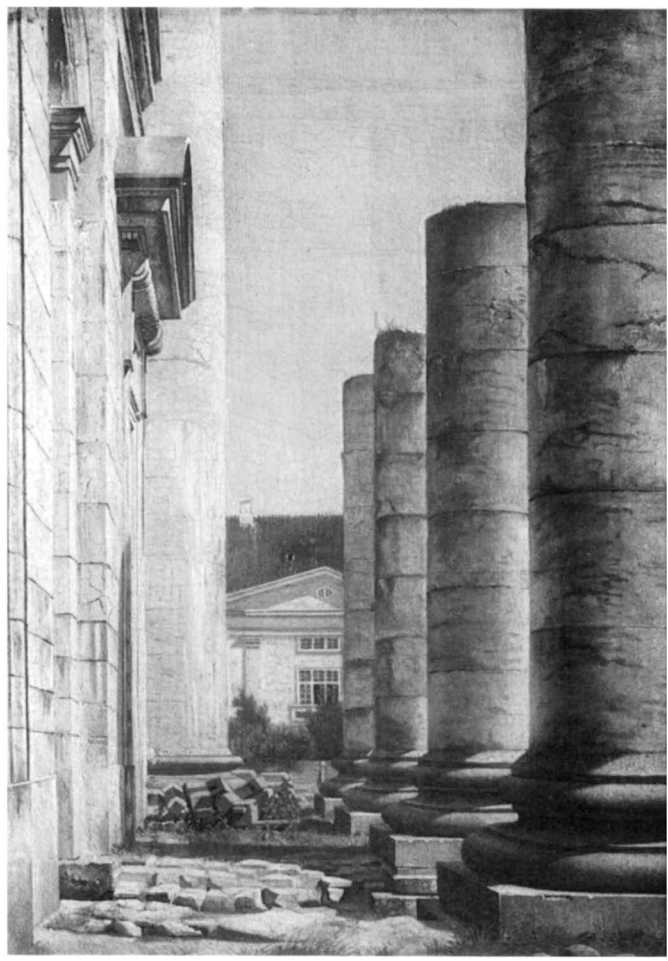
60

61

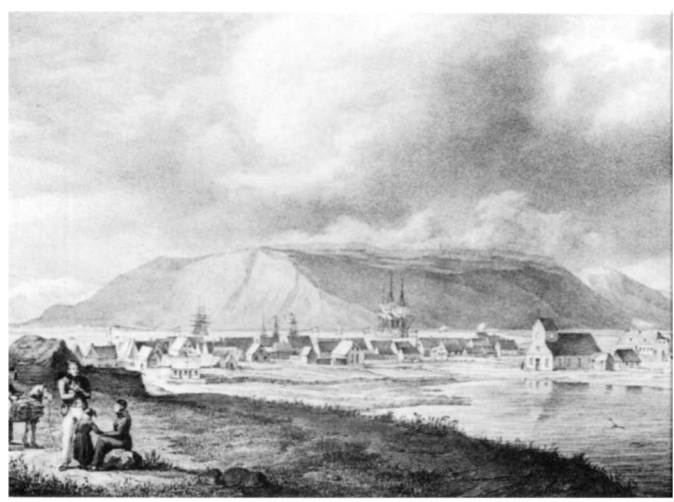
4.62 **Copenhagen. Frederik's Church. Painting by C. W. Eckersberg, c. 1817. (Copenhagen, Hirschsprung Collection.)**

4.63 **Reykjavik from Hólavöllur. Drawing by Kloss, 1835. (Copenhagen, Royal Library.)**

4.64 **Drottningholm. Court Theater. C. F. Adelcrantz. 1766. Interior. (Drottningholm, Theater Museum.)**



62



63

quakes that ruined the old Cathedral of Iceland at Skalholt, the decision was made to move the seat of the bishop to Reykjavik. The town was beginning to flourish as a port, and this part of Iceland was thought to be less subject to earthquakes and volcanic eruptions. The church there then being too small, Andreas Kirkerup was given the task of designing the new one. He began with a plan for a church built of horizontal logs, in section similar to an aisled farmhouse, thinking erroneously that this was in good Icelandic tradition.[73] Had he gone to Iceland himself, which he did not, he would have had a less romantic view. This inclination toward a vernacular building was consistent with his use of the thatched cottage motif for Liselund. His plans for a wooden church were not accepted, and the final plan was for a stone church with a tile roof (figure 4.63). Even this was not wholly satisfactory, for the tiles kept blowing off in violent winter storms, and the cathedral was much enlarged and the interior rebuilt in 1846.

Some specialized projects were also undertaken in late eighteenth-century Scandinavia. Both Adelcrantz and Jardin were involved in theater design, and two of their most interesting works have survived. At Drottningholm Queen Lovisa Ulrika's enthusiasm for theatrical performances led to the building of a theater beside the palace in 1753, for which Adelcrantz prepared drawings for remodeling in 1755.[74] This burned in 1762, and Adelcrantz designed its successor, which was completed in 1766. Restored in modern times after many years of neglect, the Drottningholm court theater is now once more in use. All the more remarkable is that over thirty of the original stage settings are extant.[75] The exterior is simple, but the interior is rich with pilasters, garlands, and a pale rose, blue, gray and yellow color scheme (figure 4.64). An entablature above the pilasters is carried onto the proscenium, which forms an introduction to the stage.

In 1766 Queen Juliana Maria had Jardin convert the armory over the stables at Christiansborg to a theater.[76] Whereas at Drottningholm the seating consists of rows of benches with concealed boxes in the corners, Jardin chose a parterre and two tiers of boxes for his long narrow space (figure 4.65). He may have been thinking of the new Opéra at Versailles (1763–1770), about which he could have learned during his visit to Paris in 1763. The walls of the boxes were built at right angles to the rails as was customary in French theaters, rather than slanting in the Italian manner. Jardin's theater, with its Ionic rather than Corinthian order and lack of much surface decoration, is less exuberant than that at Drottningholm. Although the Christiansborg theater sets are gone, the interior has been restored, primarily as a museum of Danish theater history but used for occasional performances as well.

Three buildings in Stockholm should also be mentioned. In 1746 Hårleman was called upon to plan an observatory for Stockholm, which was completed in 1753 (figure 4.66).[77] In

64

65

4.65 Copenhagen. Christiansborg Court Theater. N.-H. Jardin. 1766. Interior. (Copenhagen, The Theatre Museum at the Court Theatre.)

4.66 Stockholm. Observatory. C. Hårleman. 1753. (Stockholm, Royal Swedish Academy of Sciences.)

4.67 Stockholm. Exchange. E. Palmstedt. 1767–1776.

the years following the introduction of telescopes for astronomical observations, high towers had been popular as observing stations. Hårleman departed from this trend by building a mansion, the two lower stories for working space and the residence on the third. A solution for scientific establishments other than the conversion of houses or towers had not yet been reached.

Another familiar building type was adopted for the new Exchange in Stockholm, built in 1767–1776 by Erik Palmstedt (figure 4.67).[78] The long-standing formula of a rectangular block with side entrance and central turret that we saw in such a modest town hall as that of Sigtuna is still discernible in the Exchange, now of course on a larger scale. The lower story is rusticated. The emphatic three-bay central element with arcade below and temple-front above, using coupled columns, recalls the Frederiksstad façades, while the turret is strongly Baroque. This gave Stockholm one grand new columned façade, and the Opera House, built by Adelcrantz in 1775–1782, gave the other (figure 4.68).[79]

Tessin's original scheme for a great square across Norrbro from the Royal Palace had not materialized. When Gustavus III commissioned the Opera House, it was placed on the east side of Tessin's proposed square. It was destroyed in 1891 and replaced by the present Royal Opera House, but when built it provided a strong element of the grand effect that Tessin had intended. There was a rusticated ground story, with wall arches over the windows as well as over the central triple entrance, then a Corinthian order rising through two stories, with the three central bays projecting so that the columns were free-standing. An attic story gave the final emphasis to the central portion.

Adelcrantz was able to design a freestanding building, for which he seems to have de-

rived inspiration from Jacques-Germain Soufflot's theater at Lyons of 1754, the plan of this having been published in 1774.[80] Soufflot's theater, the first to be freestanding in France, was planned with the then popular truncated ellipse for the auditorium, a deep stage, a grand foyer and staircases, and auxiliary room for spectators and performers. Adelcrantz adopted these, but because of site restrictions he placed the axis of the auditorium and stage north-south, with his grand entrance on the east, facing the square. He included a main foyer and also a royal foyer and a royal box at the center of the first of four tiers of boxes and galleries. The interior was finished in the French classic taste, much of the design being furnished by Jean Baptiste Masreliez.

One other note of grandeur that Tessin had not envisaged was the equestrian statue of Gustavus II Adolf that the French sculptor Pierre Hubert L'Archevêque was commissioned in 1755 to prepare for the square before the Opera House was built. It was placed facing across Norrbro toward the Royal Palace, where the stairs to the north entrance are faced with a triumphal arch motif. This may have been in response to the statue of Frederik V, just commissioned in Copenhagen. It is, however, interesting to observe that instead of the state-church symbolism of the Frederiksstad scheme, in Stockholm a national hero rather than the reigning monarch was glorified and the symbolism was purely secular.

Two special cases of town planning will close this chapter. A print by Meno Haas of 1780 gives a bird's-eye view of Christiansfeld, a Moravian settlement founded in 1772 (figure 4.69).[81] The "Herrnhutter," as they were called from the town of Herrnhut in Saxony given to their sect by Count Zinzendorf, practiced piety, good works, and celibacy, and laid out their town in orderly parallel streets with the help

66

67

of the Bohemian architect J. C. Arndt. Separate houses for the brothers and the sisters, a guest house, and a plain wooden church were the principal buildings. In granting the new settlers their permission, Christian VII had some hopes that their industries would be an economic asset, and to some extent the brotherhood earned a reputation for high quality of work. The religious fervor of the early years eventually died out, however, and in 1970 Christiansfeld became an ordinary municipality.

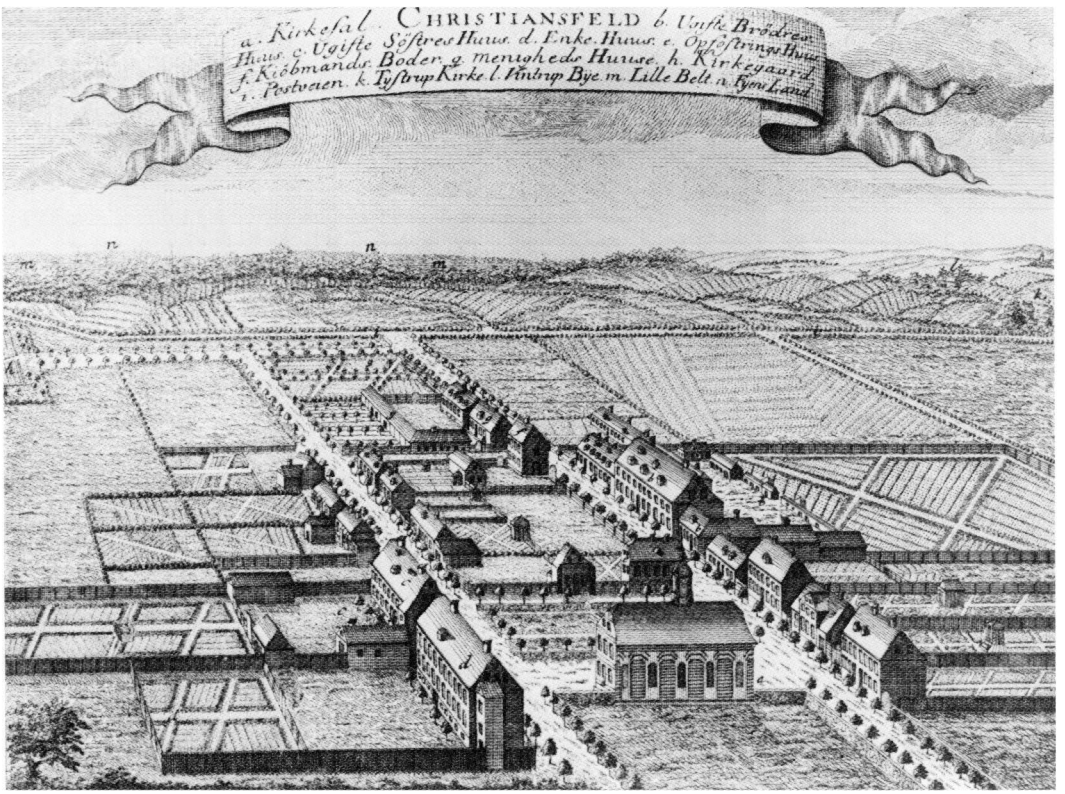
Finally, while we have concentrated upon the major stylistic events of the seventeenth and eighteenth centuries, there were strong forces at work that were to bring great changes in structural technology and attitudes of taste in the nineteenth century. In England the smelting of iron by coke had been developed in the 1740s, and by the end of the century steam power was being used in industrial production. The factory, as distinct from the individual workshop, was starting into prominence as a new building type, with the accompanying need for worker housing. Although forges, sawmills, glassworks, etc., were certainly not new, the iron-working estate at Fagervik in Finland was a prophetic microcosm of the "company town" (figure 4.70).[82] Water cascading into a ravine from the lake provided power for the works, a church was built in 1737, and the owner's house newly built in 1773. A street of plain wooden houses for workers completed the group, which still has the quiet rural character that the coming industrial cities could never attain.

68

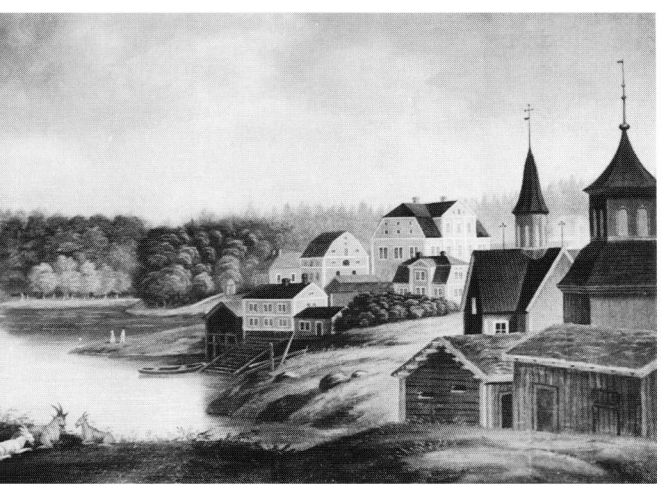
4.68 **Stockholm. Opera House. C. F. Adelcrantz. 1775–1782. (Stockholm, City Museum.)**

4.69 **Christiansfeld, Jutland. Engraving by Meno Haas, 1780. (Copenhagen, National Museum.)**

4.70 **Fagervik. Painting after drawing by Z. Topelius. (Helsinki, National Museum of Finland.)**



69



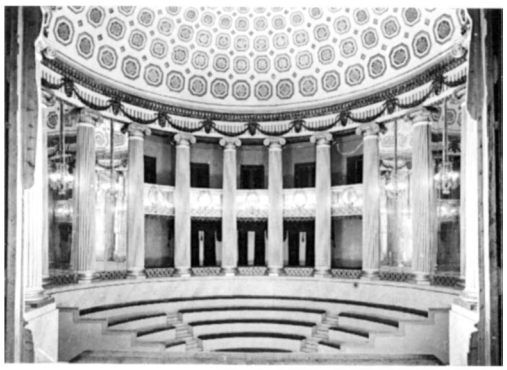
70

5 *Scandinavian Neoclassicism*

In the second half of the eighteenth century the vocabulary of the classical orders was used in a more sober manner than under the Baroque and Rococo tastes, largely from the impact of French classicism on the Academy in Copenhagen. At the end of the century there was another moment of reinterpretation of classical motifs. Its most eloquent Scandinavian expressions were made in Sweden, and there were similar expressions in England and America.[1] What in England is called the "Adamesque" and in America the "Federal" has been termed the "Gustavian" style in Sweden because of the strong support of the arts by Gustavus III, who reigned from 1771 to 1792.[2]

The late Gustavian period is generally dated from 1784, when Gustavus III returned to Sweden after a journey to Italy. He had been to Rome in company with the sculptor Johan Tobias Sergel, even climbing Mount Vesuvius and visiting the Forum in Rome with one of the first in Sweden to undertake archaeological investigations, Carl Frederik Fredenheim.[3]

Even before this journey, Gustavus III had called a French troupe of players to his court,



1

and he had already had a theater built at Gripsholm Castle by Erik Palmstedt.[4] The place chosen was the upper story of the southeast tower. Palmstedt's first solution was to put both stage and seating within the circle, but in 1781 this was all enlarged to the present arrangement (figure 5.1).[5] The seats are set in a semicircle, with access stairs and corridors in the thick wall of the tower. Ionic columns and engaged columns encircle the auditorium, two tiers of boxes between the columns at the back. A further remodeling in 1786 may have been inspired by *Il Teatro d'Ercolana,* the second printing of which Piranesi dedicated to Gustavus III in 1783.[6] The Gripsholm theater is therefore altogether different from those at Drottningholm and Christiansborg and is an early attempt to work in the full classical manner.

After his journey to Italy Gustavus III was all the more enthusiastic about classical antiquity. With his and others' encouragement, several architects and interior designers produced distinguished buildings in the Gustavian style. These buildings are marked by reserve and attempts at "correct" use of the orders without and delicate interpretation of Roman and Pompeiian motifs within.

One of the first major projects was the Botanicum at Uppsala (figure 5.2).[7] A Botanic Garden had been founded at the University of Uppsala in 1657, and thanks to the efforts of the Swedish botanist Carl Linnaeus was given fresh impetus in the mid-eighteenth century. He had the patronage of his friend Carl Hårleman, who designed the Orangery c. 1745.[8] Toward the end of his life activity in the garden declined, and then in 1786 his pupil Carl Peter Thunberg as Professor of Botany moved the Botanic Garden closer to the Castle. The Swedish architect Olof Tempelman prepared a design for the institute building, a design that was altered by the French architect Louis Jean Desprez.[9] The result was a building that has in common with Thomas Jefferson's nearly contemporary Capital at Richmond, Virginia, the problem of putting a late eighteenth-century secular activity into a Roman temple. The walls of the rectangular institute building are pierced with windows that could not have been used on either a Greek or a Roman temple, but the façade has a Doric portico in valiant imitation of the Parthenon.

Far more ambitious was Desprez's project for a new palace just outside Stockholm at the

2

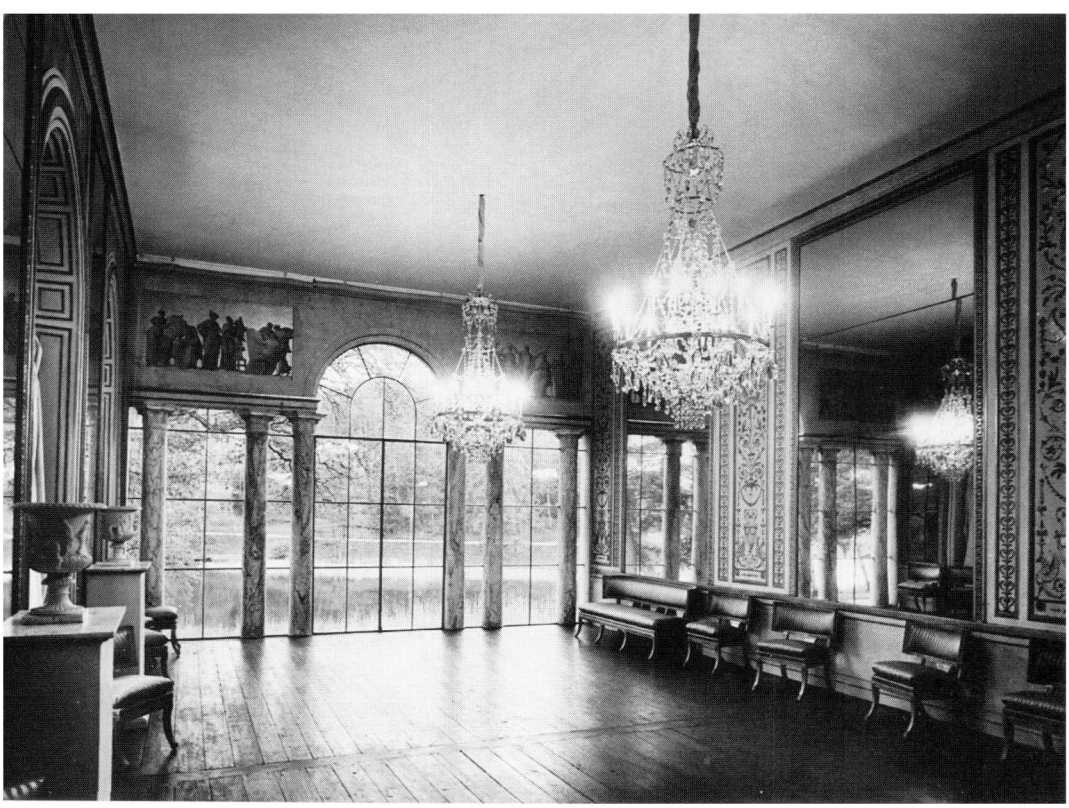
royal estate of Haga.[10] A rotunda, colonnades, temple fronts, and statues in niches were all intended in the design of 1791, but after the death of the king in 1792 the idea was abandoned. What was accomplished at Haga, however, was the pavilion. Tempelman enlarged an existing manor house, adding wings but keeping the wall surfaces uncluttered and the roof low behind a balustrade. This near severity does not mark the interior, where the French designer Louis Masreliez adorned the principal rooms with light-hearted paintings in the Pompeiian manner (figure 5.3).

Among the many other projects that Desprez proposed while in Sweden, not all of which were carried out, we may cite one of his church designs, that for the church at Tavastehus, now Hämeenlinna, in Finland, built 1795–1798 (figure 5.4).[11] As we see it today, it has

5.1 **Gripsholm. Theater. E. Palmstedt. 1781. Interior. (Drottningholm, Theater Museum.)**

5.2 **Uppsala. Botanicum. O. Tempelman and L. J. Desprez. 1788. (Stockholm, Antikvarisk-Topografiska Arkivet. Photo: Sigurd Curman.)**

5.3 **Haga, Uppland. Pavilion. O. Tempelman. c. 1793. Salon. (Stockholm, Royal Palace Collections.)**



been enlarged by the wings projecting from the central rotunda and the bell tower of 1837, but the basic idea is still a little Pantheon. Much simplified, using Doric columns in the porch rather than a full colonnade, the church was an early foray of Neoclassicism into Finland. The major invasion was to come later, and from another direction.

Another kind of building that was to become a concern for architects in the nineteenth century was the school. A prominent example from the late eighteenth century is the Gymnasium at Härnösand in Västernorrland, 1785–1791 (figure 5.5).[12] In the capital city of the province this turned out to be more complicated than simply an educational institution. Instead of having masters' lodgings in the same building with the classrooms, the teachers were lodged elsewhere, and the second story had a hall for the magistrates' court. Perhaps this led to the later conversion of the building to the town hall. The first plans were by the Swedish architect Per Hagmansson, and then there were modifications by Tempelman, who was responsible for the pillared porch. Once more an essentially domestic solution was found for the exterior. The Gymnasium could easily have been taken for a Gustavian manor house.

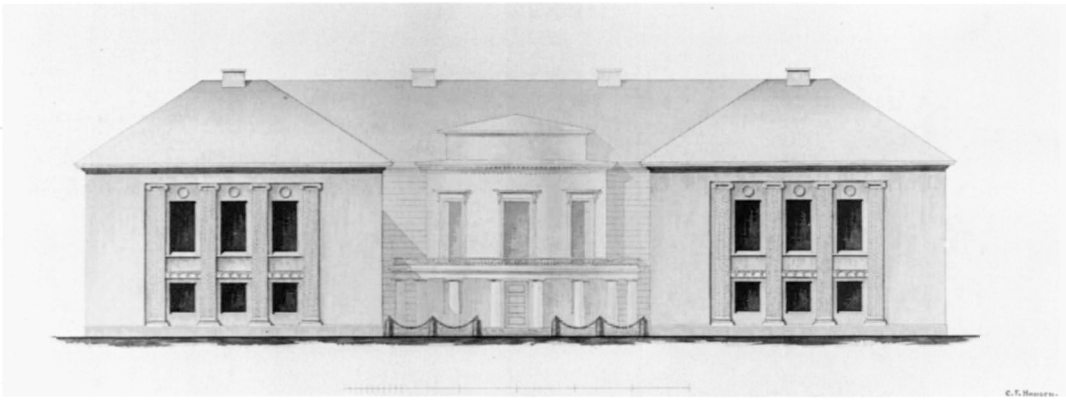
Gustavus III's enthusiasm for the antique therefore helped to stimulate some pioneering efforts toward incorporating classical ideas in contemporary design among architects active in Sweden in the 1780s and 1790s. An era more archaeologically inclined followed in the early years of the nineteenth century. This was the first of two such episodes in Scandinavian architecture, the second to follow a century later, when the principles of antiquity would be studied and interpreted in yet a different manner. In the first, forces quite apart from changing taste precipitated new opportunities in Denmark, Finland, and Norway.

5.4 **Hämeenlinna. Church. L. J. Desprez. 1795–1798. (Helsinki, Museum of Finnish Architecture. Photo: A. Salokorpi.)**

5.5 **Härnösand, Västernorrland. Gymnasium. P. Hagmansson and O. Tempelman. 1785–1791. (Stockholm, Antikvarisk-Topografiska Arkivet.)**

4

5



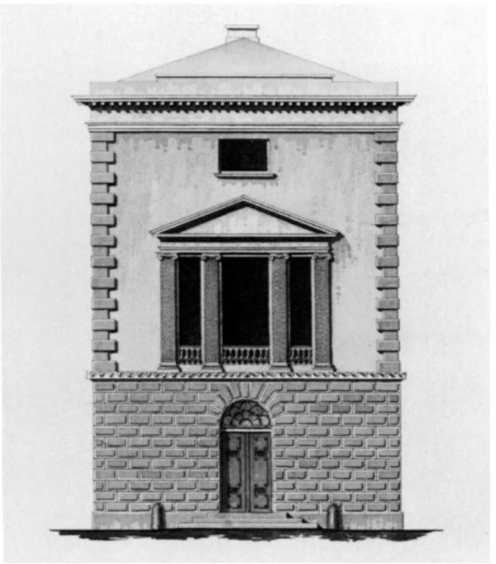
6

As Desprez and Tempelman had provided leadership in Sweden, Christian Frederik Hansen became the leader of Danish Neoclassicism.[13] His principal contributions were not so much the result of royal enthusiasm for a particular artistic style as of two great catastrophes in Copenhagen. He received his training in the Academy there as a pupil of Harsdorff, winning the gold medal in 1779. This award obliged him to undertake a student journey abroad, which he did late in 1782, returning in 1784. Meantime he had been appointed inspector of buildings in Holstein, where he went to begin practice in the Danish commercial town of Altona, outside Hamburg.

For the wealthy merchants he designed manors and country houses, such as Perdol, built 1788–1790 (figure 5.6).[14] The architect's drawing shows the garden façade. The round salon projected directly opposite the central entrance to the main block. From this salon corridors led to the wings and were continued along the courtyard sides, as at Clausholm. Wider pavilions at either end gave a sense of enclosure to the courtyard and made a frame for the circular salon as seen on axis. Although no longer standing, the building was an important landmark in Hansen's approach to planning and treatment of surface.

Hansen's work was to be characterized by the elements seen in the drawing for Perdol. He chose simple blocks, in this case played off against cylindrical forms, much in the manner of Ledoux. The plain wall surfaces provided a backdrop for the Ionic pilasters framing the triple windows of the pavilions. The motif was stated in a different way on the salon, with its low colonnade at the ground level and three windows above. Details were finely drawn and firmly contained. The treatment of light and shade on the drawing suggests that the salon received reflected light from the wings, and it should be compared to Eckersberg's treatment of light on the pillars of Frederik's Church. It is interesting to see how even in an architectural drawing the study of light to be so splendidly exploited by the Danish Neoclassical painters was already beginning.

Hansen's own house, which he built probably in 1792, is on Palmaillen, a long parkway lined with town houses that takes its name from the game "palla-a-maglio" (figure 5.7).[15] He built a compact three-story house with a rusticated lower portion, then a temple-front to mark the principal salon above. The staircase is circular, while in some of his other houses it is oval.

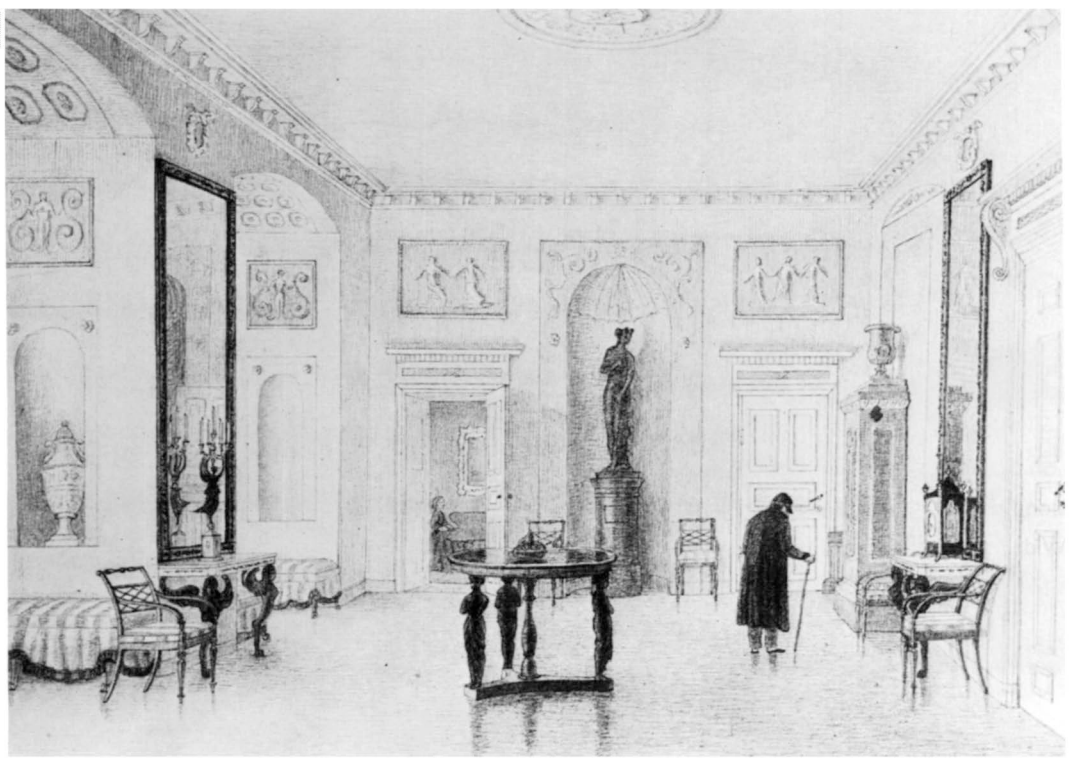


7

5.6 **Perdol, Holstein. C. F. Hansen. 1798. Drawing by C. F. Hansen. (Copenhagen, Academy of Art Library.)**

5.7 **Altona, Holstein. Hansen House. C. F. Hansen. c. 1792. Drawing by C. F. Hansen. (Copenhagen, Academy of Art Library.)**

5.8 **Altona, Holstein. Baur House. C. F. Hansen. 1803–1815. Drawing by A. Meldahl. (Copenhagen, Academy of Art Library.)**



8

9

10

For the interiors a richer finish was designed, a particularly fine example being that of the large salon overlooking the garden at the Georg Fr. Baur house (figure 5.8).[16] The owner, a wealthy grocer, commissioned Hansen to build eleven large houses on land he had purchased, and fortunately his own was among those that survived the bombing of Hamburg harbor during World War II. These houses are lined close together at the edge of the street in traditional urban fashion, but there are gardens behind that give a more country air, particularly to those overlooking the harbor. The deep arches over the windows of the Baur salon are expressed by arches carried on the Ionic columns of the balcony above the garden. The decorative motifs of the salon are Hansen's version of the interpretation of the antique that we have seen in the Gustavian style of Desprez and Masreliez.

While Hansen was carrying out his assignment in Altona, two disastrous events took place in Copenhagen. On the night of February 26 in 1794 Christiansborg Palace went up in flames. It was not entirely finished, and the fire must have been a sad blow not only to the royal family and other residents but to the craftsmen who saw their work destroyed as well. As we have noted, the wings surrounding the Riding Ground were spared. Then in June 1795 another fire laid waste the center of the city, including the Town Hall. Harsdorff, still teaching in the Academy, was 59 years old. The royal family bought the Amalienborg palaces for temporary residence in 1794, and Harsdorff designed the colonnade linking those on Amaliegade (figure 5.9). He died in 1799, however, before much could be done to recover the loss of the largest buildings in the city, since replacement of houses and shops had to come first.

Hansen was called back to Copenhagen for work toward rebuilding Christiansborg. He also prepared designs for the "Råd-og-domhus," the new Town Hall and Law Courts, built 1805–1815 and now housing only the courts (figure 5.10).[17] The site of the old building was abandoned and the new building placed on the west side of Nytorv. The broad façade with its impressive portico of six Ionic columns gives no hint of the wings extending behind it. Hansen departed from the traditional turreted model for a town hall and built something more like a palace for the city. He planned the entrance block with flanking chambers, then a deep vestibule or waiting room with four Doric columns, and directly beyond the courtroom, with Corinthian columns and the magistrates' niche, for all the world like the apse of a Roman basilica. This last was undoubtedly intentional. Shortly after came the Arrestbygning, or prison, with a heavily rusticated lower level and connected to the main building by a heavy arch across the street, recalling Piranesi's *Carceri.* Hansen's leaning was to Roman rather than Greek antiquity, and perhaps this caused him to choose a dark reddish stucco for exterior finish. By the time he visited Rome much of the marble had been quarried away, leaving brick the dominant color. Whatever the reason, we can see that color was one of the significant

5.9 Copenhagen. Amaliegade Colonnade. C. F. Harsdorff. 1794.

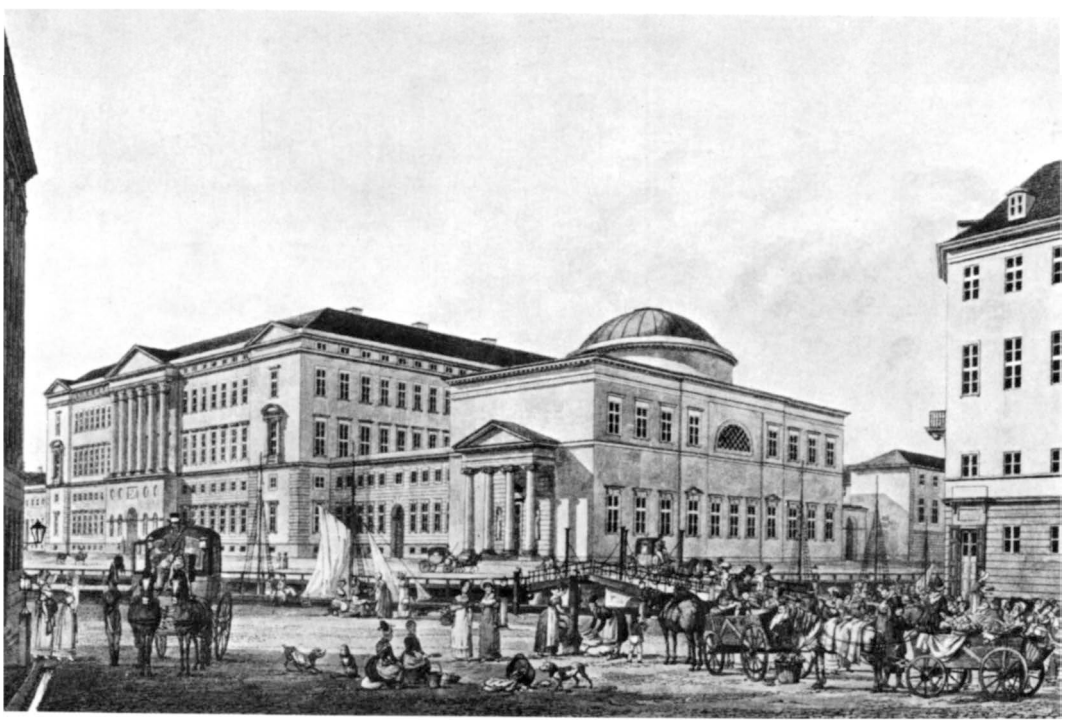
5.10 Copenhagen. Råd-og-domhus. C. F. Hansen. 1805–1815.

areas in which Hansen's classical cityscape differed from some others.

In 1803 a commission had been appointed for the Town Hall and Christiansborg Palace, and Hansen's proposal of 1800 for rebuilding the palace was basically accepted, leaving the two projects to be undertaken simultaneously.[18] Economy dictated that the walls remaining from the old palace should be used as much as possible, which meant that Hansen's palace was to some extent predetermined (figure 5.11). The many windows and elaborate surface ornaments of the old palace were no longer fashionable. Hansen simplified the main façade toward the Palace Square by closing openings in the two end projections, eliminating a columned portico for the main entrance, and reducing ornament to his characteristic discreet window moldings. The necessary expression of grandeur was achieved by the six-columned central temple-front rising through the two principal residence stories.

The royal apartments were located on the lower of these, with the king's suite in the east wing, the queen's in the north, and the state reception suite in the south. The west wing was not entirely rebuilt, the north and south wings being linked by a colonnade. The interiors were never fully completed, but they owed much to Hansen's awareness of French Neoclassical design, particularly through the works of Percier and Fontaine.[19] The Great Hall had a gallery supported by sixteen stately Corinthian columns and decorated with a frieze by the Danish sculptor Hermann Wilhelm Bissen (figure 5.12).

Construction proceeded slowly, the roof over the principal wing not being raised until 1809. The Napoleonic Wars had Europe in strife once more, bringing Denmark increasing

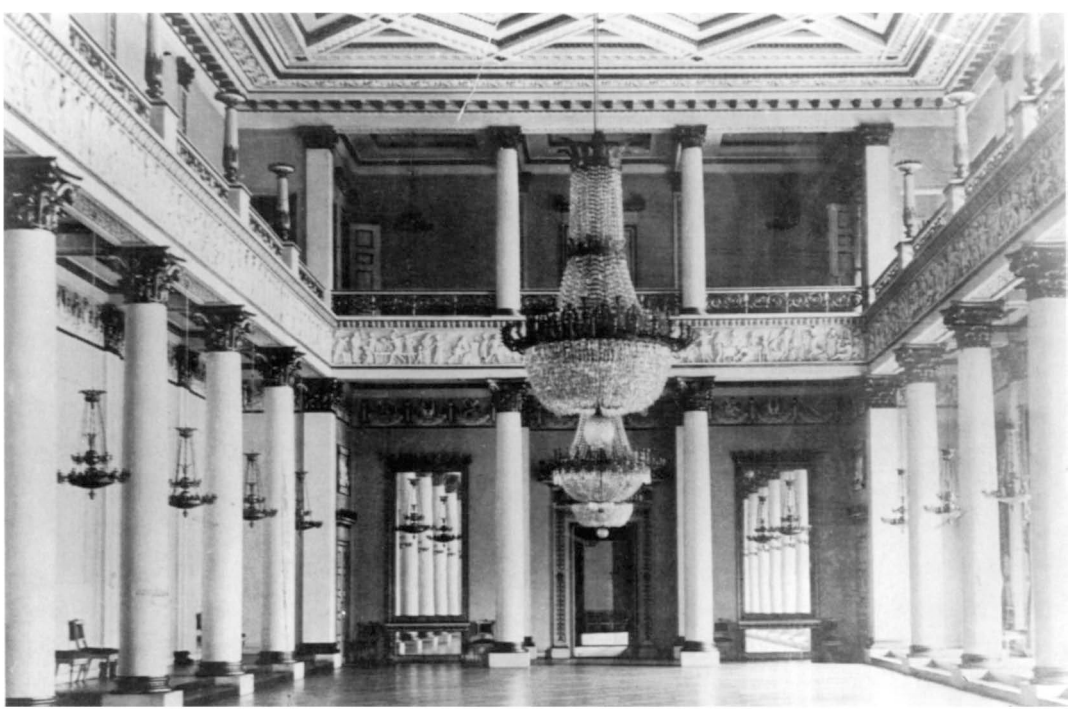


financial difficulties.[20] The palace that Lauritz de Thurah had built for Queen Sophie Magdalene at Hørsholm in 1744 was razed in 1811 for its materials.[21] By 1816 all wings were roofed, and the interiors of the royal apartments, at least, ready by 1828. As had been the case with its predecessor, however, the second Christiansborg was never entirely finished.

The Palace Chapel also had to be rebuilt, and Hansen made the same changes from Baroque to classical that he had on the palace (figure 5.13).[22] The east façade was closed up and given a four-column temple-front, while the other walls were also finished with smooth surfaces and restrained detail. Work was begun in 1810 and the dome roofed with copper in 1820. The interior was also given much simpler treatment of surface, with the galleries now minimized behind Corinthian pilasters and the Baroque ceiling replaced by a coffered dome on pendentives.

5.11 Copenhagen. Christiansborg II. C. F. Hansen. 1803–1828. Lithograph after H. F. G. Holm. (Copenhagen, Royal Library.)

5.12 Copenhagen. Christiansborg II. Great Hall. (Copenhagen, National Museum.)



12

13

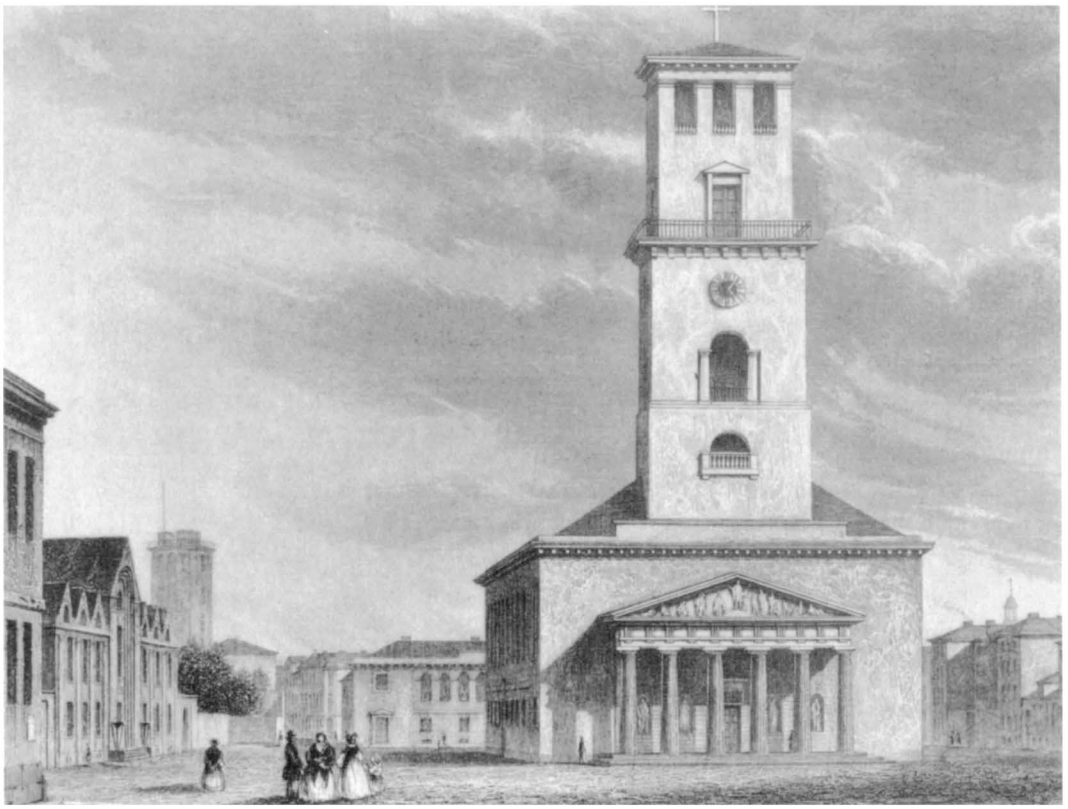
5.13 Copenhagen. Christiansborg II. Chapel. Interior. (Copenhagen, National Museum.)

5.14 Copenhagen. Vor Frue Kirke. C. F. Hansen. 1811–1829. Watercolor by P. Christensen. (Copenhagen, National Museum.)

5.15 Copenhagen. Thorvaldsen Museum. M. G. Bindesbøll. 1838.

In the meantime Copenhagen had suffered another catastrophe. Three nights of bombardment by the British in September 1807 had left much of the center city, including Vor Frue Kirke, in ruins. To Hansen fell yet another restoration, for which he began plans in 1808 (figure 5.14).[23] Construction began in 1811, and the new church was dedicated in 1829. Although built on the ruins of J. C. Krieger's church, reminder of the latter is in the austere outer walls, as is the case with the Palace Chapel. Chevet buttresses gave way to the two cylinders and dome with which Hansen built the new apse, another expression of the bold massing that he liked so much. On the east the temple-front portico is set off by the plain east wall and the simple tower rising above it. The interior is one of Hansen's strongest expressions of Roman grandeur. Rectangular piers with niches for statutes of the Apostles line the nave at the ground level, with an Ionic colonnade in the gallery. The length of the church suggested a coffered barrel vault for the nave rather than a dome, and the apse, probably designed for Thorvaldsen's statue of Christ, is lit from its dome. The effect is serene and majestic, particularly when light comes in from the south.

We may add here notice of a somewhat later building, the museum built for the works and collections of Thorvaldsen by Michael Gottlieb Bindesbøll after the return of the sculptor from Rome in 1838 (figure 5.15).[24] After several grand proposals had been made for this important new national museum, Frederik VI granted the royal carriage house, just west of the palace chapel, for the purpose. Bindesbøll added a portico on the front and an enclosing wing on the back and chose the Ionic order as fitting for Thorvaldsen's classically inspired sculptures. The sculptor's own tomb is in the center of the courtyard, and after his death in



14

15

1844 a frieze depicting his triumphal arrival in Copenhagen was painted on the exterior by Jørgen Sonne. The building is an early and striking example of a museum devoted to the work of a single artist, and it became an important source of inspiration in Denmark's second classical period.

In this brief review of what enthusiasm for the antique meant in Sweden and Denmark we have found scattered projects in and around Stockholm and several important rebuilding projects in Copenhagen. Although the Gustavian style, especially for interiors, and Hansen's great official style each had its own distinction, neither was exercised in the service of major urban complexes. For this kind of undertaking we must turn to Finland and Norway.

While Hansen was providing a badly damaged Copenhagen with palace, church, and town hall, there was a whole new set of circumstances in the old city of Helsinki. At the instigation of Napoleon, Russia attacked Finland in February 1808, and the "Gibraltar of the North," Suomenlinna, fell ignominiously after firing only a few shots. By the Treaty of Hamina, September 17, 1809, Finland became a Grand Duchy of the Russian Empire.[25]

Czar Alexander I made an initial good impression by appointing a national legislature and declaring a Governor-General to represent him in Finland. He and his successors were, however, disinclined to see this body in action and refused to exercise their sole right to assemble it until 1863. Alexander I also moved the capital to Helsinki in 1812. The town's population was then only about 4,000, and it had suffered badly from a fire in 1808. The occasion was seized to make a new city as an expression of the new regime.

Helsinki had been founded by Gustavus Vasa in 1550 to be the maritime and commercial center of the Gulf of Finland. The first site at what is now Vanhakaupunki, three miles east, is marked by foundations of the church in a little park. The harbor facilities here proved unsatisfactory, and the present site was chosen in 1640. Never large, the town was plagued by fire and famine, and it was twice occupied by the Russians, in 1721 and in 1742. To create a major city from this unpromising start was a significant achievement.

5.16 Helsinki. Senate House. C. L. Engel. Begun 1818.

5.17 Helsinki. University. C. L. Engel. 1828–1832.

A reconstruction committee was appointed, headed by Johan Albert Ehrenström, who developed the plan adopted in 1817. The approach to the inner harbor is past Suomenlinna and a number of islands, with one of the principal hills rising to the west and another to the north. Ehrenström planned a new church to dominate the northern height, with a great square before it and civic buildings on either side. In the more level portion between the northern and western heights he laid out the Esplanade, linking the harbor with the old north-south road. The architect he and the committee chose to carry out these plans was Carl Ludwig Engel.[26]

Engel was born in Germany and was a student together with Karl Friedrich Schinkel in Berlin. He also studied in Italy. In 1809 he went to work in Reval in Estonia and later worked in Turku where he met Ehrenström in 1814. His first large civic building in Helsinki was the Senate House, begun in 1818 (figure 5.16).[27] It was

16

17

18

19

planned as a range of four wings around a central courtyard, and it was not entirely completed until after Engel's death in 1840. The east wing facing the square set the tone of monumentality and authority that Ehrenström's plan demanded. It is four stories high, the two lower stories rusticated, the arched openings of the second level forming a base for the square-headed openings and the Corinthian order above. The central pavilion is a projecting portico of six columns, rising through the third and fourth stories, with the Throne Room (now the Senate Chamber) directly behind it on the third level. Four two-story pilasters at either end of this façade enclose the whole composition, which may reflect Hansen's Christiansborg II, begun fifteen years earlier. A notable feature of the interior is the great staircase, an ascending series of brick vaults supported by fluted Doric columns.

While the Senate House was under construction a disastrous fire occurred in Turku, providing an excuse to move the University, founded in 1640, closer to the new administration in Helsinki. Ehrenström's committee had been disbanded in 1825, leaving Engel more directly responsible to the Secretary of State in St. Petersburg and thus in a more independent position. His proposal to have the new University building in Helsinki complement rather than imitate the Senate House was fortunately accepted (figure 5.17).[28] Again we see a long four-story building, the two lower stories rusticated, a central two-story portico, and three pilastered bays at either end. The differences are subtle: square-headed openings at the lower levels, arched panels above the windows of the third, and an Ionic rather than Corinthian portico. Behind the portico rises another of Engel's great staircases, and behind this the Festival Hall, in semicircular theater form, with a giant order of fluted Corinthian columns rising before the gallery at the back. This room was badly damaged by bombing in World War II and has been enlarged and altered in reconstruction.

5.18 Helsinki. Old Church. C. L. Engel. 1826. (Helsinki, National Museum of Finland.)

5.19 Helsinki. Church of St. Nicholas. C. L. Engel. Begun 1826.

In 1824 Engel succeeded the Italian-born but Swedish-trained Carlo Francesco Bassi as Controller of Public Works, and through his direction, if not by his actual personal designs, a vigorous period of Neoclassical construction ensued, bringing churches, civic buildings, and houses to numerous towns in Finland. If some examples were less sophisticated than others, nevertheless many communities received a prompt architectural expression of the imperial regime. At Hamina, for example, Engel's church of 1837 is a round building with a dome, set in a walled enclosure.[29] Engel also built the Old Church in Helsinki in 1826, the site chosen being on Lönnrotinkatu, which runs diagonally southwest from the end of the Esplanade. The modest wooden church, embellished with pilasters, is in a park in a residential district and lays no claim to a grand setting (figure 5.18).[30]

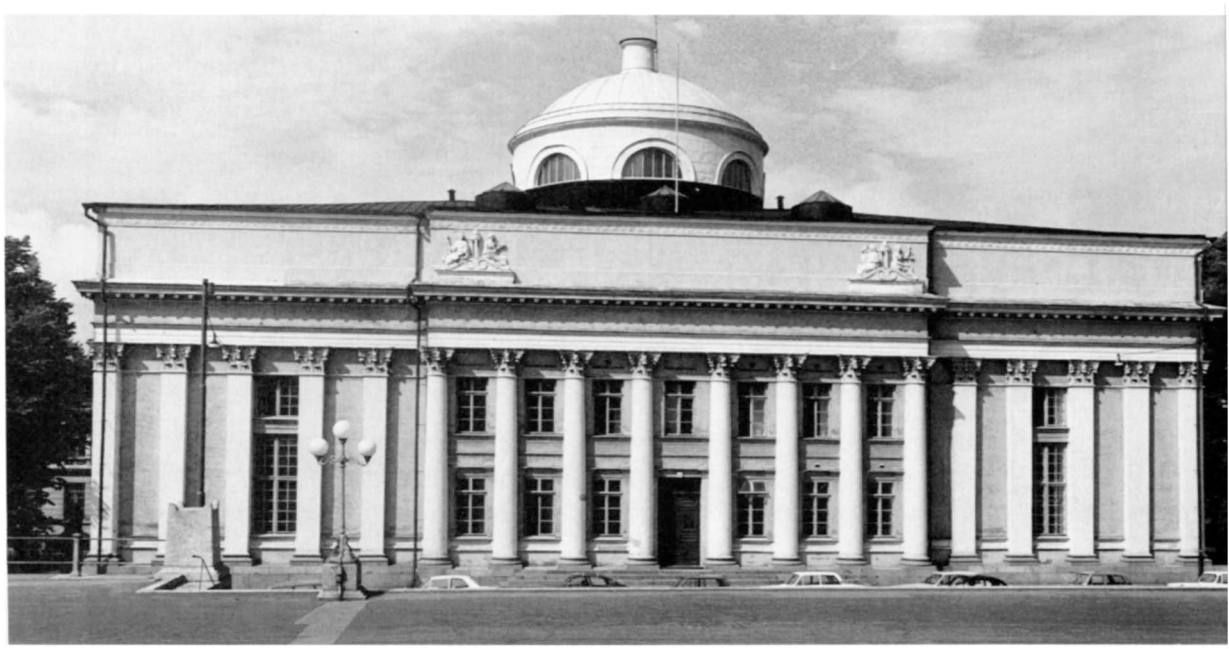
Engel's most spectacular contribution to the new Helsinki was the church of St. Nicholas, raised to cathedral status in 1959 (figure 5.19).[31] The Senate House and University both

20

had essentially palace façades, a solution to designing for large public buildings similar to that adopted by Hansen for the Råd-og-domhus in Copenhagen. Engel's opportunity was different, and instead of having to set his buildings into a crowded city he was able to place them in a far more ceremonial manner, flanking and defining a large open square. Now the civic pedestal was ready for a crowning monument.

Originally yellow, it now rises to a new white climax above the yellow buildings on either side below. The plan is a Greek cross, with the principal liturgical axis east-west and the main entrance on the west. The enormous stair now leading up from the north side of the square replaced Engel's colonnaded Main Guard Building (begun in 1818) in the 1840s. The four strong Corinthian porticoes stand before the four apses forming the arms of the cross, in which the galleries are supported on Ionic columns (figure 5.20).

Engel's last great secular building was the University Library, begun in 1833 (figure



21

5.21).[32] It is across the street from the Cathedral, and its two-story order of engaged Corinthian columns and pilasters reflects the exterior of the Cathedral, though with an attic story rather than pediments. The reading rooms on the north and south of the domed central hall may reflect the colonnaded Academy Library in St. Petersburg.[33]

The third Scandinavian city to experience change and development after the Napoleonic Wars was Oslo.[34] By the Treaty of Kiel in January 1814 Frederik VI of Denmark was forced to cede Norway to Sweden. Although the Norwegian attempt to elect the people's own king was unsuccessful, the constitution adopted May 17, 1814, was agreed upon by Sweden, and it is in fact still the basis of Norway's political structure. Charles XIII of Sweden died in 1818 and was succeeded by Karl XIV Johan, who as Napoleon's marshal Jean Bernadotte had been elected heir in 1810. Whereas the new king sponsored a number of building projects in Sweden, the most dramatic impact on

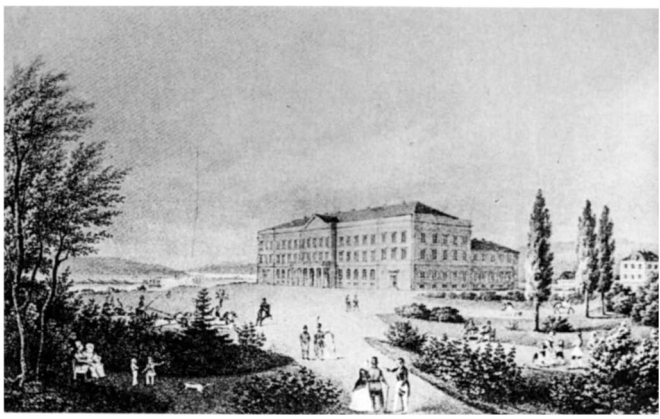
5.20 **Helsinki. Church of St. Nicholas. Interior. (Helsinki, National Museum of Finland. Photo: Istvan Rácz.)**

5.21 **Helsinki. University Library. C. L. Engel. 1833–1844.**

5.22 **Ulefoss, Telemark. C. Collett. 1802–1807. (Oslo, Riksantikvaren. Photo: O. Vaering.)**

any individual city during his reign came to Oslo.

Classical motifs were already in use in Norway. At Ulefoss in Telemark a manor house had been built in 1802–1807 on the old estate by Christian Collett.[35] On the main façade a two-story central block with portico projects at the ground level, with pilasters between the windows of the second level, the whole section crowned by a dome. One-story extensions on either side of the central block are embellished with much shallower Tuscan pilasters and entablature. Behind these extensions two wings are added at the back of the house, also colonnaded (figure 5.22). The overall scheme is like a Palladian villa, but the clear-cut geometrical forms and the severe Doric elements belong to the new taste for the antique.

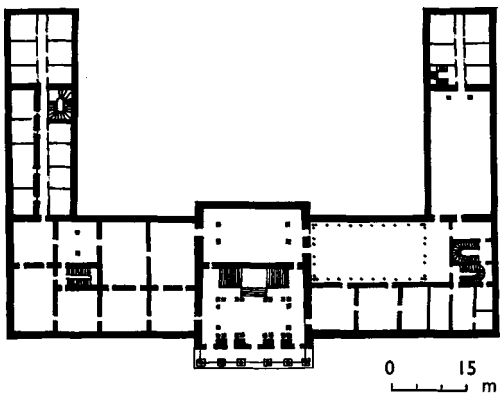


23

The population of Oslo was then well over 13,000, more than twice the size of Helsinki. Akershus Castle dominated the harbor from its commanding height, and there was already the Cathedral beside the market place. Norway as a separate country under the Swedish crown was in a different situation from Finland, which had merely been created a Grand Duchy. As Crown Prince, Karl Johan chose the site for the necessary Royal Palace on the northern height. The palace would thus tower over the city, balancing the fortress to the southeast (figure 5.23).[36]

His choice was applauded by the architect Hans D. F. Linstow, who began work on the palace in 1823. The original plan was for a two-storied H-shaped building, with a cross-gabled roof and temple fronts in the center. In addition there were to be four pavilions connected by colonnades. This proved to be much too costly, and the resulting building has a main block with wings to the north (figure 5.24). It has three principal stories, with basement and attic. On the south facade there is a portico with arcaded ground story and six-columned Ionic temple-front rising through two stories above. The columns and pediments were not added until 1848, and they are therefore not visible in the lithograph of 1840.

While the palace was under construction Linstow traveled to Denmark and Germany in 1836–1837. It was then time to finish the interiors, for which the funds were ready. He was much impressed with what he saw in Germany, especially the work of Schinkel, who was then in Berlin. On his return to Oslo, Linstow had as an assistant the young German architect Heinrich Schirmer. The work of finishing the interiors was now carried forward with much stucco and polychrome in Schinkel's "Pompeiian" manner. Much was done by the theater painter P. C. F. Wergmann, the effect closer to the Gustavian style in Sweden than to the French Neoclassicism of Hansen (figure 5.25). To the latter, however, there may have been some debt in the Great Hall, which bears strong resemblance to the Great Hall at Christiansborg, finished in 1831, and which Linstow must have seen (figure 5.26).



24

5.23 Oslo. Royal Palace. H. D. F. Linstow. 1823–1848. Lithograph, c. 1840. (Oslo, City Museum.)

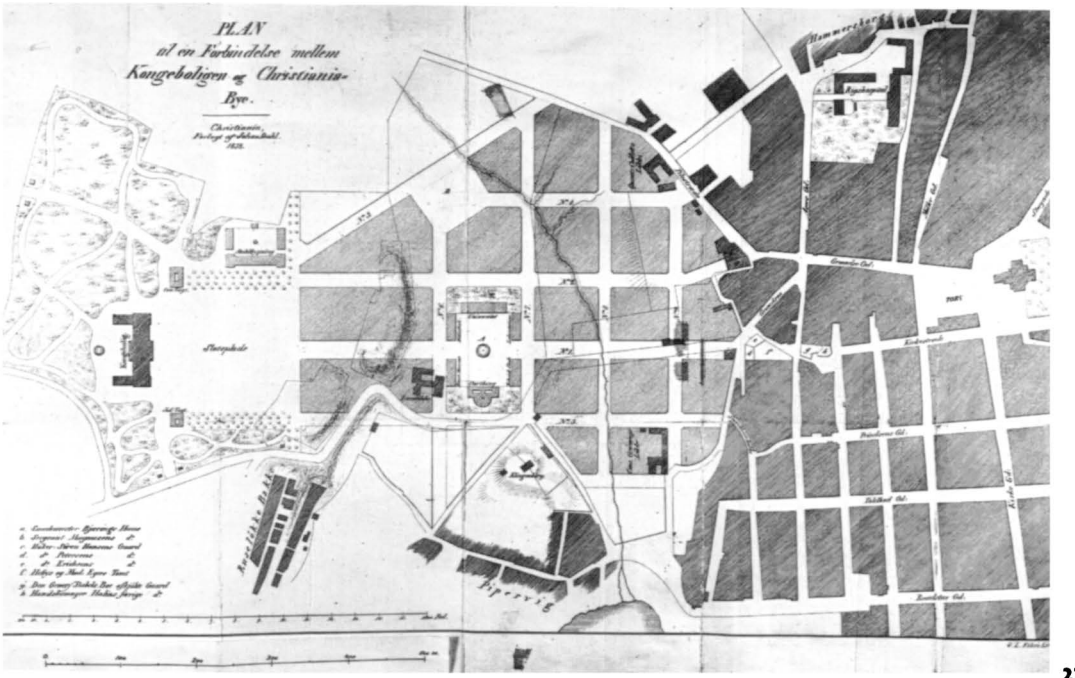
5.24 Oslo. Royal Palace. Plan. (After Kavli, *Norwegian Architecture*, p. 96.)

5.25 Oslo. Royal Palace. The Dining Salon. (Slottsforvaltningen RA/S-4224/1/U/L0001/0005; Slottet: Den store spisesal (The Dining Salon). Photograph by Teigens Fotoatelier.)

5.26 Oslo. Royal Palace. The Great Hall. (Slottsforvaltningen RA/5-4224/1/U/L0001/0002; Slottet: Den store festsal (The Great Hall). Photograph by Teigens Fotoatelier.)

25

26



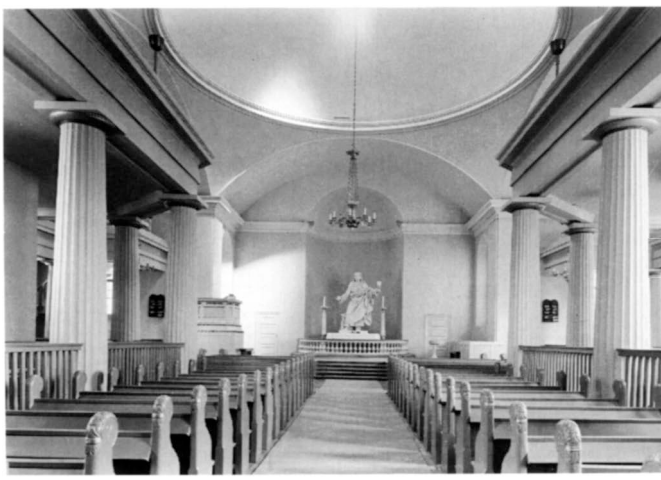
27

28

The site of the palace once chosen, in 1835 Linstow was ready with a grand plan for the city (figure 5.27).[37] He kept the land around the palace as a park covering the slopes and a great open space in front. Then down the hill toward the Cathedral he planned a boulevard, now Karl Johan Gate, with a plaza for a university at the foot of the hill and a site for a Parliament building farther south. He was not able to carry out all his ideas, but he certainly capitalized on the planning opportunity that palace builders in Copenhagen never had, and his basic scheme shapes the city still.

Linstow had a younger contemporary, Christian Henrik Grosch, who had also been born in Denmark and had studied at the Academy in Copenhagen.[38] He began teaching in the art school in Oslo in 1827 and became the state architect in 1828. His early works were in the Neoclassical tradition, probably the most severe being the Exchange of 1822–1828 (figure 5.28).[39] The clear Doric columns of its portico found another expression in the church that Grosch designed for Halden in Østfold in 1828.[40] The simple exterior surfaces and square tower recall Vor Frue Kirke in Copenhagen, which was being constructed when Grosch was a student there in 1820–1824. At Halden the aisles widen out to a transept, with a dome over the crossing, and there is a niche with a statue of Christ in the sanctuary (figure 5.29).

The most ambitious project that Grosch undertook was building for the University.[41] The first plans were drawn up in the late 1820s, and by 1840 the final scheme was adopted and construction begun. The conception was more extensive than that for the University in Helsinki, perhaps partly because a more spacious and level site was available in Oslo. Three buildings were built facing an open plaza on the north side of Karl Johan Gate (figure 5.30). On the west was placed a lecture



29

5.27 **Oslo. Plan by H. D. F. Linstow. 1835. (Oslo, Riksantikvaren.)**

5.28 **Oslo. Exchange. C. H. Grosch. 1826–1828.**

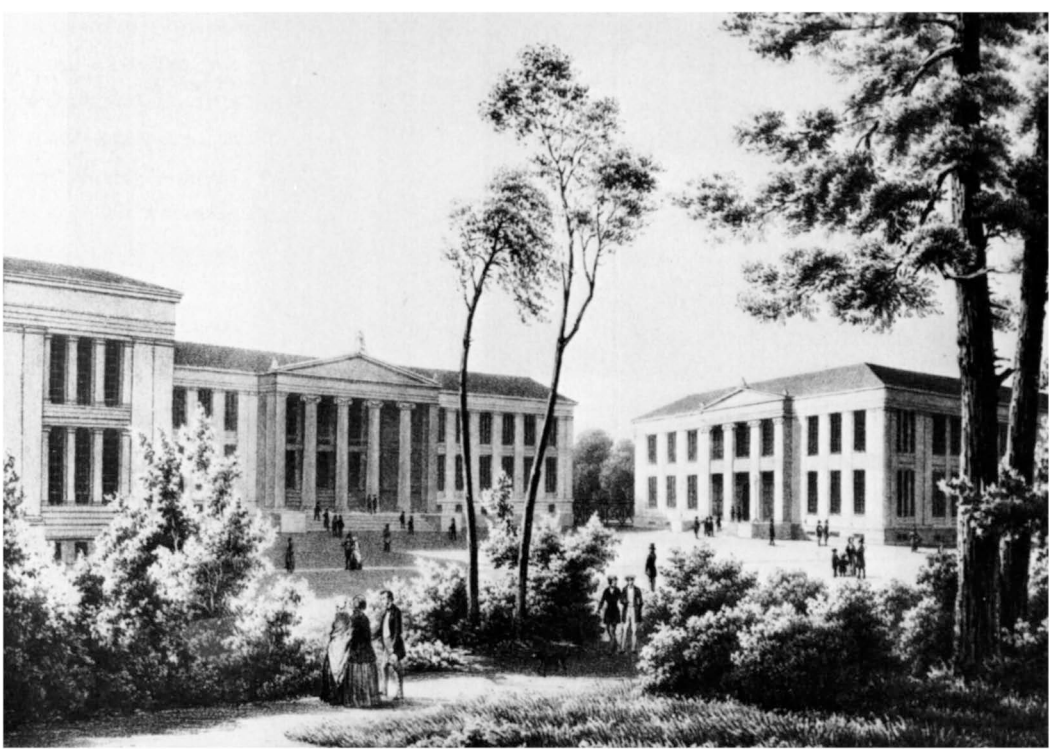
5.29 **Halden, Østfold. Immanuel Church. C. H. Grosch. 1828–1833. Interior. (Oslo, Riksantikvaren.)**

5.30 Oslo. University. C. H. Grosch. 1840–1852. Lithograph after drawing by J. Frich, c. 1850. (Oslo, Riksantikvaren.)

5.31 Stockholm. Skeppsholm Church. F. Blom. 1824–1842.

building, in the middle a museum/collections building together with an anatomical theater, and on the east a library to which was added a Festival Hall. In 1838 Grosch's original plans had been sent to Schinkel in Berlin, and the buildings as constructed bear some marks of his corrections and suggestions. The majestic vestibule and staircase are similar to Schinkel's vestibule for the Altes Museum in Berlin, begun in 1823. The Festival Hall, unlike that of the University of Helsinki, was not placed on axis with the principal entrance to the library building in which it is located. It is built like a theater, the decorations being supplied by Wergmann, although for all their grandeur of appearance they were carried out in relatively inexpensive materials.

Whereas Copenhagen, Helsinki, and Oslo all had major building and planning projects as a direct result of the Napoleonic Wars, Stock-

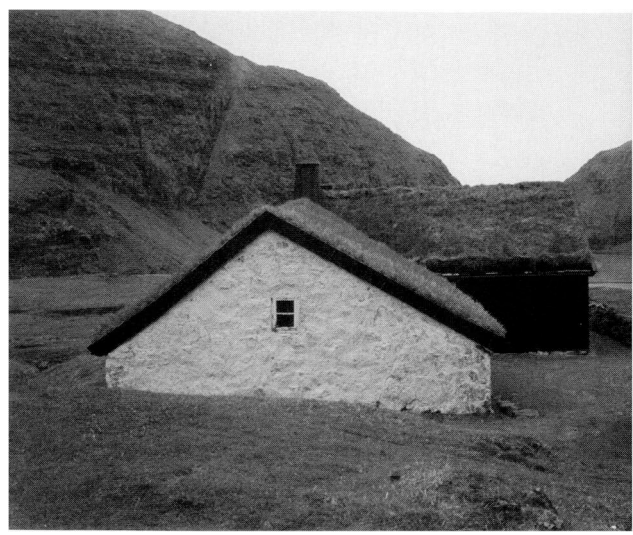


holm was not so much affected. Karl XIV Johan did indeed see to the construction of several military and administrative buildings in Stockholm and other cities, but no single architect seems to have dominated the period in Sweden.[42] For a design in the Neoclassical manner paralleling those we have been examining in other countries we may note one Swedish example by an architect who did not restrict himself to the antique for inspiration during his career.

In Stockholm Fredrik Blom designed the Skeppsholm Church, built 1824–1842 (figure 5.31).[43] This is a centralized building, octagonal on the exterior and circular on the interior, entered through porches and covered by a low dome. The present cupola is a later addition. On the interior an ambulatory is established by paired Ionic columns carrying a spacious arcade, reminiscent of Santa Costanza in Rome.

The post-Napoleonic period in Scandinavian architecture was not, however, given over solely to the Neoclassical. Blom was among the many Scandinavian architects who were exploring other possible sources of stylistic ideas. This was also a period of growing awareness of national heritage. We shall therefore turn our attention to the major traditions in vernacular architecture and then to some of the other eclectic styles.

31



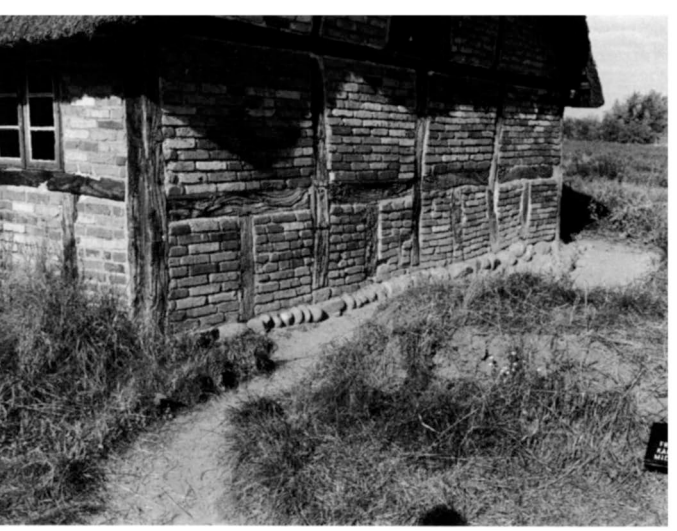
6 *Vernacular Architecture in Scandinavia*

With the years when Scandinavian architects were drawing upon antiquity and the Middle Ages for much inspiration, we approach the time when Nordic building traditions would also be important sources for designers. For the student of vernacular architecture, as the term has been devised in recent years, the five Scandinavian countries offer an astonishing variety of building types, materials, and methods of construction and decoration. Lest this richness become too bewildering, the examples chosen for this chapter will be organized in a generally northward direction, beginning with the half-timbered farm buildings of Denmark and southern Sweden, proceeding to the notched log buildings of northern Sweden, Norway, and Finland, and concluding with the stone and turf buildings of the Atlantic islands and Iceland. There will also be some discussion of brick used in farm and town buildings.

In most cases the examples chosen will also be those found in the principal open air museums of the five national capitals. This is partly because these buildings are more easily accessible for study than those like them still

6.1 Karup Heath, Jutland (Sorgenfri, Frilandsmuseet). Farmstead. c. 1850.

6.2 Lath and plaster. Drawing by Bjarne Stoklund. (Copenhagen, Dansk Historisk Faelles-forening.)



on their original and often remote sites. In addition, there has been nearly a century of investigation and care of these buildings, with the development of expertise in maintenance and interpretation that is fundamental to the study of vernacular architecture. We will therefore begin with a short review of these five museum parks.

The idea of an open air museum for buildings seems to have originated with Artur Hazelius, who began the collections of Swedish folk art in 1872 that led to the founding of the Nordic Museum in Stockholm in 1873. Although Skansen on Djurgården did not formally open until 1891, Hazelius had planned all along that there should be such a parklike setting for public visits to buildings brought there.[1] Beginning with seven or eight acres, the site expanded to seventy-five acres with 150 buildings by 1982.

In Copenhagen the motivation for the first efforts to found an open air museum was different. The Danish Folk Museum was founded by Bernhard Olsen in 1885, who had seen Swedish farmhouse interiors at the Paris Exhibition of 1878, arranged by Hazelius.[2] Olsen obtained a place in Kongens Have, the royal garden of Rosenborg Palace, in 1897 and found two buildings to place there: the dwelling house of the Halland farmstead and the loft house from Småland. These did not come from Denmark, but from areas where he felt the earliest building traditions were well preserved. The location being clearly unsuitable for any substantial development of an open air museum, land was purchased just north of Sorgenfri Castle near Lyngby, thirteen kilometers north of Copenhagen. Grown to about thirty-seven acres, Frilandsmuseet now includes about eighty buildings or groups of buildings.[3]

The third national capital in which an open air museum was founded is Oslo.[4] In 1867

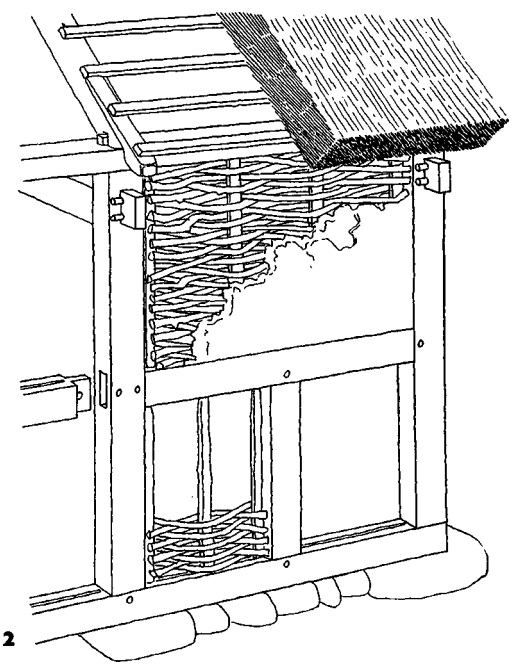
some old farm buildings were moved to a site near the city. Then in 1881 Oscar II had the stave church from Gol in Hallingdal and some farm buildings moved to a park site on his estate on Bygdøy, outside Oslo. The Norwegian Folk Museum opened here in 1902. As at Skansen in Stockholm, there is an "old town" section of houses and shops as well as the farm buildings, and there is also the building housing the major folk collections.

In 1909 about twenty-five acres were set aside on Seurasaari Island at Helsinki for a collection of the rural buildings of Finland.[5] It was founded by Axel Olai Heikel of the Finnish Archaeological Commission, who had hoped to include some buildings from related cultures, but this has not materialized.

There is a zoo at Skansen, but otherwise these four open air museums have a number of features in common. There are furnishings and explanatory materials in many of the buildings, some animals are present, some typical gardens have been developed, programs of folk music and dancing and festival occur, and there are restaurants and book shops. All are visited by thousands of people every year, some just to enjoy the parks, but many to see the examples of living and working quarters of people remote in time or place.

Finally, there is the more recent Árbaer Folk Museum on a former farm site, seven kilometers from Reykjavik in Iceland.[6] The original buildings include the house and barns, a smithy, and a small turf church. Houses have been brought in from other places, and while there are no railroads in Iceland, Iceland's only locomotive is displayed here.

We begin this survey with the half-timbered type of building, dominant in Denmark from the Middle Ages for farm and town buildings.[7] This is based on vertical posts set at the corners of the building and at intervals along the walls, forming a series of sections or bays. These posts may be connected at the top by horizontal plates running the length and width of the building and also across the breadth between the intermediate posts. Rafters for the roof may rest on the side plates. The wall areas may be subdivided by horizontal timbers between the posts and then filled in with brick (figure 6.1). Another possibility is to subdivide the wall spaces with vertical lath as a basis for entwining thin withies or wattles to support an outer covering of plaster, or daub (figure 6.2). Still another possibility is to fill the wall spaces with beach stones (figure 6.3). A variety of final effects may result according to whether the timbers and/or infill are left exposed, covered, or painted.



2

In rural building in Denmark there is also a variety of relationships between posts, horizontal members, and rafters, which constitute the elements of the building frame. The system of the fisherman's cottage from Agger in Jutland is sometimes called the "Friesian" type, since it is also to be found in the Friesian region of north Holland (figure 6.4).[8] Like the Iron Age longhouse, the main roof here is supported by a pair of longitudinal beams carried on two inner rows of posts. These posts are tied together with cross beams which are mortised through the posts and secured with pegs (figure 6.5). To the principal rafter is fastened a second shorter rafter that rests on the longitudinal beam carried on the outer wall posts. We have then what is also sometimes called a "head house," the inner row of posts being of a convenient low ceiling height. The pattern of the inner row of posts and the slight change in the slope of the outer aisles or "outshots" can be seen at the end of the farm building. At the opposite end it can be seen that the outshot was omitted on the south side of the house, making it possible to wall up between the inner row of posts and provide more window openings for the dwelling. There is as yet no chimney, smoke from the massive hearth escaping through a louver in the roof. The Agger cottage is a single long building housing the family and its livestock compactly under one roof against the weather of the North Sea coast.

Another major type of construction was the post house, in which posts in the center of the end walls rise to carry a ridge, the rafters here resting on the horizontal beams of the outer walls and on the ridge (figure 6.6). This type is found on Jutland, on the island of Funen, and on into parts of Halland and Blekinge in Sweden.[9] The example chosen here is the Lundager Farmstead from Funen, the dwelling house dated 1747 and the latest wing 1880

3

(figure 6.7).[10] A chimney now rises from the roof of the dwelling over the raised hearth below.[11] From the outside the farmstead appears somewhat closed, with few door or window openings. Over a period of years the four wings formed a courtyard house, another familiar type that was built in several materials in Denmark and Sweden. The dwelling room, scullery, best room, servants' room, stables for horses and sheep, cow barn, and threshing floor surround the court, a busy arena of farm and family life. C. W. Eckersberg caught the characteristic landscape in a drawing of 1817 (figure 6.8).

The thatched roofs covering these buildings were generally made of reeds or straw lashed to the purlins carried on the rafters. In a

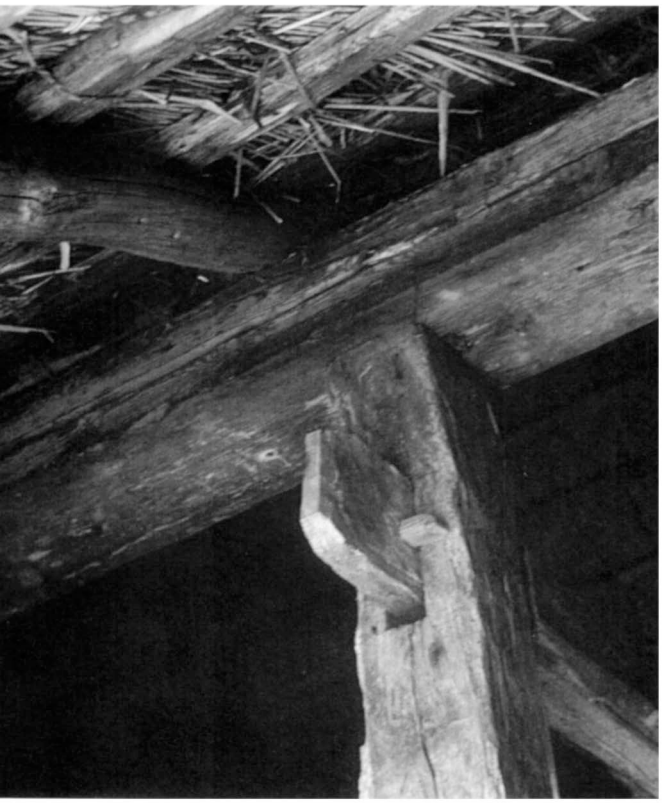
climate notable for strong winds, the "roof-trees," short pieces of wood pegged together and set along the ridge, were needed to hold down the top of the thatch (figure 6.9). We may recall the suggestion made for stabilizing thatched roofs with poles at the experimental Iron Age village at Lejre. In the illustration we can also see an alternative method of filling the gable ends, with vertical planks and batten strips. The end of the thatching is secured and protected by barge boards. An unusual material is seaweed, attached to the lowest laths in bundles, then piled up in layers and secured at the tops with turfs (figure 6.10). Another possibility is heather, like seaweed useful in regions where there is less straw available from cereal crops.[12]

In Skåne the half-timbered courtyard farm might also be found, such as the Ravlunda Farmstead formerly at Skansen in Stockholm (figure 6.11).[13] This too was built around a court with barns, stables, woodshed, and other

6.3 Agger, Jutland (Sorgenfri, Frilandsmuseet). Fisherman's cottage. 19th century.

6.4 Agger, Jutland (Sorgenfri, Frilandsmuseet). Fisherman's cottage.

4



5

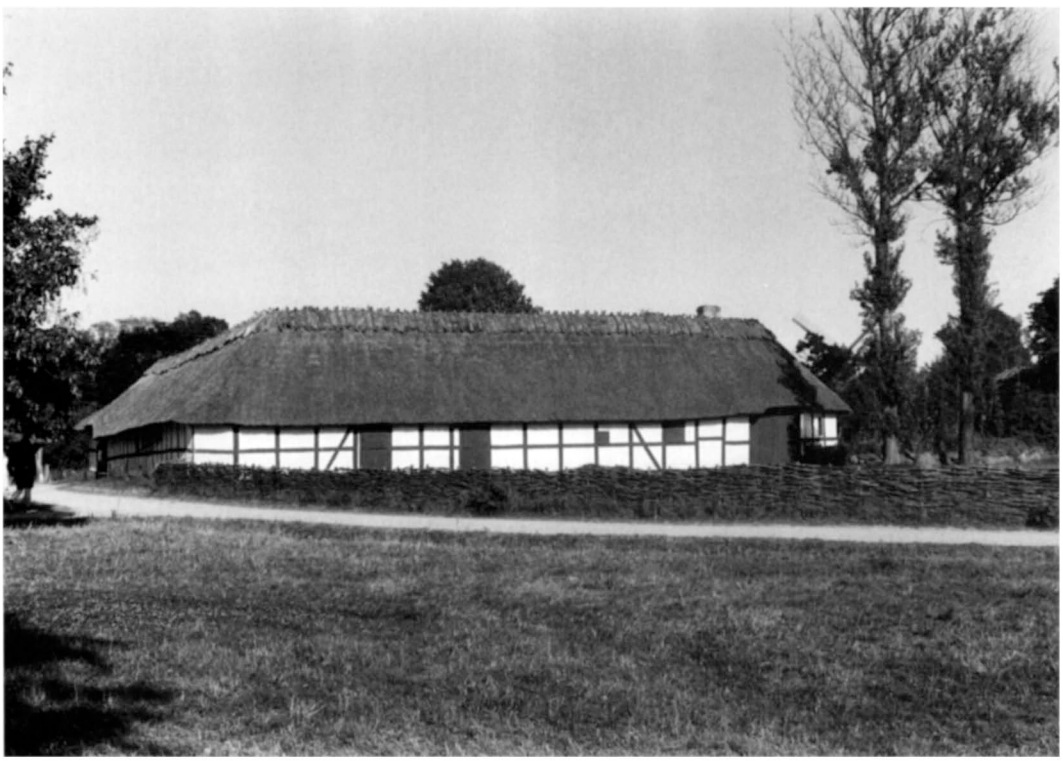
6

6.5 **Agger, Jutland (Sorgenfri, Frilandsmuseet). Fisherman's cottage. Detail of frame.**

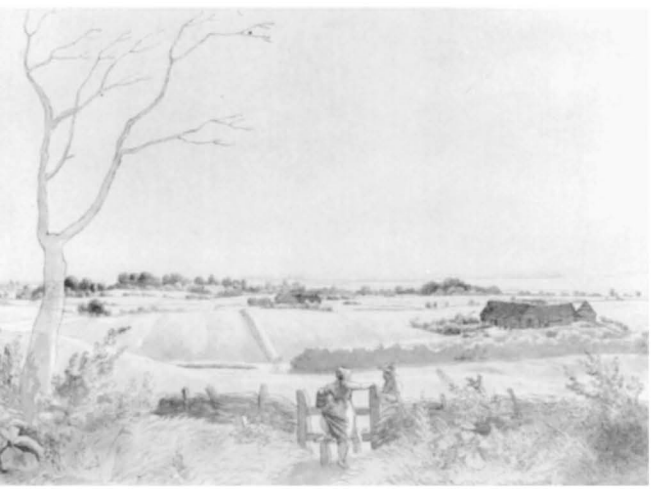
6.6 **Lundager, Funen (Sorgenfri, Frilandsmuseet). Farmstead. 1747. Detail of frame.**

6.7 **Lundager, Funen (Sorgenfri, Frilandsmuseet). Farmstead.**

6.8 **Farmstead on Møn. Drawing by C. W. Eckersberg, 1810. (Copenhagen, State Museum of Art.)**



7



8

9

6.9 **Pebringe, Zealand (Sorgenfri, Frilandsmuseet). Farmstead. 17th century. Detail of gable.**

6.10 **Laesø (Sorgenfri, Frilandsmuseet). Farmstead. 1737.**

6.11 **Ravlunda, Skåne (formerly in Stockholm, Skansen). Farmstead. 19th century.**

6.12 **Oktorp, Halland (Stockholm, Skansen). Farmstead. 18th century.**

10

11

12

buildings together with the dwelling, the whole complex having a single entrance. Except for windows in the dwelling, the Ravlunda Farmstead was closed on the exterior, life centering in the courtyard as at the Lundager Farmstead.[14]

From Halland in Sweden comes the Oktorp Farmstead, dating partly from the eighteenth century (figure 6.12).[15] For the stable, pigsty, and other farm buildings the bole-house type of construction was used, consisting of oak posts into which pine boards are tongued and grooved. This method was widely used in Denmark and the southern provinces of Sweden.[16] These buildings are also arranged around a courtyard, entered at one corner. The dwelling is a low building with chimneys, placed between higher buildings for storage and various farm chores. The low pitch of the roofs is an aid to conserving snow for insulation. Known as the South Scandinavian house, this type of dwelling in a single room, with hearth (and in earlier days no chimney), built-in bedsteads and benches, and a "pauper's beam," beyond which beggars and other strangers were not permit-

6.13 **Halland Farmstead (Sorgenfri, Frilandsmuseet). Begun 17th century.**

6.14 **Heimbare, Raumdal (Oslo, Norwegian Folk Museum). Loft. 17th century. Corner notching.**

6.15 **Mora, Dalarna (Stockholm, Skansen). Farmstead. 16th century.**

ted to advance, was often decorated with paintings on the walls and hanging cloths.[17]

A different kind of construction was also used at the Oktorp Farmstead, that of horizontal timbers notched together at the corners. As it happened, the first building acquired for the Danish Open Air Museum, in 1896 before the removal to Sorgenfri, was a house of this type, the farmstead from Stamhult in Halland, dating from the seventeenth century (figure 6.13).[18] The farm buildings that now form the courtyard are of plank construction and were brought in later. The roof of the dwelling is of turf, laid over a lining of birchbark, surely one of the most picturesque of roofing materials.[19] The timbers of the dwelling are oval, whereas those of the original outbuildings or "herbergs" on either side are rectangular.

This brings us to the immense subject of notched log construction in Sweden, Norway, and Finland.[20] The patterns seen here are relatively simple but could become much more complicated, both for the ways of cutting the joints and for the decorative patterns (figure 6.14).[21]

14

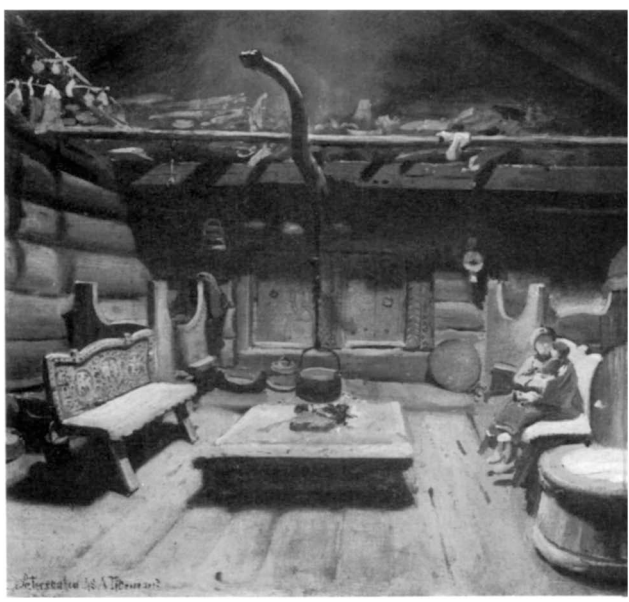
15

The first building to be brought to Skansen, in 1891, is the Mora Farmstead from Dalarna, which Hazelius had bought in 1891.[22] From the outside it looks very much like the forts of the American frontier, with its log buildings around a court and almost no openings to the outside. The main dwelling is on the north side of the court, the internal division into a small entrance room with chamber behind and the main room with its hearth and built-in beds being clearly defined by the projecting timbers on either side of the door (figure 6.15). On the other sides of the courtyard the farm buildings are placed close together. For protection against rotting in the soil and against marauding rodents the lowest timbers are raised well above the ground on heavy stones (figure 6.16). Dates carved on some of the buildings indicate a late sixteenth-century period of construction, and for all the vulnerability of timber buildings to fire, the Mora Farmstead bears witness to the durability of such structures. Even earlier is the most famous of the Mora farmsteads in its original location, the thirteenth-century home of Anders Zorn, one of Sweden's most prominent painters, who incorporated the original house into his estate and ultimately the Zorn Museum.[23]

For another kind of arrangement of these notched log farmsteads we may look to the characteristic groups from Setesdal in Norway. At Bygdøy several structures have been brought in and arranged in the local fashion with dwellings on one side of a road and farm buildings on the other (figure 6.17). At left in the illustration is the loft from Brottveit in Valle, probably dating from the second half of the seventeenth century. The lower level was used for the storage of food and the upper levels for clothing and valuables.[24] We observe the lower level to be built with horizontal notched logs and the two upper levels with heavy corner posts set into sills, the walls filled like the stave churches with vertical planking.

Next to the loft is the dwelling house, or *stue,* from Åmlid in Valle.[25] Here the notched log house has a protective gallery of stave construction before it, much like the exterior galleries on some of the stave churches. Within there are the two small rooms at the entrance end, as in the Mora Farmstead. The Åmlid stue, however, has a central hearth in the medieval manner, with a smoke hole in the roof above and a long beam projecting from the wall to carry the cooking pot (figure 6.18). Benches are fixed to the walls and beds built in the corners of the room. Chimneys, wooden floors, and more windows would characterize later houses. A loft from Ose and a stue from Kjelleberg complete the dwelling side of the Setesdal group, with barns and a stable across the narrow road.

17



18

6.16 **Mora, Dalarna (Stockholm, Skansen). Farmstead. Loft posts.**

6.17 **Setesdal buildings (Oslo, Norwegian Folk Museum). c. 1700.**

6.18 ***Arestue på Sogneskar i Valle.*** **Painting by A. Tidemand, 1848. (Oslo, National Gallery.)**

19

20

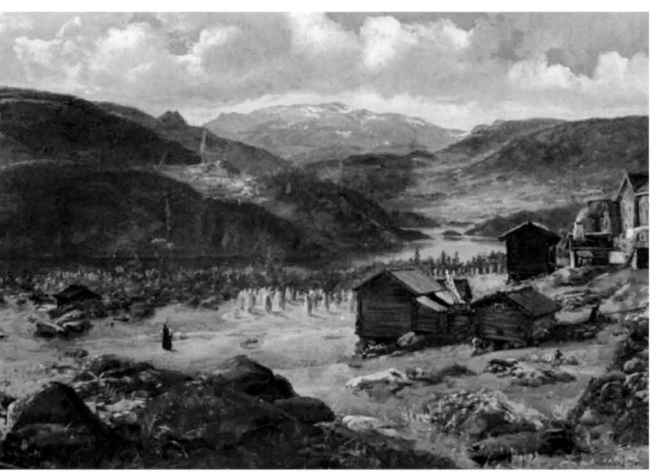
Like the stave churches, these buildings could be decorated with carvings, such as those on the uprights of the Kjelleberg stue gallery, reminiscent of Viking carvings (figure 6.19). For the eighteenth-century refurbishing of the fourteenth-century loft from Vastveit in Telemark, now at Skansen, a more modern pattern of acanthus was chosen (figure 6.20). The interior of the stue might be brilliantly painted, as for example at the stue from Bjørnebergstølen in Hemsedal, dating from 1792 and attributed to the painter Kristian Hulebak (figure 6.21).[26]

Another way to group the Norwegian farm building is often found in Numedal. At Bygdøy the examples brought from this region are set around an open space, with roads leading in and out of it from opposite corners. Among them is the Rauland stue, one of the oldest timber buildings in Norway (figure 6.22).[27] The carvings on either side of the door and the runic inscription on the lintel suggest a date in the second half of the thirteenth century. The plan is similar to that of the Åmlid stue, three rooms with originally a central hearth in the main room. A gallery across the gable end once sheltered a stair to small bedchambers over the two smaller rooms. In contrast to the broad expanse of Danish farmsteads drawn by C. W. Eckersberg is the mountainous landscape in which the Norwegian farmsteads huddle as painted by J. C. Dahl (figure 6.23).

The Norwegian timber houses are not solely built as separate structures. In western Norway, especially in the coastal districts, a type of long building, or *lån,* has been used, which consists of two or more loft, stue, and other units joined together to form a single building with several rooms (figure 6.24). These may be built in either log or stave construction. There is some debate as to whether this kind

21

22



23

24

6.19 **Kjelleberg, Valle (Oslo, Norwegian Folk Museum). Stue. Late 17th century. Door carvings.**

6.20 **Vastveit, Telemark (Stockholm, Skansen). Loft. 14th century. Door carvings, 18th century.**

6.21 **Bjørnebergstølen, Hemsedal (Oslo, Norwegian Folk Museum). Stue. 18th century. Interior. (Oslo, Norwegian Folk Museum.)**

6.22 **Rauland, Uvdal (Oslo, Norwegian Folk Museum). Stue. 13th century. (Oslo, Norwegian Folk Museum.)**

6.23 ***Hjelle in Valdres.*** **Painting by J. C. Dahl, 1850. (Bergen, Fine Arts Gallery.)**

6.24 **Habostad, Stranda (Sunnemore Museum). Stue. 19th century.**

of building developed in postmedieval times by adding individual units together or whether it continues the longhouse tradition from the Iron Age.[28]

It would not be right to leave consideration of Norwegian construction in wood without mentioning the sawmills. Developed in France in the sixteenth century, the water-powered sawmill won acceptance in Holland and Norway but was strongly resisted in England.[29] In the eighteenth-century Norwegian sawmill from Åkra in Hardanger, the lower part, resting on a stone foundation, is built of notched logs, with squared timbers for the upper portion (figure 6.25). Powered by a heavy waterwheel, which is geared to move the saw blade up and down against the logs, this is a very modest forerunner of the huge wood products factories that we shall see later. In between came the larger and more permanent sawmills, such as the one at Hellefoss near Modum, painted by J. C. Dahl (figure 6.26).

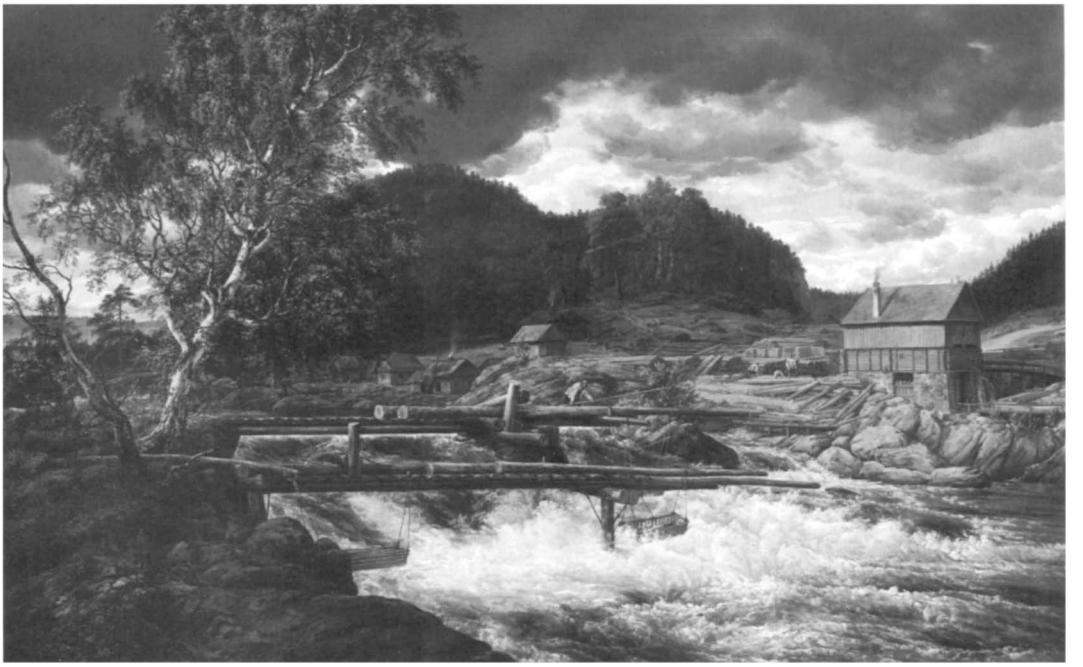
In Finland there is also a strong tradition of using round or squared notched log construction for farm buildings. An early view of the Kortaniemi estate at Kittilä in Finnish Lapland shows the buildings grouped neatly around the court, several other buildings scattered on the property, with plowed fields and a hayrack (figure 6.27). This was more than an ordinary farm, for on the hilltop in the distance are located two "observatories," surely one of the northernmost scientific establishments of the day.[30] The Niemelä farm from Konginkangas in central Finland dates from the 1780s and was the first group of buildings to be set up at Seurasaari, in 1909 (figure 6.28).[31] The arrangement is less formal here. The first dwelling had also the sauna, or bathhouse, so essential in Finnish culture. In time were added an enlarged dwelling portion and dairy, cowshed, pigsty, threshing floor, and also a boathouse, since Fin-

25

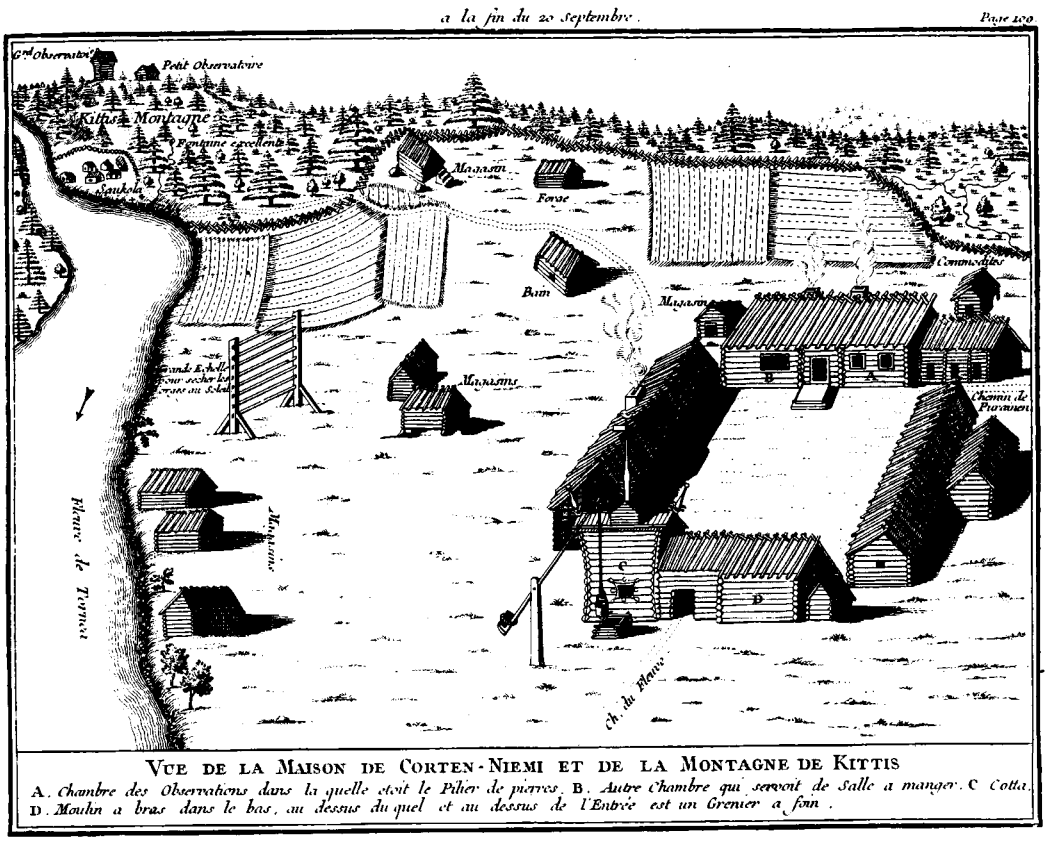
6.25 **Åkra, Hardanger (Oslo, Norwegian Folk Museum). Sawmill. 18th century.**

6.26 ***Hellefoss near Modum.*** **Painting by J. C. Dahl, 1838. (Oslo, National Gallery.)**

6.27 **Kittilä. Kortaniemi Farmstead. Engraving by R. Outhier, 1744. (Copenhagen, Royal Library.)**



26



VUE DE LA MAISON DE CORTEN-NIEMI ET DE LA MONTAGNE DE KITTIS

A. *Chambre des Observations dans la quelle etoit le Pilier de pierres.* B. *Autre Chambre qui servoit de Salle a manger.* C *Cotta.* D. *Moulin a bras dans le bas, au dessus du quel et au dessus de l'Entrée est un Grenier a foin .*

27

land is a country of lakes and water transport. Farms would also have one- and two-story loft houses, similar to the lofts of Norway, for the storage of clothing and for summer sleeping quarters. Many of these buildings are roofed with rough boards, the ends projecting at the ridge, as at the Mora Farmstead.

Much of the architecture of Finland that we have been observing has been close to Swedish building traditions if not actually by Swedish builders. In southeastern Finland, however, there have been closer connections with Russia, and the province of South Karelia was ceded to Russia in 1944. In 1939 the Moiseinvaara farmhouse from Suojärvi in Karelia was acquired by the museum at Seurasaari and is therefore an easily accessible example for study by Western observers (figure 6.29).[32] It may remind us of the Iron Age longhouses in that it was built to shelter the family and the cattle under one roof. The farmstead is more sophisticated, in two stories, with living, storage, and guest quarters on one side and a cowshed with

6.28 **Konginkangas (Helsinki, Seurasaari). Niemelä Farm. 18th century.**

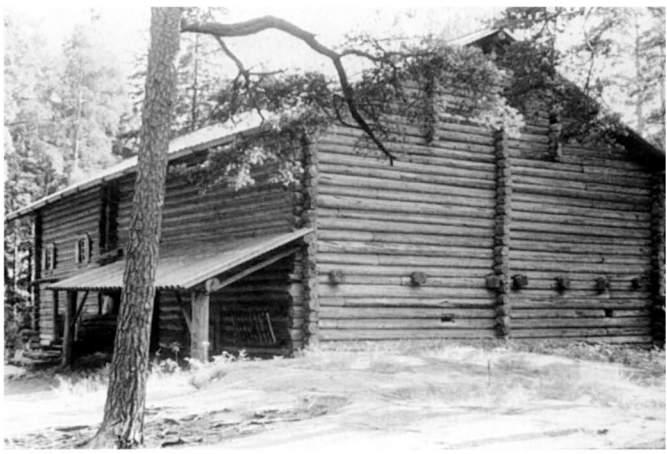
6.29 **Moiseinvaara, Karelia (Helsinki, Seurasaari). Farmstead. 1884. (Jay C. Henry.)**

6.30 **Karuna (Helsinki, Seurasaari). Church. 1685–1686.**

hayloft above on the other. The sauna, stable, and storage barn are separate.

There was also a tradition of church building in wood in rural areas, quite apart from the stave churches of Norway. A simple rectangular building, with no division into nave and aisles, and perhaps an entrance porch or bell tower was a common type. The church from Karuna now at Seurasaari was built in 1685–1686 and restored in 1772–1774 (figure 6.30).[33] It is covered by vertical boarding, with an entrance porch and a high steep roof. The interior is dark and crowded with pews. The paintings that once adorned it have partly been removed to museums in Helsinki. Characteristic of the Scandinavian village churches is the separate belfry (figure 6.31).

In Sweden a small number of wooden churches remain from the Middle Ages. At Granhult in Småland the church was probably begun at the end of the Romanesque period, c. 1300 (figure 6.32).[34] It began as a simple nave and chancel church, built of horizontal timbers with dovetail joints. It has a steep roof, and it originally had only very small window openings. Fragments of the late Gothic wall paintings are still visible. Additions were made beginning in the seventeenth century, and a second group of paintings dates from 1745–1754. It is a rural church, for a time abandoned and used as a granary, but then repaired between 1936 and 1950 and used for occasional services. By no means all the known early Swedish wooden churches have survived, however, and we owe considerable knowledge of those that have disappeared to the Swedish artist and antiquary Nils Månsson Mandelgren. He did for Sweden something comparable to the work of J. C. Dahl in Norway, for he went about in Småland particularly, making measurements, drawings, and notes, such as those for Bankeryd church in Småland (figure 6.33).[35]



29

30

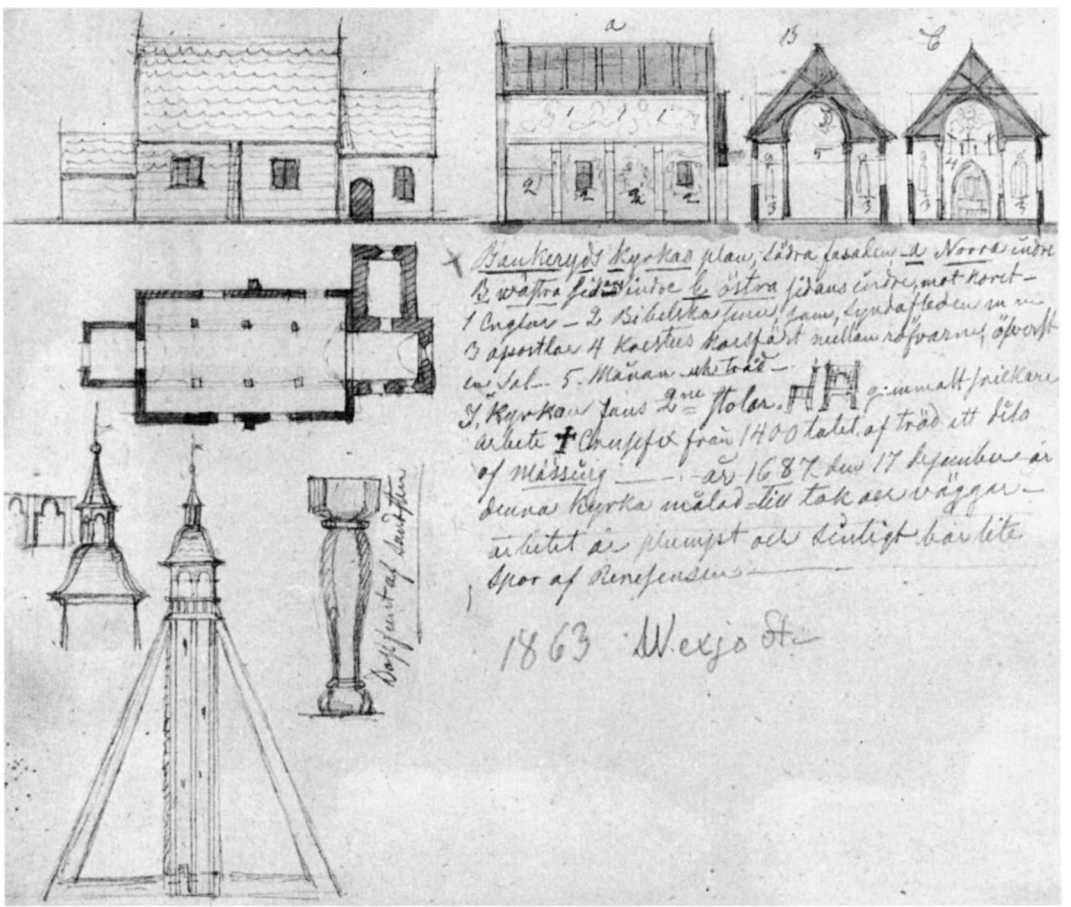
6.31 **Karuna (Helsinki, Seurasaari). Church belfry. 1767.**

6.32 **Granhult, Småland. Church. Begun c. 1300. (Stockholm, Antikvarisk-Topografiska Arkivet.)**

6.33 **Bankeryd, Småland. Church. Drawing by N. M. Mandelgren, 1863. (Lund, Folksarkivet.)**

31

32

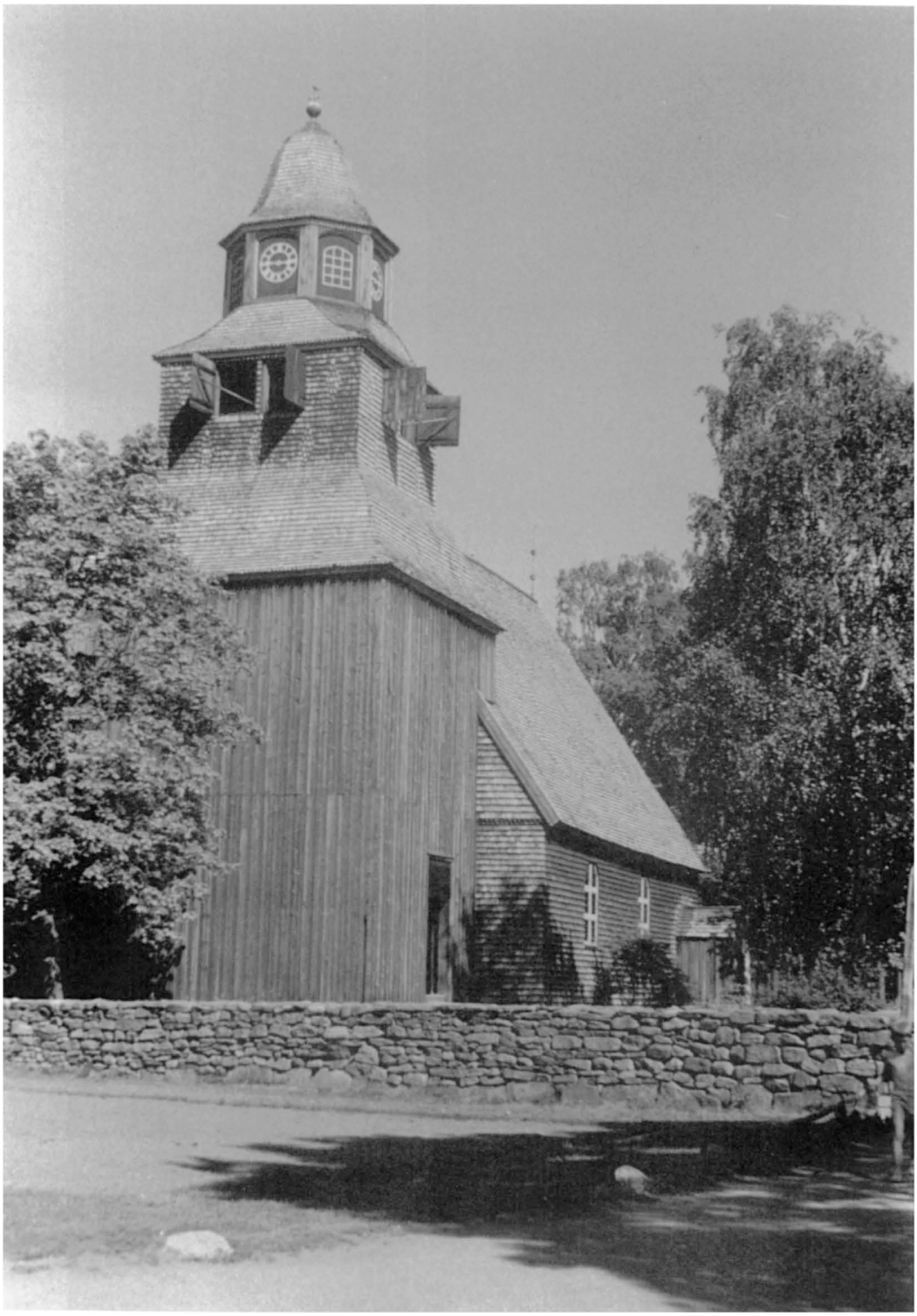


33

These were the basis for his publications on Swedish cultural history.

A more recent example of a Swedish village church is the one from Seglora in Västergötland, now at Skansen in Stockholm, built in 1729–1730 (figure 6.34).[36] This too is undivided internally, but is more elaborate in plan, having a polygonal apse. The exterior is covered with oak shingles painted red, as was often the custom. The bell tower at the west end and the sacristy were added in 1780–1790. On the inside the heavy horizontal timbers of the walls are whitewashed, and the low curving ceiling boards are painted with biblical scenes and acanthus borders.

A later church at Petäjävesi in Finland, 1763–1764, is more elaborate and is built of notched timbers (figure 6.35).[37] It is cruciform in plan, with galleries in the north, south, and west extensions. The interior is not painted but derives its character from the structural details so clearly exposed and from a moderate amount of blocky carving on the altar rails and gallery fronts. The four wings of the building



are covered by wooden barrel vaults, and the crossing has a gored dome. Like the houses of Halland and Blekinge, the interior is surprisingly spacious in contrast to the exterior appearance.

Before we turn to farm buildings in brick, we should take note of several distinctive types of small dwellings, some of which are, or were, used only seasonally. Prominent among these are the Lapp huts, such as the one from Frostviken in Jämtland (figure 6.36).[38] A frame of two pairs of curving poles joined at the top by a thin ridgepole pushed through them can then be subdivided by horizontal bars and then slanting poles over which can be laid a covering of birchbark and turf (figure 6.37). For further protection another set of poles can be laid against the outside. In the middle of this basically circular building there is a hearth, marked off by stones. With recent methods of keeping the reindeer herds these huts have generally fallen into disuse, but were characteristic of the nomadic Lapps for hundreds of years. The storehouses of the Lapp camps were mounted on one or more high poles, reached by ladders which would be set away when not in use (figure 6.38). Similar storehouses are in use in Alaska today.

Then for other seasonal shelters there were the fishermen's huts, such as those from Nymindegab on the west coast of Jutland (figure 6.39).[39] In the late spring farmers in this region would move to these huts, placed in groups of three to accommodate the six men needed for a boat and their wives. These huts, also no longer in use, are built like A-frame buildings of heavy slanting timbers pegged to cross-beams and thatched, the ridges secured with turfs. Beside the entrances are turf-built chimneys. A fourth unheated hut was used for storage.

On the Faroe Islands the longhouse of the Viking period was succeeded by a two-room

6.34 Seglora, Västergötland (Stockholm, Skansen). Church. 1729–1730.

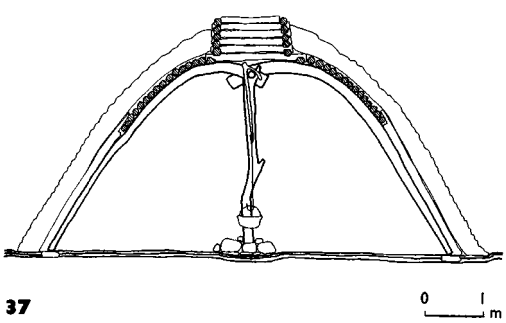
6.35 Petäjävesi. Church. 1763–1764.

36

6.36 Frostviken, Jämtland (Stockholm, Skansen). Lapp hut.

6.37 Lapp hut frame. (After Manker, *Lapsk kultur,* figure 141, p. 139.)

6.38 Lapp storehouse (Stockholm, Skansen).



37

house, probably early in the seventeenth century.[40] One example, which is now a house museum, is Duvugarthur at Saksun on Streymoy (figure 6.40). The original part of the house consists of the *røgkstue* or smoke room and the *glasstue* or window room. In the *røgkstue,* the center of daily activity, there is a stone-framed hearth against one wall, with louvre above but no windows. The *glasstue* has windows, ceiling, and a stove connected through the wall with the hearth, and was used more as a "best room." Stone outer walls shelter the characteristic Faroese vertical plank walls, and the roof is thatched.

Timber was, and is, scarce. Some might be imported, some found as driftwood, and some from shipwrecks. The latter may sometimes be identified by wormholes. At Saksun a "priest's room" was added to the *glasstue,* the dark wooden wing projecting from the whitewashed *røgkstue.* Such a farmstead would include a cowshed, storage sheds with dry stone walls, and possibly a splashmill with horizontal waterwheel (figure 6.41).[41]

38

Certain modes of construction and arrangement give the Icelandic turf houses a special place in the group of North Atlantic vernacular buildings, ranging from the Scottish islands to Greenland. We have already considered the Viking foundations and the reconstruction at Stöng, noting the scarcity of wood for building in Iceland. Two main kinds of buildings with turf have been identified from later periods.[42] One is the building entirely of turfs, laid to form domed or barrel-vaulted roofs. The other is the house built of timber and covered with turf, the comparatively thin layers of the roof widening out to form massive outer walls. In this second group the roof might rest on one, two, or three rafters laid over a ridgepole that would be supported just by the walls or by one or two posts. Another type of roof was built of rafters pegged together at the top and resting on beams laid on the walls or supported by posts.

The characteristic plan of the Icelandic farmhouse developed over a long period of time, as the archaeological remains and the manuscript illustrations indicate (figure 6.42).[43] To the longhouse or *skali* of the sagas was added a sitting room or *stofa* for a workroom for women and also a guest room, while the *skali* was still used for sleeping, as at Stöng. Then by the fourteenth century a passageway had been put between these two rooms, leading to the lavatory and bathroom, or *badstofa,* while extra rooms were added at the ends of the *skali* and *stofa,* with gables facing outward

39

40

41

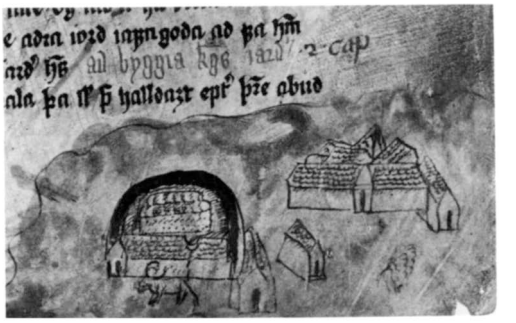
6.39 Nymindegab, Jutland (Sorgenfri, Frilandsmuseet). Fishermen's huts. 19th century.

6.40 Saksun, Faroes. Duvugarthur Farmstead. 18th century.

6.41 Mule, Bordø, Faroes (Sorgenfri, Frilandsmuseet). Splashmill.

6.42 Farmstead. From the Jónsbók manuscript AM 345. (Reykjavik, Stofnun Árna Magnússonar á Íslandi.)

6.43 Laufás. Turf farm. (Reykjavik, National Museum. Photo: Gísli Gestsson.)

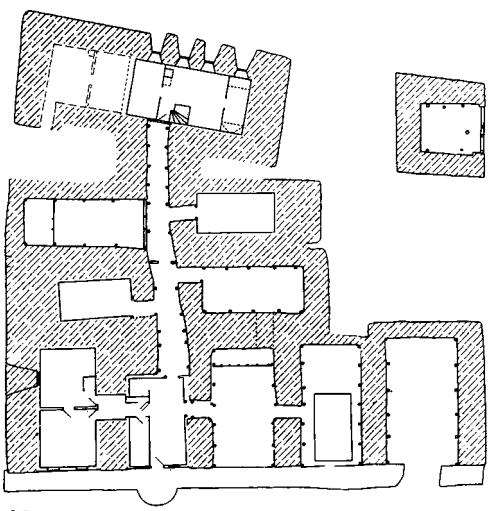


42

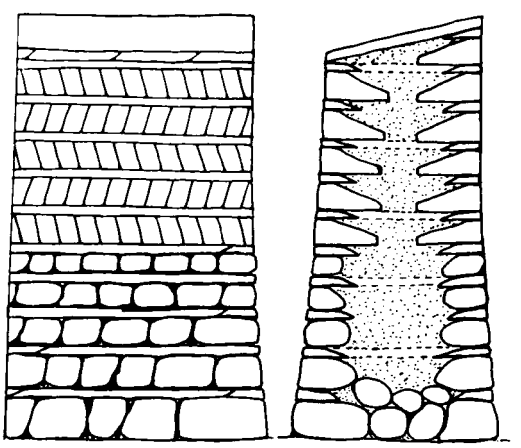
43

6.44 **Laufás. Turf farm. Plan. (Gísli Gestsson, in Ágústsson, "Development of the Icelandic Farm," figure 14, p. 265. Courtesy Gudrun Sigurthardottir.)**

6.45 **Turf wall. Drawing by Hörthur Agústsson. (Courtesy Hörthur Ágústsson.)**



44

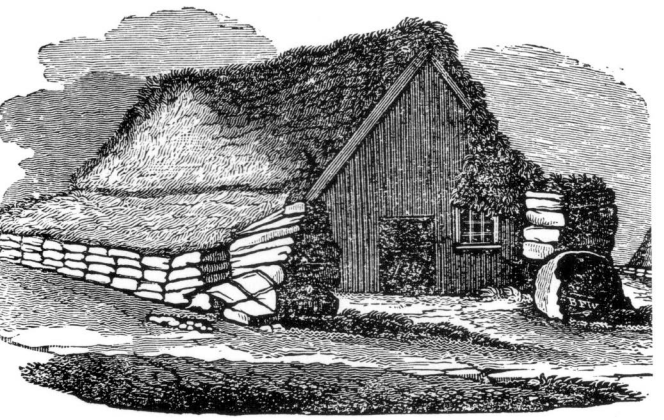


45

and separate entrances. These gable ends might be timbered (figure 6.43). By the seventeenth century the *badstofa* became the principal sitting and eating room, taking the place of the *stofa,* which was left out of all but the wealthiest homes. This had to do with diminishing supplies of firewood and the need to make the best use of what little heat there was, and by the eighteenth century the *badstofa* was used for sleeping as well. Then the *skali* and *stofa* were turned so that their gable ends faced outward, resulting in the ridge-farmhouse or *burstabaer* in northern Iceland (figure 6.44). In southern Iceland the *badstofa* was brought to the front of the house and the passageway shortened.

As for the turf walls themselves, they were built from turfs cut in several shapes and sizes from the sedge marshes with special tools. They were built as double skin walls of various combinations of stone and turfs with a hard-packed core of earth between (figure 6.45).[44] Herringbone patterns appearing by the fifteenth century were considered particularly attractive and added to the stability of the walls. These techniques were carried to Greenland by Icelanders settling there.[45] The interiors were lined with wooden planks set vertically, joined by tongue and groove much in the manner of the walls of Norwegian stave churches.[46] Whether the Icelandic turf houses are directly related to the "black houses" of the Scottish Hebrides is still a matter of debate.[47]

Turfs were used not solely for houses but for churches as well, though we have to rely on published accounts for descriptions of those that are lost. The first church at Reykjavik was built of turfs, to be replaced by the present cathedral in 1796.[48] We have, however, a description and drawing of the church at Thingvellir as seen by the English traveler John Barrow, Jr., in 1835 (figure 6.46).[49] Barrow



46

6.46 **Thingvellir. Church. Drawing in *The American Magazine*, 3, no. 12 (September 1837): 461. (Eugene, University of Oregon Library.)**

6.47 **Silfrastadir (Reykjavik, Árbaer Museum). Church. 1842.**

47

6.48 Rømø. Kommandørgården. 1748.

6.49 Rømø. Kommandørgården. Interior. (Sorgenfri, Frilandsmuseet.)

thought it extraordinary enough to measure and record, saying that "the extreme length was twenty-three feet, but of this eight feet were devoted to the altar, which was divided off by a partition stretching across the church, and against which was placed the pulpit. . . . The width of the church was ten feet, and the height of the walls about six feet." He went on to say that the walls "were wainscotted, and from them large wooden beams stretched from side to side. . . . The interior of the roof, the rafters of which also rested on the walls, was also lined with wood." The church was therefore finished in the same manner as the Icelandic house, and Barrow found it furnished with benches but very crowded and at that time used for storage.

A later turf church that has survived was built in 1842 at Silfrastadir in northern Iceland (figure 6.47).[50] It too went out of use as a church, was moved to a nearby farmhouse, and served for a number of years as a badstofa. Then in 1950 it was moved to the Árbaer Museum and reconsecrated in 1961. The sheltering function of the thick walls surrounding the timber building is clearly seen here at the east end, and in this case the outer layer is of stone.

While farm building in the Scandinavian countries was almost entirely carried out in wood in the earlier periods, there did develop a brick tradition on the Jutland peninsula. An early example is in its original location still, actually on the island of Rømø off the west coast of Jutland. The Kommandørgård, or Commander's Farm, is now the property of the Danish National Museum, which has restored the house and lets the land out for farming (figure 6.48).[51] Begun probably in 1748, it is built of brick that appears to be of Dutch rather than local manufacture. At this time there was contact with Friesland, whence brickmaking began to develop on the Jutland coast. The house at Rømø has undergone alterations and additions, and in the 1770s it was owned by a wealthy seafaring merchant. In the course of restoration it was found that the interior had been extensively decorated with paintings, the unknown painter probably coming from the mainland (figure 6.49). The numerous biblical subjects suggest a church painter, such as the one who had worked at Møgeltønder, nearby, or the Rococo painter of Damsholte Church on Møn.

Now moved to the Open Air Museum at Sorgenfri but originally very close to Nymindegab is the Lønnestak Farmstead (figure 6.50).[52] It is a courtyard farmstead, built in 1803, but it is very very different from the Lundager Farmstead (figure 6.7). Instead of opening inward to the courtyard, the principal entrances to the dwelling, barn, and stable are on the exterior, and the dwelling is in the south rather than the north wing. This represents a change in fashion, and the building was apparently the first to be built of brick this far north in Jutland. The tiles in the best room and the living room are also noteworthy as being imported from Holland. The plan allows for access to the cowshed and stable from within instead of through the courtyard, another innovation.

With the Lønnestak Farmstead we approach the time when local and anonymous traditions were to become codified and the

48

49

6.50 **Lønnestak, Jutland (Sorgenfri, Frilandsmuseet). Farmstead. 1803.**

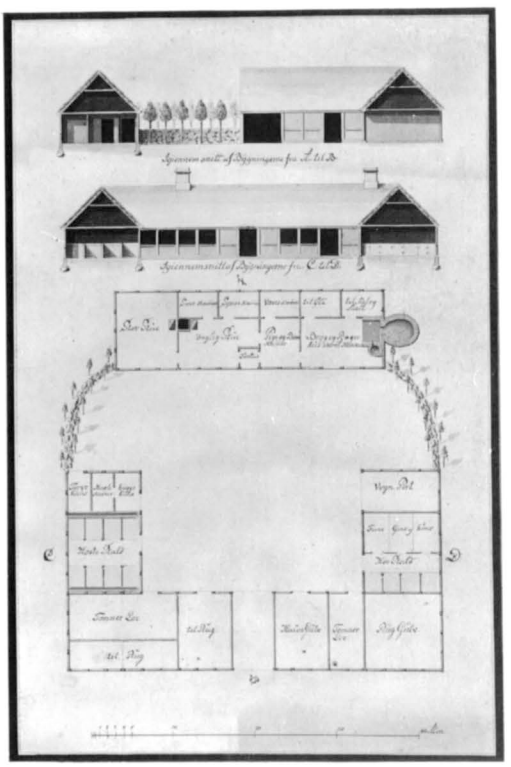
6.51 **Proposal for a small farm. Late 18th century. (Copenhagen, Academy of Art Library.)**

6.52 **Proposal for farm buildings. (Klein, *Landbrugets bygninger,* figure 1.)**

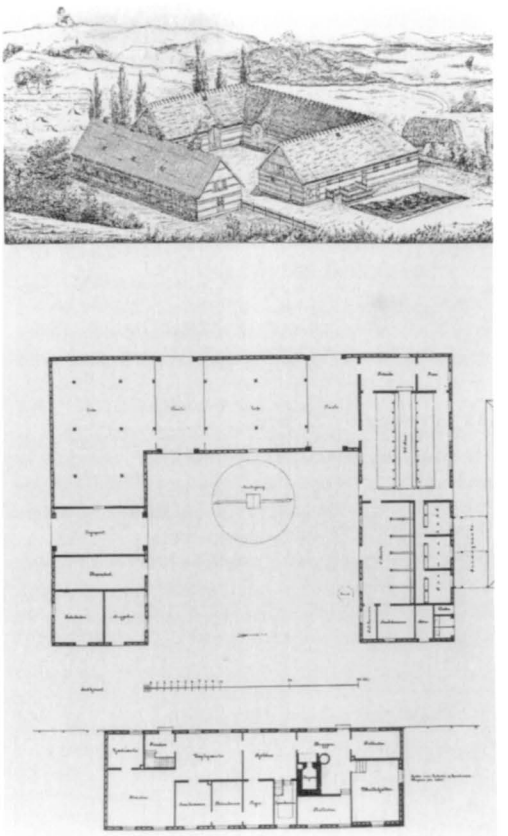
6.53 **Copenhagen. Prefabricated house. 1972.**

concern of professional architects.[53] Beginning at the end of the eighteenth century, proposals for small farms were drawn up, to be followed by competitions and publications of designs up to the present (figures 6.51 and 6.52). New materials and plans, developed according to changes in agricultural practices, generally have not altered the sense of traditional appearance evident in these proposals, and there has even been room for prefabricated nostalgia (figure 6.53).

From the vernacular buildings of rural Scandinavia we should turn briefly to those of the towns. Some of the more fashionable town houses have already been noted, such as the Peterschenka House in Stockholm and the Baur House in Altona. The more modest dwellings, built of less expensive materials, are not plentiful in the larger cities for the periods before the nineteenth century and tend to be hidden away among more recent buildings. Parts of



51



52

53

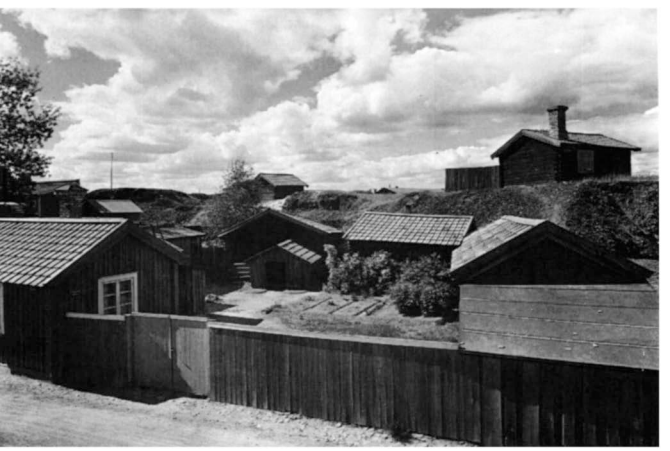
some of the smaller towns, however, retain significant numbers of their early houses so that it is possible to get some idea of their former character.

At Køge on the east coast of Zealand there are several streets near the church of St. Nicholas where old houses remain from the sixteenth century, the town having been known as a trading center since the eleventh century. On Store Kirkestraede is the oldest dated timber house in Denmark, built in 1527 (figure 6.54).[54] Now only three bays wide, it was once part of a double house. It is half-timbered with brick nogging and a steep tiled roof with pronounced eaves flare. Inside there is just one room, with open hearth and a door leading out to the garden at the back. Among the larger houses in the town is the one on Vestergade built in 1644 (figure 6.55).[55] This is characteristic of seventeenth-century town houses all over Denmark. It is two stories high, with an overhang across the front and a high tiled roof. It was built for a merchant, and while his means were evidently not sufficient for a grand house like that of Jens Bang in Ålborg, he could follow the fashion of the day and adorn the half-timbering with brackets and carvings.

6.54 Køge, Zealand. Store Kirkestraede 20. 1527.
6.55 Køge, Zealand. Vestergade 14–16. 1644.
6.56 Falun, Dalarna. Miners' houses. (Falun, Bergslagets Museum.)

A town of a completely different nature that still has some of its early buildings is Falun in Dalarna.[56] The great coppermine, run by the Kopparberg Mining Company, had been developed since 1230, the charter of the company dating from 1347. A ton of gold, fifteen tons of silver, and 500,000 tons of copper have come from here, including the copper for the roof of Versailles. Some of the small row houses for the miners remain in the Old Town on the west bank of the river (figure 6.56). The houses are one story high, built of notched logs, with their gables toward the street. The traveler Edward Clarke reported appalling conditions of fumes in the air, saying that "the town church is covered with copper; but a more improper material can hardly be used; for the sulphuric acid gas, with which the air is powerfully impregnated, is rapidly dissolving this copper covering."[57] In Norway, Røros in Sør-Trøndelag was founded in 1644 as a copper mining town, and miners' houses remain from the seventeenth through the nineteenth centuries (figure 6.57).[58]

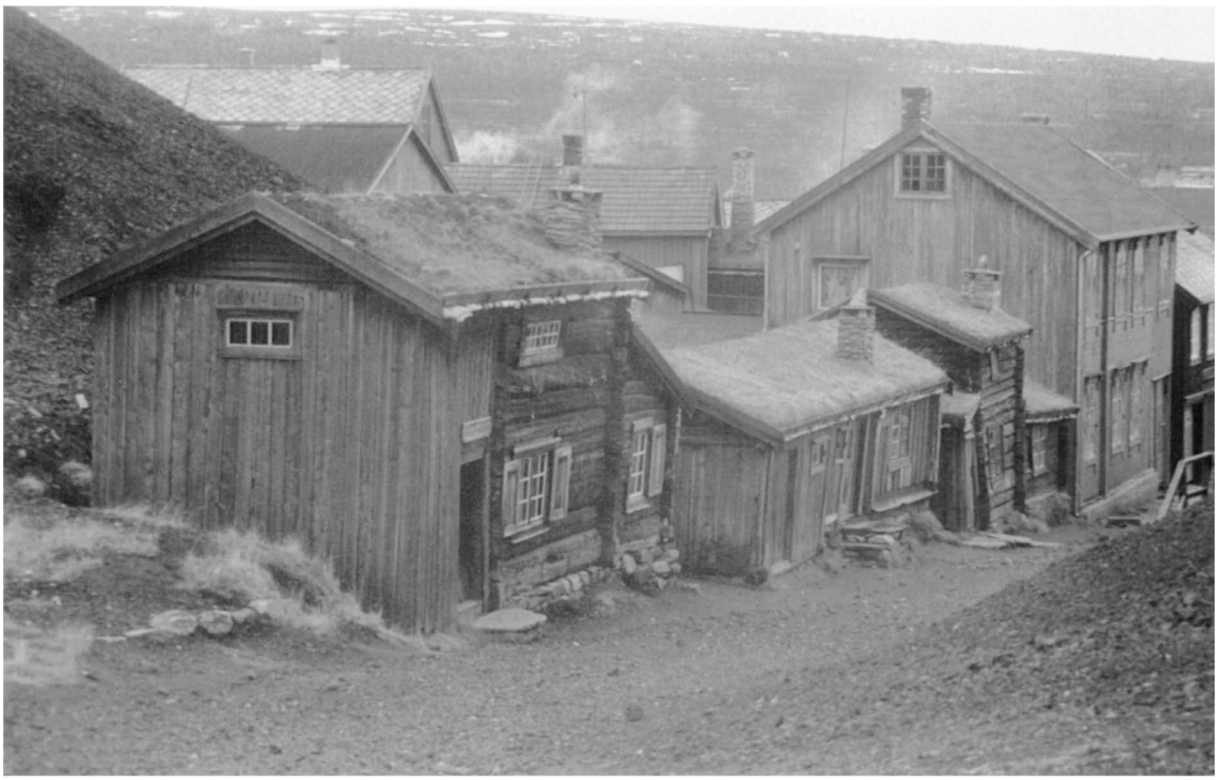
55



56

Over in Finland a great fire in 1827 destroyed much of the former capital of Turku, but a portion of the city on the south side of Vartiovuori Hill was spared because it was sheltered from the wind.[59] C. L. Engel's proposal for the demolition of this area in connection with his plans for rebuilding Turku fortunately did not materialize, and by 1956 the old houses were secure. They were taken over by the Historical Museum of Turku to form a handicraft as well as an open air architectural museum (figure 6.58). Called Luostarinmäki, this museum site is different from some in that the buildings have not been brought in from elsewhere but are in their original locations. Another interesting aspect is that the dwellings are accompanied by other buildings for the household, almost like small "urbansteads" instead of farmsteads, each household devoted to a particular craft: combmaker, furrier, carpenter, shoemaker, printer, baker, and several others. The buildings are raised on stone foundations and are built with corner posts and horizontal or vertical siding, with some horizontal log construction. The ropewalk set up down the middle of one long street, visible in the illustration, was necessary in a seagoing town to supply the ropes for rigging. It might be in a long building or, as here, outside.

While Luostarinmäki is now maintained as a museum, another town in Finland has a heritage of old dwellings that are still in use as private homes. Porvoo is the second oldest town in Finland, after Turku, and was founded as Borgå in 1346.[60] The Cathedral of St. Mary is the only medieval building to survive the many town fires. In 1809 Alexander I here proclaimed Finland a Grand Duchy of Russia, and the town continued to flourish commercially. In this old part of town the streets wind up and down the hillside in irregular paths and are lined with wooden one- and two-story houses



57

58

6.57 Røros, Sør-Trøndelag. Miners' houses. (James A. Donnelly.)
6.58 Turku. Luostarinmäki. Village street.
6.59 Porvoo. Village street.
6.60 Ålesund, Romsdal. Apartment blocks.

59

set directly on the streets (figure 6.59). There is a variety of sidings, roofs, door and window headings, and gables, and one gets a strong sense of how these nineteenth-century houses had to be crowded onto the medieval streets.

For a homogeneous community of dwellings from the early twentieth century we may look to Ålesund on the west coast of Norway.[61] The town is an important fishing and commercial center; here again what we see now is the result of a great fire, this one in 1904. Whereas the town buildings we have been considering in this chapter have been of wood or brick, Ålesund was rebuilt largely in stone. Not strictly vernacular, many of the buildings were architect-designed under a regulatory commission headed by Fredrik Naeser. The result is distinctive, however, for here are rows of houses and flats rich in Richardsonian Romanesque, Dragon Style, and Jugendstil detail (figure 6.60). In Stavanger, on the other hand, there are streets in the old part of town lined

60

6.61 **Stavanger, Rogaland. Houses.**

6.62 **Reykjavik. House at Laufasvegur 31. (Reykjavik, Árbaer Museum.)**

with wooden houses that preserve the early character of this seaport (figure 6.61).

While Denmark, Sweden, Finland, and Norway have had sufficient timber for domestic building, this has not been the case in Iceland. For buildings more suited to the growing towns than the turf houses, ready-cut timber was imported from Denmark late in the eighteenth century. Then toward the end of the nineteenth century, prefabricated timber houses were brought from Norway. All timber building was still very expensive, however, and an effective solution was found in corrugated iron imported from England.[62] While at first this might seem a dismal approach, the vertical wall panels resemble batten boarding, and the Icelanders paint these buildings in bright colors with contrasting trim (figure 6.62).

62

These rural and urban vernacular buildings survive from comparatively recent times. Farmsteads that are known to have been repeatedly rebuilt on the original foundations and remains of buildings that have been discovered in towns are among the fragmentary pieces of evidence for the centuries-old traditions of some of the house types described above. Much that has been learned from them has been adopted and transformed by some of the leading Scandinavian architects of the nineteenth and twentieth centuries.

7 *Eclectic and Early Modern Scandinavian Building*

The century between the Napoleonic Wars and World War I was crowded with opportunities and dilemmas for the Scandinavian architects. At this time the embellishment of buildings was dependent on imitation of admired structures from the past. Neoclassicism was one response to the problem of creating an official image, whether leaning to the imperial implications of Roman building or to the democratic implications of Greek, and there were of course models other than the classical to follow.

But this was not to be the whole story. While Jardin was at work on Frederiks Church and Adelcrantz was building the Drottningholm theater, some significant technological events were taking place in England. Such inventions as that of the steam engine in 1768 and the power spinning frame in 1769, to say nothing of the smelting of iron ore by coke beginning in the 1740s, set European industrial production on a new path. Together with the shifts in the political alignments of Norway and Finland and the growing tendency away from absolutism toward democracy, the rise of modern industrial society brought new population

pressures on Scandinavian cities and new kinds of patrons of buildings.

A fully detailed account of what happened architecturally cannot be attempted here. From the 1830s up to about the turn of the twentieth century, leading Scandinavian architects turned to three other principal sources of inspiration for at least their ornamental expressions: the medieval, the Renaissance/Baroque, and local traditions. The designs resulting from their choices appeared, however, on some buildings that were anything but traditional in their functions. Among these were the rapidly growing number of industrial buildings.[1]

This chapter treats first some of the stylistic possibilities and the early factories, followed by consideration of three major projects that were begun between 1892 and 1911: the Town Hall in Copenhagen, the third Christiansborg Palace, and the Town Hall in Stockholm. It will conclude with works contemporary with these projects by certain strong artistic personalities whose individual interpretations of possible traditional sources marked a turning point in Scandinavian architectural design.

In Copenhagen, while C. F. Hansen's Christiansborg Palace was under construction, there were other projects afoot. A university, primarily for the study of theology, had been founded under Christian I in 1479 in the chapel of Vor Frue Kirke, and we have already noted Holy Trinity Church and the Round Tower with its observatory built under Christian IV. A separate building and later an anatomical theater were also added, and these were lost in the fire of 1728. Rebuilding was undertaken by J. C. Krieger, only to be destroyed in the bombing of 1807. In 1831 Peder Malling, a student of C. F. Hansen, began the present main building, completed in 1836 (figure 7.1).[2] Malling departed from the more severe classical style of Hansen by incorporating some medieval

7.1 Copenhagen. University. P. Malling. 1831–1836.

7.2 Oslo. Bazaar. C. H. Grosch. 1845–1857. (Oslo, Riksantikvaren.)

1

touches in his exterior design. The tall central entrance bay with recessed portal, window, and lunette is capped by a gable that combines the Roman gable-and-arch motif with stepped archivolts in the Romanesque manner. This portal leads into a large vestibule, beyond which lies the festival hall. Two stories of classrooms are served by staircases in the vestibule and expressed on the exterior in three bays on either side of the portal. This arrangement is much like the core of C. F. Hansen's Råd-og-domhus, but the division by pilasters, the large windows, and the curious lunettes and gables above give the University a much busier appearance. M. G. Bindesbøll and the painter Constantin Hansen were called upon for the interior decorations, which include scenes from classical mythology and Danish history.[3]

2

A much more explicit use of Romanesque motifs was made by C. H. Grosch for the Bazaar in Oslo, designed in 1839 but not entirely completed until 1857 (figure 7.2).[4] This was built to house the market and butcher stalls. The land slopes sharply down to the east back of the Cathedral, and Grosch ringed the plaza with a half circle of two-story brick buildings containing the shops, which are connected outside and inside by sheltering arcades. In 1854 he added a fire station at the southwest corner. Handsomely executed with broad arcades below and dwarf arcades in the Rheno-Lombardic Romanesque manner, the result is a unique backdrop for the Cathedral and still actively serves many of its original purposes. Grosch's primary interest in the classical manner probably led him to the Romanesque in preference to the Gothic.

For an individual dwelling, large or small, the prospective owner had these stylistic possi-

7.3 **Steensgård, Langeland. G. F. Hetsch. 1836–1837. (Richardt and Secher, *Prospecter,* n.p. Copenhagen, Academy of Art Library.)**

7.4 **Oslo. Oscarshall. J. H. Nebelong. 1848. (Oslo, Riksantikvaren.)**

7.5 **"Raphael's Villa." Painting by J. Roed. c. 1840. (Copenhagen, Ny Carlsberg Glyptotek.)**

bilities from which to choose according to means, ambition, personal preference, and the inclinations of the architect.[5] The Gothic was favored more than the Romanesque for domestic buildings. At Steensgård on Langeland a manor was rebuilt in 1836–1837 by Gustav Friedrich Hetsch, a German-born architect who had studied in Paris (figure 7.3).[6] The building already had an octagonal tower, and when finished with stringcourses, stepped gables, and parapet it emerged as a somewhat benign Rygård.

Similarly Oscarshall on Bygdøy, outside Oslo, a private castle built for Oscar I by Johan Henrik Nebelong in 1848, was designed to satisfy the king's interest in Norwegian legend and history (figure 7.4).[7] It was placed on a rocky site overlooking the Oslo Fjord and surrounded with parkland. Nebelong was a pupil of Hetsch in the Academy in Copenhagen and went to Oslo as an assistant to Linstow in 1840. Al-

4

5

6

7.6 Oslo. Cathedral. A. Chateauneuf. 1848–1850. Interior. (Oslo, Riksantikvaren.)

7.7 Oslo. Trinity Church. A. Chateauneuf. 1849–1858.

though the compact little castle with its hexagonal corner tower has been compared to contemporary German examples, the north elevation is also reminiscent of the so-called "Raphael's Villa" in the Villa Borghese gardens in Rome. Since the time of Eckersberg this had been popular with the Danish Neoclassical artists (figure 7.5).[8] Nebelong also had been in Rome and had made drawings of the little building, which for the Norwegian site he translated into a little Gothic castle. The interior was decorated with paintings by Adolph Tidemand and stucco reliefs by Christopher Borch showing scenes of Norwegian landscape and legend.

While individual homeowners could satisfy nostalgic desires to live in houses decked out with Gothic trappings, for the churches it was another matter. Slender piers and pointed arches evoked what was perceived as the piety of the Middle Ages, and some church authorities moved to remodel in the Gothic manner as well as to build afresh.

One of the more spectacular programs of remodeling was carried out by the Hamburg architect Alexis de Chateauneuf at the Cathedral in Oslo, 1848–1850 (figure 7.6).[9] The interior was given wooden vaults with thin applied ribs, cast like a giant net over the old nave and transepts. Baroque and Rococo furnishings were removed, and the gallery received a screen of late Gothic pointed arches. Chateauneuf's spire, added at the same time, remains, but fashion was to change, and the church was stripped of its Gothic revival fittings in the restorations of 1948–1950.

Chateauneuf was more fortunate in the survival of Trinity Church in Oslo, built from his designs in 1849–1858 (figure 7.7).[10] Placed on a height on Akersbakken, it is now more eclipsed by surrounding buildings than originally. Here was an opportunity to build from the be-

ginning, and Chateauneuf chose a cruciform plan with a large central domed octagon. The latter probably reflects the octagon at Nidaros Cathedral in Trondheim and perhaps even more the Palatine Chapel at Aachen. Traceried windows, salient corner buttresses, and turrets and pinnacles complete the scheme. On the interior, clustered piers support the ribbed vaults of the aisles, and the central octagon opens out to the exterior windows. This created a far more genuinely medieval space than could be accomplished by the application of detail alone, and it was a pity that Chateauneuf did not live to see it built. It was finished by his young assistant Andreas von Hanno.

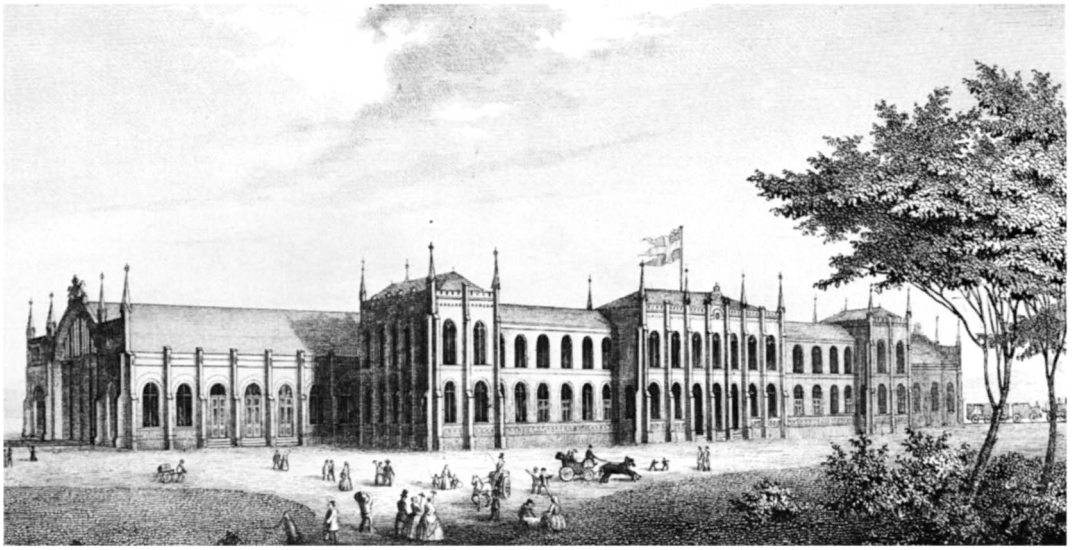
The medieval revival in church architecture continued to the end of the century, but meanwhile certain other buildings were designed in this style. In the days of Christian IV the library of the University of Copenhagen was housed in

7

the attic of Holy Trinity Church. In 1855 a competition was held for a new building to be built next to Peder Malling's main classroom building. M. G. Bindesbøll submitted an interesting design, but the commission went to Johan Daniel Herholdt. The library was built from 1857 to 1861 (figure 7.8).[11] By this time Henri Labrouste had built his famous Bibliothèque Sainte-Geneviève in Paris, 1843–1850, using stone and cast iron. Herholdt's library followed this model in some ways but had to be arranged differently because of the site. Across from Vor Frue Kirke, the library begins with an entrance building, with the entrance itself on Fiolstraede. The monumental vestibule and staircase give access to a suite of offices, beyond which stretches the long section for the book stacks. The exterior wall arcades and traceried oculus windows of the entrance building suggest North Italian Romanesque models,

7.8 Copenhagen. University Library. J. D. Herholdt. 1857–1861.

7.9 Gothenburg. Railway Station. A. W. Edelsvärd. 1856–1858. (Gothenburg, City Museum.)



9

while the narrow vertical divisions of the library itself, with their painted moldings over the upper windows, are in sympathy with the façade of the University building. As in medieval construction, the exterior pattern of windows separated by thin wall strips corresponds to the rows of iron columns that support the interior. The churchlike effect resulting on the interior is further emphasized by the Batty Langley–like Gothic pattern of the columns. The two university buildings together have a certain grandeur outside and in that sets the tone for the authority of the educational enterprise.

An entirely different problem was posed by the coming of the railway. The first steam-powered locomotive for drawing a passenger train was put into service in England in 1825.[12] The "iron horse" also introduced a new era in the moving of goods, the earliest Danish use of the new means of transport being a line from Altona to Kiel built in 1844, then in Danish territory. Norway in 1854 and Sweden in 1856 also began short rail lines.[13] The mountainous terrain of Norway scarcely lent itself to ease of rail construction, and the many bodies of water between the islands of Denmark were similarly inhospitable to long-distance rail lines. The earliest Scandinavian railway of any considerable length was built in Sweden over the much more continuous level land route between Stockholm and Gothenburg from 1855 to 1862. By this time a whole generation of railway stations had been constructed in England and on the Continent.

As the western terminal for this line, designed by the Swedish engineer Nils Ericson, Adolf W. Edelsvärd built the station in Gothenburg in 1856–1858 (figure 7.9).[14] The type was by now familiar, with the trains completing their journey under a long shed with arching cast iron roof, long platforms between the tracks, loading platforms and warehouse facilities on either side, and a ticket office/waiting room to accommodate passengers. The question of embellishment was being answered in a variety of ornamental styles: Greek, Italian, Egyptian, Gothic, and even Moorish. Edelsvärd chose a rather thin late Gothic set of motifs. The station was remodeled in 1877 and replaced in 1916.

7.10 **Sandvik, Vestfold. Railway Station. G. Bull. 1873. (Dietrichson and Munthe, *Holzbaukunst*, plate 13.)**

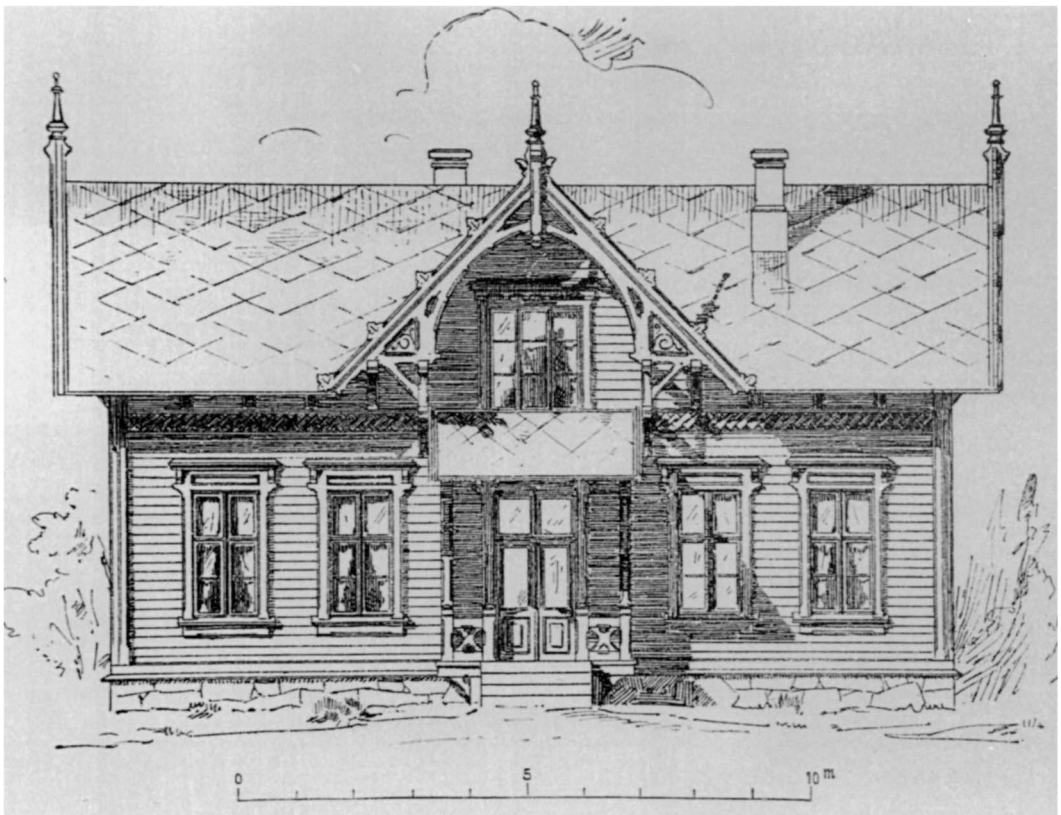
7.11 **Oslo. Parliament. E. V. Langlet. 1866.**

A station beside a track, rather than a terminus, would be planned differently. For Sandvik in Vestfold a little station was designed in 1873 by Georg Andreas Bull, who had been the state railway architect from 1863 to 1872 (figure 7.10).[15] A central entrance with porch and pinnacled gable led into a vestibule with ticket office beyond and waiting rooms on either side. This was an essentially domestic design in outward appearance and characteristic of the many small stations that were needed in the smaller towns between the major city terminals.

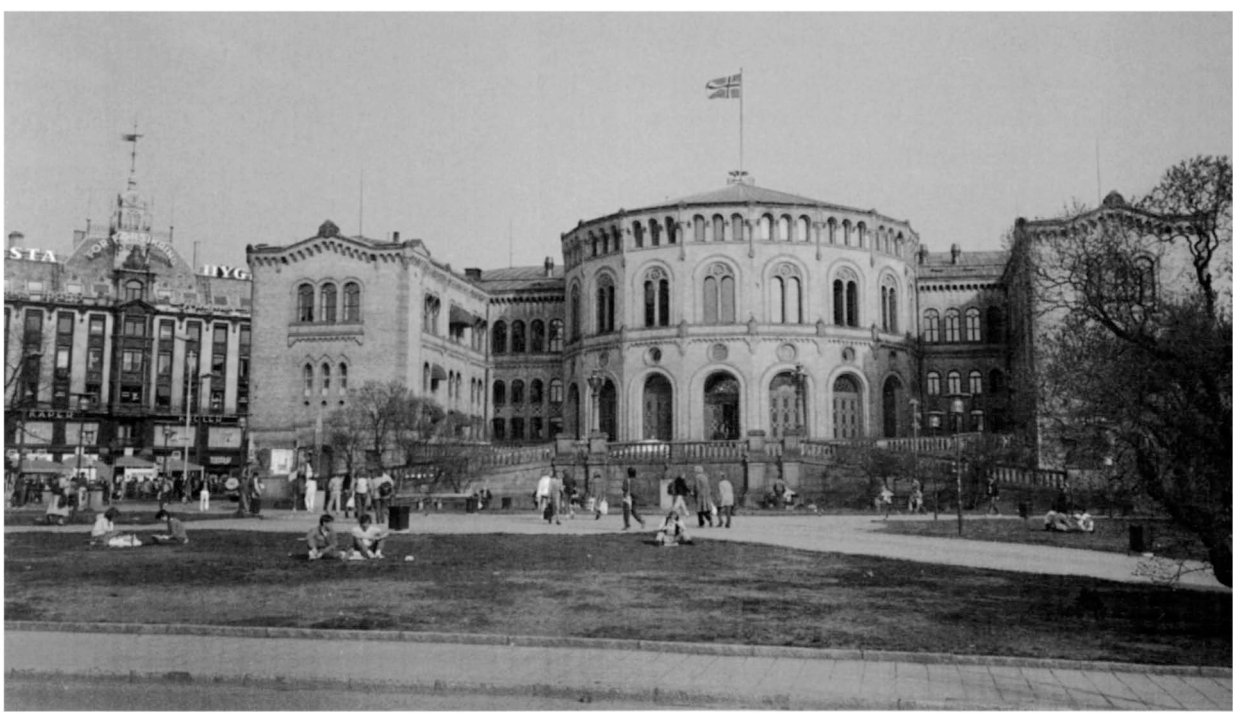
In Oslo the middle years of nineteenth-century building were brought to a climax with the Storting (Parliament) (figure 7.11).[16] After more than twenty years of proposals, a design for the Storting building was finally agreed upon, that of the Swedish architect Emil Victor Langlet in 1866. Built of yellow and gray brick with granite trim, it rises boldly between Karl Johan Gate and Stortings Gata at the end of the esplanade leading from the Royal Palace park. While not precisely in line with the Palace, the Parliament lies on the east side of Akersgata, which leads from Akershus park up the hill to Gamle Aker Church. With Karl Johan Gate leading on over the Parliament hill to the Cathedral, the two principal axes of the city now had the seat of the national legislative body at their intersection. Tall modern buildings now make this difficult to perceive, but on completion of the Parliament in 1866 the cityscape must have been quite different. Langlet chose an H-shaped plan, with the two assembly rooms projecting east and west from the center portion. The exterior is carried out in the Lombard Romanesque style, the groups of single, double, and triple round-headed openings played off against each other and against the blind arcades and corbel tables. For the interior Langlet turned to colorfully painted wood finishes in a combination of Gothic, "Swiss," and ancient Norwegian motifs.

Among the later medievalizing churches one stands out as clearly imitative, King Oscar's Chapel at Grense-Jacobselv in Finnmark, built by Jacob Wilhelm Norden in 1869 (figure 7.12).[17] It was built at the northern tip of Norway, just at the Russian border, in part to command respect from Russian fishermen. Built of local stone, with its single tower, nave, short choir, and polygonal apse it resembles medieval Swedish parish churches and takes its name from a visit by Oscar II in 1873.

Representative of the larger city churches in the Gothic style is St. John's Church in Bergen, built by Herman M. Backer in 1894 (figure 7.13).[18] It is dramatically placed, high on the hill up which climbs Vester Torv Gaten from the market square. The view back down is as impressive as the view up. The church has the necessary pointed openings, steep gables, and pinnacles, but the use of some polychromed brick and a suggestion of broad flat surfaces indicate that some changes in fashion were taking place.



10



11

In Denmark a late expression of medieval style in church building was more Romanesque than Gothic.[19] The two great restoration projects in Norway and Sweden were for the Gothic cathedrals of Trondheim and Uppsala. In Denmark the comparable effort was for the rebuilding of the Romanesque Viborg cathedral, and Denmark, as we have seen, had a wealth of brick Romanesque churches. Martin Borch chose this tradition for the church of St. Andrew in Copenhagen, built 1898–1901 (figure 7.14).[20]

12

In the meantime some important developments had been taking place in thinking about Protestant church architecture. Earlier Scandinavian builders had approached the matter from the seventeenth century in such buildings as Holy Trinity Church in Kristianstad, 1617–1628, Adolf Fredrik's Church in Stockholm, 1768, and the Lutheran Church of St. Nicholas in Helsinki, 1826. Conventional symmetrical plans had been chosen, whether basilical or centralized, and the outward appearance of these churches was one of regularity, however richly ornamented. A move away from symmetry together with efforts to place more emphasis on the pulpit was already under way in England and the United States, and this had been described and illustrated by the German author K. E. O. Fritsch in 1893. The plan of St. Andrew's Church appears to be based on a "Model of a Rural Church" in that book.[21]

The church is built of red brick, with a sparing use of ornamental motifs except for the familiar paneling. The main portal leads to the nave, and there is only one aisle, on the south side behind the tower that rises south of the portal. This is the arrangement of Fritsch's "rural church" plan. On the interior the nave is covered with domical vaults, and the south aisle is separated by large round-headed arches at the lower level. Above the aisle is an open

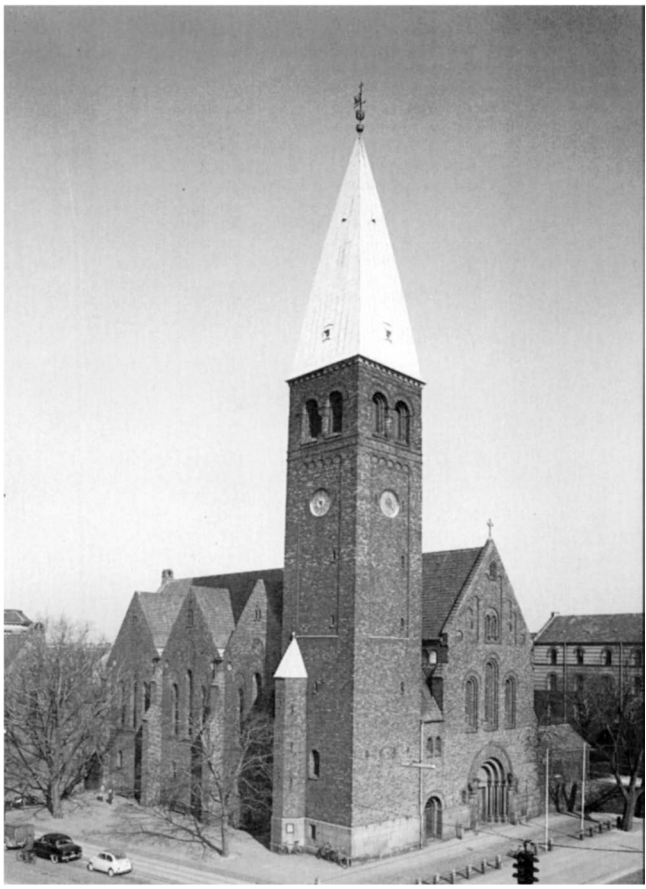
13

7.12 Grense-Jacobselv, Finnmark. King Oscar's Chapel. J. W. Norden. 1869. (Oslo, Riksantikvaren.)

7.13 Bergen. St. John's Church. H. M. Backer. 1894. (Oslo, Riksantikvaren.)

7.14 Copenhagen. St. Andrew's Church. M. Borch. 1899–1901. (Copenhagen, National Museum.)

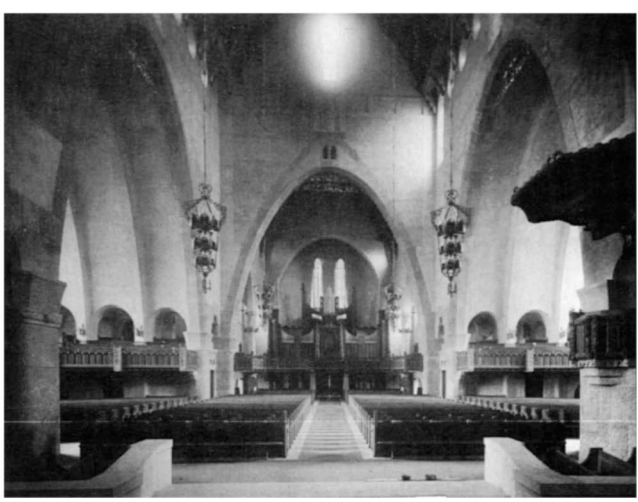
7.15 Stockholm. Engelbrekt Church. L. I. Wahlman. 1906–1914. Interior. (Stockholm, City Museum.)



14

vaulted gallery, the effect reminiscent of San Marco in Venice or Sant' Ambrogio in Milan.

A still later interpretation of the medieval styles was made for the church commemorating the Swedish hero Engelbrekt Engelbrektsson, leader of the popular uprising in the 1430s.[22] Built from the designs of Lars Israel Wahlman in 1906–1914, it has a commanding position on a high bluff above Karlavägen in Stockholm. It is a cruciform building, with long nave and transepts and a tall tower at the southwest corner. Its brick surfaces are broad and smooth with an almost nervous delicacy of ornament at the top of the walls and the tall slender tower. Despite the conventional plan, the effect of the interior is unique, the granite piers and parabolic arches carrying the wooden roof over the nave (figure 7.15). Most striking



15

among the many paintings in the church is that of Christ Crucified above the altar, a much-transformed echo of such paintings in the medieval parish churches. The height of the nave, nearly 100 feet, keeps the massive proportions of piers and ribs from producing a cavelike effect.

Another possibility for historic style, that of the Renaissance and Baroque era, also found expression in major works in the second half of the nineteenth century. If the university buildings in Helsinki, Oslo, and Copenhagen were intended to appear as impressive halls of learning, so were the museums and theaters founded in increasing numbers in the Scandinavian cities.[23] In Stockholm the royal collections of painting and sculpture had been housed in a wing of the Royal Palace since 1793, when a plan for a separate museum came to nothing. By 1840 the matter was revived and by 1846 a

7.16 **Stockholm. National Museum. F. A. Stüler. 1849–1866. (Stockholm, National Museum.)**

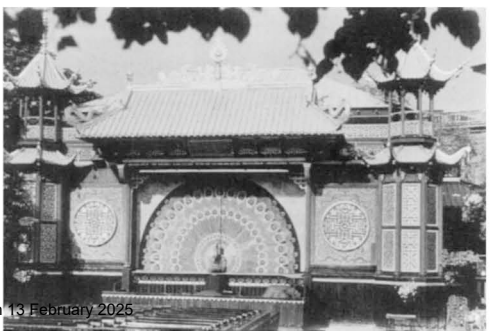
7.17 **Copenhagen. Danish National Bank. J. D. Herholdt. 1866–1870. (Copenhagen, National Museum.)**

17

committee appointed. Several proposals were made, approval going to that of the German architect Friedrich August Stüler. He had studied with Schinkel and was becoming well known as a museum designer, having recently begun the Neues Museum in Berlin.[24] For Stockholm the proposed National Museum was to be a major national architectural event, the largest project, in fact, to be undertaken since the completion of the Royal Palace itself.

The site finally chosen is on Blasieholm, across the harbor from the Palace. Stüler's building, begun in 1849 and completed in 1866, has a majestic west façade that gives some indication of the inner disposition of the building (figure 7.16).[25] The three-bay central portion, divided by pilasters with tall round-headed windows between, is flanked by the north and south wings, three stories high above the basement. The project was for a museum to house galleries for painting and sculpture and also a library. Stüler planned it to be in four wings, the court so created crossed by a central wing. The grand vestibule and stair hall give access to the galleries in the wings. No corridors were included, circulation being through the larger and smaller galleries. Stüler had a strong sense that such a museum should be a work of art itself, which he tried to achieve through the richness of red and gray limestone and a Renaissance ornamental vocabulary.[26] He also used iron in its construction. The interior designs were supplied by Fredrik Wilhelm Scholander, one of Sweden's leading architects (whose proposal for the museum itself had not been accepted), and in 1896–1908 the Swedish painter Carl Larsson designed the great frescoes above the staircase. This was the first of the major

18

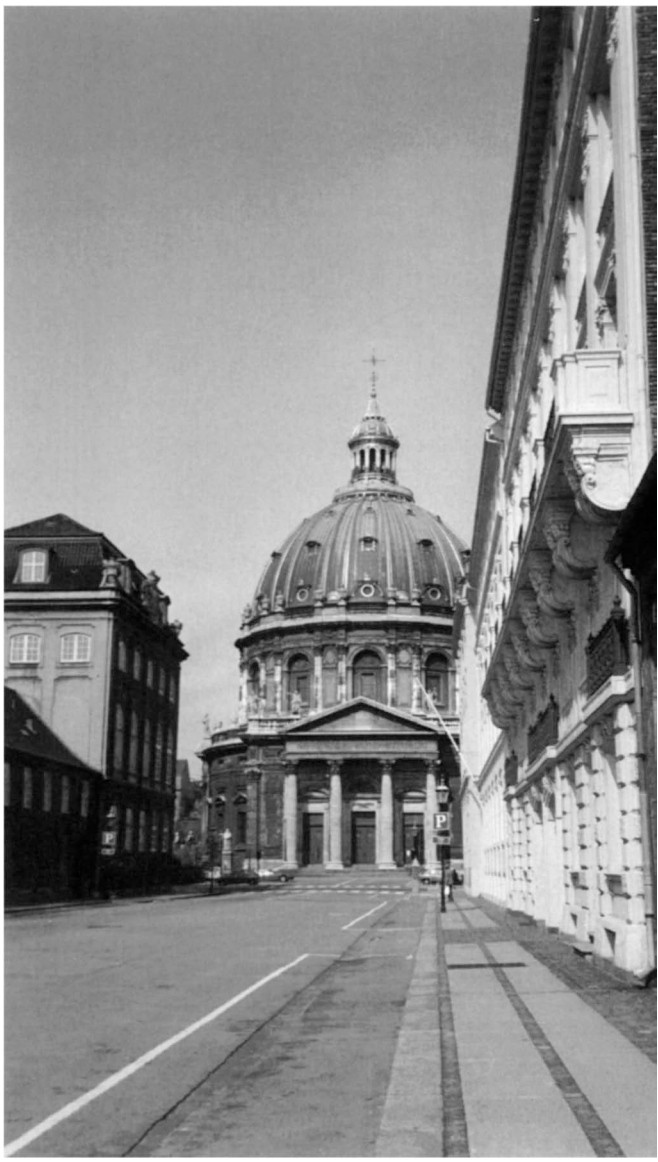


19

7.18 **Copenhagen. Royal Theater. V. Dahlerup and O. Petersen. 1872–1874. (Copenhagen, National Museum.)**

7.19 **Copenhagen. Pantomime Theater. V. Dahlerup. 1874.**

7.20 **Copenhagen. Frederik's Church. F. Meldahl. 1876–1894.**



20