





Frederiksberg

Positively conservative, historical landmark castle, big parks and lots of theaters

Frederiksberg is geographically a part of Copenhagen, but has been governed as an independent municipality since 1841. The main shopping street is Gammel Kongevej. You can get there within 15 minutes by walking from the city center from Rådhuspladsen (Town Hall Square). Frederiksberg is classic Copenhagen at its best. You are constantly reminded of the past through the architecture seen when passing by grand bungalows and villas that cover a large part of the district. The vibe here is just calmer than in other parts of the city, a place where grandmothers walk their poodles and take time to feed the doves! Frederiksberg residents are typically middle-upper class, primarily academics and people involved in the art scene or broadcasting. Main street Frederiksberg Alle ends at the main entrance to Frederiksberg Have. A beautiful Baroque inspired recreational area. The park has been the place to go for centuries for Sunday trips outside of Copenhagen to enjoy a bit of fresh air. Frederiksberg is also a cultural haven offering a variety of theaters, revues and cabarets.

A big event on Saturdays from 9 am – 3 pm is the district's open air flea market running from April-October. The flea market consists of

approximately 70 stalls and is located in the parking lot behind Frederiksberg City Hall. Be sure to get there early as it's very popular.

In the Viking days Fredriksberg was a village area named Solbjerg. In 1620 King Christian IV decided the area should work as a manor and provide Copenhagen and the castles with agricultural articles. In 1699, the Frederiksberg Castle and the two parks Søndermarken and Frederiksberg Have were designed in French/Italian Baroque style by King Fredrik IV and served as his summer residence, hence the name. The new village developed around the castle, leaving very little land for farming use. In the years that followed, the King sold the entire area little by little it become freehold land and a parish of Denmark. Middle-class Danes loved the area and they too began to build their summer residences there.

City

Unspoiled, historical and commercial in a happening mix

The heart of Copenhagen city is an intimate thrill on its own. This beautiful part of the city is dominated by a skyline dating back to medieval times with Renaissance copper domes, spires and bell towers. You won't find many other capitols in the world where it's this to get around. Everyday life is dominated by busy Copenhageners going to and from work predominately on their bicycles riding along dedicated bike paths. You are literally walking on the past with all the cobblestone streets- and very often one way! Forget getting around by car, Copenhagen deserves to be discovered by foot, bike or boat. Starting with a canal tour is one of the best ways to get an overview of all the exciting places to experience.

The old city's focal point is Strøget, a two kilometer long pedestrian street and the best place to shop for high to low-end finds. For popular Danish design make sure to pay a visit to Illums Bolighus and Royal Copenhagen. Both shops are located at Amager Torv.

On one end of Strøget you find the City Hall Square where people gather to pay tribute to national sport stars or to welcome the New Year, and every so often you will run into some kind of demonstration. You can climb up the City Hall clock tower for a great view and hear the tower bells, which are synonymous with the noon-time news for the locals, and chime on the hour daily. If you have a desire to appear on live TV, there's Aftenshowet (the evening show), broadcasting daily on the square from 6 pm. On the other end is Kongens Nytorv (the king's new square), a large roundabout where you can see The Royal Theater, which also houses the famous Bournonvilles' inspired Royal Danish Ballet, Magasin du Nord, a beautiful department store equivalent to Saks Fifth Avenue in Manhattan or Harrods in London, and the famous Nyhavn.

Nyhavn, meaning the new harbor, was put into use for trade back in the 1670s. It's difficult not to come across a lopsided shop house here that doesn't have some 300 years of history and numerous famous residents, among them H.C. Andersen who used to live in house number 18. Due to trade from far away lands, the sailor pubs and restaurants ended up with exotic names like Cap Horn and Hong Kong Café. This is a happening place to hang out, eat and drink and be merry.

Vesterbro

Tivoli Gardens, the red light district and specialized designer shopping, let me entertain you!

Vesterbro might just be your first impression of Copenhagen when you arrive from the airport by the new metro to the central train station, Hovedbanegården. If you walk out from the south entrance you are already on Istedgade, the main street in the rather shady red light district. But it's all a mix now a day; you have porn shops and gay saunas next to Pakistani and Thai green grocers and private residences. About 10 years ago Vesterbro started undergoing a dramatic urban renewal and the area is fast becoming more fashionable by the minute.





Sankt Hans Torv - Nørrebro

Nørrebro

Ethnic atmosphere, underground music and vintage shopping

Istedgade is a great shopping and dining street with lots of small exclusive interior and fashion designer shops next to hardware stores and textile shops. It's also a common sight to see Carlsberg brewery's horse drawn carriages trotting through the streets of Vesterbro. The scene is very bohemian and colorful.

If you decide to take the nNorth entrance out of Hovedbanegården instead, you are standing right next to The Tivoli Gardens (1843), one of the 10 most popular amusement parks in the world, and by far the most stunning. Tivoli is much more than fun rides, it also has amazing gardens, gourmet food restaurants, open air concerts, lots of theater and out of this world creative high-tech firework displays at midnight. This treasured garden is at its most beautiful at night time. Vesterbro is in more ways than one, the hottest place in Copenhagen to visit day or night.

From a historical perspective Vesterbro has been a center for working class entertainment. But it is also a district with a long history of deep poverty. Peasants came to Vesterbro to do their market business in its many small squares. They would sleep in the Inns and just enjoy themselves with whatever this city district had to offer, maybe even take a stroll in Tivoli Gardens. In the 1800s the migration from countryside to city was so massive that the area couldn't keep up with the demand for work. The area became very slummy and the red light district had golden days. In those days Vesterbro was situated outside the deep moats surrounding the inner city, which was protected by several gates, and Vesterbro was locked down at night to keep the mop in one place. The district didn't even have a place to worship until citizens from the more affluent neighboring Frederiksberg district built a church for the locals. This was done primarily because its residents just wanted to prevent the working class citizens of Vesterbro from using their churches!

Nørrebro is a colorful multi-ethnic part of the city and by far the most crowded in population. The city's pulse is pumping fast and furious in Nørrebro. The locals are a mix of old school working class (however extinct a class they may be in modern society), young families, immigrants and students.

The immigrants of Nørrebro provide a colorful specter of exotic shopping and eateries dominated by Middle Eastern, Turkish and Asian influences. Nørrebro also has plenty to offer when it comes to organic food shopping. Ravnsborggade is a street that offers a great line up of whimsical antique and second hand shops but remember to bargain. Nørrebro is also the place to be when looking for underground music in clubs such as Rust and Stengade 30.

One way to enter Nørrebro is by crossing the four lakes and the beautiful Dronning Louises Bridge. The artificial lakes date all the way back to King Absalon in 1160 and were originally made for defensive purposes because they could easily be used to flood the area outside Copenhagen before the enemy could get too close to the city center. Later the lakes were used to supply drinking water, but by 1959 people had had enough tadpoles and mosquito maggots in their morning coffee! For centuries, the lakes have been a popular recreational area for locals to hang out, jog, bike or feed the swans and ducks. You can easily spend a few hours here, rent a paddle boat and eat at one of the many lakeside restaurants and cafés.

Sankt Hans Torv is a beautiful old square with many fancy café's and if the weather permits, plenty of street entertainers. Jørgen Haugen Sørensen's edgy granite sculpture "The House that rains" (1992-93), is a much discussed focal point. It's described as a raw and rather brutal monument and might just refer to the more recent rebellious history of Nørrebro. For decades it has been a place where left-winged orientated youth hold demonstrations and often come to heads with authorities. Most recently, protests against the destruction of a youth house resulted in burned cars and buildings and several arrests. Despite these clashes and a politically fuelled history, the district is generally a very safe place.

Christianshavn

Authentic and relaxed Island feel combined with sublime gastronomy

You enter Christianshavn by crossing Knippelsbro Bridge leading to the island of Amager and find yourself in an old, charming district that dates back to 1618. The locals are a great mix of businessmen, artists, hippies and traditional families. When it comes to city fires of the past this area has been spared and is truly medieval Copenhagen.

Experience beautiful architecture, peaceful walks along the cobblestone streets and romantic canals where people live in their much sought after houseboats. If you are looking for a good restaurant, Christianshavn has many to choose from and a few of the city's best can be found on the side streets named Overgaden neden Vandet or Strandgade. The restaurant Era Ora specializes in Italian cuisine and Noma provides the best in Nordic innovative gastronomy. Both restaurants hold Michelin stars.

Christiania is a must see area of Christianshavn. Back in the 70s a group of hippies and intellectuals found that "something was rotten in the state of Denmark," and decided to make their own community. They managed to take over a fairly large area of abandoned military barracks and named it "Free Town." They designed their own set of rules, completely independent of public legislation. The politics surrounding Christiania is a much discussed subject in the media and several attempts have been made over time to close down the place due to the selling of cannabis. Therefore, if you are walking down Pusher Street and are offered Red Afghan or Black Nepal, don't expect to get a holiday ticket!

That aside you can expect to see innovative architecture, especially around the lake area Norddysen. The lakeside architecture showcases peculiar and daring individual styles, as well as social housing you never dreamt of. You will find homes up in the trees or with hobbit like structures, colorful cabins and futuristic UFO inspired residences. Be sure to make time for a visit to the local blacksmith where the famous Christiania bikes are built. At night you might even be lucky to hear nightingales singing in the tree tops of "Free Town."

King Christian IV is often referred to as the father of Copenhagen. He is, after all, the man behind most of the city's remarkable historical renaissance landmarks as well as its architecture and the layout of Christianshavn village, which previously was a military area. He made certain that the village be inhabited quickly by declaring the area a tax-free zone for up to 12 years. Needless to say people didn't think twice about moving in.



Østerbro

Noble, traditional and elegant, high end art, promenade at the Sound

The wide boulevards and abundance of greenery make Østerbro a very pleasant place for the many families that live here. This neighborhood, which is considered to be one of the best in the city, is a place you really wouldn't mind your kids growing up. Ex-Princess Alexandra gathered the same and recently moved here to start a common life with her new husband and two little Princes. International diplomacy takes up most of Dag Hammerskjolds Alle alongside well established high-end auction houses, galleries and antique dealers. Be sure to visit The National Art Gallery (Statens Museum for Kunst). The impressive national as well as international art collection covers the past 700 years.

Østerbrogade is the main shopping street. If you have even the slightest interest in Danish design, you will enjoy a visit to Normann Copenhagen. It's the city's new flagship store featuring modern design combined with organic forms and functionality. Next to Østerbrogade is the green heart of the capital Fælledparken. This is the place to hang out, picnic and play soccer or listen to an open air concert by the pavilion. Festivals and big political meetings also take place in Fælledparken.

The National Stadium PARKEN is right next to Fælledparken. It's the home of Copenhagen's soccer team FCK, nicknamed "The Lions", and holds international sports events as well as big international rock concerts. The stadium has 42,000 seats.

People living on Østerbro love walking on the Sound promenade, Langelinje. It also happens to be one of the world's largest dock sides for international luxury liners. Visitors are greeted by one of Copenhagen's most well known landmarks, The Little Mermaid. If you walk to the end of Langelinje towards the city you will end up passing the royal family's winter castle Amalienborg. Another great pedestrian area is the old fortification "Kastellet" (1626). It's the best preserved of all Northern Europe.

Østerbro is clean and airy, a development that didn't happen over night. There's a historical reason behind this. In the late 1800s when Copenhagen's ramparts were long destroyed, surrounding districts like Vesterbro and Nørrebro developed from trade into residential areas. The development happened too quickly to make sure proper housing conditions and surroundings in general were taken into consideration. People were stacked like sardines in small apartments and deadly epidemics were common. Østerbro, due to its location and lack of trade market squares, remained countryside for a longer period of time and wasn't hit by growing pains until the 1880s. The authorities learned from previous mistakes and introduced stricter building legislation demanding broader streets and higher quality of residency.

Islands Brygge

New urban city life, modern architecture, hip art galleries, or go for a swim in the harbor

Cross "Langebrogade" Bridge from the city center and you enter this newly developed part of Copenhagen. It's been five years since a new era began for Islands Brygge. Many buildings were torn down or modernized. Today the area is becoming somewhat similar to what Covent Garden is to London - a happening place with something for every age group. Plenty of innovative new companies have decided to move in and the area is now beaming with life on many levels.

Many art galleries have moved out here and focus on the artists of tomorrow, but the area is still lacking some of the cozy feel Copenhagen has to offer in most other districts. Quite a few of the remaining run down factories have undergone a total makeover and are now luxury flats giving a good example of futuristic architecture in Copenhagen. The harbor strip for pedestrians offers marvelous sea and city views, especially at night.

This part of Copenhagen used to be only sea. Islands Brygge, meaning The Icelandic Wharf, was where cruise ships from the neighboring Nordic countries docked. Back in the 1880s the military needed new barracks and a large shooting range so they started to reclaim land and build up a whole new part of town. By the turn of the century, Islands Brygge had become industrial consisting primarily of factories.

You will find plenty of entertainment alongside the picturesque harbor strip.

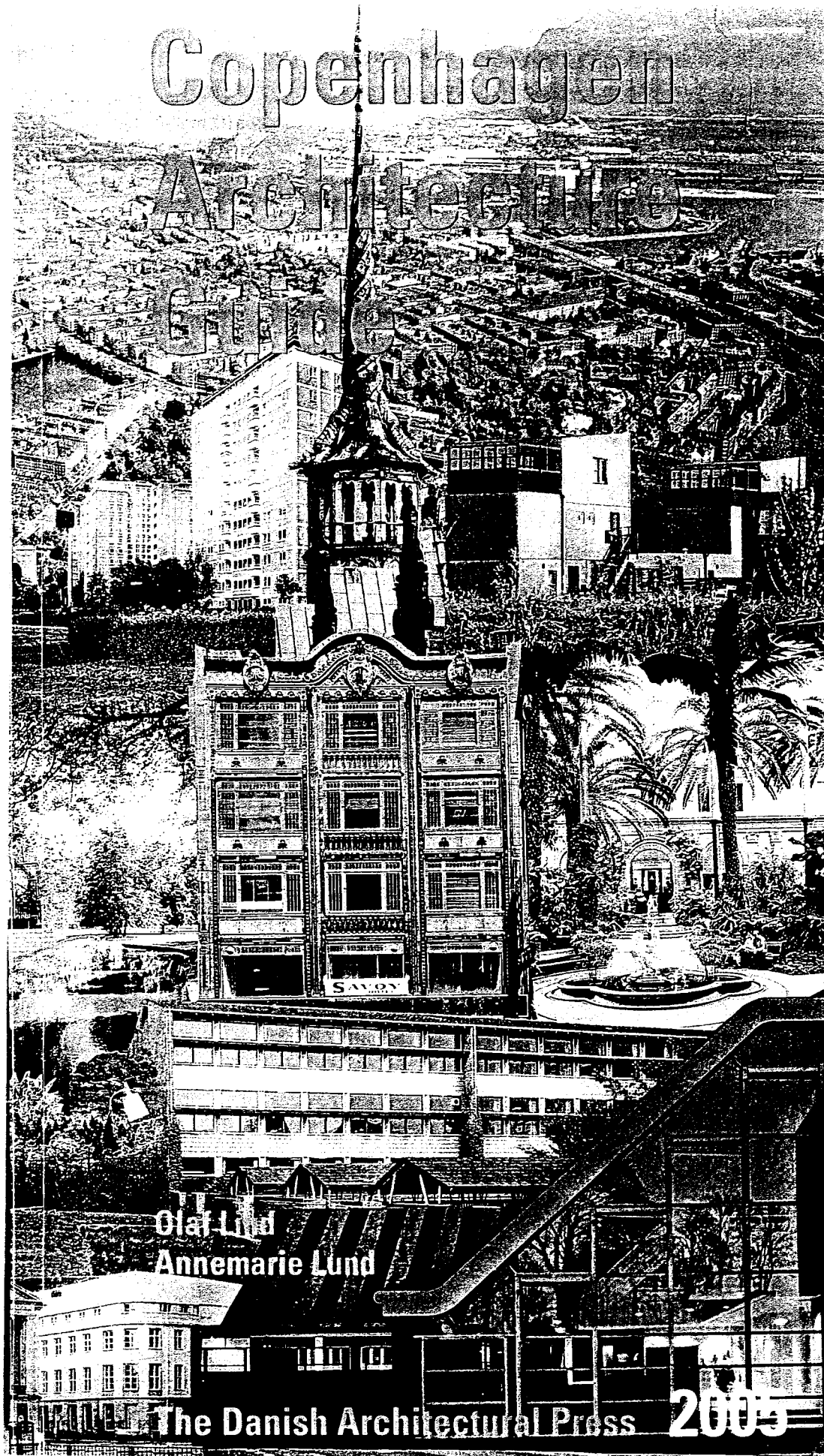
Havneparken is a large park area with a major playground for younger kids. A fun element in this kid's haven is the magnificent climbing sculpture. Next to the playground you will skate boarding ramps, roller skaters and basketball courts. There's also a ground for beach volleyball and one for the popular French ball game Pétanque.

Easily recognizable is the harbor festival square named Pinetiet. It's a huge ferry cut in half with the deck removed, then turned up side down resting on two major pillars. This way the ferry works as a roof and provides shelter for a variety of entertainment and events such as concerts, theater and even birthdays and weddings.



Chertan by Surtedanis Sa (Surtedam talu)

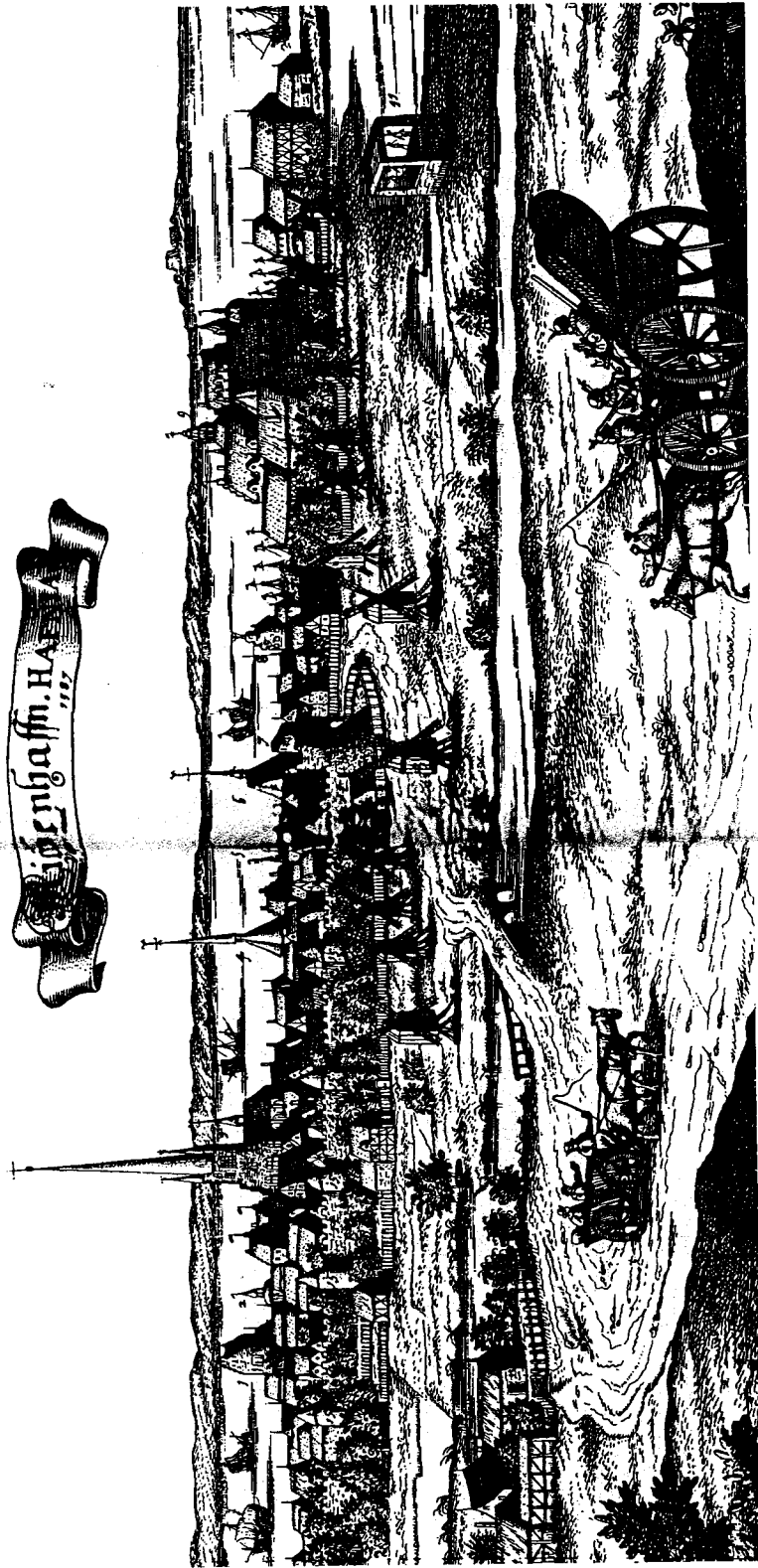
Copenhagen Architecture Guide



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Copenhagen, 1587

Geological prologue

The geographic spread of the some 300 subjects in this guide reflects essential features in the history of Copenhagen. It is not surprising that most are located in the central urban area, showing that from the time the city emerged in the 12th century to the middle of the 19th, it was a clear unit, sharply separated from the world by solid fortifications. Seven centuries of building lie within this area, which also contains many of the buildings that are part of the Danish identity purely because of their historical significance.

The spread of subjects in this guide that lie outside the city ramparts – which were demolished in 1852 – is, if not surprising, then at least telling. Most are clearly located north of the city. In Trap Danmark (5th edition, 1959), Professor Axel Schou wrote about the importance of the ice age for Copenhagen's topography: "The great differences in landscape between the county's relief-rich northernmost region and the southeastern part, which is characterized by the alluvial plain that separates Copenhagen, Roskilde, and Køge, ... is explained by the curve ... in the course taken by the ice front. A seemingly minor detail in the last ice age's glacier topography here had momentous consequences for the qualitative evaluation of the present-day landscape with a view to cultivation, habitation – yes, even with regard to such small details as the choice of a destination for a Sunday outing."

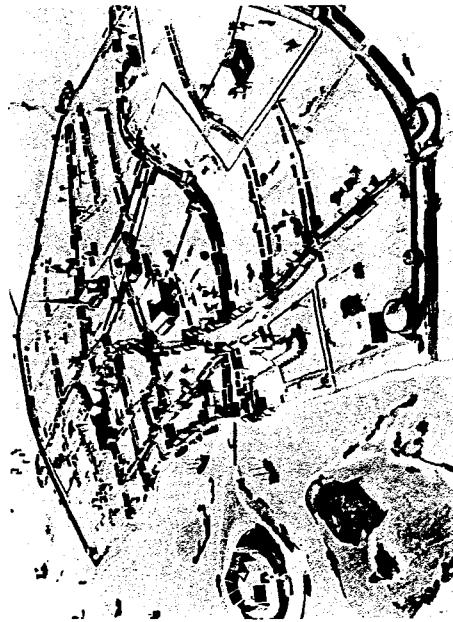
This "relief-rich" northern area has for centuries attracted the people of the capital and the concept "outing" covers everything from luxurious 18th-century royal hunting

lodges to a patch of contemporary grass in Dyrehaven park, where a Dane can sit with his beer. The north has been a pleasure area, in contrast to the heath west of Copenhagen and the coastal areas on Køge Bay and Amager, which have been put to more practical use. The use of the northern landscape for hunting, relaxation, and artistic inspiration left its traces as buildings that were to promote pleasure, something that for long periods had been the right of the royal family and nobility and later also of the better bourgeoisie. Summer houses were palaces, manors, and large villas that served as refuges from the stifling conditions in the crowded city behind the ramparts. Inspiring northern Zealand developed a tradition of good-quality, beautiful summer houses, often designed by the period's best architects. Painters and poets, especially in the Romantic Age in around 1800, did their part to make a place for northern Zealand in the national consciousness as the ideal of harmony between nature and culture.

This provides some of the explanation of why so many old buildings north of Copenhagen have been chosen for this guide. But the tradition of good building in this region continued even after the city ramparts were penetrated and more democratic building began. Or to put it in a different way: the more or less well-to-do Copenhagen builders at the end of the 19th century and in the 20th also preferred to settle in the lovely landscape to the north, and they frequently employed the day's best architects. Right up to the very present, the attractions and traditions of the north – which began as one of nature's whims in the ice age – have had a decisive influence on Copenhagen's building and urban planning.



Havn before
Absalon



Copenhagen
around 1500



Copenhagen
around 1600

The areas west and south of Copenhagen, put to more practical use, also developed their architecture throughout the centuries, but they managed without help from famous architects. Dragør in Amager (J 136) is an example of an unplanned town that developed in its own way in the course of the 18th century into a homogeneous unit which, after today's norms, is very good architecture. In the west and south, deliberately planned architecture left decisive marks during the 20th century's explosive urban development. This growth especially took the form of completely new conurbations, such as the towns on Køge Bay, Albertslund, and Høje Taastrup, and major traffic facilities like Kastrup Airport.

Good architecture

The concept "good architecture" is an indefinable one that can thus comprise both anonymous buildings in a community and major projects designed by an architect who expresses both himself and a large, international clientele. This is a large field that is not fully elucidated in this guide because it covers a decidedly urban area in which deliberately planned architecture has dominated.

The choice of subjects for this guide was made spontaneously by a group of experts who then made adjustments to their selection after thorough discussions. The subjects can consequently be viewed as reflecting what a contemporary Danish group of experts considers to be good, distinctive architecture. The some 300 subjects do not, however, provide a sufficiently good picture of Copenhagen's best architecture. Many were left out after careful consideration because of space limitations. In addition to taking architectural quality into account, the experts also evaluated whether the subjects reflected a characteristic development when they were built with regard to form, technique, or their relationship to history and society. These aspects also expand our concept of what is good architecture, and in this respect Copenhagen and its environs have a wealth of examples. Within this field, architecture moves effortlessly between sublime art and buildings of historical interest. Here Copenhagen does not differ from other major cities. Nonetheless, Copenhagen's architecture – country manors from the 19th century, public housing from the 1920's, and contemporary commercial buildings – has its own special tone that can be distinguished from that of all other cities. The subjects in the guide were chosen in order to bring out this special Copenhagen tone as it is found in houses, parks, and plans, giving as many nuances as possible.

The merchants' harbor

The oldest building in the guide is the House of the Holy Ghost, erected in the latter half of the 15th century as the hospital of a monastery founded in 1296. The building is the oldest in Copenhagen that has been preserved in its entirety, and is consequently the city's oldest piece of architecture. But Copenhagen's history is much longer. There was evidently a trading post near present-day Slotsholm in around 800. The site was mentioned for the first time by Saxo Grammaticus in an account of the year 1026. A number of papal briefs from the end of the 12th century give it the Latin name Hafnia (harbor), corresponding to the oldest Danish name for the place: Havn. Written sources from the 13th century give the name Køpmannæhafn (merchants' harbor), clearly the source of the city's present name, and showing that it was a trading post. The area around Havn was owned by the landed gentry in the early Middle Ages. One landowner was the Bishop of Roskilde, Absalon, who was also a great warrior. In 1167, Absalon built a fortress at Havn, which consequently gained military importance in the period's wars against the Wends. Remains of Absalon's fortress can be found under Christiansborg Palace, and its builder is considered the founder of Copenhagen.

After Absalon's death in 1201, his lands in Køpmannæhafn fell to the bishopric in Roskilde, which retained them for more than 200 years, until the king, Erik of Pomerania,

nia, captured the city in a coup in 1417. After the Réformation in the 16th century, when the state confiscated church property and the central administration had grown, the little town on the Sound was officially acclaimed the capital of the Kingdom of Denmark and Norway. At the time, Denmark also covered Scania, Halland, and Blekinge, east of the Sound, so the capital lay in the middle of the kingdom, but was smaller than Malmö, Nästved, Odense, and Viborg. The little capital had two exit roads, one in the southwest, about where present-day Vestergade runs, and another that followed the course of present-day Købmagergade. Staggered at Gammel Torveje, the two roads met by a ferry and a square, present-day Højbro Plads and Amager-torv. The structure of the city itself at this point has consequently not changed since the Middle Ages. Then, as now, Amager-torv was the city's central market place, a high point on today's elongated market, the Strøget mall. And close by it, a bit west of the square, was the Church of the Holy Ghost, the monastery, and the House of the Holy Ghost, chronologically number one in this guide (F 1). Gothic architecture is represented only by this little hospital building.

Copenhagen's secular Medieval buildings are gone or survive only as ruins. Some are hidden, like the remains of Absalon's fortress under Christiansborg, where they are nonetheless accessible. Others can be seen above ground, such as the ruins of Jarmer's Tower on Jarmers Plads, named after the Wend chieftain Jaromar, who took part in one of the many conflicts between the bishopric in Roskilde and the king in the 13th century. The tower was built in the 16th century, part of the city's Medieval fortifications, but in the 17th century it was covered by Christian IV's Western Ramparts. As a whole, fortifications were decisive for the formation of old Copenhagen, and especially during Christian IV's reign (1588-1648), the town was given a framework that still plays a role for its form and life. The largest single monument in the fortifications was the Citadel (F 11), which still gives a vivid impression of the ramparts' size and forms, but the Christianshavn Ramparts (I 15) also convey this carefully conceived past glory. The fortifications around the inner city and Christianshavn were built in several stages over the ensuing centuries, and when Copenhagen's days as a fortified city ended in 1856, this magnificent architectural work reflected the art of war and urban ideals of the Renaissance and the Baroque.

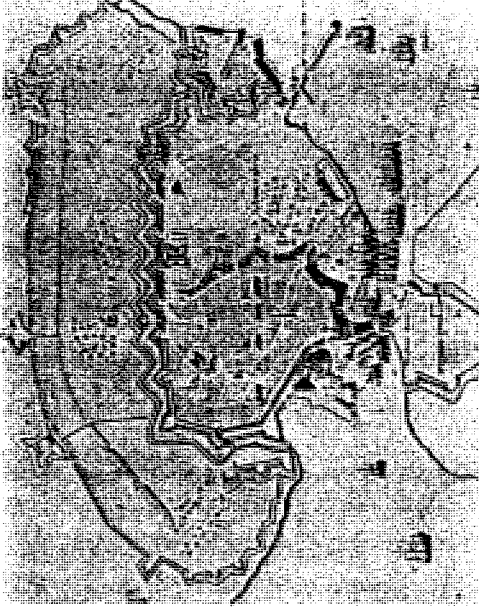
The great builders

Christian IV was in all ways a Renaissance prince. As a builder (and perhaps an architect) he created some of Copenhagen's largest and most valuable buildings, making Dutch Renaissance a characteristic style for the city. It can be seen in such buildings as Rosenborg Palace (F 3) and the Bourse (F 4), and the style of royal edifices was copied in town houses, as shown by the house on Amager-torv (F 6). The town houses on Strandgade (F 7) from the same period are more anonymous, although they also had decorations in the style of the day. Together with the buildings in Møgstræde (F 13), the basic features of these buildings give us a picture of 17th-century Copenhagen. Christian IV was also an innovator when it came to ordinary housing. He made a decisive break with the familiar urban and housing patterns with the erection of Nyboder (F 9), intended to house the navy's permanent staff: ordinary people. For more than 350 years, the buildings have been a clear and strong source of inspiration for numerous Danish housing complexes. The Renaissance king made his most decisive mark, however, on urban planning. Copenhagen was expanded enormously under Christian IV with New Copenhagen, between Rosenborg Palace and the Citadel, and with the planning of the Christianshavn quarter, which was founded as an independent seaport in 1618 and was incorporated into Copenhagen in 1674. The plan for Christianshavn was drawn up by the Dutch fortifications engineer Johan Semp, who employed the theories of the Italian ideal cities. At the beginning of the 17th century, Christian IV had a naval

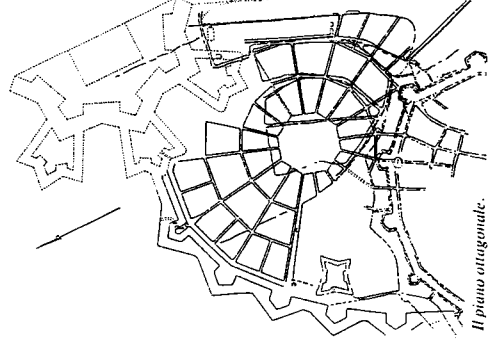
Copenhagen in
Christian IV's time



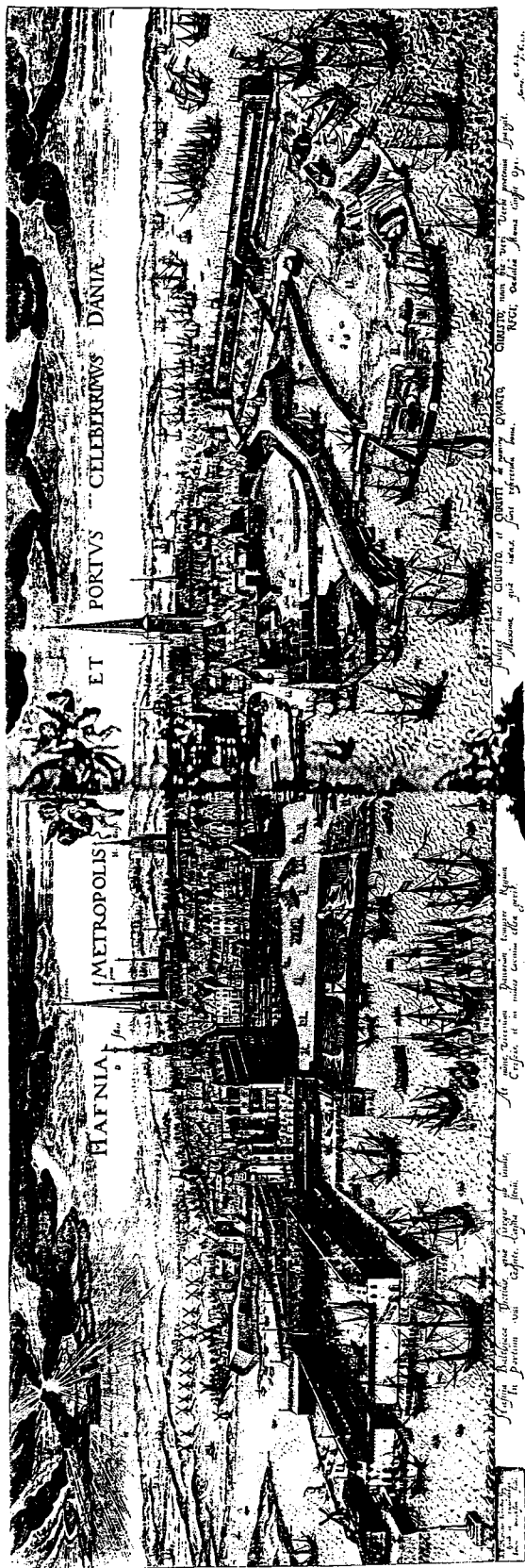
Copenhagen in
1654, after the
death of
Christian IV



The octagonal plan



Il piano ottagonale.



Prospect of Copenhagen in 1611, after Johan van Wijk

harbor built on a site occupied today by the Royal Library's garden. Built around the harbor were the Provision Yard and the Armory, and the entire complex made up what was called the marine arsenal.

At the end of the 17th century, the expanded city was fortified against the outside world with sturdy architectural symbols of church and state. The Church of Our Savior (F 17) was built in Christianshavn, Charlottenborg Palace (F 16) was the first major building on the newly designed Kongens Nytorv square (F 2), and the enormous ramparts of the Citadel were raised outside New Copenhagen. The Kingdom of Denmark and Norway had been harshly amputated when peace was concluded in 1658 and Scania, Halland, and Blekinge had to be ceded to the Swedes. Suddenly, the Danish capital was the kingdom's border town in the east, and the Citadel provided the necessary defense on that flank. The Reformed Church (F 18) was also built at this time and bears witness to a degree of religious tolerance in 17th-century Copenhagen. The opera house in Fredericiagade (F 20) gives us a glimpse of Copenhagen as a cultural city at the beginning of the 18th century, and the Red Mansion on Slotsholmen (F 21) from the same period was an administration building for the increasingly organized state, which since 1660 had been personified in the absolute monarch. One such monarch, Frederik IV, built a summer house on high Valby Hill west of the city in 1700. Over the decades, the house grew and was transformed into the stately Frederiksberg Palace (H 19), surrounded by romantic, popular Frederiksberg Gardens.

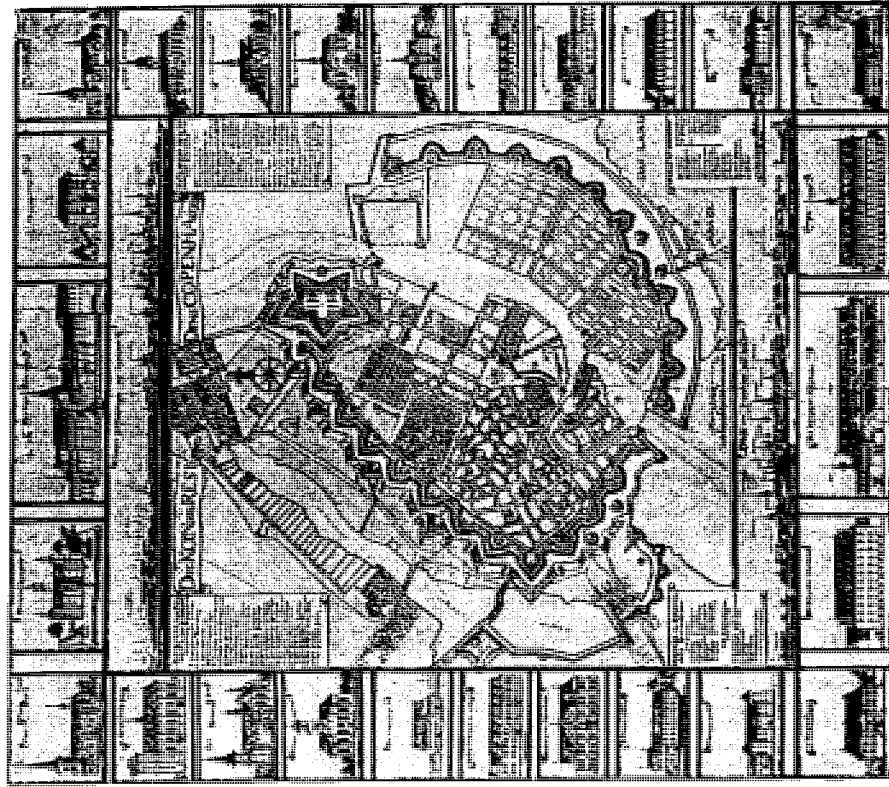
Fires and urban construction

Everything that urban planning, architecture, and the initiative of ordinary people had painstakingly built up could be destroyed in a few hours. This happened in Copenhagen's great conflagrations, the first of which broke out in 1728. The fire had plenty to feed on in the city's old half-timber houses. This provided a lesson for the future, and building was regulated to better resist fires. When the "conflagration houses" were built after 1728, Copenhagen changed its appearance, from half-timbered facades to at

Reesen's plan from 1611

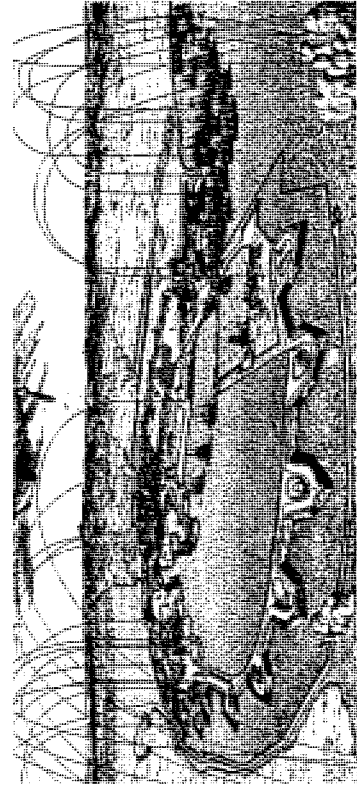


least street facades of plastered brick. A well-preserved example of these houses is a row of tall, narrow buildings with gable attics on Gråbrødre Torv (F 22). At the same time as the city was being rebuilt after the fire, the king and state made their mark with impressive architectural works. The first Christiansborg (F 25) was a Baroque palace, as large and magnificent as anything elsewhere in Europe, but it only stood for some 50 years before it was also consumed by fire. Christian VI's Christiansborg had hardly been finished before his successor, Frederik V, began to lay out an entirely new quarter, Frederiksstaden, in 1749. It was to be the city of the nobility and merchants, and both the urban plan and the buildings were the greatest achievement of Nikolai



An ideal plan, 1687

The bombardment of Copenhagen on July 26, 1700, seen from the sea



Enlightened, the architect who, with his elegant Rococo buildings, more than anyone else struck the lovely tone that is so distinctive of Copenhagen. It culminated in the palaces around Amalienborg square (F 32), but can also be found in Eigtved's other buildings in Frederiksstadten, for example a building in Amalienborg (F 36) and Frederik's Hospital (F 33).

At around the middle of the 18th century, Copenhagen's harbor also underwent major expansions. This was the time when great fortunes were made in overseas trade, especially with the East. On the Christianshavn side, Nikolai Eigtved left yet another elegant trace, even though it was just a warehouse (F 27), and on the five islands east of the entrance to the harbor, large, well-built houses were erected for the navy (F 29). The dynamics of the city could not be contained within the ramparts. It spread to large manors in the extensive wooded areas and hunting grounds in the north. The royal family sought unspoiled nature and isolation in the Hermitage (J 26), and the aristocracy followed the same pattern, although on a smaller scale, with manors such as Frederiksdal (J 30) and Schæffergården (J 31). The concept "maison de plaisir" was introduced and set the standard for numerous buildings to come.



A map showing the fires in the center of Copenhagen

A. 1728
B. 1795
C. 1807

Below: The Copenhagen fire of 1795



A Classical opening

What is now the Royal Danish Academy of Fine Arts was founded at Charlottenborg Palace in 1754, with Nikolai Eigtved as its first director. He died shortly afterward and was replaced by Nicolas-Henri Jardin, who was brought in for the job direct from France. In this way, Denmark made contact with the newest architectural current abroad, Classicism, without the usual delay. Jardin's influence was spread through a fairly small number of buildings, such as Bernstorff Palace (J 40), the Salvgade barracks (F 43), and further work on the domed church in Frederiksstadten (F 82) that had been begun by Eigtved but neither architect proved able to complete. It actually was not finished until the end of the 19th century at the initiative of the magnate C.F. Tietgen, with Ferdinand Meldahl as the architect, and by then Classicism had gone out of fashion. Jardin's work at the Royal Danish Academy of Fine Arts was important for



Analienborg. Prospect

spreading Classicism's new message. Of his pupils, C. F. Harsdorff is the one who stands out as its great exponent. He was also a teacher at the academy, but the building that he erected adjacent to Charlottenborg (F 45), in particular, served as a model for ordinary builders and their clients. It laid the basis for the many town houses with a Classicist look that give a crisp, refined resonance to the city's distinctive architectural tone.

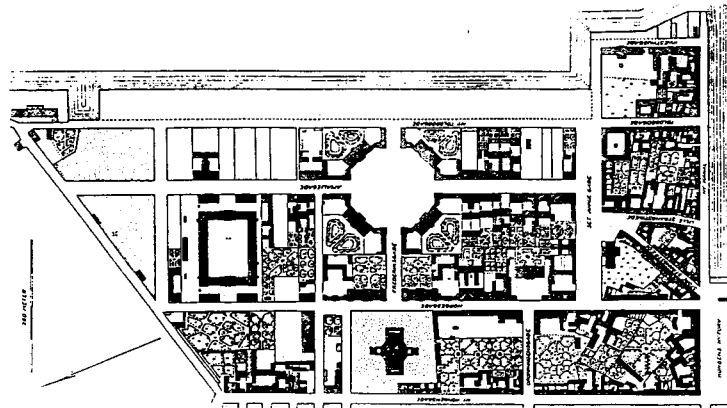
Two major conflagrations changed the city at the end of the 18th century. The magnificent Baroque Christiansborg Palace was consumed by a fire in 1794 that left only the buildings around the riding grounds standing, and in 1795, the entire city, from Holmens Church to the Western Ramparts, was gutted by a fire. Both conflagrations opened up the way for a new orientation in architecture in the direction of Classicism, which provided guidelines for much of the ordinary construction on the site of the fires. For public and monumental building, the mantle had been assumed by one of Harsdorff's pupils, C.F. Hansen. His Classicism was much more striking and theatrical than the style championed by his teacher, which might be why C.F. Hansen is viewed today as the Classicist par excellence. Another explanation for C.F. Hansen's standing is his great productivity. Besides major projects in Copenhagen, he also designed numerous buildings as provincial master builder in Holstein, in addition to building churches elsewhere in Denmark. The Napoleonic Wars were a time of unrest, and in Denmark they culminated with the bombardment of Copenhagen by the English in 1807. As a result, Denmark went bankrupt in 1813, and the union with Norway was dissolved shortly thereafter.

This was not a good climate for large-scale construction. C.F. Hansen's major work was in fact done on a tight budget and often on the ruins of older buildings whose

crackered walls had to be reused: the Classicist Christiansborg Palace, which burned down in 1804, had itself been built on the ruins of the Baroque palace; the Church of Our Lady (F 56) was built on the site of several earlier churches; and the city hall and courthouse on Nytorv square were erected where the city's old town hall had been destroyed in the fire of 1795. C.F. Hansen's buildings created the image of monumental Copenhagen, and his Roman-inspired Classicism gave Denmark a place in international architecture for the first time. He also lived to a very ripe old age, so to younger generations of architects it probably came as a relief when the long Hansen era came to an end with his death in 1845.

Great freedom

Radical changes took place in Denmark in general and Copenhagen in particular in the mid-19th century. The city had reached a dangerous state of insufferable overbuilding and stinking filthiness. But things were also happening. The first steam locomotive traveled between Copenhagen and Roskilde in 1847. The absolute monarchy was abolished in 1848, and democracy, ensured by the new constitution, was adopted in 1849. The demarcation terrain outside Copenhagen's ramparts was opened up for construction in 1852. Five thousand inhabitants of Copenhagen died of cholera in the summer of 1853. Copenhagen's status as a fortified city was abolished in 1856. An ordinary citizen of Copenhagen in those days could certainly be overwhelmed by all of these events. Architecture also made a number of turnabouts after the long period with stringent Classicism. The teacher-pupil relationship still carried weight, but the jumps were larger between one generation and the next. M. G. Bindesbøll was at the academy while C.F. Hansen was a professor and director, but the Classicism of the Thorvaldsen Museum (F 62). Bindesbøll's first independent building, was entirely different from Hansen's. It was colorful and sensual, and took an unfettered approach to the Classical



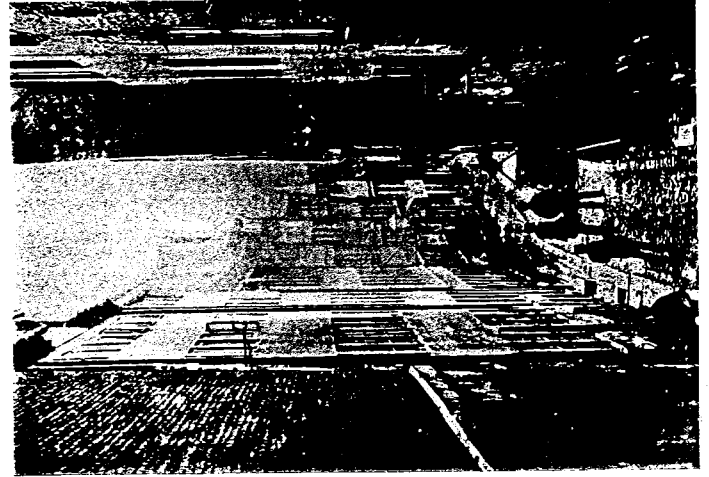
Frederiksstadten



Ferdinand Meldtall's plan from 1866

past. Bindesbøll was as a whole an original architect. When the Danish Medical Association wanted to build housing outside the city for the survivors of the cholera epidemic, Bindesbøll was asked to draw up the plans. He did in the course of a few weeks, and nonetheless created a scheme that has inspired housing ever since. The Medical Association's housing scheme (C 64), known as Brumleby, on Øster Fælled commons has withstood political forces and many other kinds for nearly 150 years; its latest restoration was completed in 1996.

As early as 1843, nine years before the ramparts were demolished, the Tivoli Gardens (F 61) were laid out in the military zone, but this popular recreational area was

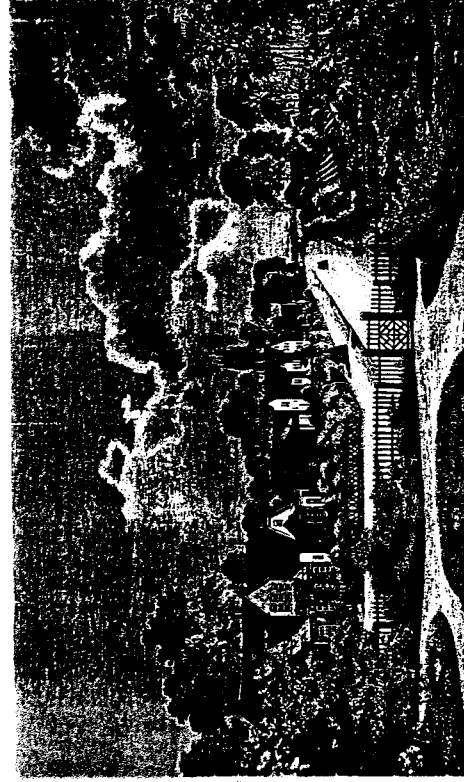


*A narrow alley,
Peder Madsens Gang*

unable to absorb all the press from the crowded city. Liberation from the close confines that had surrounded Copenhagen for centuries was followed by a liberation in architecture. The University Library (F 66), built between 1857 and 1861, was the start of historicism, which made free use of models from the history of architecture in order to create the right atmosphere for a building's location and function. Liberalism swept the country in both architecture and politics. The liberal attitude to architecture's basic roles might break out in theatrical stagings, which were found especially toward the end of the century, for example in Satorvet (E 75), but the period also created solid, substantial works such as the Municipal Hospital (F 67), which was built between 1859 and 1863, designed by Christian Hansen, an expert in Antiquity. A brewery-owner by the name of J.C. Jacobsen liberated himself in 1846 from centuries of beer-brewing traditions in the city and moved his brewery all the way to Valby, which had clean water, among other things. The result was the Carlsberg Breweries (H 63), a pioneering enterprise in the new age of industrialism whose buildings include a great deal of fine architecture. This general liberation was also expressed as individualism in the housing of ordinary citizens. The country's first villa quarters were laid out in the 1850's in Frederiksberg on Gammel Kongevej and in Østerbro in the Rosenvænget quarter. Villas in general have not, however, been included in this guide.

The price of freedom

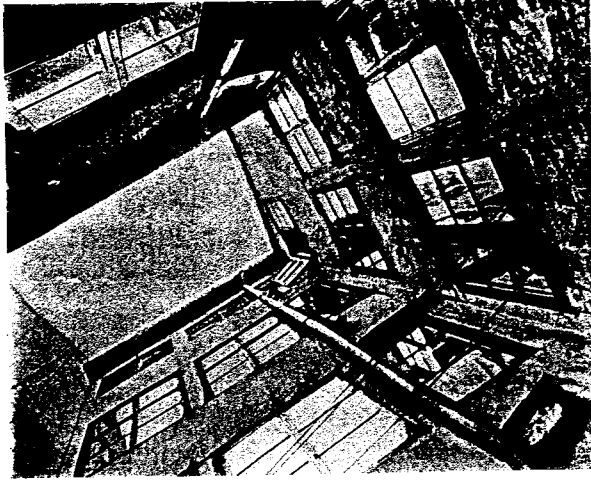
A distinctive feature of this period of liberation, however, was that the increasing volume of building was divided into two types. One type of building came about in the usual way. It consisted (and consists) of a process in which a client needed a building for a specific purpose, and hired an architect to design a project and oversee the work of building. The other kind of building, which predominated, came about in a new way. Anyone at all who had the money and imagination bought a piece of the large area outside the city that had now been liberated from military restrictions and could be



Rosenvænget, Copenhagen. From Illustreret Tidende, 1863

settled largely without civil restrictions as well. The price of land increased with unprecedented speed so everything had to be done quickly. Mr. Anyone-at-All had his building knocked together as quickly and cheaply as possible. The building was supposed first and foremost to earn money. Of course it did contain a few housing units, but this was of secondary importance since there was such a great demand for housing that renting them out was not a problem. This is how most of Copenhagen's quarters just outside the ramparts were built in the latter half of the 19th century. Speculation in land and housing had become a common phenomenon that legislation was only able to stop slowly, in keeping with changes in the political climate. By our standards, building techniques were not bad in those days since they were based on a long tradition, but the housing density was unbearable. For good reason, this guide gives no examples of the period's slum housing, but sober, high-quality buildings were also built outside the ramparts at the time. One example is the rather anonymous building on Gasværksvej (H 287), which was part of the major urban-renewal project in Vesterbro.

The beginnings of political change could be seen as early as 1865, when the Workers' Housing Society was founded on November 20th at a meeting of workers at the Burneister & Wain shipyard, where two physicians, F.F. Ulrik and Emil Hornemann,

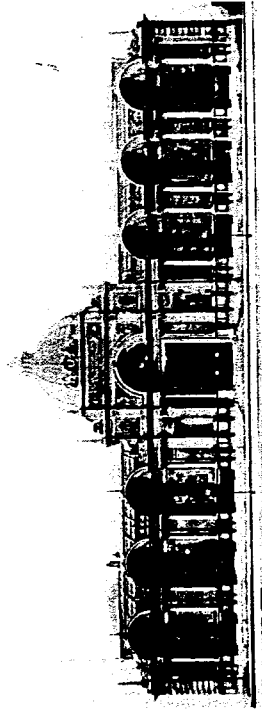


Slum housing in
Bremerholm

lectured on working-class housing conditions. The physicians urged the participants to take their housing situation in their own hands by founding a building and savings society. They openly acknowledged that the motive for their suggestion was a desire to maintain the prevailing social order. A worker who owned his own home would be less revolutionary, they believed, and perhaps they were right. The society quickly got under way and as early as 1866, the topping off ceremonies were held for the first 10 houses, built on Sverigesgade in Amager, followed by a high degree of building activity far into the 20th century. One of the Society's largest projects was the "Potato Rows" (F 77), whose 480 houses reflect the clients' middle-class ambitions and desire to own their own homes. The physicians were right in this respect. There was nothing revolutionary in this housing area except for the original constellation of clients, which was an honest countermove against the wild speculation in the areas just outside the ramparts.

The view from a hilltop

While activity in Nørrebro and Vesterbro was most hectic, a few oases were kept open, for example around the former military ramparts. Large parks such as Østre Anlæg (F 72), the Botanical Gardens (F 73), and Ørsted Park (E 75) date from this period. Defense was still a hot political issue at the end of the 19th century, but now it was a question of fortifications farther outside the city. The Western Ramparts ran from Jørgenslev Mose to Avedøre and today form a unique, continuous recreational area. The same period witnessed the construction of major cultural institutions such as the Royal Theater (F 74), the Royal Museum of Fine Arts (F 83), the Marble Church (F 82), and the Ny Carlsberg Glyptotek (F 84), which also marked the end of Historicist architecture. While the century came to a close, architects were beginning to tire of using international models from the past. Instead they became aware of their Danish and Scandinavian heritage. A portent of new times came as early as 1886 with the Abel Cathrine Foundation (H 80), but National Romanticism, as the trend was later called, reached a culmination in Copenhagen City Hall (F 85), completed in 1905, with which the architect Martin Nyrop created a monument to democracy, a union of art and popular culture that was rich in images. The turn of the 20th century was like a hilltop from which it was possible to see in many directions. And this is what art did, and architecture did it, by making use of the many new potentials. The painter-architect J.F. Willumsen struck a festive note with the Free Exhibition Building (F 91). The Art Nouveau movement of the south was tempting and inspired Anton Rosen's many buildings in Denmark and Copenhagen in particular, for example the exuberant Palace Hotel (F 102) and the advanced hotel and commercial building in Vesterbro (E 98). Ulrik Plesner's housing complex, Åhusene (E 89) and ved Danas Plads (E 97), were lush and liberated adaptations of both Danish and English building. New technology was reflected tentatively in e.g. the Østre Elektricitetsværk electric power plant (F 93), while the Main Railway Station (E 95) was still a sign that national and popular elements provided an anchorage. The Free Port was laid out in the 1890's with the use of the newest technology in



Ny Carlsberg Glyptotek, 1892-1894

building and construction, for example using reinforced concrete as the material for Warehouse 1 (F 86).

The beginning of the 20th century was both promising and threatening. In around 1900, a number of surrounding municipalities were incorporated into Copenhagen Municipality, which tripled in size as a result. This was intended to ease the pressure from the enormous population increase that Copenhagen had been plagued by for some decades, and still suffered under, but it also required planning. An international urban-planning competition was consequently announced in 1908 for the newly acquired areas. It was won by Carl Strintz, the city surveyor from Bonn, whose proposal was a mixture of German Romanticism with winding roads and English ideas about garden cities. The proposal did not leave many tangible traces, but the idea of planning



Carl Strinz's plan from 1908

on a large scale, urban planning, had been introduced in Copenhagen. The housing shortage and feverish, uncontrolled housing construction were among the threats. In 1907, after hectic building for five years, there were 10,000 empty apartments. At the same time, many poor families lived in housing with more than four people per room. Tension in housing construction had become too great, and the bottom fell out of the housing market. Banks and contractors went bankrupt, and building stopped completely, resulting in both an increased housing shortage and unemployment in the ensuing years.

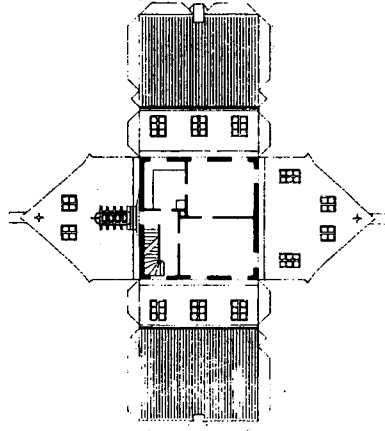
Maturing in difficult times

This crisis was the introduction to fruitful developments in Danish housing construction. The working and middle classes began to play a role as builders because they organized themselves, and their building fell into two categories from the very start: the garden house and the urban apartment. A strong source of inspiration came from England with the garden city movement founded by the urban planning theoretician Ebenezer Howard. His writings, such as *Garden Cities of Tomorrow* from 1898, were a reaction against industrialism's slum cities in England, which were far more overwhelming than Copenhagen's. Germany contributed the idea of housing societies, which had built working-class housing in major industrial towns. A common feature of the two movements was that land and housing were to be common property, more or less following the practice of the cooperative societies that had shown their viability in Denmark for half a century. The year 1912 was a turning point. The two movements each founded a society that was to influence developments far into the future. F.C. Boldsen, a lawyer from Randers who was an enthusiastic adherent of Howard's garden cities, took the initiative to found the Danish Garden House Society. The society's board members were the architects Martin Nyrop, Anton Rosen, and Egil Fischer, the art historian Vilhelm Lorentzen, and the labor unionist Jens Christian Jensen, who was chairman of the house carpenters, a profession that had an unemployment rate of 75%

at the time. And this was also one of the motives for founding the Workers' Housing Society, at the initiative of Jens Christian Jensen – in close cooperation with the cooperative movement in Copenhagen.

Both societies quickly turned their ideas into buildings. The Grøndalsvænge quarter in Nørrebro (E 106) was started in 1914 by the Danish Garden House Society, and the Workers' Housing Society inaugurated its first building in 1913, on Nyelandsvej (E 108). The houses on Grøndalsvænge were an exponent of the Bedre Byggeskik (better building practices) movement, which was initiated by the Federation of Danish Architects when they founded their "design aid service" in 1907. For a small fee, the architects offered to supply the country's small-scale builders with designs for their new houses. The goal was to bring a bit of aesthetic order to building in the countryside and subside it at an economic and ecological simplicity based on good Danish crafts traditions and both classical and local ideas of form.

In 1915, the movement organized itself as the Society for Better Building Practices, which continued operations until the end of the 1940's. Its 40 years of work to promote better building left their mark throughout the country as simple, sensible, robust houses that today are still among the most coveted homes. The Workers' Housing Society, later the Workers' Cooperative Housing Society (AAP), was the country's first non-profit housing society. In the course of the century, it proved a decisive factor for housing

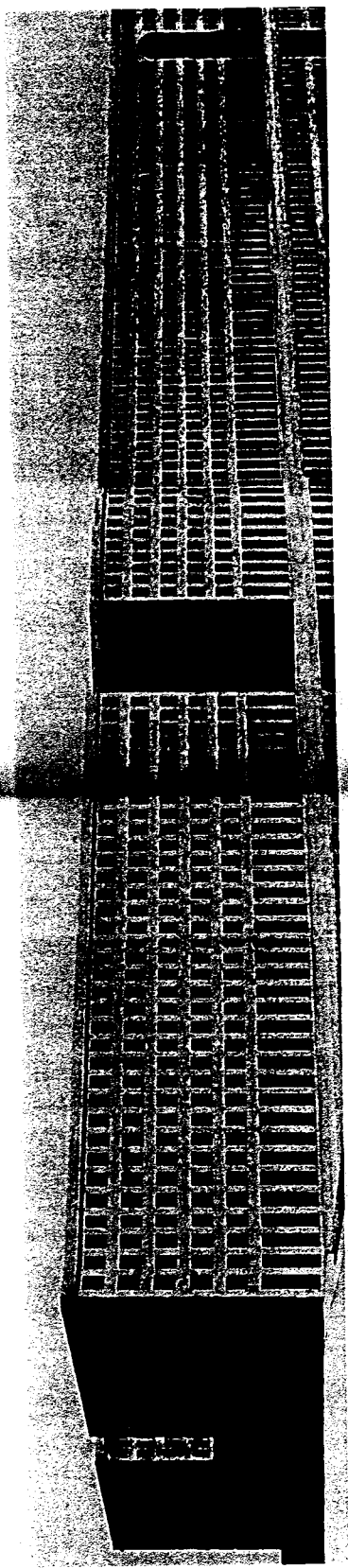


A folding paper house from the Society for Better Building Practices

and urban development throughout the country, with a production of nearly 450,000 units. The building on Nyelandsvej set the standard, with its heavy, red-brick walls and traditional approach, for the many housing blocks in Copenhagen in the ensuing couple of decades. The Copenhagen Public Housing Association (KAB), founded in 1920 at the initiative of F.C. Boldsen, concentrated from the beginning on garden houses and realized its ideas with a radical and innovative approach with such housing developments as Bakkehusene in Bellahøj (E 117) and Studiebymen in Hellerup (B 114). Several of those behind the founding of the Society for Better Building Practices and the two housing societies also took the initiative to found the Danish Urban Planning Laboratory in 1921 as a reaction against the country's provincial towns, which were growing wild. The laboratory is still an important archives and debate forum for Danish urban planning.

Classicism again

Despite the resolute initiatives taken by housing societies, the housing shortage became so severe during the First World War that the authorities had to take an active role in housing construction for the first time. Copenhagen Municipality built both tem-



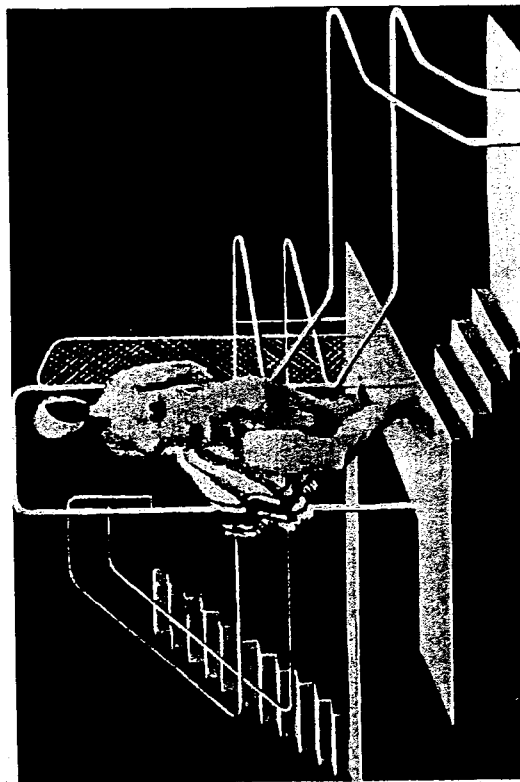
Carl Petersen and Ivar Bentsen: competition project for an office building at the former railroad yards, 1919

porary emergency housing, which in several cases had many fine qualities but has been demolished, and permanent housing, which supplemented the ring of housing blocks around the older quarters. The apartment blocks on Struenseegade (E 112) that were designed by Poul Baumann are a well-formulated prototype of this building and housing form, and Kay Fisker's Hornbækhus (E 116) is a monumental culmination in the development of the large apartment block. The closed city-block form was opened to provide sun and air in Classens Have (F 119) and Solgård (B 124), and as a result paved the way for the demands made of housing that Functionalism later emphasized. Classens Have represented Neo-Classicism. The new interest in things Classical had been awakened in a rather ridiculous way by the "spire affair." The brewery owner Carl Jacobsen (who gave his name to the Carlsberg brewery) offered in 1910 to pay for a new spire for the tower of the Church of Our Lady since he felt that the old one was not impressive enough. The idea sparked off a heated debate among architects, the oldest of whom welcomed the idea while the young ones, led by Carl Petersen, believed that the spire would compromise C.F. Hansen's Classicist masterpiece. The young architects won the fight. The tower got no spire, but the conflict had created a movement that acknowledged the Classical core in Danish architecture and signalled a renaissance for C.F. Hansen's architecture. Neo-Classicism reached an artistic and theatrical culmination in the Police Headquarters (I 111), completed in 1925. But it was also vociferously criticized by young architects, who with Poul Henningsen in the lead published the satirical, radical periodical *Kritisk Revy*. This waggish publication gave the first inkling of the century's most important movement in society and culture: Functionalism.

Making things work

Functionalism made its breakthrough in Scandinavian and Danish architecture in the product and housing exhibition arranged in Stockholm in 1930 by what was then called the Swedish Society of Industrial Design. In Copenhagen, the city architect Poul Holsøe was one of the first to respond to the new signals, which were expressed clearly and consistently in the "white meat market," built between 1931 and 1934 (H 133). At the same time, Arne Jacobsen gave his own elegant version of the white style in the Bellevue housing scheme, Bellevue Theater, and Bellevue Coastal Baths (J 134). The consistent, Functionalist housing form, free-standing, parallel blocks, got its first clear exponent in the Blidah Park housing scheme in Hellerup (J 138). In commercial buildings, Nørrebro Station (E 126) and the Vesterport office building (E 134) provide examples of the smooth transition from Neo-Classicism to Functionalism, while Hotel Astoria (E 140) is an expressive and liberated exploitation of the new potentials in form, materials,

Søren Hansen and Arne Jacobsen: curtain for the Bellevue Theater, built in 1935-1936



and structures. The same can be said of the residential building and post office on H.C. Østeds vej from 1939 and the School on the Sound (I 150), which further broke with the shaped Functionalism. Functionalism's major achievement in housing construction was the balcony, which was used for a completely new facade type in Ryparken (B 131) and Storgården (B 139), where the repetition of the many little "armchair balconies" makes an overwhelming effect. The balcony was also a leading motive in the powerful Vesterløshus, designed by Kay Fisker and C.F. Møller in 1939 (E 144), but here it was sustained by an architecture that simultaneously reflected an awareness of tradition

and was an expression of powerful, personal form. The two architects had experimented back in 1929 with the new idiom in an advanced residential building on Vodroffsvej (E 125) and had together with their colleague Poul Stegmann been responsible for building Århus University since the early thirties. These buildings were exponents of what was later called "the functional tradition," a pragmatic line in Danish architecture that can be traced all the way back to M.G. Bindesbøll and still exerts a tangible influence. In Denmark, Functionalism was given its most striking and personal form of expression in the completely new and important commissions for the state, with Vilhelm Lauritzen as the architect. The Radio Building (E 151) and Kastrup Airport (H 157) were radiantly clear, sensitive solutions to problems that had no traditional answers, and both are key works in the architecture of the time and the entire century.

The city of Copenhagen was given a comprehensive and largely continuous system of parks. Important parts of it run along the municipal border, from Lake Endrup in the north, through Uterslev Mose (A 148), parts of the Western Ramparts (A 81), then south through Krogebjergparken, Damhusengen, and Damhusøen (D 149), then further through Vigerslevparken (G 122) to Valbyparken (H 147) at Kalvebod Strand.

War and common sense

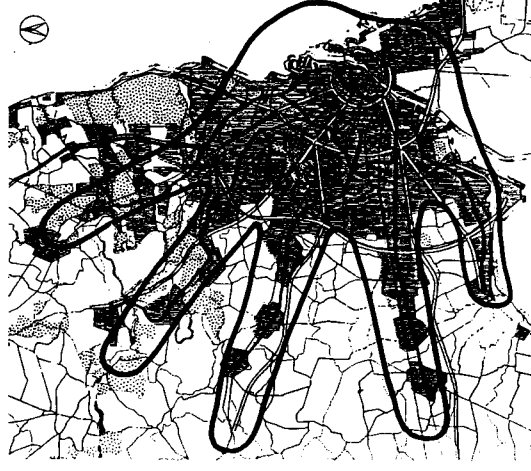
The Second World War and the occupation of Denmark put an end to the experiments of the thirties in art, culture, and society. Architecture in the forties was largely subdued and centered on the functional tradition as a matter of national principle. The Atelier Houses (B 164) from 1943 were a poetic expression of both a Spartan time and cultivated restraint. In the almost contemporary Bispeparken housing scheme (B 161), Functionalism's achievements were combined with the functional tradition to form a pattern that was to dominate public housing construction for a couple of decades to come. Søllerød Town Hall (J 163), which was inaugurated in 1942, had been designed by Arne Jacobsen and Flemming Lassen in 1939 and served as a clearly conceived type model for Functionalism's Danish town halls. During the war, Copenhagen undertook the period's largest urban-renewal project in the deteriorating quarter around Borgergade and Adelgade. New buildings took the place of old. Dronningegården (F 165), which was begun in 1943, has a composite look of monumentality from the past and the complex situation of the day, but its architectural qualities are also linked with the functional tradition.

Far into the post-war period, housing construction was characterized by the simple common sense of the functional tradition. Collaboration between public housing societies and architects in this period yielded fruitful results that have never been surpassed since. Søndergårdsparken (J 168) from around 1950 clearly follows traditional demands for form and material and was also an example of the desire of the Danish Public Housing Association (DAB) to experiment with low-rise house forms and new housing types. The association's Bredalsparken (J 172) was built at the same time, a very large park scheme with a well-conceived relationship between the complex's staggered blocks and the spaces between them. The population of Denmark, and especially of Copenhagen, grew unprecedentedly in the post-war period. Drastic measures had to be taken to avoid a housing shortage and to ensure the rising housing standard that all expected as the economy began to prosper. The methods were planning and industrialization. In 1947, the regional planning office, under the leadership of the architect Peter Bredsdorff, set forth a plan for the Copenhagen region. It showed residential areas placed along five "fingers" that stretched out from the central city, and was quickly known as the "finger plan." As a simple symbol of a plan based on existing developments, the sketch also took on an important professional and political significance in the years to come.

The idea of establishing a wooded area around Copenhagen to create some of the

qualities found in northern Zealand, natural or man-made, had been conceived in the twenties. The "green report" of 1936 on a system of recreational areas for the residents of the capital sought to extend Copenhagen's system of parks with connected systems of paths, excursion roads, and green areas in greater Copenhagen. In legislating the preservation of large agricultural tracts, it was recommended that continuous systems of nature reserves be established and that state forests be planted in unwooded areas. In 1967, Parliament and the municipalities involved revived these plans, which now cover some 1,500 hectares of forests and grazing lands.

Planning manifested itself on the state level with the founding of the Ministry of Housing and Building and the State Building Research Institute in 1947. Now the state wanted to take an active part in the building and housing market, and state subsidies



The "finger plan," 1947

...are provided so that more industrialized processes could be used in housing construction. One of the first projects of this kind was high-rise housing in Bellahøj (B 180), an experiment with both new building techniques and the form itself, since buildings of this height were completely new in Denmark. The Modernist urban architecture that had been outlined by the Swiss architect Le Corbusier was consequently introduced in Denmark, but it was given an even more radical expression in the Milestredet housing scheme in Brøndby (G 188), built between 1953 and 1958. Some architects felt that industrialization in the high-rises had been carried too far at the expense of housing quality and ordinary human considerations. This attitude was supported by sociological studies, but industrialization in housing construction continued.

Loners and masterpieces

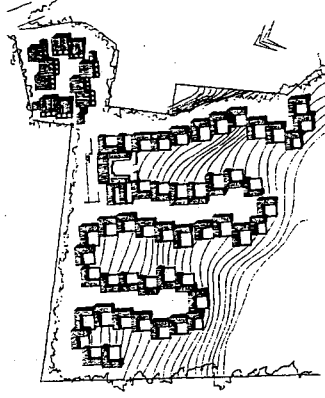
Modernist architecture was often given a mechanical and unarticulated expression in industrialized housing construction. Arne Jacobsen, in contrast, was able right to his death in 1971 to bring the Modernist idiom to a point of personal perfection and simplification that made his buildings internationally renowned. This is true of such projects as the office building for Jespersen & Son (E 186) and Rødovre Town Hall (D 189), both from 1955; SAS Royal Hotel (E 200) from 1960; and Danmarks Nationalbank (F 215) from 1971. Individually refined yet type-like, these projects are among the culminations of 20th-century architecture. Another great architect in the post-war period was

Jørn Fisker, who carried on his unerring version of the functional tradition in such projects

as the Voldparken housing development (A 171) and Voldparken School (A 174), both from the fifties. Jørn Utzon won international renown in 1957 with his winning project for the Sydney Opera House, but in the years just before, he had created the atrium house schemes in Elsinore and Fredensborg, providing a model for housing construction a couple of years later, though they are outside the scope of this guide. Jørn Utzon has built very little in Denmark, but his organically stringent architecture is represented here by Bagsværd Church (J 228), from 1976, and the Paustian House (C 280), from 1987. Seven Houses on Pintevej in Rungsted (J 204) exhibit consistent, simplified architecture inspired by American work from the time and traditional Japanese architecture. Their architects, Jørgen Bo and Wilhelm Wohlert, had worked a few years before with the same motives in the Louisiana Museum of Modern Art in Humlebæk, a complex that has won international fame.

Debate and reaction

Utzon's atrium houses were one of the sources of inspiration for the extensive, low-rise housing suburb Albertslund Syd (J 205), which was built between 1963 and 1968 as an initial experiment with industrialized dense/low-rise housing. During this same period, the monumentally high housing development Høje Gladsaxe (A 214) was built as the heretofore most radical example of rational high-rise housing. The two projects sparked off a heated debate about low- versus high-rise housing, but time has shown that low-rise is preferable. The building industry, which was geared to large-scale production, did, however, leave one last monument: the Brøndby Strand housing development (J 218), which was completed in 1973, when the Danish housing industry boom culminated with an annual production of 50,000 units. The reaction to large-scale



Jørn Utzon's atrium houses in Fredensborg, built in 1962-63

industrialized building was inspired by the state itself. The State Building Research Institute announced a competition in 1971 for dense/low-rise housing. It was won by Tegnestuen Vandkunsten's radical proposal that called for resident democracy and provided intrepid, informal solutions to everything from the problems of national planning to the furnishing of individual rooms. The proposal was carried out on a modest scale in the Tingsgården development in Herfølge (outside the scope of this guide), which with its relaxed, visually rich architecture nonetheless had a major influence on the housing construction of the period. The rebellious atmosphere of the time also manifested itself in the founding of the "free city" of Christiansia in Christianshavn in 1971. Fællestegnestuen stood behind two important experiments in combining a garden house with an urban apartment. Farum Midtpunkt (J 219), from 1974, is a compact structure of parallel terrace houses, while Solbjerg Have (D 236) in Frederiksberg, from 1980, is a block that combines high, terse street facades with fragmented terraced

facades on the courtyard. Both developments were unique, with distinctive qualities that did not serve as models for others. Following the State Building Research Institute's competition, dense/low-rise housing gradually dominated. Galgebakken (J 225) in Albertslund Nord, from 1974, experimented with types of housing and "neighborhoods," and a couple of years later, the neighboring housing development, Hyldespjældet (J 226),



The beginnings of Christiania in 1971

demonstrated how a Casbah-like entity could be built up from concrete elements. The client for both developments was Vridsløselille Cooperative Housing Society, which also built Gadekæret (J 231) in Ishøj in 1979, using concrete elements for a scene modeled on old Danish villages. Dense/low-rise building reached an architectural culmination in Tegnestuen Vandkunsten's Fuglsang Park (J 242) housing development in Farum, from 1983, with housing placed adjoining A5 Tegnestuen's congenial Stenvad School, forming a uniform entity. Similar originality and lushness can be found in Vandkunsten's almost contemporary double development in Værløse, Hesselø and Nørgårds Plantage (J 242).

Public monuments

While housing construction came to grips with large-scale production and rationalization, the public sector made its mark with monumental projects. In the same period, until the mid-seventies, Copenhagen County Hospital in Herlev (J 209) and Copenhagen Municipal Hospital in Hvidovre (G 212) were built according to two diametrically opposed principles. The former, 120 m tall, is a magnificent sculpture in the Copenhagen skyline, while the latter is a low, sprawling complex with a structural, Modernist idiom. The Technical University of Denmark in Lyngby (J 199) was built over a period of several years before 1974 and is the model of the day's ideals of rationality and structural organization. The Panum Institute in Nørrebro (E 230) is an expression of similar ideas, but in a highly concentrated form and a Brutalist idiom.

The guide gives four examples of the period's new churches. Three are by Johan Otto von Spreckelsen, who won the competition for the new arch in Paris in 1983. Like this major international creation, Sankt Nikolaj Church in Hvidovre (J 201), Vangede Church (J 227), and Stavnsholt Church in Farum (J 240) were built over squares and

Regeneration and the future

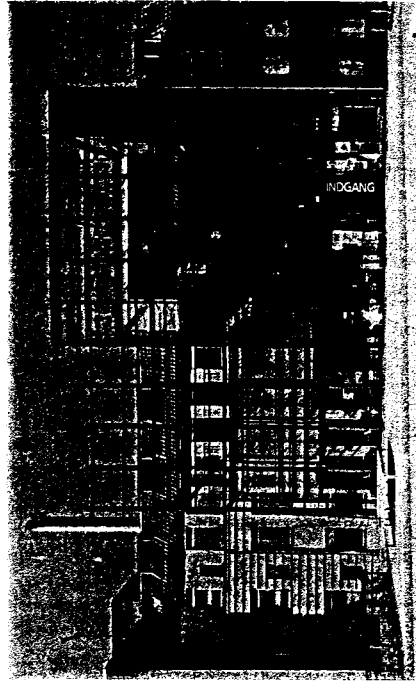
Throughout the entire latter half of the 20th century, urban renewal has been a challenge in Copenhagen, as it has been in other cities. As noted earlier, the beginning was made in the district around Borgergade and Adelgade during the Second World War. Urban renewal around Bremerholm (F 216) in the late sixties was drastic, but left both distinctive new buildings and the old city block described. The design of Pistolstæde (F 221) in 1971 reflected an interest in preserving old buildings for their picturesque value alone, and Sofiegården in Christianshavn (I 220), from the same period, was a talented proposal for fitting in new buildings with old surroundings. These approaches were not taken in the late seventies when the slums of Nørrebro in the "black rectangle" (E 239) were to be tackled. Urban renewal on this scale proved explosive, as demonstrated by confrontations between Nørrebro's inhabitants and the authorities in 1980. The new buildings in Nørrebro furthermore failed to convince posterity of the necessity and justness of this kind of urban renewal. When the blocks on Rigersgade (F 233) and on Gammelholm (F 254) were renovated in the early eighties, a more sensitive approach was taken, and some of this work was actual restoration. In instances where smaller-scale renovation and pure infill were concerned, contemporary architecture was better able to come into its own. And it did so distinctively in Tegnestuen Vandkunsten's Gavegården in Østerbro (C 263) and "the blue corner" in Christianshavn (I 268), both from 1991. It is difficult to find a balance in infill between artistic and urban elements, but Henning Larsen's stringent, poetic BT-huset (F 284), from 1994, keeps it in exemplary fashion.

Renewal of the existing city continued through the 1990's, with the most concentrated efforts made in Vesterbro (H 304). Planning is now being done to regenerate the areas closest to the city center, where there is inter-war housing of significant architectural value in the northwest, for example. Since 1996, a number of projects to improve specific quarters have been undertaken at government initiative, six of them in Greater Copenhagen. The Holmbladsgade quarter in Amager, Kongens Enghave, the Northwest Quarter (also called the Pentagon Area), and Outer Nørrebro are in Copenhagen Municipality. Avedøre Stationsby is in Hvidovre Municipality and Brøndby Strand is in Brøndby Municipality. These projects aim at overall urban renewal that deals with the physical state of the quarter's buildings, the urban space and landscape, and social and cultural conditions. One specific result of the project is the Northwest Quarter Center, a cultural and activity center in the Pentagon Area (1997) located in an old industrial building renovated to designs by Domus arkitektur a/s. Copenhagen's role as a European Cultural Capital in 1995 was the impulse for major building projects such as the renovation of City Hall Square (F 85), the extension of the Royal Museum of Fine Arts (F 83) and of the Royal Library (F 314), which were not completed until 1998 and 1999, respectively.

During this same period, massive new construction – both high quality and low – was undertaken along the waterfront in the inner city, while the former free port was transformed into an exclusive housing and commercial area (F 302 and F 308). In the latter half of the 1990's, Copenhagen was moreover engaged in large-scale building and excavation work in conjunction with the Metro, whose first section, from Nørrebro to Amager and Ørestaden, will open in 2002. The following year, the Metro will expand from Nørreport to Vanløse via Frederiksberg, and in 2005, it will extend along the east coast of Amager to the airport in Kastrup. The Øresund link (J 325) marked the millennium on an international scale and with anticipated wide-ranging consequences for the entire Greater Copenhagen area. Examples are the many plans for construction projects in Ørestaden on Amager and the link between Copenhagen Airport (J 157), which has been expanded considerably, and the Main Railway Station that was established in 1998 with new stations in Kastrup and Tårnby. The physical planning of Øre-

cubes. These churches demonstrate the architect's intense work with the relationship of geometry, form, and light. A completely different approach to church construction is taken by Ingolf and Johannes Exner in their Church of the Resurrection in Alberslund (J 243), from 1964. Its forms, light, and material create rooms that are saturated with atmosphere and mysticism.

In order to direct a major part of the urban growth in the capital towards the south, Parliament enacted a law in 1961 on planning the Køge Bay area. The expansion of that same city is unique because of its extent and the recreational values that have been added to the area through planning. It has gained an architectural attraction in Køge Bay Coastal Park with a Museum of Modern Art (J 295), which was inaugurated in 1966.



Northwest Quarter Center, Copenhagen, 1997. Domus arkitektur a/s

Old virtues

In the mid-eighties, there was a new interest in high-rise housing, and once again, the state helped provide inspiration. The Ministry of Housing and Building's competition in 1983 for industrialized apartment houses was won by Arkitektgruppen i Aarhus. The Engen housing development in Rødovre (O 264) is one of several projects that were carried out according to the winning project's building system. At the same time, pension funds proved a new kind of client for housing construction. Without the constraints that limited imagination in public housing, they made use of a more ambitious architecture that often followed the day's demand for formalism and a smart lifestyle. The Dalgas Have housing development (E 265) and Copenhagen Business School (E 251) in Frederiksberg at the end of the eighties are an entire urban quarter in this spirit, designed by Henning Larsens Tegnestue. The school was moreover inspired by the office's internationally famous project, the Ministry of Foreign Affairs in Riyadh, Saudi Arabia.

Less formal, but with an appeal to the period's terse lifestyle, is Tegnestuen Vandkunsten's elegant and poetic Dianas Have in Hørsholm (J 279), from 1992. The formalistic architecture nonetheless was given its most radical and comprehensive expression in the new town of Høje Taastrup (J 257), built after a winning proposal from Jacob Blegvad's Tegnestue in a competition from 1978. The town is the clearest example of Neo-Rationalism in Denmark, and the arches over its railway station (J 258) have made Høje Taastrup "the city of arches."

staden began with an international competition in 1994 announced by the Ørundselskabet and won by a Finnish proposal that was used as the basis for further planning. The only ideas taken from the competition that will be used in the final urban structure are the Metro line, the winding canals, and the "boulevard."

The grand plans from the 1990's are now being realized. This is especially true in Ørestaden, where Copenhagen University's Faculty of Arts (KUA) (I 345) was completed in 2003 and the IT-University (I 354) in 2004. During this period, people began moving into Ørestaden's first housing schemes located in the northern part of the area, the University quarter. Here one also finds the first stage of DR Byen (I 362) completed in 2005, and close by, the Chinese inspired Tietgenkollegium student housing scheme (I 358) that was completed the same year. However, the extensively debated project for the new National Archives (Rigsarkivet), which was to lie in the University quarter, has been dropped. The archives will instead be built on a site near the Main Station. In Ørestad City, a new headquarters for Ferring (J 332) was already finished in 2001, while the first stage of the Field's shopping center was realized in 2004 as Ørestaden's great attraction for trade and entertainment – allegedly to serve both Zealand and south Sweden. In the central part of Ørestaden, housing projects are also being built, including the odd and unconventional VM-buildings (J 359), whose first stage was occupied in 2005. The most important infrastructure for Ørestaden is the Metro (F 342), whose first stage with 13 stations – with four in Ørestaden – was completed in 2004, while the stretch to Copenhagen Airport is expected to be completed in 2007.

Another new city quarter is Havnevesten, which with institutions and housing was built in the Islands Bygge area on the site of the former soya bean processing factory. The quarter's most distinct building schemes are the two old silos (I 358), which in 2004-05 were converted to exclusive apartment buildings. The attraction of the central harbor area is also evident with grand traditional might in the Opera (F 351), which was built on the Dokken islet in 2000-2004, precise and symmetrically placed on the Amalienborg axis. In a more contemporary fashion, a new national theater (F 365) will be built on Kvæsthusbroen pier close to both the city and harbor. More of the old buildings on the Holmen islet are being converted to other uses. Some interesting examples of this are the seaplane hangar on Margrethesholm, which in 2001 was converted to a headquarters (F 333), and the torpedo boat hall on Frederiksholm, which in 2003 was converted to unusual, exclusive apartments (F 341).

The Metro station in Ørestaden and Ferring Pharmaceuticals A/S, designed by Henning Larsens Tegnestue



The conversion of the Frihavn harbor area to housing and commercial use began in the 1990's and has continued with the new building for the Finance Institute for Danish Industry on Langelinie Allé from 2002 (F 338), a high-rise apartment building on Damp-tærgevej from the same year (F 339) and a copper-covered office building on Amerika Plads from 2004 (F 349). This has occurred according to a plan by the Dutch architect Adriaan Geuze with a greater density than usual in Copenhagen. The new urban areas have a fresh and cool character with smooth designed facades on standoffish headquarters buildings, although with a few positive exceptions such as the new headquarters for Sampension from 2003 (C 347) at Tuborg Harbor, and the revolutionary Hellerup School from 2002 (C 337).

The period's most hectic building activity has occurred on the edges of the city in the harbor areas and especially in Ørestaden. However, traditional urban renewal has also continued, although at a somewhat slower pace than previously. The neighborhood improvement initiative that was started in 1996 has resulted in building schemes like the fine rebuilding and extension project of the Kvarterhus neighborhood center in the Holmbladsgade quarter from 2001 (I 334), and the amusing and functional Maritime Youth Center from 2004 (J 352) at Sundby Harbor.

The development of the beaches on Østnager is also evident at the sculptural Kastrup Søbad public bath complex from 2004 (J 357) and the new, large Amager Strandpark (J 139).

A very noticeable conversion in the city center is Hotel Skt. Petri from 2003 (F 348), which with extreme elegance was established in the former Daells Varehus department store on Nørregade. In a different vein, one can consider the establishment of the Danish Jewish Museum in the Galejhuset from 2004 (F 350) as being extremely discreet seen from the Royal Library Gardens, while its interior is a powerful and concentrated expression of Jewish history. Frederiksberg Center, which has been under renewal since the 1990's, was given an important addition in 2004 with the very stringent Frederiksberg Highschool (E 353) at the newly established Falkoner Plads (E 360). New buildings in an old structure can also be found at the Auditorium at the Svanemøllen Kaserne barracks from 2002 (C 335), where the new building is a radical departure from the 1890's barracks scheme. The city's renewal is especially evident in the restoration or renewal of the urban spaces. Examples of this are Halmtorvet, Prags Boulevard (I 363) and Jemtelandsgade by the neighborhood center (I 334), Bertel Thorvaldsen's Plads (F 343), the square at Rødovre Town Hall (D 189) and Utterslev Torv (B 340).

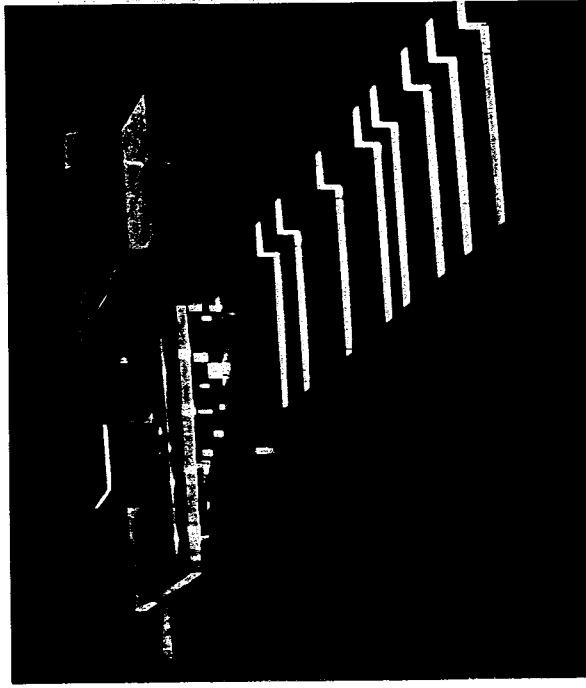
A number of schemes mentioned in previous editions of this guide have been either rebuilt or enlarged, and are thus updated in this edition. This is true of the new building for the Pharmaceutical University at University Park (E 317), restoration of Størekassen – the Royal Theater's New Stage (F 74), the restoration of Bellevue Theater (J 137), the restoration of Anton Rosen's hotel and commercial building on Vesterbrogade (E 98), the addition to the Kildeskovhallen swimming hall (J 207) and the restoration of the Royal Veterinary and Agricultural University's ceremonial auditorium (E 65).

In the near future, Copenhagen will be the site of buildings designed by well-known foreign architects. At the Ørdrupgaard Museum, the Iraqi/English architect Zaha Hadid is responsible for the design of a new addition, which was completed in 2005 (J 361), at DR Byen (I 362) a concert hall designed by the Frenchman Jean Nouvel will open in 2006, and in the same year, the Zoological Gardens (H 132) will have a new elephant house designed by Englishman Norman Foster (Foster & Partners). After a great and vehement debate, the project for a scheme of very tall and unusual apartment buildings on Krøyers Plads in Christianshavn was rejected by the city council, despite the fact

that this project was also designed by a famous foreign architect, the Dutch Erick van Egeraat.

The effort to achieve a foreign contribution to the building activity in Denmark originates both from the common tendency toward globalization as well as a certain degree of self-sufficiency in Danish architecture, which many feel lacks renewal. The three future projects first mentioned have also the common feature of being subsidized by private funds. This can perhaps reveal a growing tendency in the development of the capital city, that the current liberalistic trends imply large building schemes financed by patrons of art and architecture. The Opera on Holmen is the most striking example of pure patron building. It is like the old days, in the golden period of Danish overseas trade when the wealthy were responsible for many of the buildings that are included in this guide. If the architectural quality of these new, fund-subsidized building schemes is the best of this time, then the development can be considered positive from a narrow architectural point of view. But as can be seen at the Opera, a good city is not created by isolated building works. The grand context in a city is created by the state or large popular movements. Unfortunately, the new liberalistic tendencies in building and city development do not seem to be creating an urban context on the same level we experienced in the past.

Olaf Lind, May 2005



Project for a new theater at Kvæsthusbroen

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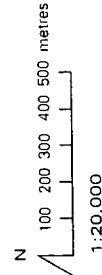
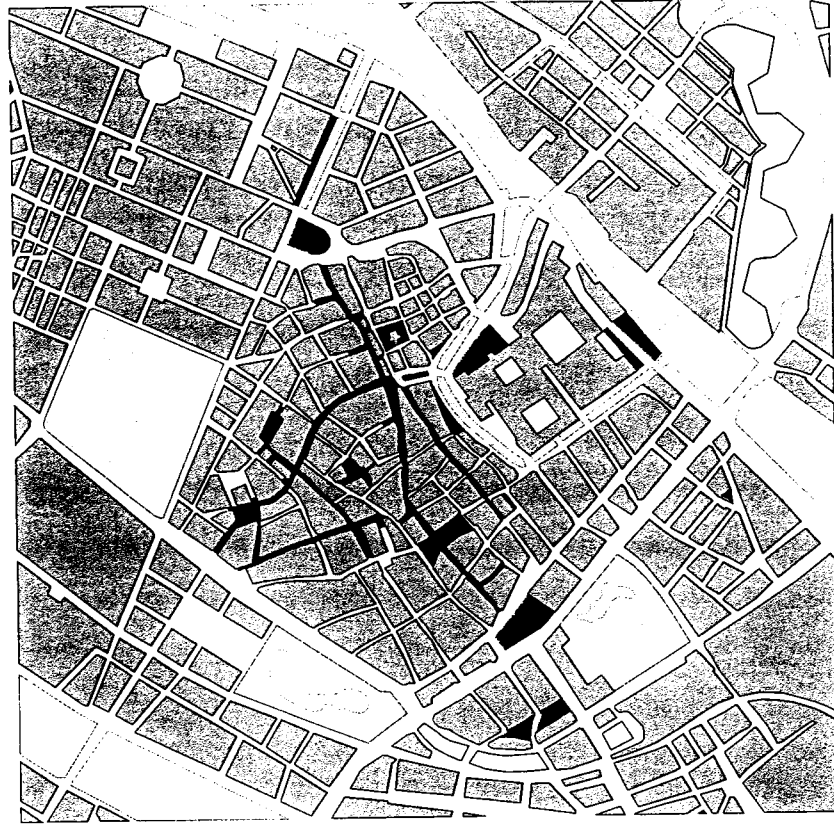
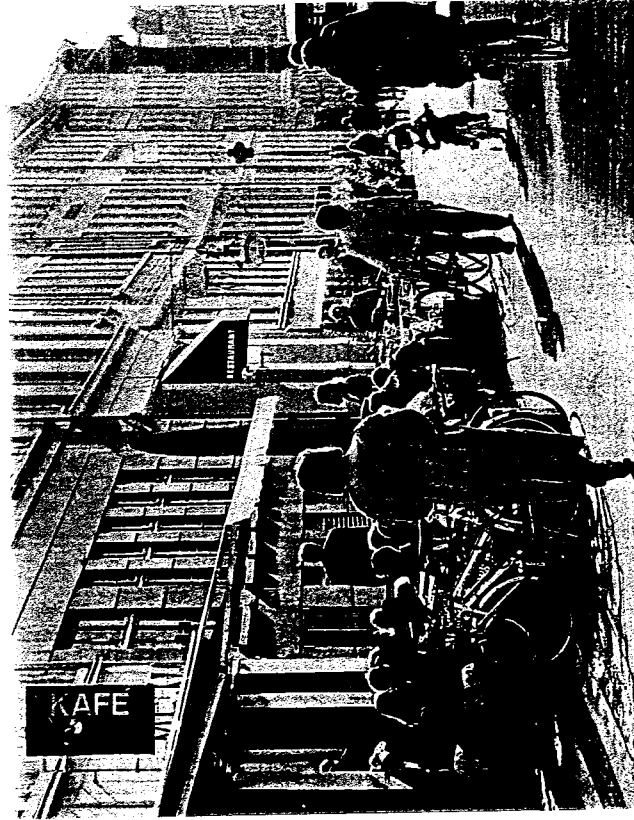
NEW CITY SPACES
DANISH ARCHITECTURAL PRESS 2006

Copenhagen

Denmark

A better city step by step

Copenhagen's old main street was pedestrianised in 1962, marking the start of what was to become extensive renovation. Over a period of four decades, many of the streets and squares in the inner city were gradually transformed into wholly or partially car-free space. This created good conditions for walking and urban recreation activities in the city centre. Systematic studies of the development of city life show a marked increase in activity in step with improvements. Cutting down on the traffic in the city centre along with gradually reducing parking options has helped limit car traffic in the inner city substantially. At the same time, a targeted policy to create better conditions for bicycle traffic has strengthened Copenhagen's position as a biking city.



Above: Map showing the medieval city core, plus part of the harbour and adjacent neighbourhoods. Dark lines indicate the extensive network of car-free or almost car-free streets and squares established gradually between 1962-2000.



Aerial photo of Copenhagen from the north.
In the middle between the harbour and newer
quarters, the core of the city from the Middle
Ages. Right foreground: Amalienborg, Royal
Palace Square.

The city

Copenhagen is Denmark's capital and greater Copenhagen has a population of 1.3 million inhabitants.

The city was founded around 1100 and grew gradually from a small fishing village protected by a castle to a lively trading port. The name Copenhagen means "merchants' harbour".

In terms of structure, Copenhagen is a typical European city, which grew within shifting fortifications surrounding its harbour, giving the city its characteristic shape. Large segments of the moats and ramparts of the 1600s and 1700s are still intact and serve as some of the city's parks.

Although major fires in the 18th century erased almost all traces of the buildings of the Middle Ages, the inner city, which comprises about 1 x 1 kilometres, has largely maintained its medieval street pattern. The buildings in the inner city derive primarily from the period after the great fires. They are four- to five-storey buildings with relatively short facades, which give the streets of the city an interesting and varied rhythm.

Although shifting periods left their mark on the buildings, large areas have maintained the simple neo-classic style that dominated the beginning of the 1800s.

The inner city continues to be Copenhagen's most important business area, with both fashionable shops and department stores, but it serves a wide variety of other functions as well.

Many of the buildings in inner Copenhagen still have shops on the ground floor, offices in the middle storeys and residences in the top storeys. A total of 6,800 people live in the inner city, which by European standards is a relatively high number of urban residents. The city core also contains many cultural institutions, large segments of the university and other institutions of higher learning with a total of 14,000 students. Thus given its scale and versatility, the city core has many of the basic elements needed to develop a good urban environment.

Public space policy – many small steps toward a better city
In the years up to 1962, all the streets and squares of the city centre were used intensively for car traffic and parking, under pressure from the rapidly growing fleet of private cars. In the years that followed, both traffic and parking, which had gradually come to dominate the inner city, were reduced or pushed back. A large number of streets and squares were converted to pedestrian areas, which today give the users of the city very attractive conditions for walking and all kinds of urban recreation activities.

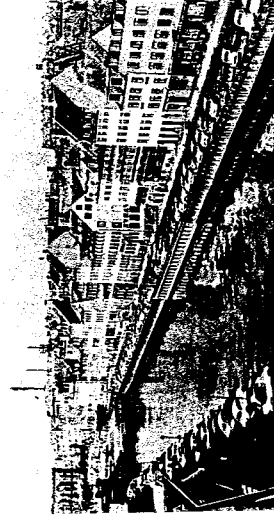
Pedestrianisation began with the city's main street, Strøget, which was converted in 1962 as an experiment. During the rebuilding of German cities after the Second World War, a number of pedestrian streets were established and it was these trade-oriented streets that served as an inspiration for Copenhagen. Despite the precedent, the conversion of the 1.1-kilometre Copenhagen main street into a pedestrian street was seen as a purely pioneering effort, which gave rise to much public debate before the street was converted. "Pedestrian streets will never work in Scandinavia" was one theory. "No cars means no customers and no customers means no business," said tradesmen. Other voices claimed "we are Danes, not Italians" or "there is no tradition for outdoor public life in Scandinavia," which was true enough. However, the Danes had never before had the room and the opportunity to develop a public life in public spaces.

In no time at all, Strøget proved to be a huge success as a pedestrian street, in both popular and commercial terms. It did not take long for the tradesmen on Strøget, as well as in the other Danish towns that acquired pedestrian streets, to discover that the traffic-free environments were a valuable inducement to increased turnover.

More conversions of streets and squares followed in subsequent years. In 1968 the first north-south pedestrian street was established, followed by another in 1973. Gradually a cohesive network of pedestrian streets was



Left: Until 1980 Nyhavn along the waterfront was a car park for 78 cars. After renovation it has become the city's most popular walking street. On a summer day 1,000-1,500 people can be found sitting at cafes, on benches or the quay.



developed, offering today a truly effective system of transport for people on foot. It is easy to walk around in Copenhagen from one end of the city to the other, and today foot traffic represents about 80% of the movements in the inner city.

Already in 1962, parking on the squares along the new pedestrian street was reduced and recreational city activities began to develop. Over the next 30 years parking has been removed from a total of 18 squares, and all these new car-free spaces have been placed at the disposal of city life. When Strøget was pedestrianised in 1962, the city's pedestrian area comprised 15,800 square metres. 38 years later in the year 2000, the area of car-free streets and squares has grown to almost 100,000 square metres, or more than six times as many square metres reserved for public life.

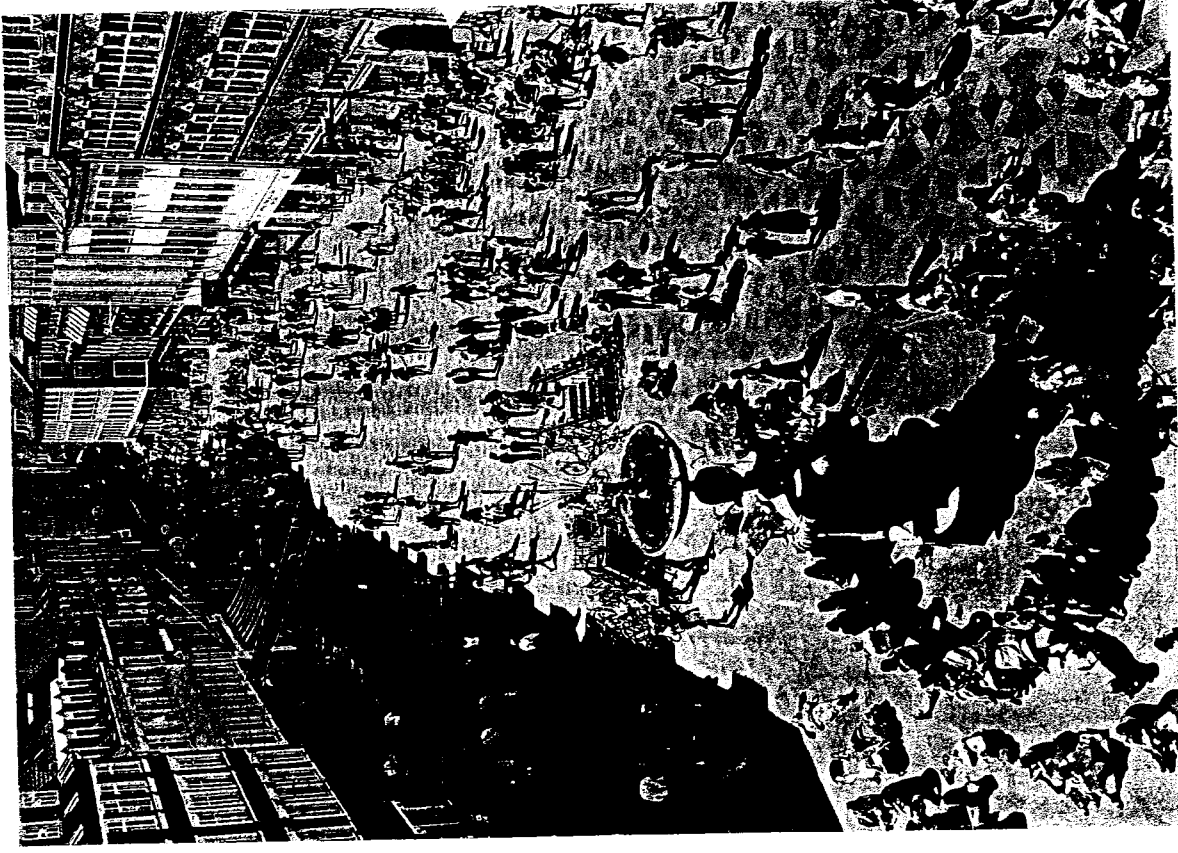
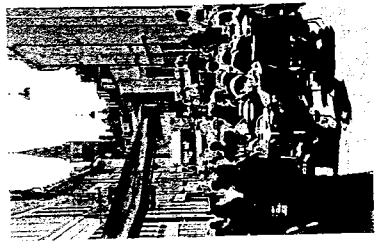
The gradual expansion of the system of car-free and almost car-free spaces in the city has had three obvious advantages. City residents have had time to develop a completely new city culture, to discover and develop new opportunities. Correspondingly, car owners have had time to get accustomed to the idea that it has become more difficult to drive to and park in the city centre, but much easier to bicycle or use public transport. Thus people have had time to change their traffic habits and patterns. Finally it has become easier for the city's politicians to take the many small step-wise decisions on the basis of previously successful measures.

These many small decisions have led to an unusually attractive city centre, a relatively modest number of cars, and a profusion of public life quite extraordinary by Scandinavian standards.

All in all a development that must be attributed to a strategy of many small steps.

City space and traffic policy

In order to free space for the new city life, parking in the inner city has been reduced by 2-3% annually over many years. Motorists have gradu-



Above: Copenhagen's main street, Strøget, was pedestrianised in 1962. The 1.1km street crosses four squares including Amagertorv, shown here. This square was improved step by step like the other streets and squares in the city. In 1996 Amagertorv was repaved with a patterned granite floor designed by sculptor Bjørn Nørsgaard.

Left: A parallel street, Strædet, was converted into a pedestrian priority street in 1989. Photos from 1988 and 1995.

ally grown accustomed to paying more to park or to leaving their cars at home, taking public transport, walking or bicycling in the increasingly more comprehensive network of bicycle paths.

The bicycle path network has been expanded year after year, and today the opportunities to bicycle in Copenhagen are so good relative to driving a car that many people prefer bicycling to work. Of the people who commuted to Copenhagen at the end of the 1990s, slightly more than a third bicycle, about a third drive cars and the last third use public transport to go from home to work.

Bicycling is once again a rather safe and uncomplicated mode of transport in Copenhagen, and it is not unusual to see the head of the Royal Theatre or a Minister of Parliament bicycling to work through the streets of the inner city.

One interesting new initiative to promote the use of bicycles in the city is free city bikes financed by sponsors and advertising. The city bike system covers the inner city and comprises about 2,000 bicycles that can be borrowed the same way one borrows a shopping cart in a supermarket by leaving a deposit in the lock. A small deposit is all it takes to borrow a bike from one of the 126 bicycle racks spread throughout the city centre, and you get your money back when you return the bicycle. Over the past 25 years, bicycle traffic in Copenhagen has risen by 65%. Car traffic throughout the whole municipality has been held about constant from 1970 to 1996, even though the number of cars in the metropolitan area as a whole has risen dramatically in this same period. The unchanged traffic level within the city limits in more than a quarter of a century is extremely unusual by European standards.

Not until 1996 did car traffic in Copenhagen begin to grow beyond the 1970 level.

Car traffic in the city centre has been reduced by limiting the opportunities to drive as well as by reducing the number of parking spaces. About

600 parking spaces have been eliminated in the centre of Copenhagen over the past decade, and today the city has about 3,000 parking spaces, two-thirds of them at kerbside in the streets. In fact, the city operates just fine with far fewer parking spaces in the city centre than in the other Scandinavian capitals. Stockholm has 8,000 parking spaces in the city centre and Oslo has 4,800.

Projects in the inner city and surrounding residential areas
The City Architect of Copenhagen has described the architectural concept underlying the design of the public spaces in the core of the city as "pearls on a string". The individual squares along the city's main streets have their own design and are connected by simple surfacing of the streets between them.

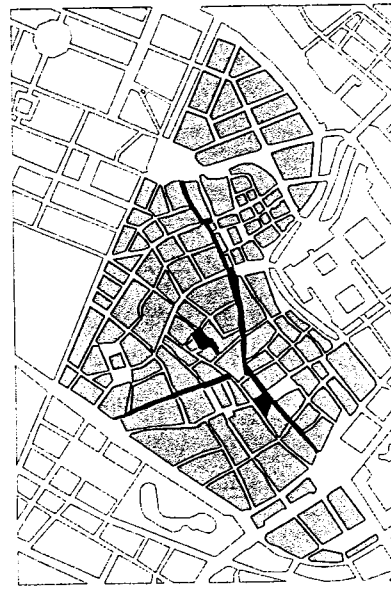
Most squares have been designed using traditional Copenhagen materials and simple traditional designs, leaving room, however, for more experimental ideas as well. One repeated feature is the traditional sidewalk of concrete slabs laid in bands separated and edged by *chaussé* stone. In pedestrian and pedestrian priority streets the classic sidewalks have been replaced by street floors, often divided into a middle zone of concrete slabs edged by bands of granite slabs and cobblestones. Renovation of public space started with the inner city and the conversion of streets into pedestrian areas. In the next phase, the squares in the city centre were renovated and changed into places where urban recreation activities were given a high priority.

In more recent years, work has been ongoing to renovate the squares and streets in a number of the adjacent residential areas. Sankt Hans Torv, described on page 96, is an example of a renovated square in a densely populated residential area. The municipal planners are now working to bring similar improvements to the city's large traffic areas and terminals in other parts of the city.



Left: Bicycle traffic in Copenhagen has grown by 65% since 1980. Bicycles are an important link in the transport system and handle 33% of commuter traffic.

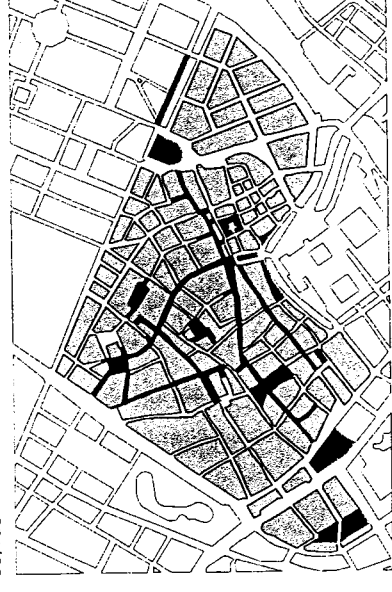
Far left: The latest addition to bicycle policy strategy: 2,000 city bikes that can be borrowed free of charge from the 126 bicycle racks located throughout the city centre.



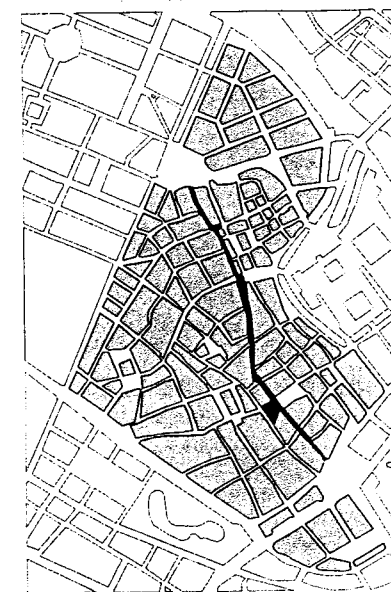
1962
15,800 m²



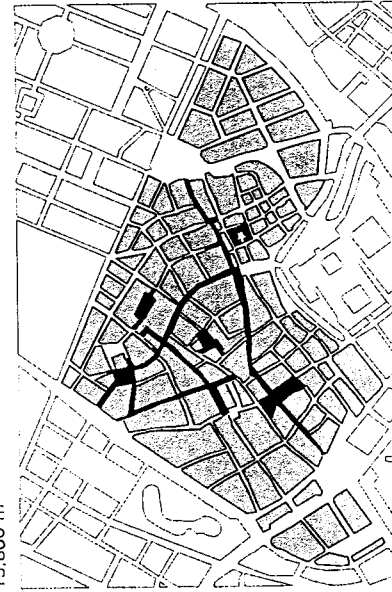
1968
22,860 m²



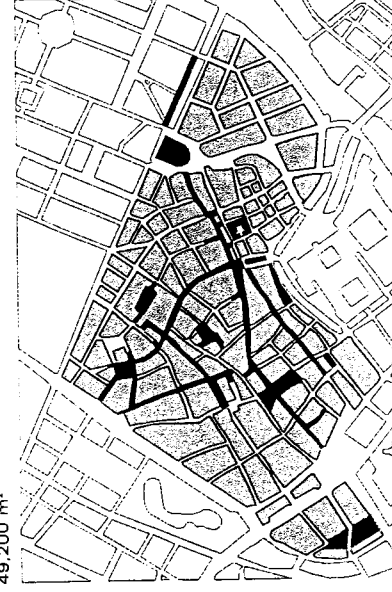
1973
49,200 m²



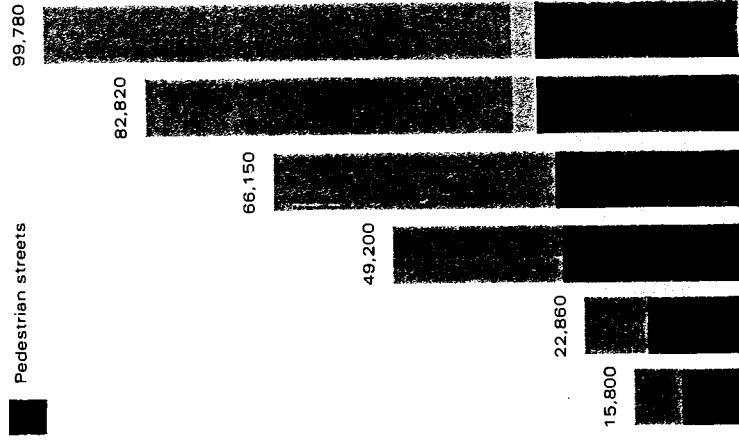
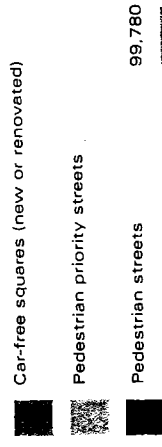
1988
66,150 m²



1992
82,820 m²



2000
99,780 m²



1962 1968 1973 1988 1992 2000

Above: The development of pedestrian areas in Copenhagen city centre from 1962 to 2000 in m². As shown by the bar graph, the conversion of streets into pedestrian streets was more or less finished by 1973. Subsequent efforts focused on reclaiming and improving the city squares. Of total car-free areas, streets represented 33% and squares 67%.

Left: 38 years of gradual expansion of the car-free network of streets and squares in the city centre.

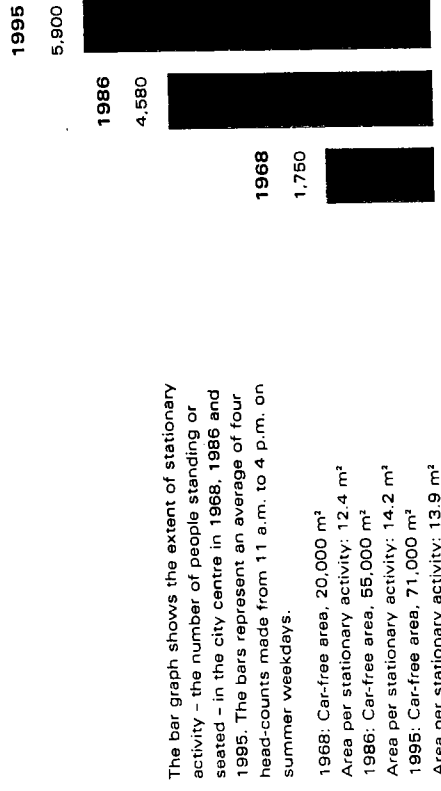
From shopping streets to public forum

Almost all cities have systematic methods of gathering data and information about car traffic. However, it is extremely rare for cities to gather data on the development of pedestrian traffic and public life. Copenhagen occupies a special position in this area. Since 1968, researchers from the Centre for Public Space Research at the School of Architecture in Copenhagen have regularly recorded how public space is utilised and what changes and developments have occurred with respect to life in public spaces. A number of comprehensive studies of urban life throughout central Copenhagen in 1968, 1986 and 1995, supplemented with many smaller studies of individual locations, have made it possible to follow the development of urban life in step with the many improvements made since 1962. These findings have been documented in the book "Public Spaces - Public Life, Copenhagen 1996" published that same year. The earliest studies from 1968 show that the then new pedestrian streets were popular as walking and shopping streets. However, when the first street musicians began performing for this new large public, utilising the good acoustics available once the cars were gone, they were shooed away by police. People were supposed to shop, not stop to listen to people play! Thus the pedestrian streets were at this point considered and largely used as shopping streets.

The study in 1986 shows the growth of a new and more active urban culture in which many more people participated in the exchange of talents, messages and alternative goods. The city's car-free space, which had vastly increased in the intervening years and now comprised more squares, had become "the country's largest public forum" according to a leading Copenhagen newspaper. It is important to note that this public forum requires no entrance fee or prior reservation, but is a place where anyone can turn up and participate, entertain others or be entertained. A very lively city centre has gradually developed.



A remarkable development of public life has emerged in step with improvements in the quality of public space. In only 27 years the summertime use of the streets and squares of the city has increased by 3.5 times.



1968: Car-free area, 20,000 m²
Area per stationary activity: 12.4 m²
1986: Car-free area, 55,000 m²
Area per stationary activity: 14.2 m²
1995: Car-free area, 71,000 m²
Area per stationary activity: 13.9 m²

The latest of the city-wide surveys from 1995 shows that this development has continued, and now features heavy growth especially in the recreational activities of the city.

Pedestrian activities have been notably constant since the heavy growth immediately after the main streets were converted to walking streets in the 1960s and the beginning of the 1970s. The number of pedestrians in the streets has thus not risen in more recent years, among other reasons because street capacity is fully utilised for large periods of time. However, what has changed dramatically is the extent of non-walking activities. In the 27 years in which the development of public life has been followed, the number of people who engage in recreational activities on the streets and squares of the city centre on a summer day has increased by 3.5 times. In this connection it is interesting to note that the extent of the city's car-free area has also increased 3.5 times from the time of the study in 1968 to the corresponding study in 1995. Every time the city has expanded the pedestrian area by 14 square metres, another Copenhagen has turned up and set himself down to enjoy what the city has to offer.

One important factor in the large growth in stationary pedestrian activities has been the development of a cafe culture in the city. When the first pedestrian streets were established in the 1960s, outdoor cafes in Copenhagen were largely unknown. Since then, however, a cafe culture has grown gradually and today Copenhagen offers more than 5,000 outdoor cafe chairs, and on a good day, they are almost all taken. Thus, an entirely new city activity for Scandinavia – cafe culture – has developed over a relatively short period of time in step with changes in society and quality improvements in the inner city. A walking tour through central Copenhagen on a summer day shows a level and variety of activity and that was simply unthinkable 20 or 30 years ago. A new city culture has risen from the new city spaces, disproving the sceptics who said that Danes would never use public space.

The temperate Danish climate was given as yet another factor that would make it impossible or at least severely limit any attempts to develop public life in Denmark, and here too the development has been interesting. Outdoor serving starts early in the spring and continues later and later in the autumn. As Copenhageners have come to enjoy life in city spaces, the outdoor season has been extended and now stretches seven months from April to November. People are even talking about continuing all the way to Christmas.

The gradual transformation of the city centre from car culture to pedestrian culture has made possible a gradual development of city life and city culture. Copenhageners have grown accustomed to the new possibilities and have had the time and the opportunity to develop the versatile public life that is now characteristic of Copenhagen.

Public spaces from Copenhagen featured in the collection of projects:

Gammeltorv/Nytorv: p. 88

Axeltorv: p. 92

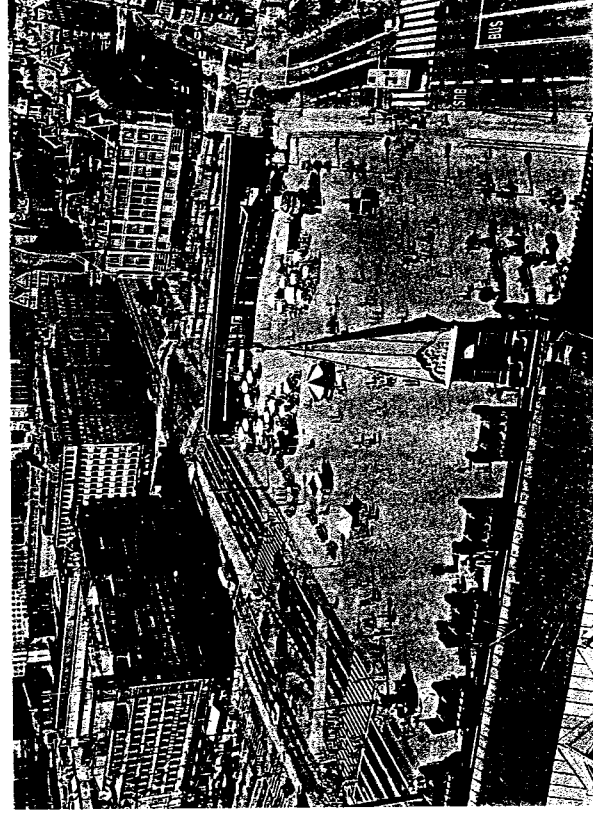
Sankt Hans Torv: p. 96



The Town Hall Square was renovated in connection with Copenhagen being the European Cultural Capital in 1996.

Right: Town Hall Square in 1995 before renovation.

Below: Renovation turned Town Hall Square into a large unified bowl-shaped space concluded by a pavilion building in dark glass.



Left: Copenhageners have become increasingly more enthusiastic about using their city. The outdoor season has been extended year by year and now starts on 1st April and doesn't end until 1st November. On cold days cafes provide cushions and blankets to help guests keep warm and enjoy outdoor life in the city as long as possible.

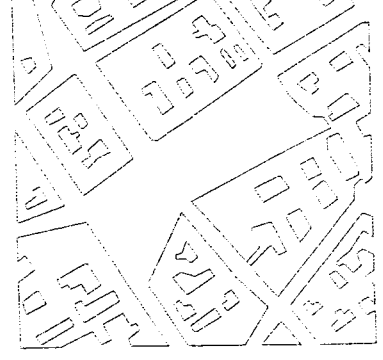
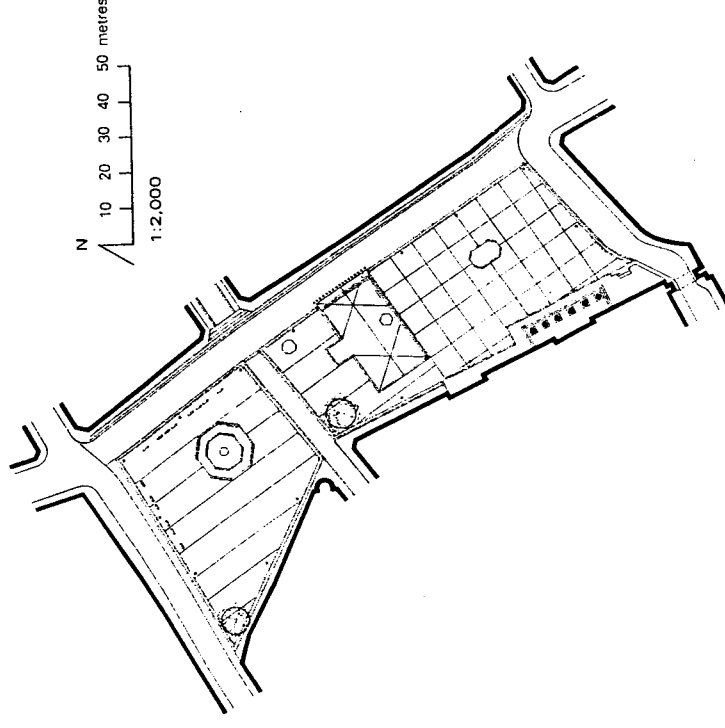


Gammeltorv/Nytorv

Copenhagen, Denmark. 1991-92
Architect: Stadsarkitektens Direktorat, with architects
Sanne Maj Andersen and Leif Dupont Laursen

Location: City centre
Type: Central city square
History: Renovated public space
Architectural feature: Surface treatment

Gammeltorv/Nytorv is an example of the quiet renovation of an urban space in which buildings play the leading role and surfaces provide unity. The history of the square is told in the details of the pavement.



Pedestrian zone: 7,300 m²
1:5,000



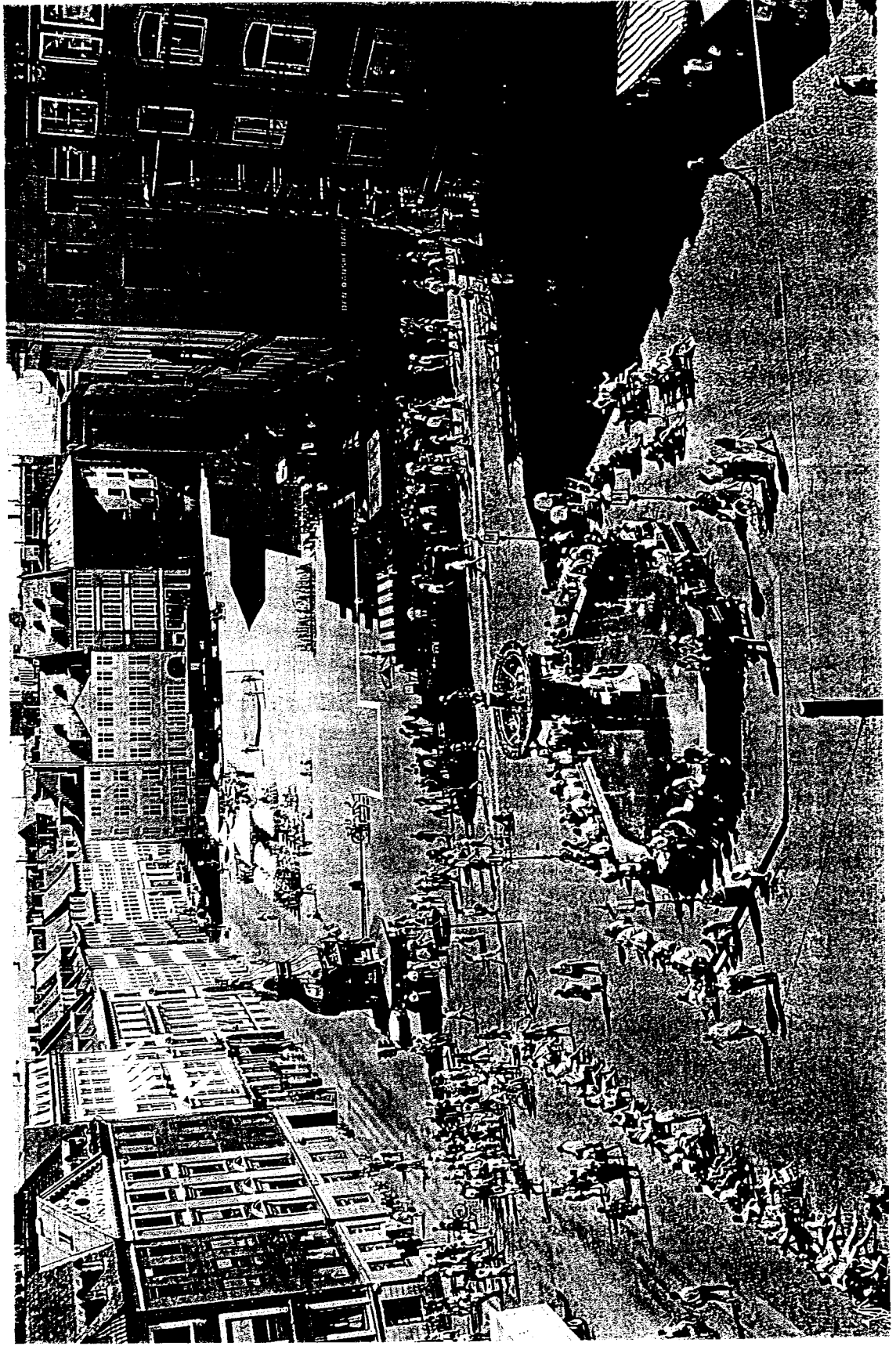
Gammeltorv/Nytorv
1:5,000

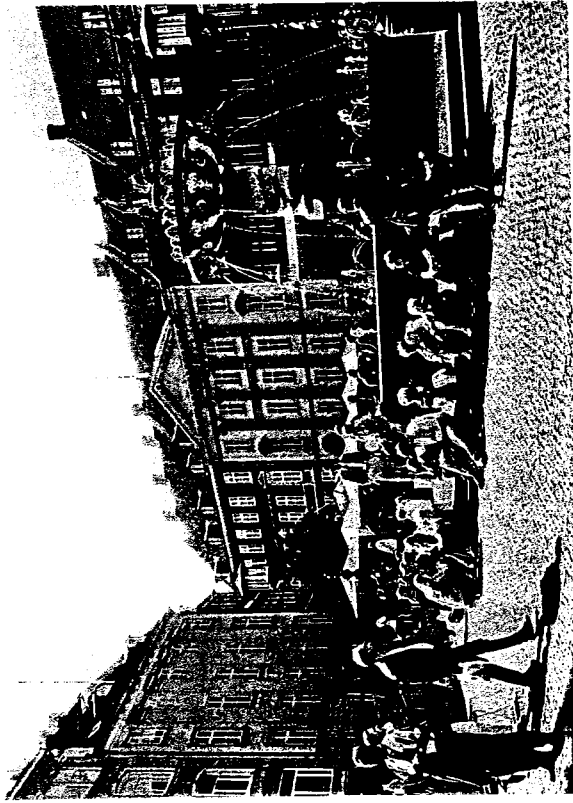


Copenhagen
1:100,000

Right: Before 1962 the square was totally dominated by parked cars.

Below: Gamelletorv/Nytorv after renovation. Peace has been restored to public space and pedestrians have priority.





The city was founded in 1167 and today the city centre still has the winding street pattern of the Middle Ages lying within the boundaries of the historic fortifications with their partially preserved ramparts and moats. Gammeltorv and Nytorv are situated in the historic centre and present an open, slightly sloping square.

Gammeltorv is Copenhagen's oldest square, and served as the town hall square from about the year 1479, when the city's third town hall was built at its southern end. The square was expanded to include Nytorv after the building behind the town hall was torn down in 1606. The Cari-

tas fountain at Gammeltorv dates from 1608 and was once a festive contribution to the city water supply. The town hall burned down several times and after the great fire of 1795, the building was torn down completely, giving the space the form we know today, in which both Gammeltorv (old square) and Nytorv (new square) are united into one large, connected urban space.

Most of the buildings surrounding the square are in neo-classic style, which gives the square a relatively homogeneous and quiet character. A new town hall and courthouse were built on the west side of Nytorv after 1805. Gammeltorv/Nytorv lost its prominence as the city's main square in 1905, when the city council moved to the present town hall on Town Hall Square.

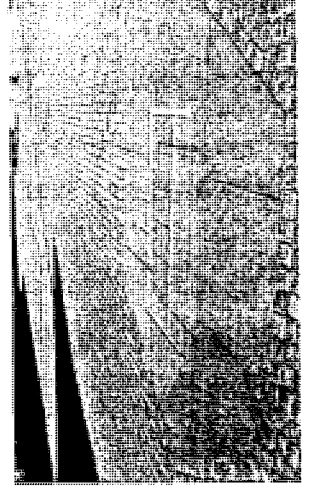
With the increase of car traffic after the Second World War, Gammeltorv/Nytorv was used for parking. However, in 1962 the space near the fountain at the old end of the square was incorporated into part of the pedestrian area when the city's main artery, Strøget, was pedestrianised. After renovations in 1974 and 1991, the new end was made car free step by step and today the entire square is one cohesive pedestrian area with a granite floor from wall to wall, emphasising its unity. A couple of bus lines continue to run along the eastern side of the square, while car traffic is restricted to the north and south sides.

The starting point for the redesign of the squares was to create a quiet background for the buildings, so that the space would stand out clearly. The chaussée stone floor unites the space across the terrain that drops about four metres from north to south. The history of the site is told in the details of the stone floor. The site of the former town halls that originally separated the old and new squares is marked as a rectangular horizontal plane creating a few steps in the sloping terrain. The outline of the most recent town hall is shown in the floor, which also contains a stone with information about the building and an illustration of its form.



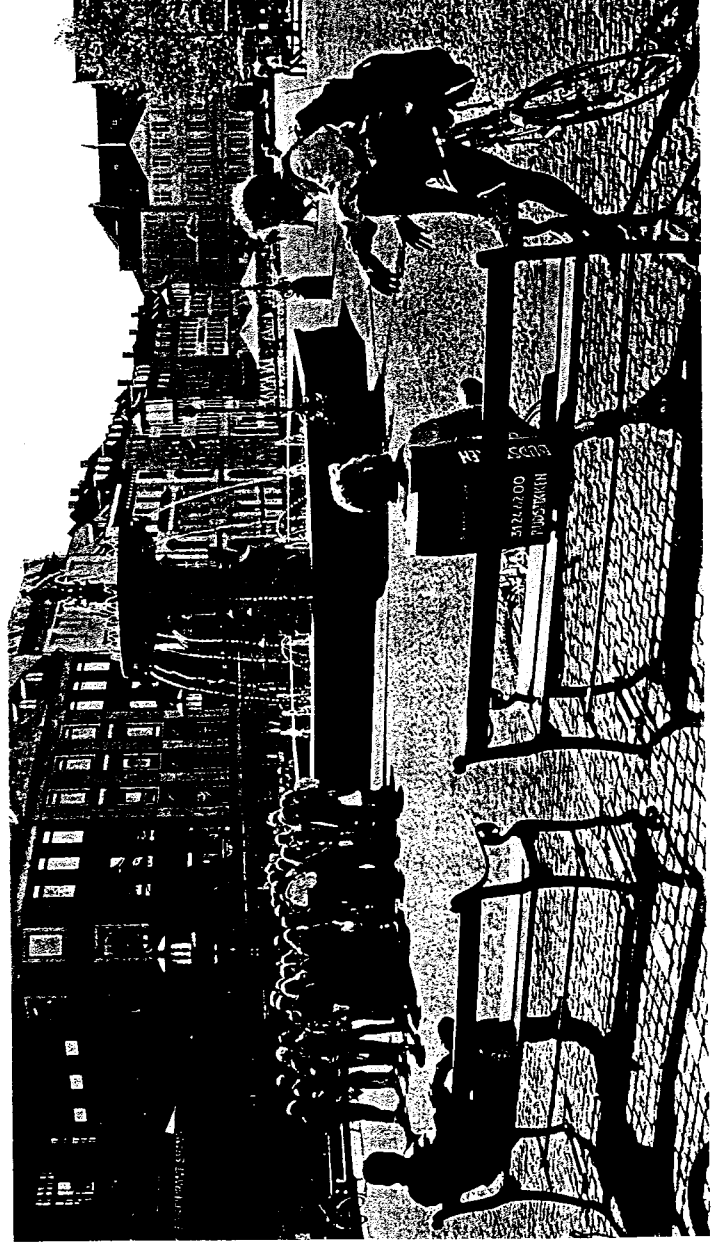
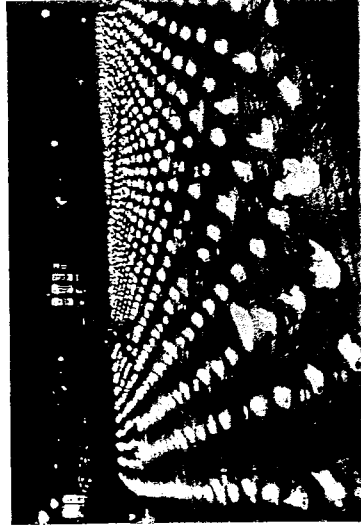
Above: The Caritas fountain at Gammeltorv is a popular place for urban recreation.

Right: Chaussée stone granite paving unifies the floor of the square. The location of former town halls is marked on the surface. Information about the buildings and their history is included.



The new square contains the outline of the old scaffold indicated by a little plinth raised to seat height.

Over time both squares have been used for many purposes, from the jousting tournaments of mounted knights to public executions and bustling markets. Today Gammeltorv/Nytorv is one of the most popular of the city's squares for urban recreation, a place where people can sit and watch the ever-changing crowd of people from far and near who cross the double square at Strøget, the main pedestrian street. The square is host to a continuous stream of activities throughout the year, both ordinary and festive. Tents and podiums are set up for special arrangements. Jazz is played here at the annual jazz festival, symphony orchestras give classical concerts, and colourfully dressed folk dancers step to traditional music. In the summer the square is filled with outdoor cafes and Gammeltorv serves as one of Copenhagen's informal meeting places around the Caritas fountain.



Above: Hundreds of devotional candles are lit on the floor of the square in a moving memorial to AIDS victims.

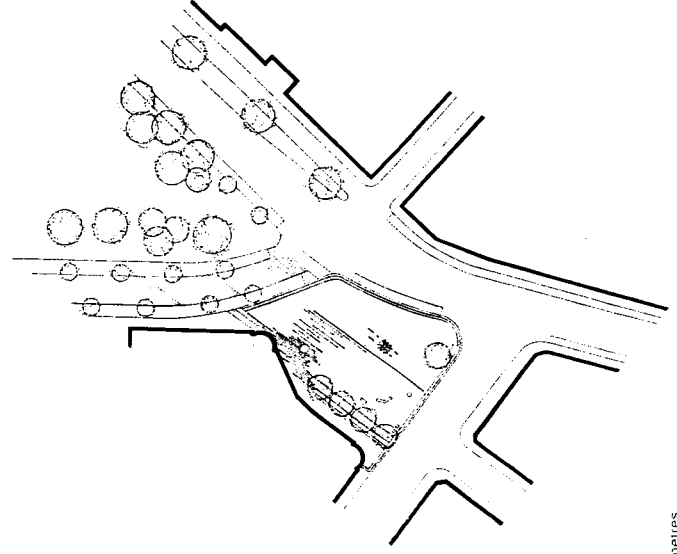
Right: Relaxed morning mood. Shown in the foreground, the traditional Copenhagen benches found throughout the city.

Sankt Hans Torv

Copenhagen, Denmark. 1993
Landscape architect: Sven-Ingvær Andersson
Artist: Jørgen Haugen Sørensen

Location: District outside the city centre
Type: Recreational square
History: Renovated public space
Architectural feature: Surface treatment

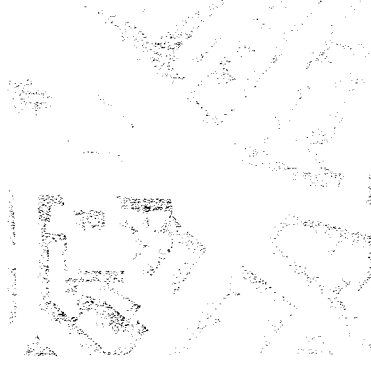
Despite the open character of the site and many traffic arteries, simple tools turned Sankt Hans Torv into a lively and well functioning urban square. The slightly convex granite floor gives a soft landscape-like quality to the square.



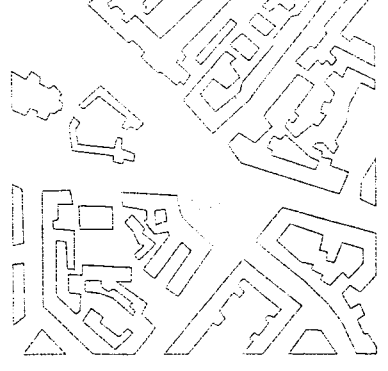
N
10 20 30 40 50 metres
1:2,000



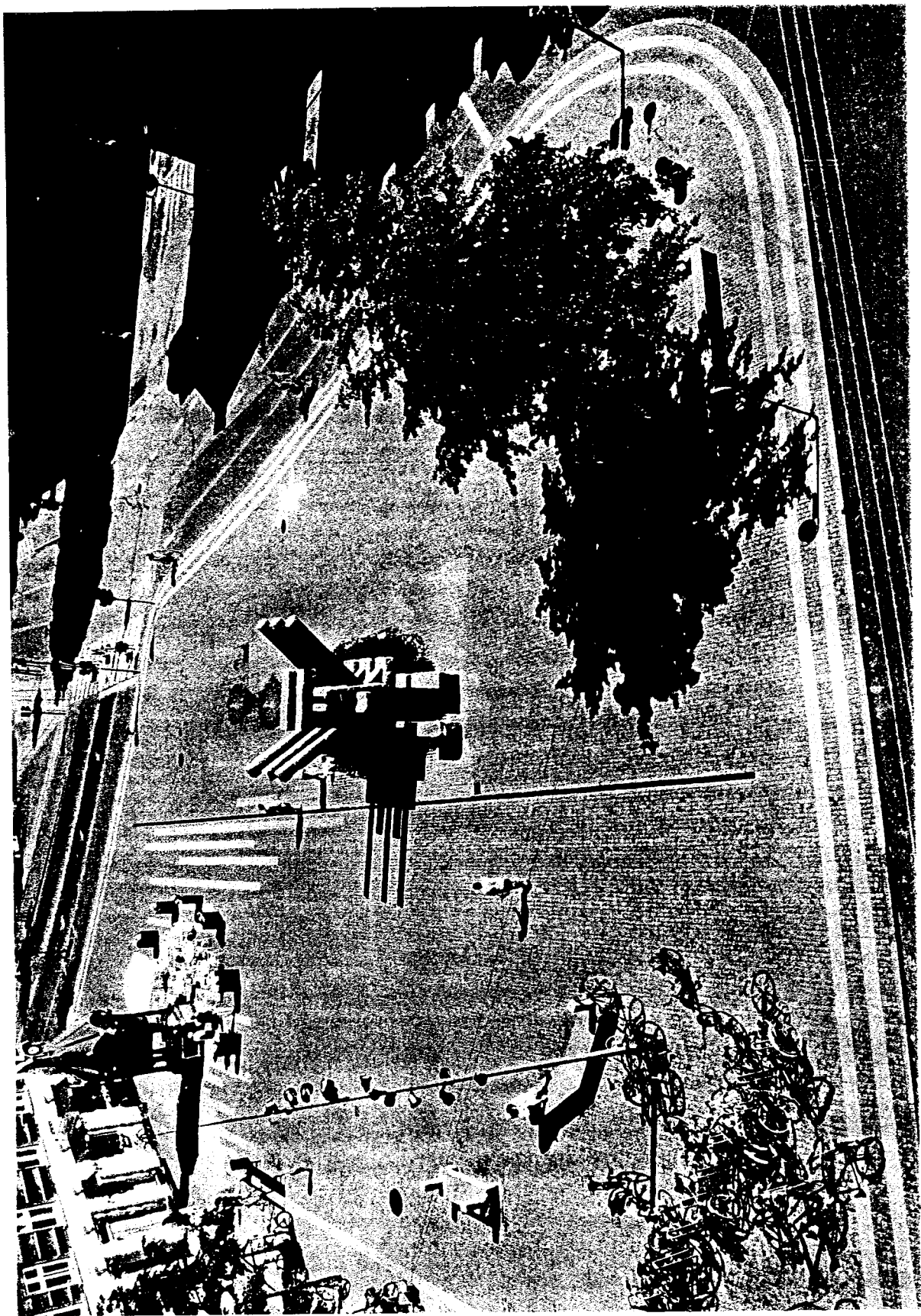
Copenhagen
1:100,000



Sankt Hans Torv
1:5,000



Pedestrian zone 1,800 m'
1:5,000



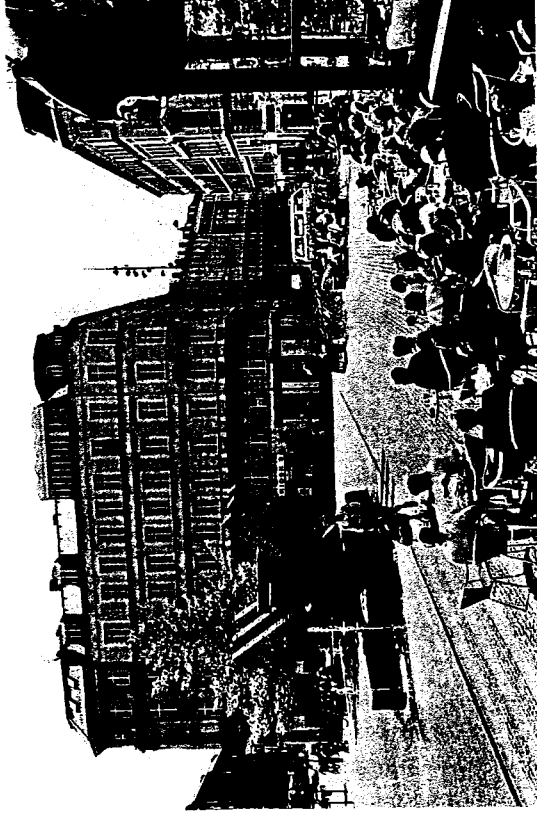
The sculpture, entitled "the house of rain", is in the middle of the square. The surface buckles and forms a depression around the sculpture, giving even more emphasis to its gravity. The tree on the right stands on a slight rise in the terrain.

Sankt Hans Torv is a square in one of the dense urban quarters, Nørrebro, built outside the old city centre after the city walls were torn down towards the end of the 19th century. Three of the sides of the square are ringed by four- and five-storey buildings containing local shops, restaurants and cafes on ground floor level. The fourth side of the square opens towards a church, which stands free on a triangle that has the character of a park.

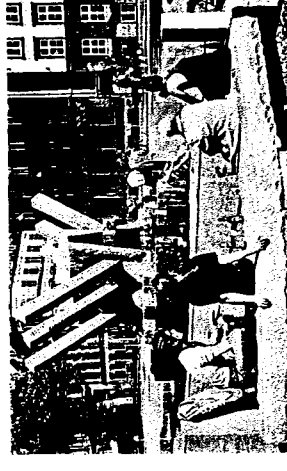
In converting Sankt Hans Torv from its old function as a busy intersection to its new function as a square for recreational activity, much of the surface traffic was diverted. This created a new city space with its back against the buildings on the northeast side of the square. The space still has heavy traffic along its southeast side, but a lively city life has grown up around the cafes and fountain on the sunny car-free side of the square.

The surface of Sankt Hans Torv buckles slightly, as if the landscape just beneath the city continues to rise and fall. The one lone tree that was on the square originally kept its accustomed spot, but today stands on a slight elevation, while the very large and distinctive granite sculpture is solidly planted in a recess that marks the point of gravity for the square. The sculpture, entitled "the house of rain", is part of a fountain whose jets of water rise from the floor in varying strengths and splash back into the recess. It is a petrified landscape that finds its own place in the midst of the cobblestone streets that connect the city. The edges of the surface along the streets have also been softened. Rows of linear stone bands that interact with the strong directionality of the sculpture add a dynamic aspect to the otherwise low-key mood of the square.

The cafes spread along one side of the square, where a row of linden trees soften the edge of the square from their position in a rectangular field of gravel. In a corner is one of the city's old kiosks, today used for outdoor food service. A tall slender mast with a gilt top stands like a



giant darning needle and turns a series of spotlights on the floor at night. The renovation of Sankt Hans Torv is an interesting example of how a well designed public space can act as a catalyst for the renovation of a whole district. The design of the square marks a change in the status of the neighbourhood and symbolises the rebirth of the quarter through its lively use as a local recreational square and meeting place.





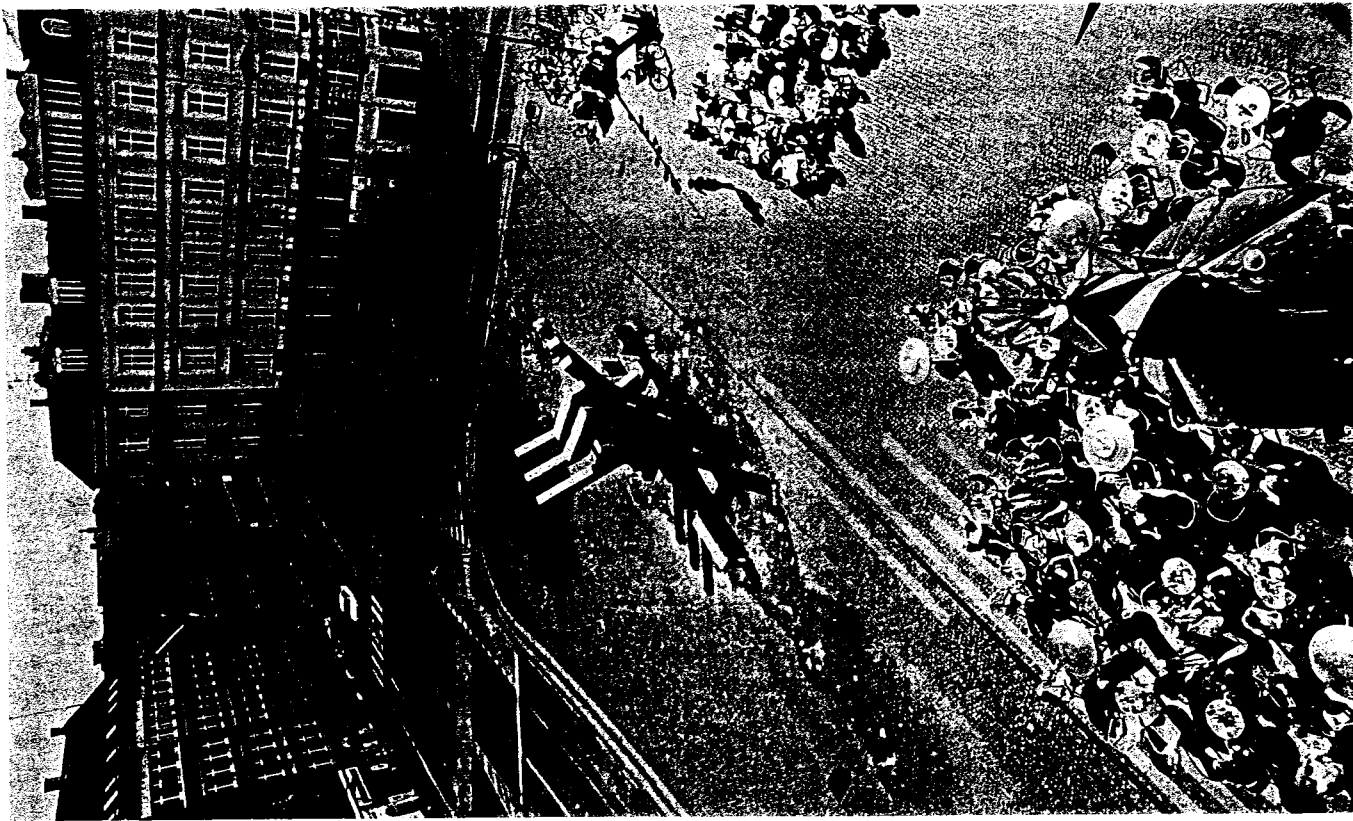
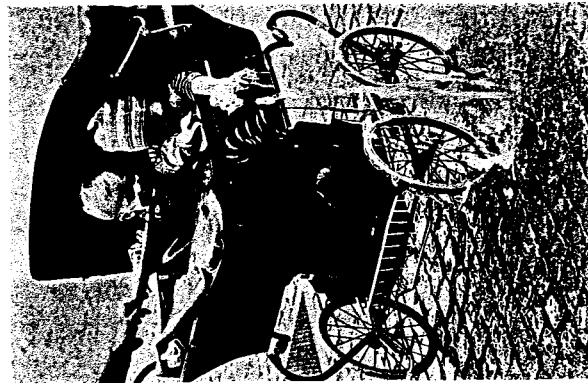
Above: The "darning needle", a tall slender mast with a gilt top turns its spotlight on the floor of the square.

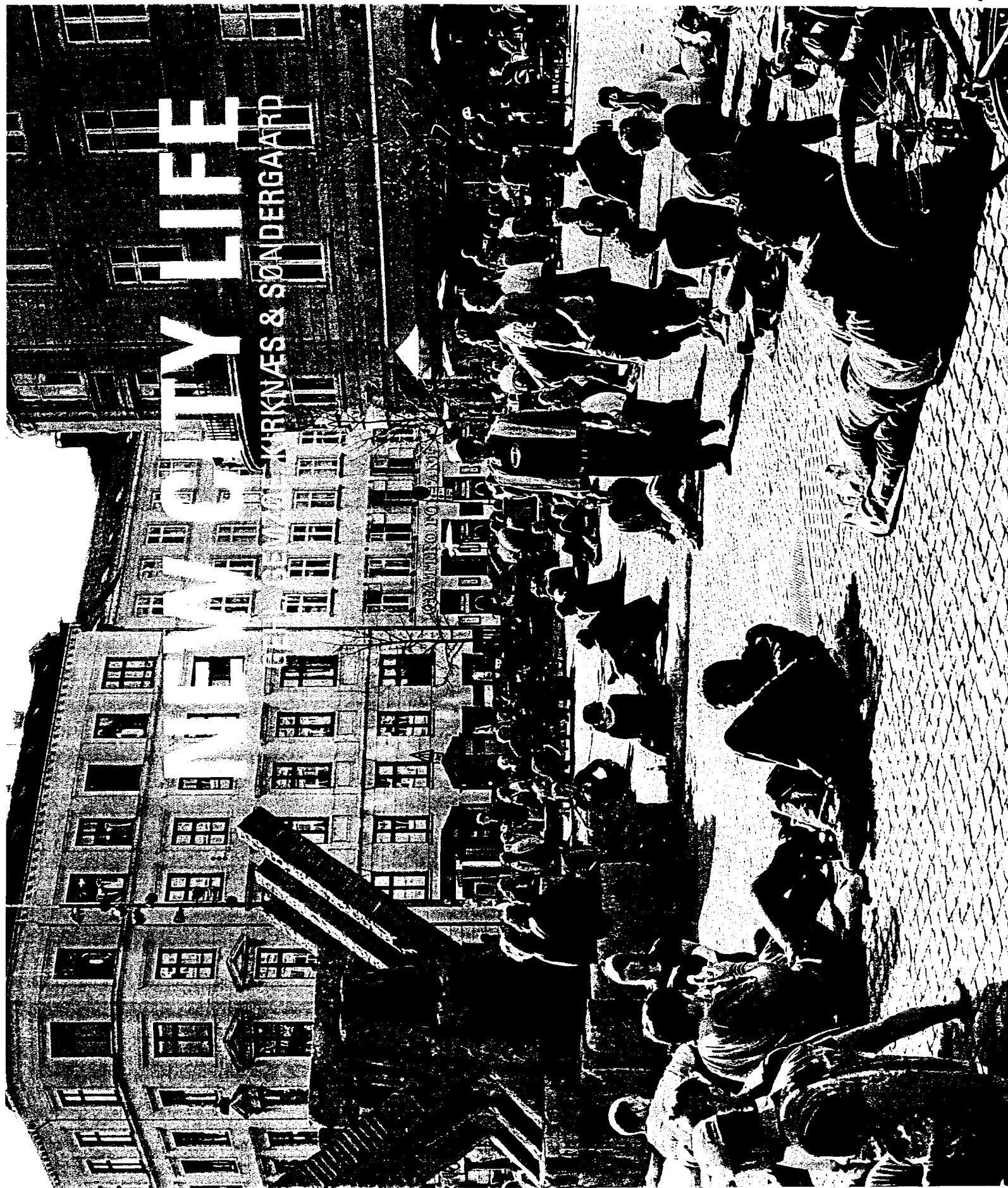
Right: Jets of water that spring directly from the pavement attract children of all ages.

Far right: Stripes in the pavement and the position of the sculpture bring a dynamic element to the square.

Overleaf above: Sankt Hans Torv is a lively spot with cafes spilling out on to the square, a popular meeting place, particularly for young people.

Overleaf below from left to right: The square seen from southeast. A summer square during the Copenhagen Jazz Festival. The square is furnished with heavy granite benches.





CITY SPACE QUALITIES

City spaces are places where children and adults from all cultures and lifestyles can move freely and meet to socialize and play and enjoy experiences with visual appeal. Although the modern world seems smaller in many ways thanks to information technology, it is still infinitely complex. Now more than ever it is crucial for us to encounter people with other lifestyles and from other cultures as the starting point for a social and cultural exchange in our daily and public lives that can be based on first-hand experience and trust.

The focus of the previous chapter was city activities. This chapter describes some of the important quality criteria for our use of city space and then reviews a representative selection of Copenhagen's city spaces in 2005.

The list of 12 key quality criteria to ensure safe, comfortable and enjoyable city space for residents is based on research developed and tested over many years by the Center for Public Space Research. The quality criteria are presented, explained and then applied to descriptions of selected city spaces to evaluate how many quality criteria they meet. The individual fields are colour coded in white, grey and black to indicate good, average and poor fulfilment of the requirements.

It is interesting to note that the city spaces meeting most quality requirements are also the most popular and well-visited sites in the city. Conversely, the city spaces that meet few or next to no quality criteria are those least utilized. The city's residents have a well-developed sense of where they like to be – and where they don't.

PROTECTION

Protection expresses our need to be kept safe from accident, insecurity and discomfort. Traffic is an important factor. Good city spaces provide such good traffic safety that we do not have to fear being run down or remain on constant alert, with children firmly in hand and so on. In short: good city spaces provide good conditions for pedestrian traffic.

Another criterion that falls under protection is crime prevention to ensure a genuine sense of security when we move about the city. Dark, deserted spaces and streets often promote a feeling of insecurity. For places to feel safe, there have to be people around with things to do.

This is best achieved by the presence of diverse functions: housing, offices, shops and restaurants, so that there are lights in the windows and people nearby at all times of night and day.

The third factor deals with protection against uncomfortable sensory experiences such as unpleasant smells, pollution or adverse weather conditions. In Scandinavia, the main problem is that wind cools us down and cloud cover keeps the sun from warming us up again. But the problems vary with the seasons and from region to region. Other parts of the world often have completely different climate problems, but protection from unwanted elements of the climate remains important.

COMFORT

Opportunities to participate in a variety of activities and experience the surroundings rest on how city space is designed to facilitate basic human activities under good conditions. Pedestrians need to move freely, as well as stand and sit where it feels good and natural.

Designing the edges of public space is especially important to city life. People prefer to stay at the edges or border zones with their backs well protected. They want good opportunities for looking, listening and talking.

Good city space has multiple uses. It is important to be able to stay and experience city space, to use it for both passive and active recreation. It is not necessary for many things to happen at once, but rather for the "stage" to be set so that it can be used for many different things sequentially: from quiet square to marketplace to open-air cinema, and so on.

ENJOYMENT

Creating thoroughly enjoyable spaces is highly dependent on utilizing the qualities, attractions and special opportunities found in and around city spaces. It is vital to create city spaces on a human scale, with fine details, good materials and good street furniture. Good city space must also provide opportunities to enjoy the positive aspects of the local climate.

Finally, city space should offer good experiences, fine views and interesting sensory impressions. Last but not least and it almost goes without saying: all qualities should be part and parcel of beautifully conceived architectural unity.

Protection against traffic and accidents – feeling safe

- Protection for pedestrians
- Eliminating fear of traffic

Protection against crime and violence – feeling secure

- Lively public realm
- Eyes on the street
- Overlapping functions day and night
- Good lighting

Protection against unpleasant sensory experiences

- Wind
- Rain/snow
- Cold/heat
- Pollution
- Dust, noise, glare

Opportunities to walk

- Room for walking
- Interesting facades
- No obstacles
- Good surfaces
- Accessibility for everyone

Opportunities to stand/stay

- Edge effect/attractive zones for standing/staying
- Supports for standing
- Facades with good details that invite staying

Opportunities to sit

- Zones for sitting
- Utilizing advantages: view, sun, people
- Good places to sit
- Benches for resting

Opportunities to see

- Reasonable viewing distances
- Unhindered views
- Interesting views
- Lighting (when dark)

Opportunities to talk and listen

- Low noise levels
- Street furniture that provides 'talkscapes'

Opportunities for play and exercise

- Physical activity, exercise
- Play and street entertainment
- By day and night
- In summer and winter

Scale

- Buildings and spaces designed to human scale

Opportunities to enjoy the positive aspects of climate

- Sun/shade
- Heat/coolness
- Shelter from wind/breeze

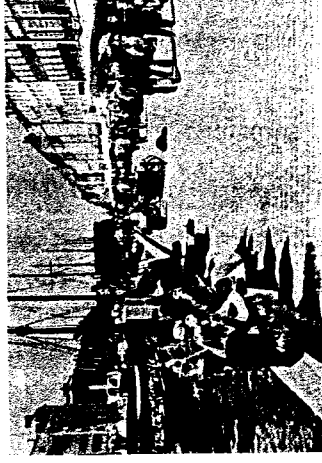
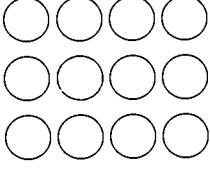
Positive sensory experience

- Good design and detailing
- Good materials
- Fine views
- Trees, plants, water

Two examples using quality criteria to evaluate city space

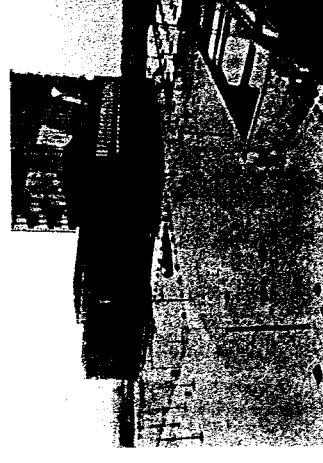
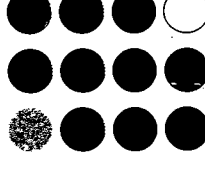
Nyhavn, quayside street in central Copenhagen

This example produces many white (good) fields due to the thoroughly good quality based on all criteria.



Kay Fisker Square, main square in new city district

An example of a square in the new town of Ørestad with a very poor rating in most areas covered in the list of quality criteria.



MOVEMENT AND STAYING SPACE

Two very basic types of space can be identified throughout the history of urban planning:

MOVEMENT SPACE

Based on the forward-directed senses and linear movement patterns of human beings, the paths between tents and booths later became the streets and boulevards between buildings. Psychologically, streets invite linear movement, seeming to say: "Move on, move on."

STAYING SPACE

Plazas, squares and other open spaces in the city. Whereas streets were based on the frontal senses and linear movement of human feet, staying spaces are based on sight, on people's ability to scan a large area and survey the options. The human eye can see other people and activities within a distance of 100 metres. The largest dimension of squares in European cities is almost always just about the magic size: 100 metres. While linear space invites movement saying "come on, keep moving", plazas and squares encourage staying. Psychologi-

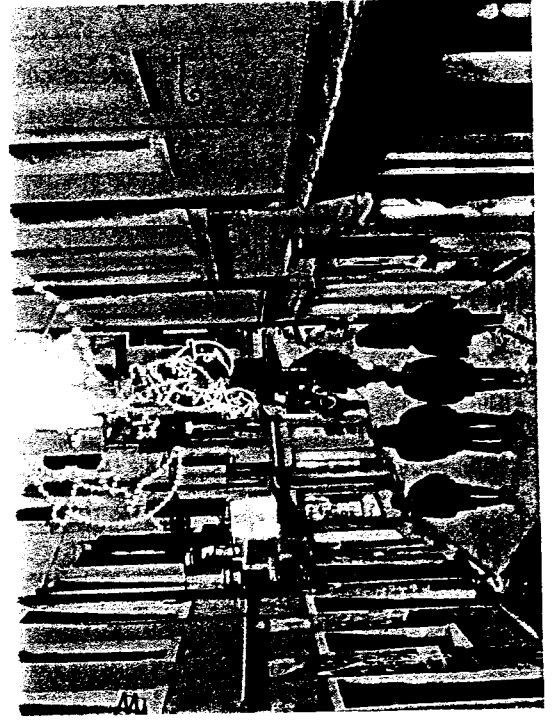
cally, the space is saying: "Stop and look at the many things this space has to offer." People walk more slowly across squares and stop more often.

Traditionally, it was here in the city's plazas and squares that space-demanding functions were held: markets, meetings, coronations and executions. Even today squares encourage staying and public events. This is where the majority of the city's café life, public gatherings, concerts and so on are held. City parks also belong in the category of spaces that encourage staying, or perhaps a combination of staying and strolling leisurely along paths.

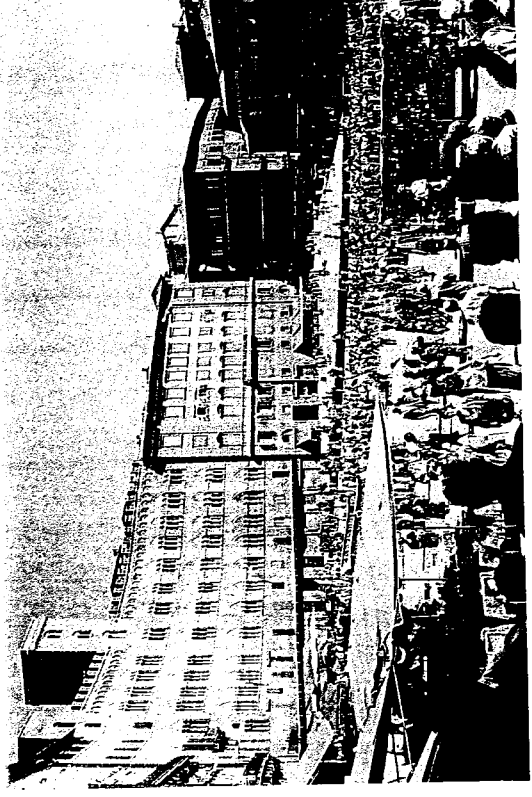
Even though strolling through the park can be described as a moving activity, it can equally well be characterized as a staying activity taking the form of slow rotation in space. Similarly, children's play at a playground can be described as lively movement in a very small area. This is staying in a particularly fleeting and fluid form.

LOCATION, SCALE AND INTENSITY

Within the two archetypes of city space – movement and staying space – modern cities show large variations in function, design and use. Centrally located streets and spaces near train stations and transport hubs often have a high intensity of functions and pedestrians. More decentralized streets often carry only local traffic, and in residential



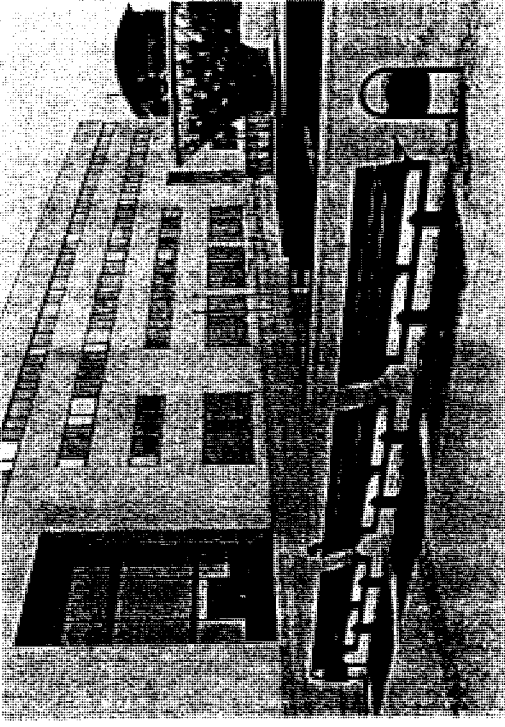
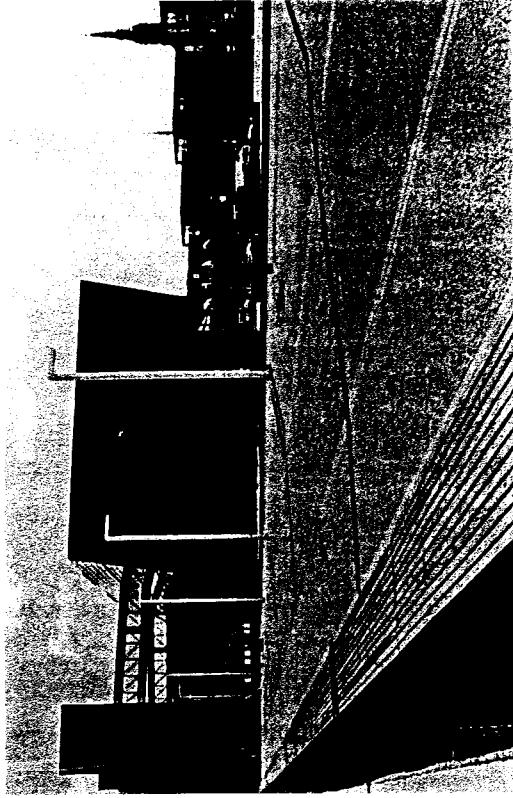
Left: A popular space for movement, Venice, Italy.



Right: A good staying space, the Campo, Sienna, Italy.

Left: Søren Kierkegaard Square almost devoid of any signs of life.

Right: A new rarely used square at Tuborg Harbour, Hellerup.



areas, the street is an access way largely used by residents. The city's plazas, squares and parks serve more as gathering points. Regardless of where they are located in the city structure, they usually serve a large public. However, central staying spaces with many functions and crowds attract people from the whole region or even national and international visitors, while local staying spaces function as relaxation sites for what is often a thinly populated local area.

The high utilization of centrally located urban spaces in contrast to more peripheral spaces is reinforced further by two factors: the city's most vital attraction is "other people", and when the central spaces have a high level of activity, that in itself attracts more people. 'Since there are so many people here, it must be a good place to be – or they would have gone home instead.' Or, as the old adage has it: 'Nothing draws a crowd like people', which also remains true for urban life in modern cities.

In contrast, the level of activity in the more local urban spaces of the city is more modest. There are few users and the low level of activity does not attract more. However, quiet local life can definitely have its qualities and charm.

Another factor that weakens the use of newer streets, squares and plazas has to do with scale and the large, windswept spaces built for a highly limited number of users. Being at a party in a huge room with few guests is never particularly festive; being in a smaller room with greater density is far more intense and lively. The large theatre with a small audience and the small theatre with a large audience provide very different experiences. In many of the newer urban districts, we find numerous squares and plazas that are too large for communal activities. Treating size and scale in relation to human senses and behaviour patterns appears to be an art that modern urban planners and architects have difficulty mastering. Or put another way: some of the city's new urban spaces are poorly designed to provide a framework for new city life. But with a little more care, they could have done.

INTRODUCTION TO THE TYPES OF SPACE DESCRIBED

The preceding section described how the character of life in city space changed dramatically over the 20th century. Also noted is how the change in use of city space from the necessities of daily life to optional, recreational activities presents entirely new and compelling demands for quality. If quality is lacking, urban residents have many other options, but if the quality is there, urban dwellers are as keen to meet and enjoy the common spaces of the city as they were in previous decades and centuries.

Thus the quality and activities on offer in city space are critical for urban life in today's society.

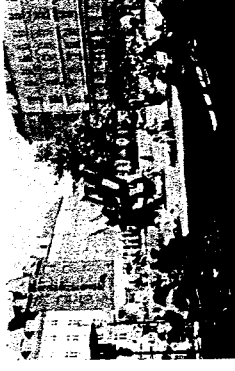
In the following, we will present a characteristic selection of Copenhagen city spaces. There are old and new spaces; green, grey and blue spaces; central, decentralized and local spaces as well as spaces dedicated to play and sport. Together the spaces described make up a representative selection of the city spaces currently supporting city life.



URBAN STROLLWAYS

Boulevards, avenues, streets and byways where directional movement is key

Shown: Strødet, inner city



MAIN CITY SPACE

The main squares of the city or district, space that frames many different events

Shown: Sankt Hans Square, Nørrebro



LOCAL CITY SPACE

Space that primarily serves local users and incorporates playing and staying

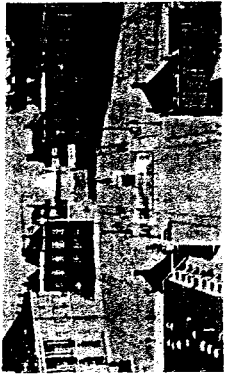
Shown: Bopa Square, Østerbro



SECLUDED CITY SPACE

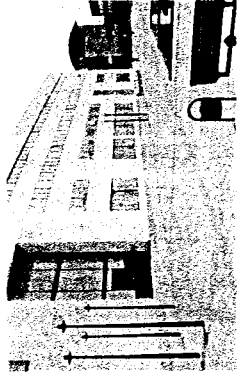
Location and design offer fewer options, simple furniture for staying perhaps

Shown: Utterslev Square, Utterslev



Often a formal forecourt for seats of power, space used for celebrations, ceremonies and cheering crowds

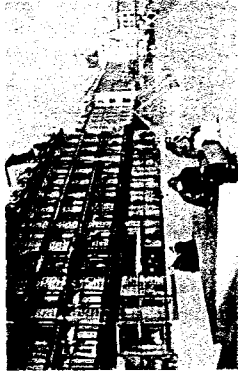
Shown: Amalienborg Palace Square, inner city



DESERTED CITY SPACE

Space featuring large surfaces with few activities and buildings with few entrances

Shown: Tuborg Harbour, Hellerup



TRANSPORT HUBS

Space dominated by people in transit, going about their daily activities and errands

Shown: Metro Square at Kongens Nytorv, inner city



GREEN CITY SPACE

City parks and urban oases, a framework for recreation from sunbathing to sport

Shown: Kongens Have, inner city



Space with carefully planned design elements to create special, primarily sensory experiences

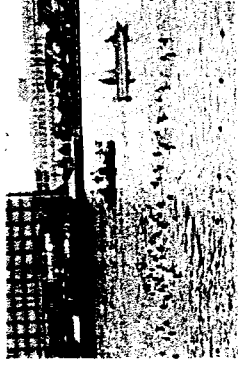
Shown: Solbjerg Square, Frederiksberg



TEMPORARY CITY SPACE

Space intended for temporary use, often on land planned for other purposes

Shown: Mikado Square, Ørestad



AQUATIC CITY SPACE

With water as the dominant surface, this space often creates identity in the city scene and offers various activities on and in the water

Shown: Copenhagen Harbour



WATERFRONT CITY SPACE

Access to and view of the water give these spaces added value and a myriad of possible activities

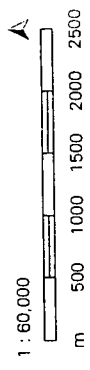
Shown: Harbour Park, Islands Brygge



CITY SPACE FOR PLAY AND SPORT

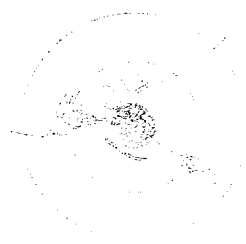
Designed for activities that require permanent specialized equipment

Shown: Skateboard park, Fælledparken



URBAN GROWTH LAYERS AND CITY SPACE

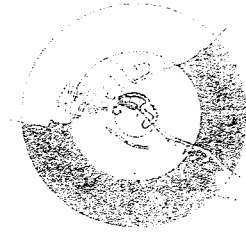
Below is a selection of typical city spaces from the various periods of Copenhagen's urban growth and development.



THE INNER CITY

Medieval and renaissance city
Radius: 1 km

PLACE	TYPE
1. Strøget	Main pedestrian promenade
2. Gammeltorv and Nytorv	Central city square
3. Copenhagen Town Hall Square	Main city square
4. Amalienborg Palace Square	Ceremonial square
5. Søren Kierkegaard Square	Harbour square
6. Metro Square, Kongens Nytorv	Metro square
7. Kongens Have	Central city park
8. Axeltorv	Staying square
9. Nyhavn	Waterfront staying area



THE OUTLYING CITY

Urban quarters from 1910-2005
Distance from the city centre: 3-6 km.

PLACE	TYPE
19. Brønshøj Square	Local square
20. Utterslev Square	Local square, local park
21. Kay Fisker Square, Ørestad	Central square in new town
22. Husum Square	Local square
23. Vanløse Square	Local square
24. BMX track, Ørestad	Space for bikers
25. Circus Square, Bellahøj	Square for temporary events
26. Mikado Square, Ørestad	Temporary space in new town



THE ADJACENT CITY

Urban quarters from 1850-1910
Distance from the city centre: 1-3 km

PLACE	TYPE
10. Holmbladsgade, Amager	Local street
11. Bopa Square, Østerbro	Local staying square
12. Melchior Square, Østerbro	Local staying square
13. Nørrebro Park, Nørrebro	Local park
14. Harbour Park, Islands Brygge	Local and regional harbour park
15. Solbjerg Square, Frederiksberg	Local square
16. Skateboard park, Fælledparken	Space for sport, Østerbro
17. Climbing wall, DGI-byen	Space for sport, Vesterbro
18. Sankt Hans Square, Nørrebro	Local and regional staying square



CITY WATERFRONT

PLACE	TYPE
27. Harbour	Recreational harbour
28. Lakes	System of centrally located lakes

The Green Wedges Of The Capital

The Story Of The Green Areas
Of Greater Copenhagen

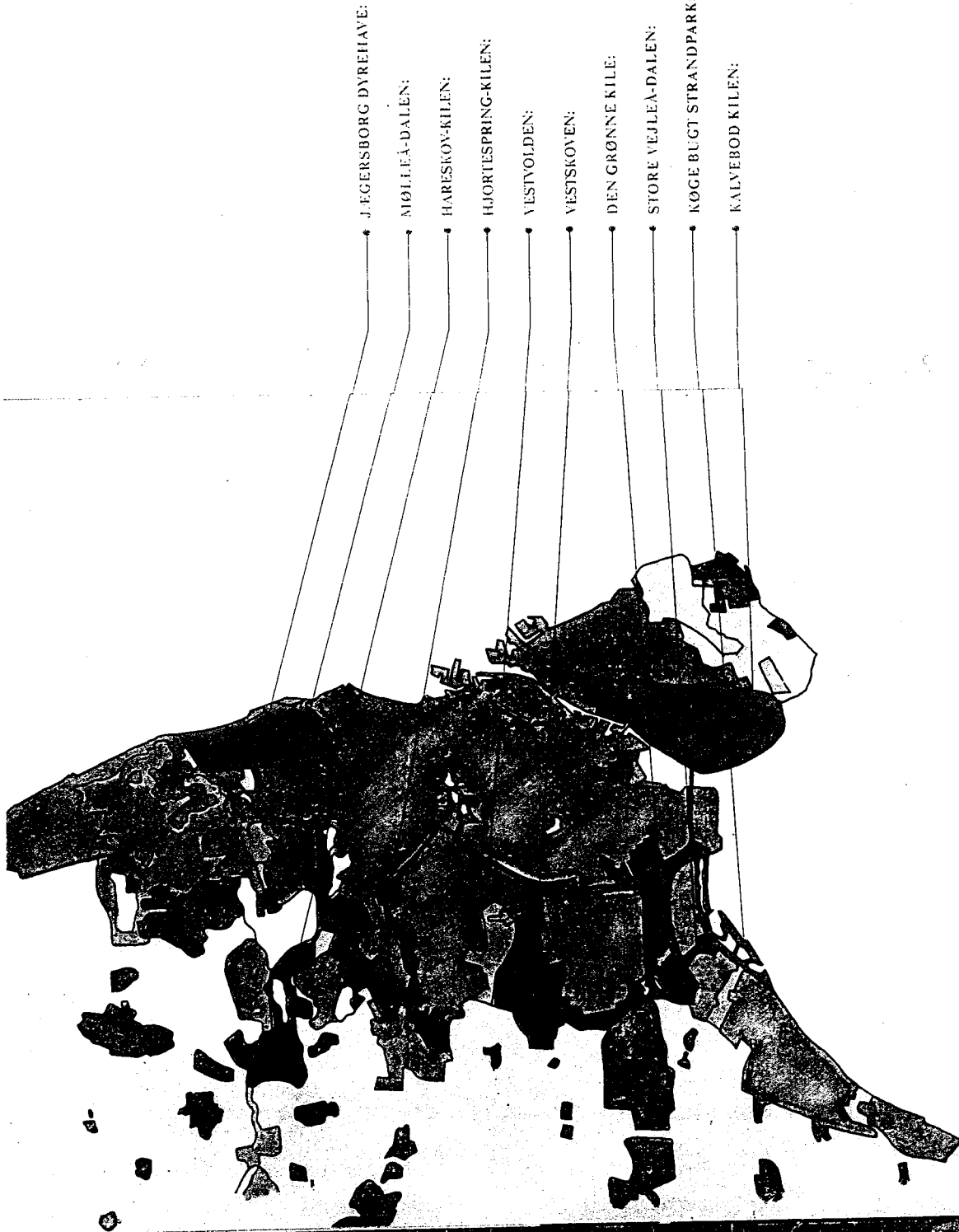
The Ministry of the
Environment
The Planning Department

The Greater Copenhagen
Council
1984



Table Of Contents

Introduction	7
From fortress town to finger city	8
Green planning	15
<i>The park on the Sound</i>	20
<i>The cradle of industry</i>	24
<i>Big forests - Clear lakes</i>	26
<i>Scraps of a vision</i>	30
<i>A ring-road without cars</i>	34
<i>Landscape in transformation</i>	36
<i>The field of opportunities</i>	40
<i>The meadow and bog belt</i>	44
<i>A dream comes true</i>	46
<i>Now Vestmager is being opened</i>	50
<i>The future of the wedges</i>	54
Supplementary literature	56



From fortress town to finger city

Some 15 to 20 kilometres from the centre of Copenhagen there are big, connected green tracts driving into the conglomerate of the city like *green wedges*: Dyrehaven, the Hareskov-wedge, the Hjortespring-wedge, Vestskoven, Den grønne Kile (the Green Wedge), Køge Bugt Strandpark and the Kvalved-wedge.

These green wedges, their history and their significance as leisure areas for the population of Greater Copenhagen form the main subject of this booklet.

Furthermore, it will describe three *green belts* which connect the wedges with one another: Mølleå-dalen, Vestvolden and Store Vejleå-dalen.

First, however, it is necessary to give a brief outline of the history of the city's development.

The City Within The Ramparts

One of the main tasks of town planning is to determine which areas should be kept *free* of development.

This has certainly been no easy task in a city like Copenhagen whose explosive growth over more than a hundred years has surpassed even the wildest expectations.

However, the task has been solved with much greater success here than in most other major European cities.

Even in 1850 Copenhagen was still a fortress

town – enclosed within those ramparts where the people of Copenhagen had held their own against the Swedes' onslaught on the town some 200 years previously.

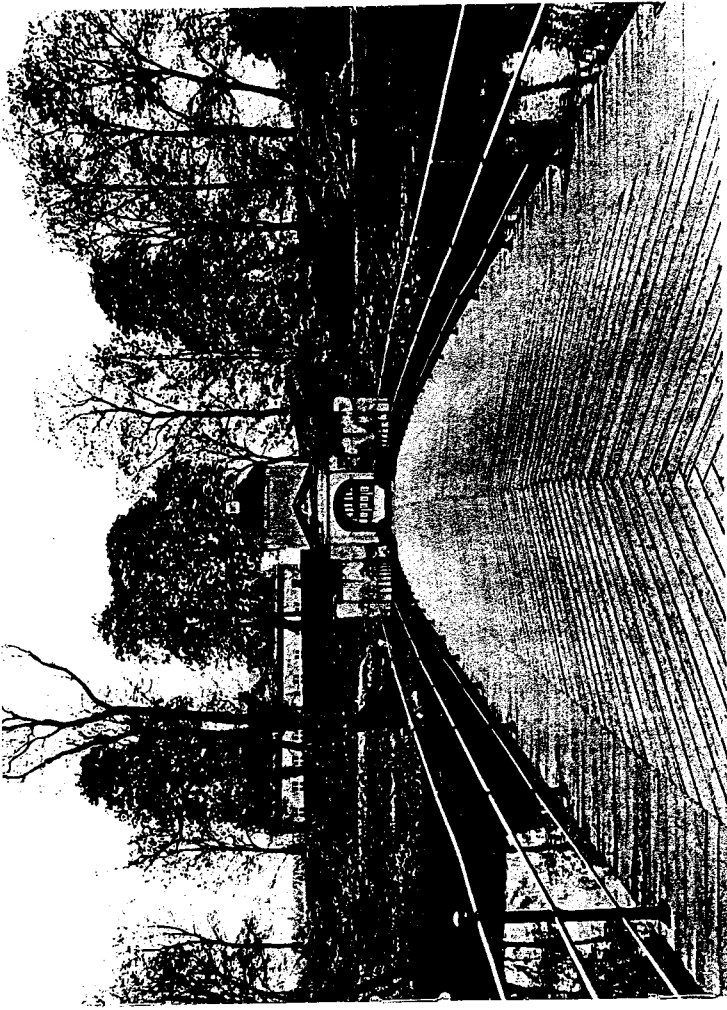
Within the ramparts 130,000 inhabitants lived on just 3 square kilometres, and both housing and sanitary conditions were beneath contempt. The population of Copenhagen grew, and the town became more and more overpopulated. Outside the ramparts there was open farm country, but here all development was prohibited within cannon range of the ramparts out of regard to the defence of the town.

The Bridge-sections Emerge

In 1851, the military gave up defending the fortress town against the forces that threatened to break it open from within. The ban on development outside the lakes was lifted by the 6 January, 1852 Act. Nørrebro (North Bridge) and Vesterbro (West Bridge) emerged.

The phrase lifting the ban on development is to be interpreted quite literally. There was no such thing as town planning, and the Development Act which was enacted in 1856 imposed very few requirements on builders. The Act fixed a maximum building height and a minimum width for streets and roads. Furthermore, it was required that all flats should have access to

Kastellet (the Citadel) was erected in the years 1662-1665 as a part of Copenhagen's land-based fortification. The fortification includes five bastions and a moat. Some of the old buildings are still used by the military as offices whereas the ramparts serve as parks.



two staircases. The rest was more or less left to free enterprise.

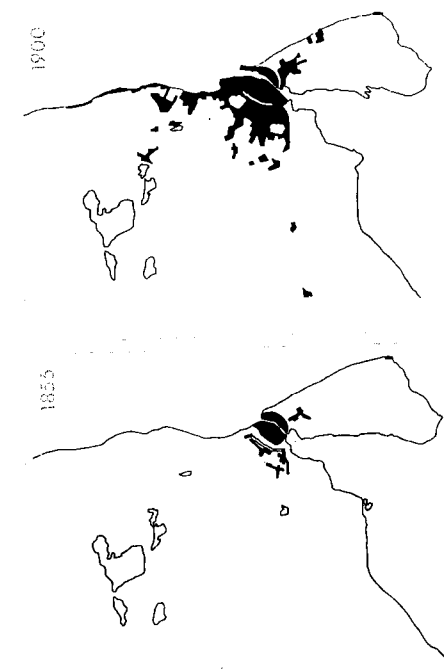
Property speculators exploited the situation ruthlessly. The sites were heavily overdeveloped, and the working-class families that moved to the hastily erected tenement halls of the bridge-sections had to make do with small, insanitary flats.

The more affluent part of the population moved to Østerbro (East Bridge) and to

Frederiksberg, the latter of which gained local independence in 1858.

A military area of demarcation was maintained for some years to come between the bridge-sections and the medieval town. However, in 1867 the old ramparts were demolished, and the area of demarcation was developed. The remains of the ramparts may still be seen today in the Tivoli, Ørstedsparken, Botanisk Have (the Botanical Gardens) and Østre anlæg (the Eastern

Copenhagen's development in four steps: From fortress town to fully developed metropolis.



ramparts). Kastellet (the Citadel) and Christianshavn's ramparts were preserved more or less intact.

The Incorporated Districts

Denmark was really becoming industrialized, and the migration from country to town was increasing. Around the year 1900, Copenhagen's population had grown to 360,000 with one half living in the bridge-sections. The population of Frederiksberg had grown to nearly 80,000. At that time it was Gentofte (14,000 inhabitants) and the leafy spots north of Copenhagen that attracted the rich with its fresh air and low tax rates.

The flight of major tax-payers from Copenhagen contributed to the incorporation of Valby, Brønshøj, Sundbyøster and Sundbyvester in the City of Copenhagen in 1901-1902. The purpose was, among other

things, to make room for developing residential neighbourhoods. The framework for the development of the new districts was laid down on the basis of an international town planning competition in 1908-1909, and the improved communications made it possible for still more people to settle in the incorporated districts.

The Tram City

At the turn of the century the bicycle and the horse and carriage were the dominant means of transport in Copenhagen. During the subsequent years, trams were electrified, and in 1911 the City Council assumed charge of their operation. The result was that the tram service network was extended considerably, and a uniform fare system was introduced.

As the terminal stations were gradually moved farther and farther away from the centre of the city, new layers of housing



districts were added around the city hub. However, with the metropolitan railways new conditions for the growth of the capital were created.

The S-train City

In 1930, the Rigsdag (Parliament) decided to electrify the local train service. The metropolitan railways between Copenhagen and Klampenborg were opened in 1934, and soon more were added. The basic framework of the local transport network had been established at the beginning of the century with the construction of an underground railway from the new central railway station on Vesterbrogade to Østerport. The Coastal Railway was thus connected to the rest of the railway network.

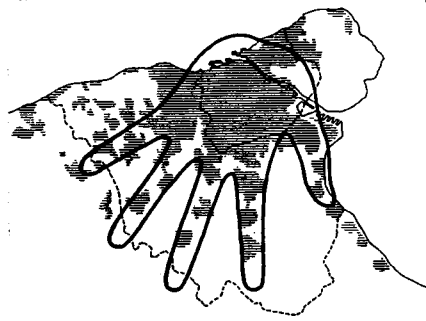
The metropolitan railways made it possible to live outside Copenhagen and at the same time work in the city. The structure of the city was starting to change.

The Finger Plan

In 1940 the population of the capital passed one million, and the need for a general plan was becoming more and more urgent. In 1945 a group of town planners associated with the Danish Town Planning Institute started preparing a comprehensive plan for the future structure of the city. Two years later the work group published its proposal for a local plan for Greater Copenhagen; posterity has come to term the proposal the Finger Plan. The plan implied stopping the layer-upon-layer growth, and that most of the future city growth should be concentrated in narrow town fingers along existing and future metropolitan railways.

There should be no development of inter-finger areas. This should ensure the maintenance of areas for recreational purposes near housing districts – the green wedges.

The short distance to S-trains would mean



that there was less than 30 minutes by train to the jobs in and around the central sections of the city, no matter where in the finger towns you chose to live.

The City Fingers Swell

The Finger Plan was favourably received by the politicians. By means of a new act, the City Regulation Act of 1949, they made it possible to exert a certain amount of control over city growth in accordance with the principles of the Finger Plan. A special city development committee was appointed. It divided Greater Copenhagen into inner and middle zones, where future city growth was to take place, and outer zones where no development was to be permitted. However, the fast industrialization and increasing affluence which were to come about in the 50's and 60's had not been taken into account. Much greater numbers and much more space consuming houses

were built than had been expected, and the areas that had been designated inner zone were quickly used up.

Furthermore, the number of private cars skyrocketed. The car made many people independent of public transport. Consequently, it became attractive to settle outside the compact city area.

Districts with single-family houses flourished. The «web» between the town fingers was coming under attack.

Regional Planning

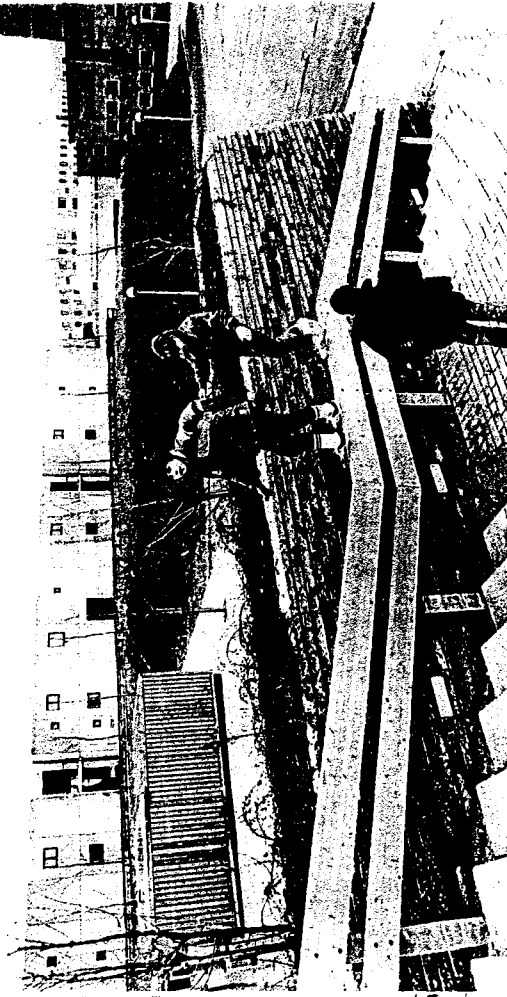
In order to halt the sprawling of the city, all the local councils in Copenhagen, Roskilde and Frederiksberg counties were gradually subjected to the City Regulation Act, and true regional planning was started.

The result was a 1st step plan for city development in the Greater Copenhagen area. The plan was adopted by the National Town Planning Commission in 1953. It maintained the fingerstructure of the capital. Furthermore, the 1st step plan pointed out that new housing areas should primarily be situated along future metropolitan railways to Roskilde and Køge whereas town development in Northern Zealand should be stopped in order to protect the natural beauty spots.

In the mid-60's the Copenhagen city planning committee adopted definitive geographical limits to growth in the town fingers. This took the wind out of the land speculators' sails to some extent. The rateable value of property in the wedges fell, and the way had been paved for planning and public acquisition of land for recreational purposes.

But, after all, there were limited possibilities for controlling where people should settle. Motoring had become a very great success. Large segments of the population were now

The Finger Plan from 1947, reproduced schematically: The central parts of the city are covered by the palm whereas the fingers indicate the developed areas along the metropolitan railways. The green wedges are situated in the spaces between the fingers.



A very comprehensive planning job preceded the town development in the Køge Bugt finger. This picture shows Avedøre Station.

car owners, and tax allowances and reliefs together with the increasing affluence enabled more and more people to buy their own houses. Large areas around existing villages were parcelled out and developed with single-family houses. In particular, the areas in Northern Zealand with many forests and lakes attracted the many who relocated from the central parts of Copenhagen during those years.

However, the development was more sluggish towards the west and south-west, and they had been pointed out as the primary directions for city growth in the 1st step plan.

The Køge Bugt Plan

At the beginning of the 1960's the Køge Bugt area was primarily agricultural and used for summer cottages.

In 1961 the Danish Parliament, the Folke-

ting, passed a special Act about the planning of the Køge Bugt area, and the Minister of Housing appointed a planning committee with representatives from counties and local authorities.

The work of the committee resulted in a master plan that was adopted in 1966. On the basis of this plan the construction of housing for 150,000 people in ten new town units along Køge Bugt – from Avedøre to Jersie beach – was begun. Each unit got its own S-train station and a shopping centre next to it. There was to be multi-storey housing nearest the stations whereas the rest of the town units were parcelled out as single-family house areas and compact, low-height housing.

It was a definite precondition for the establishment of the new communities along Køge Bugt that there was an S-train connection to Copenhagen. However, this part of

These centres are situated at Hammersholt, Måløv, Høje Tåstrup and Koge.

When the Greater Copenhagen Council was founded in 1974, it confirmed the main features of Regional Plan 73, and for the first step of the regional plan, from 1977 to 1992, the Greater Copenhagen Council has decided that the remaining rural zone areas of the finger-town region are to be preserved and used for recreational purposes for the population of the metropolis.

Regional Plan Appendix, 1982

The regional plan was conceived at a time of rapid urban growth and large-scale relocation from the central municipalities to the suburbs. Since then, population growth has almost stopped. There has been a severe slow-down in construction, and the relocation pattern has changed. The movement of people from some parts of the capital region to other parts has practically stopped.

In 1983, the Greater Copenhagen Council adopted an appendix to the regional plan, the Regional Plan Appendix, 1982, in which the slower growth was taken into consideration. At the same time it was once again stressed that the green wedges between the town fingers are to be preserved.

After all, the green wedges contain by far the majority of the open-air areas of the metropolis. They are very important, not only to the housing areas of the town fingers, but also to the central parts of Copenhagen, which are, relative to their number of inhabitants, short of green areas.

The Regional Plan

In 1967 the Regional Planning Council was established. It consisted of local politicians from the whole capital region. The result of the Council's work was Regional Plan 1973 which laid down a new main structure for the region. The regional plan calls for two transport corridors, one going east-west, the other going north-south. The latter is to connect the town fingers, and at finger-/corridor intersections there are to be built centres to relieve the City of Copenhagen.

Green planning

The forests around the Furesøen were preserved partly out of consideration to the hunting interests of the royal family. Today, the area is a destination of excursions to the whole population of the region.

Absolute monarchs, the military and 20th century town planning have each contributed to securing Denmark's capital its green areas.

Jægersborg Dyrehave was laid out as a royal hunting ground at the end of the 17th century, and the forests at the Furesøen were preserved partly out of consideration to the hunting interests of the royal family.

The Crown also created a number of castle parks which are open to the public today, e.g. Kongens Have, Frederiksborg Have and Sorgenfri Slotshave.

In addition, the forests north of Copenhagen were to supply timber for building ships for the Danish navy. Consequently, forests were planted in the northern region at a time when unplanned felling was the ordinary state of affairs in the rest of the country.





The forests of northern Zealand formerly had great military importance. They supplied timber for the Danish navy.

tion of the army's Royal Engineers. Vestvolden – or Vestenceinten (the Western Encinte), as it was originally called – was to serve as a defence to Copenhagen against enemies that might approach from the west. The rampart is built in a 14 kilometre long unbroken line from Køge Bugt to Utterslev Mose.

The rampart was given up as a military defence in 1920. Today, Vestvolden serves as a city park, and it constitutes a green link between Hjortespringkilen, Vestskoven, Den grønne Kile and Køge Bugt Strandpark. In the early 1940's Vestamager (the western part of Amager) was created by reclaiming a large shallow area in Kalveboderne. The purpose was to provide the military with a new rifle range to replace the one in Amager Fælled, which was too close to the city. Since it was reclaimed, Vestamager has been closed to the public. Now, however, the military is abandoning the area, which has developed into an exciting natural preserve in the meantime. With its unique location, just a few kilometres from Copenhagen's City Hall Square, Vestamager will be a noble supplement to the recreational areas available to the population of the capital.

Military Areas

As already mentioned, Copenhagen's original fortification left a ring of parks around the inner city. The military has also contributed indirectly to the green oases of the metropolis in other ways.

Originally, Fælledparken was a military training area, but it was handed over to the Copenhagen Council in 1893.

During the 1880's and 90's Vestvolden (the Western Rampart) was built under the direc-



Whereas the western region is flat and treeless, Copenhagen's northern region is rich in natural value. This picture is from Lille Hareskov.

with the objective of studying town planning problems and disseminating knowledge about the town planning cause.

In 1928, the Town Planning Institute held a planning conference at which there were representatives from e.g. ministries, local authorities and private organizations. The meeting resulted in the appointment of a committee for planning the Copenhagen area.

The Green Report

The committee immediately started preparing a plan on how to safeguard the capital's supply of green areas at a time of fast, and partly random urbanization.

The committee's final report was published in 1936. It became standard pattern for the work of subsequent years to safeguard the green areas of the Copenhagen region and to improve public access to them.

The report of the Copenhagen region's green

The idea of afforesting the western region was conceived in the 1930's, but it was not realized until the 1960's and 70's.



monotonous. The soil is very fertile, and hence all woods have been removed to make room for farming.

Around 1960, the Prime Minister's Department appointed a preservation planning committee for Frederiksberg and Roskilde Counties and one for Copenhagen County. The committees were partly to solve concrete planning tasks, partly to prepare proposals for a green plan for the whole of the capital region. The committees followed up the concept of the green wedges. In a 1974 concept sketch, it was proposed to extend the green wedges outwards in the regions to a »green ring« of excursion areas including the big lakes, forests and countryside as well as Helsingør and Frederiksværk as heavily forested countryside of Mid-

The 1936 report also spurred the establishment of a number of paths during the years of occupation, 1940-45, which improved public access to the recreational areas north of Copenhagen.

The Green Wedges Of The Finger Plan

One of the main concepts of the green report was that it should be possible for the population of the metropolis to get out in the open without having to travel over great distances through urban districts.

This concept was developed further in the Finger Plan which was published in 1947. Again, it was the Danish Town Planning Institute that inspired a piece of far-sighted planning work.

The Finger Plan pointed out the possibility that it was feasible to preserve a number of green wedges, extending all the way into the central parts of the city, between the future town fingers. In that connection the special requirement for safeguarding green areas in the western region was pointed out, for whereas Copenhagen's northern regions are rich in natural value – extensive forests, deep lakes, diversified terrains – the countryside to the west of Copenhagen is flat and

Bugt Strandpark was commenced, and it was officially opened in 1980.

As far back as the early 1960's the Køge Bugt committee had drafted a proposal for a recreational area between the urban area along Roskildevej and the future urban areas at Køge Bugt. In 1978, the local authorities involved accepted a framework plan for the area which had been prepared by the Greater Copenhagen Council. The area was named Den grønne Kile (the Green Wedge) – not because it is greener than the other wedges, but rather because that was the name that could be agreed upon.

Even today, Den grønne Kile is characterized by farms and market gardens as well as a military training area at Avedøre. Some day, however, the wedge will be developed into a recreational area, open to the public.

Vestamager (Western Amager)

In the fall of 1983, the Copenhagen City Council and the Ministry of the Environment decided to open Vestamager to the public as from the summer of 1984. When the new bridge from Avedøre Holme to Amager is opened, there will be path connection between Vestamager and green wedges on the Zealand side.

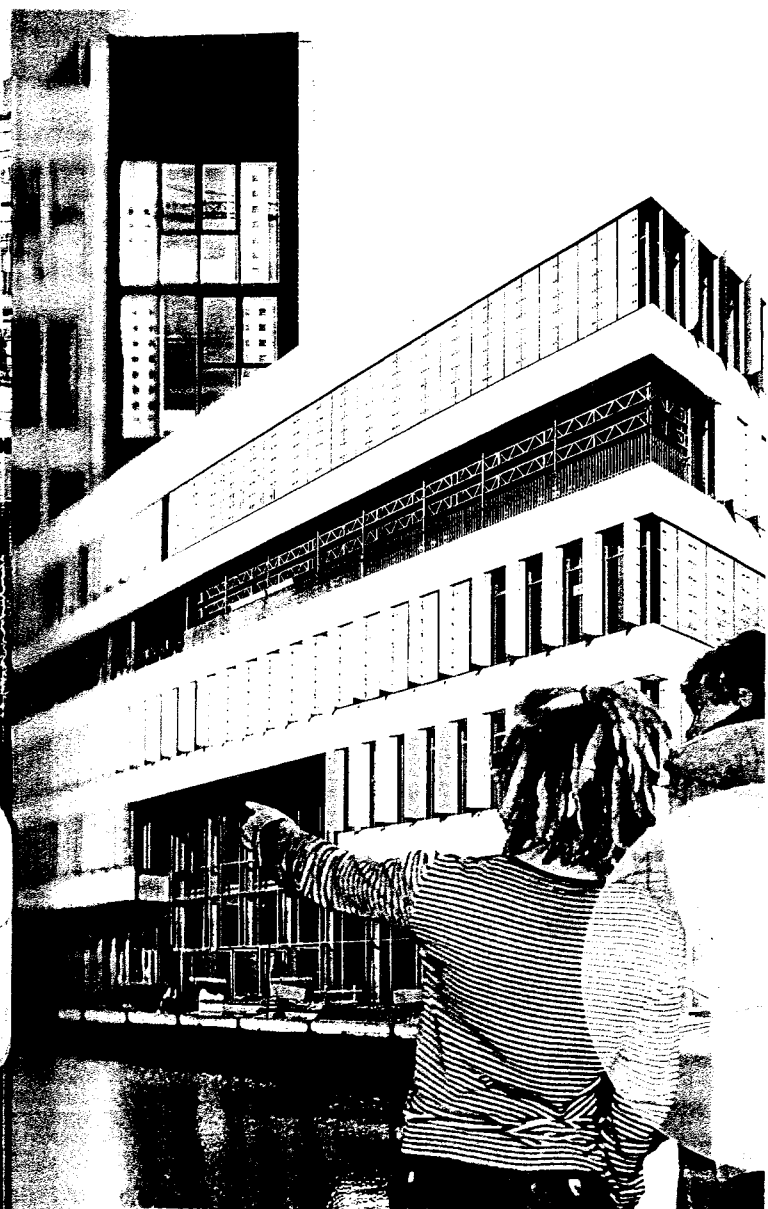
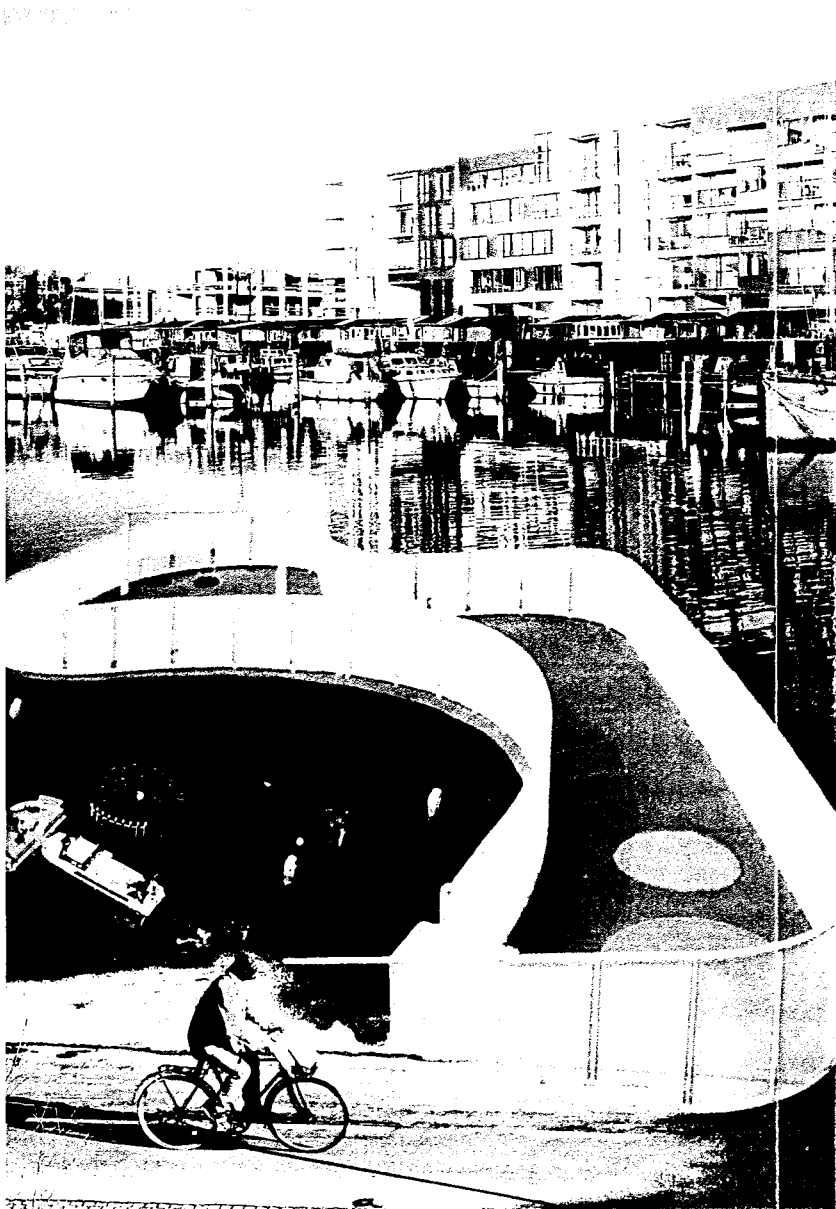
Through a consistent series of decisions, each inspired by the far-sighted planning work of the '30's and '40's the creation of an inter-linked green structure for the whole capital area will have succeeded.

It has not been an unbroken string of successes, and there are still many tasks to be solved. However, the main structure has been fixed. In the following we will take a closer look at each of the green wedges.

The Western Region Gets Its Green Areas

In 1952-53 the first actual afforestation work was carried out in the western region, i.e. in the area between Brøndbyvester and Brøndbyvester. It was carried out jointly by Brøndby and Copenhagen Councils. However, Brøndby Forest was of modest extent. Albertslund Council started planting up areas in the Store Vejleå valley in 1964.

In 1967, the Danish Parliament decided to start realizing the plans about a Western Forest between the Roskilde finger and the Frederikssund finger. This forest is now a reality. Ten years later the laying out of Køge



COPENHAGEN X



Copenhagen X is an open urban and residential exhibition (2002-2012) created by the partnership of Realdania, the City of Frederiksberg, and the City of Copenhagen in association with the Danish Architecture Centre

www.copenhagensex.dk

NEW ARCHITECTURE IN COPENHAGEN

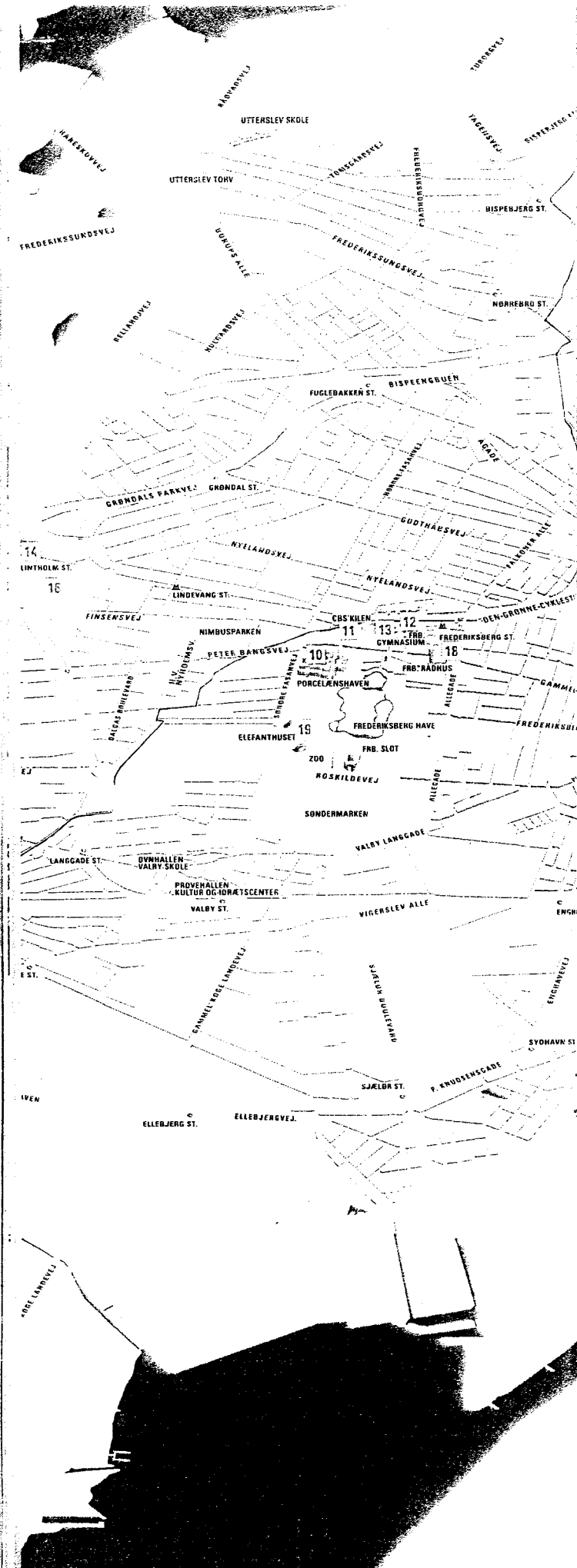
COPENHAGEN X 2007 / 2008



FREDERIKSBERG



- 10 PORCELÆNSHAVEN
- 11 CBS KILEN
- 12 FREDERIKSBERG HIGH SCHOOL
- 13 FREDERIKSBERG'S NEW PLAZAS
- 14 FLINTHOLM STATION / THE RING LINE
- 15 GREEN CYCLE ROUTES
- 16 FLINTHOLM URBAN CENTER
- 17 THE BRIDGE OVER ÅGADE
- 18 THE AREA AROUND FREDERIKSBERG METRO STATION
- 19 THE ELEPHANT HOUSE



10 PORCELÆNSHAVEN

- a new quarter on an old industrial site

Smallegade / Søndre Fasanvej

FREDERIKSBERG



Green and historical

From 1882, the Royal Copenhagen Porcelain Manufactory towered above the corner of Smallegade and Søndre Fasanvej, but since production was moved, there is room for other activities in the many different kinds of factory buildings. Now that the transformation of PorcelænsHAVEN is completed, the area has not only apartments and services, but also a student-housing facility, a department of Copenhagen Business School, and commercial premises for Georg Jensen and Royal Scandinavia.

The goal for PorcelænsHAVEN (literally, "the porcelain garden") was to preserve as many of the original buildings as possible. Frederiksberg Municipality's local plan lays out strict rules to ensure that the quarter fits into its surroundings. For example, windows and doors should preferably be painted traditional "Frederiksberg green." Trees are also covered by special regulations. Since 1882, many trees have been donated and planted by prominent foreign guests during their visits to the porcelain manufactory. The local plan confirms that some of the trees are in the two highest preservation classes and must be moved to another location in the area if they cannot remain where they are.

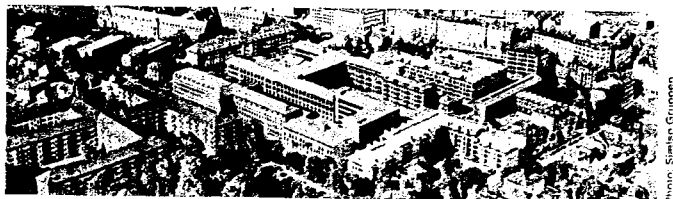


Photo: Søren Grønne

Time frame

Completed in 2008

Client

Sjælsø Gruppen / Doughty Hanson & Co. / European Real Estate Fund

Architects

Juul & Frost / Arkitema / DISSING+WEITLING / Henning Larsen Architects

Engineers

Midt Consult / Erik Pedersen Aps

Contractors

Hoffmann A/S / Mühlenberg A/S / WR Entreprise A/S



Photo: Lina Almqvist

11 CBS KILEN

- a new building for Copenhagen Business School

Kilevej 14

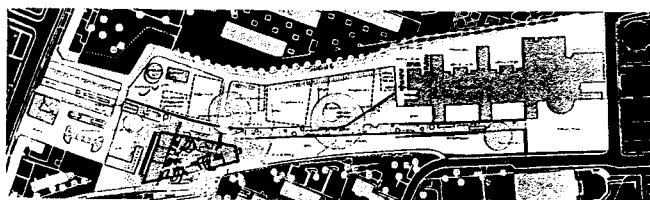


FREDERIKSBERG

An enclosed atrium

The Wedge (CBS Kilen) and Copenhagen Business School's old building on Solbjerg Plads form the two ends of the campus, with green spaces in the middle. The guiding concept of the Wedge is a dynamic ground-floor space that opens up on the activities and landscape of the surrounding squares and buildings, including the newly renovated Frederiksberg Main Library, Frederiksberg High School, and Frederiksberg Center shopping mall.

The Wedge rests on two grass-covered hills and its glass façade provides a smooth transition between the open air, the landscape, and the building's interior. The top four stories are shielded by movable, vertical shutters in a combination of wood, colored glass, and metal, giving the building's facade great variety. An organically shaped atrium rises five stories inside the building. Large circular windows provide light from above, both diffuse and direct sunlight, and create exciting light and shadow effects in the atrium. Classrooms and offices are placed along the outer walls, and corridors take the form of indoor balconies with views of the atrium. While the Wedge's top three floors are reserved for research and administration, the three bottom stories and the atrium are livelier, with a café, conference and teaching facilities, and rooms for group work.



Time frame

Inaugurated in 2005

Client

Copenhagen Business School

Architects

Lundgaard & Tranberg Arkitektfirma A/S

Engineers

NIRAS A/S

Contractor

E. Pihl & Søn A/S

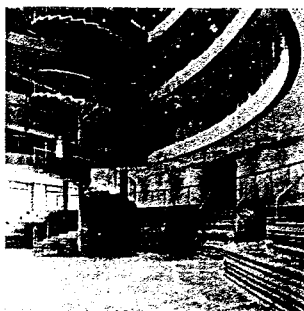


Photo: Jens Lindhe

12 FREDERIKSBURG HIGH SCHOOL

- part of Frederiksborg's new hub

Falkoner Plads 2

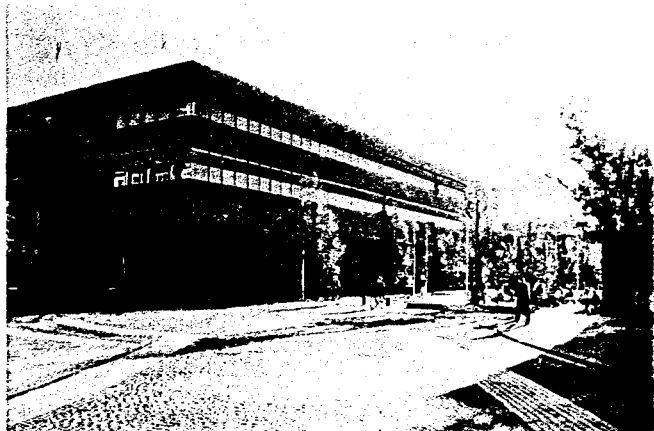


Photo: Jens Lindhe

The virtual high school

Frederiksborg High School is part of a new, dynamic hub in Frederiksborg Municipality comprising the Copenhagen Business School, Frederiksborg Main Library, two large malls (Frederiksborg and Falkoner), and Frederiksborg Metro Station. The high school is part of the municipality's vision for the area around the station as a new traffic hub and focal point for shopping, culture, and education.

The high school is part of the unified plan for "Frederiksborg's new plazas." Its open facades interact with the surroundings and plazas, and its assembly hall and lunchroom face the urban space. Broad staircases lead from the assembly hall to flex rooms and gyms in the basement and wide stairs lead to the stories above, which are airy and transparent. Frederiksborg's local color has been preserved in the form of little green oases, indoor "schoolyards."

The school's top two stories are designed as a campus with visual contact across the corridors and the indoor courts. Both open and more closed rooms provide a great degree of flexibility for teaching and group work. Frederiksborg High School was built to live up to the new ideas of "the virtual high school," where teaching continuously incorporates modern information technology. The school has 650 pupils and 80 teachers.

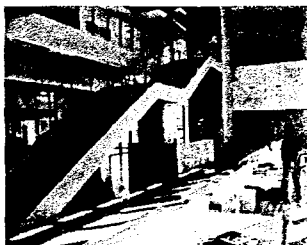
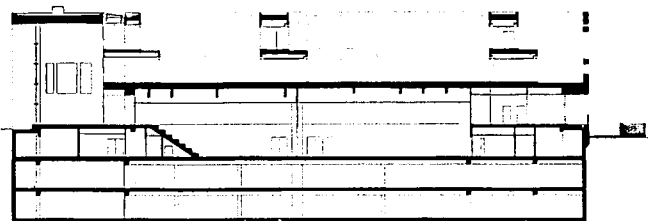


Photo: Jens Lindhe

Time frame

Inaugurated in 2004

Client

Frederiksborg Municipality

Architects

Henning Larsen Architects

Engineers

Moe & Brødsgaard

Contractor

NCC

13 FREDERIKSBURG'S NEW PLAZAS

- four new public plazas

At Frederiksborg Metro Station

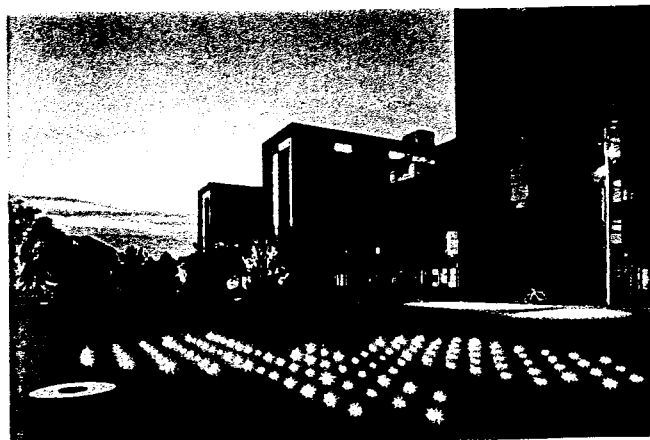


Photo: Jens Lindhe

Puddles, light, and calm

As the buildings were going up around Frederiksborg Metro Station in 2001, the municipality collaborated with SLA on a plan for how the urban spaces between the buildings could become new and attractive meeting places for the residents of Frederiksborg. The result is four different plazas, each with its own potentials and characteristics.

Each of the new plazas has its own identity. Visitors to Solbjerg Plads can run and play among a hundred little puddles that were made with the aid of circular grooves in the paving that collect rain water. Thirty-two "loudspeaker wells" can broadcast sounds and perhaps even entire concerts on the plaza. Wooden benches and stairs on different levels at Falkoner Plads are occupied as the day progresses by students, library visitors, moviegoers, and clients of the fitness center. Fyrretræslunden has room for a rest on the grass or a bench. Visitors can stroll past the Frederiksborg Center shopping mall along the pedestrian passage, Solbjergvej, and have a cup of coffee under the big trees in front of the historic railway station. Although all the plazas have their own distinctiveness, all were inspired by Frederiksborg's history as a separate municipality, embedded in the City of Copenhagen, that is famous for its gardens. This is why trees, bushes, and paving stones are important elements in all the plazas.

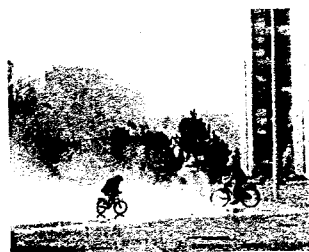
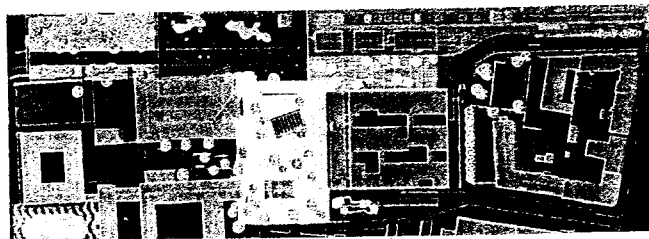


Photo: Jens Lindhe

Time frame

Inaugurated in 2005

Client

Frederiksborg Municipality in collaboration with Realdania

Architects

SLA

14. FLINTHOLM STATION / THE RING LINE

- part of the 11.5-km ring line with six new stations

Flintholm Allé 55

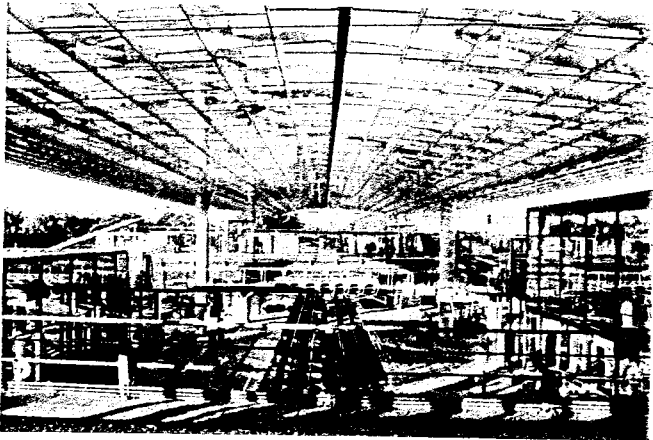


Photo: Christian Bang

A futuristic station

Half a ring line was completed in 1934, making it possible for train passengers to avoid a trip to the center of town when they wanted to travel from Hellerup to Vanløse. The original plan was finally carried out in 2005, when it became possible to get on the train in Hellerup and get off again 18 minutes later at Ny Ellebjerg, the new terminus.

The Ring Line is made up of six old stations and six new ones: Flintholm, Ålholm, KB Hallen, Danshøj, Vigerslev Allé, and New Ellebjerg. The aim was to make the new stations as simple and easy to navigate as possible, and the platforms are made mainly of glass and steel. The Ring Line should be easy to use. On weekdays, the trains run every five minutes, so passengers do not have to study complicated timetables.

Flintholm Station, which was inaugurated in 2004, is the Ring Line's hub. This slightly futuristic station with its 5,000 sq. m. glass roof will be the third busiest in Denmark, after Copenhagen Central and Nørreport. By 2010, as many as 90,000 passengers will use the Ring Line every day, over half of them via Flintholm. In 2007, some 21,000-22,000 passengers used it daily.

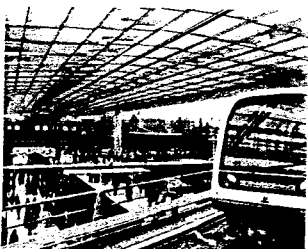
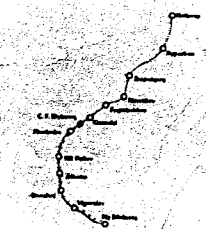


Photo: René Strandbygaard



Time frame
Inaugurated in stages from 2004

Client
Barndanmark

Architects
KHR Arkitekter AS /
DSB arkitekter (Flintholm Station) /
Arkitema (other stations)

15 GREEN CYCLE ROUTES

- a network of cycle routes through Copenhagen

Across the city



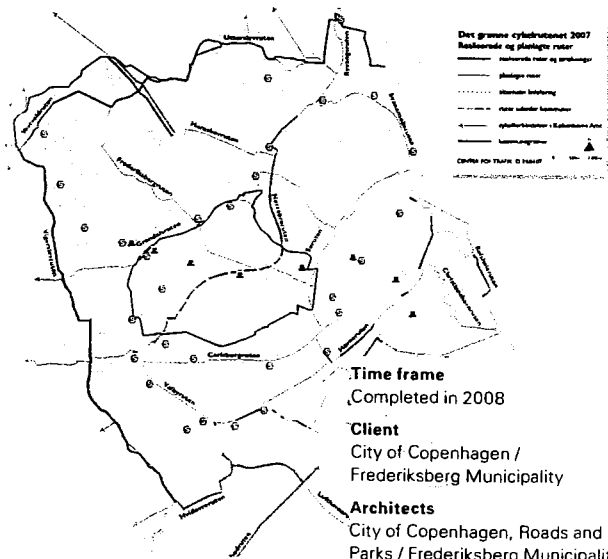
FREDERIKSBÆRG

A highway for cyclists

Since about a third of all employees in Copenhagen bicycle to and from work, the cycle paths along the main access roads are sorely pressed. Both fast and cautious cyclists compete for space and constantly have to stop at traffic lights and at bus stops while passengers get off. Safety and comfort suffer as a result.

The vision behind green cycle routes is to promote safe cycling, which will get more people to cycle. New "highways" are being laid out for cyclists that will let them get to their destinations quickly along pleasant green routes – away from cars and buses.

Green cycle routes are intended to supplement existing cycle paths, not to replace them. Even though the network is primarily an alternative for the many people who ride across the city, it is also intended for excursions and relaxation in the green. There are plans to lay out 22 green cycle routes covering over 100 kilometers, about a third of which comprise existing cycle paths through parks. When the network is completed, it will cover an area from Ryvang in the north via Husum in the west to Ørestad in the south. The Nørrebro route is well on its way to completion as a pilot project. The route runs primarily along the former railroad yard from Hellerup through Nørrebro and Frederiksberg to Valby.



Time frame
Completed in 2008

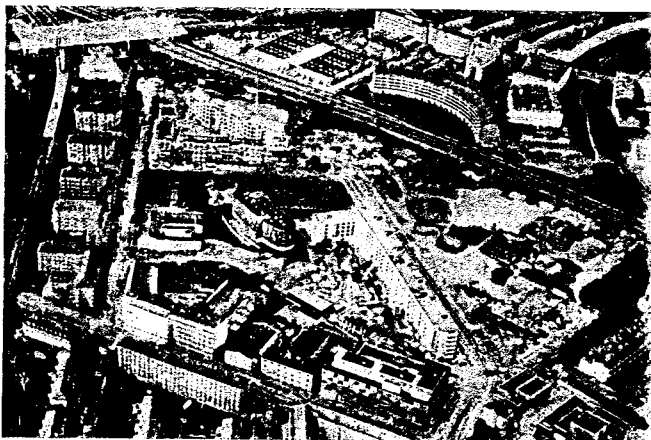
Client
City of Copenhagen /
Frederiksberg Municipality

Architects
City of Copenhagen, Roads and
Parks / Frederiksberg Municipality

16 FLINTHOLM URBAN CENTER

- a new urban quarter on a former industrial site

Flintholm Metro Station - Finsensvej



FREDERIKSBERG

A reinterpretation of the block

The area between Flintholm Metro Station and Solbjerg Have in Frederiksberg Municipality is being built up in stages, with housing, shops, a student-housing facility, day-care centers, and nursing homes. The unified plan for the area emphasizes that the new quarter must not become an enclave. This is why the architects have based their work on Frederiksberg's special qualities, with many private front yards and apartment buildings' open facades with balconies. The goal was to create a modern quarter where public and private areas are intertwined in new ways.

The new quarter, Flintholm, is on the border between the classical arrangement of large complexes filling entire city blocks and a more open area with single-family houses. Endeavoring to combine the best of both worlds was an obvious choice. The result borrows from both single-family houses and apartment houses. The unified plan proposes various kinds of complexes of two to six stories. Instead of being closed on all sides, like the apartment houses that fill entire city blocks in Copenhagen's "urban suburbs," they will open up on a park and other recreational areas being planned. Flintholm will have housing for young people, senior citizens, and families, in addition to commercial buildings. Flintholm Boulevard will be the main shopping street, laid out in the center of the quarter.



- A: Cultural Center
- B: Grocery store, mixed use
- C: Housing
- D: Nursing home
- E: Mixed use
- F: Listed industrial building
- G: Student housing
- H: Mixed use
- I: Center
- J: Housing

Time frame

Fully built up in 2010

Client

Frederiksberg Municipality / MT Højgaard / JM Danmark A/S (condos) / Pension Danmark (rental apartments)

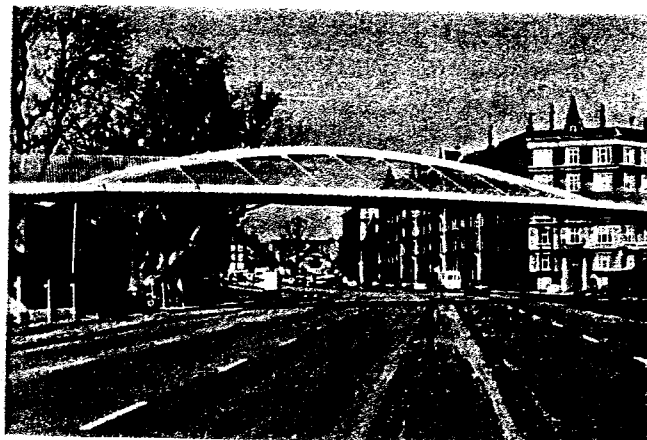
Architects

Unified plan: Erik Møllers Tegnestue / Holscher Arkitekter

17 THE BRIDGE OVER ÅGADE

- a modern city gate

Across Ågade



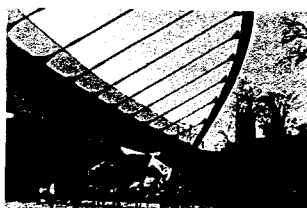
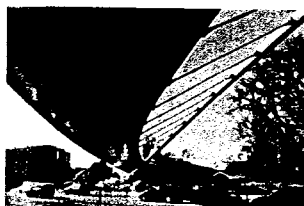
FREDERIKSBERG

A green artery over the traffic

Ågade, on the border between Copenhagen's Nørrebro quarter and Frederiksberg Municipality, is an important approach and exit road for many of the city's drivers, but crossing the wide street can be something of a challenge for cyclists and pedestrians. It became easier in 2008, when a new bridge over Ågade was finished. The bridge is part of the work by the two municipalities to create a network of green cycle routes across and up and down the city. The bridge is an original and attractive urban fixture that fits in with its surroundings and serves as a modern city gate across the busy street.

The architects chose the arched form so that the bridge can serve as a natural continuation of the winding Nørrebro cycle route that was the first of the new routes to be finished. A jury called the winning design elegant and graceful, and felt that the bridge's curved, light design provides an excellent supplement to the distinctive and massive apartment complexes in the area.

A green plaza will be laid out along the Nørrebro cycle route at Rantaaugade, where a car dealership stands today. The plan is for the plaza to be used by the local residents for relaxation and activities such as ball games, sunbathing, and picnics.



Photos: DISSING + WEITLING

Time frame

Inaugurated in 2008

Client

City of Copenhagen

Architects

DISSING + WEITLING

Landscape architects

Schenherr Landskab

Engineers

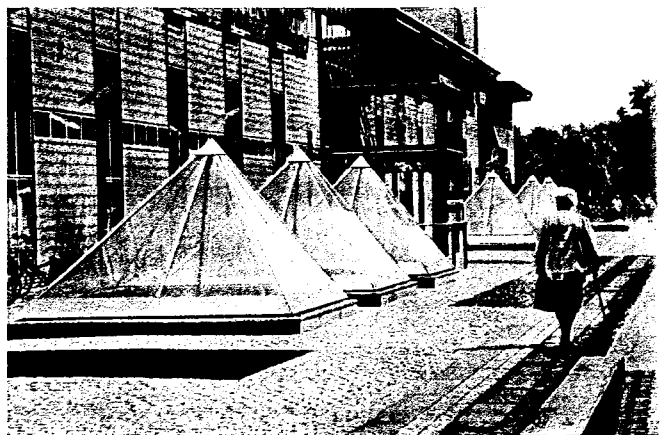
COWI

18 THE AREA AROUND FREDERIKSBERG METRO STATION

- a new hub

Between Falkoner Allé and Ndr. Fasanvej

FREDERIKSBERG



From railroad yard to new urban spaces

The decision to put the Metro line underground in Frederiksberg Municipality made it possible to create new urban spaces on top of the former railroad yard. The vision was to create a unified plan that was to promote urban life and also ensure that recreational activities, play, and outdoor life harmonized with the residents' everyday occupations. In addition to Frederiksberg High School and Copenhagen Business School's Wedge, the area now has a movie theater, a renovated main library, and a fitness center. A complex with 114 housing units for young people and shops on the ground floor is being built on Sylows Plads.

The unified plan emphasizes the importance of "preserving the quarter's open, green character" and "having the new buildings harmonize with existing listed buildings." The new buildings have expansive transparent glass facades that provide views of inner courtyards and gardens. In order to link the area with the new meeting and recreational spaces, four new plazas were laid out between Frederiksberg and Solbjerg Metro Stations. Read more about them under "Frederiksberg's New Plazas."



Photo: Torben Petersen



Photo: Jens Lindhe

Time frame

Completed in 2006

Client

Frederiksberg Municipality

Architects

SLA:
Frederiksberg's New Plazas

Henning Larsen Architects:
Frederiksberg High School, fitness center, and main library renovation

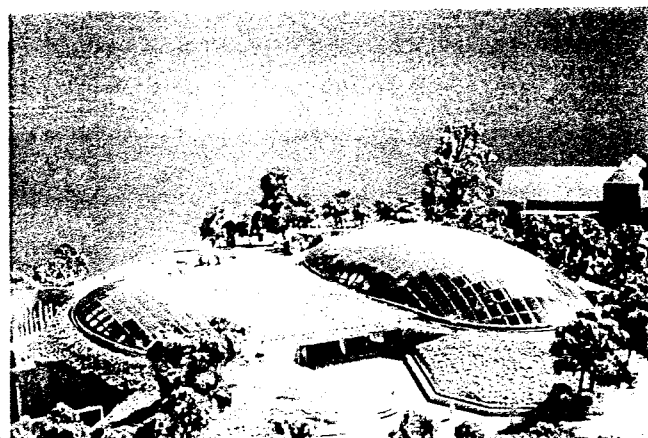
Gehl Architects: Consultants on urban life/ urban spaces

19 THE ELEPHANT HOUSE

- spacious facilities for the Zoo's elephants

Roskildevej 32

FREDERIKSBERG



Animal welfare under the domes

With the Danish artist Per Arnoldi as the middleman, Copenhagen's Zoo was able to get the famous British architect Norman Foster involved in the project to build new facilities for its elephants. Norman Foster used his hallmark, which is also found in his design for the Reichstag in Berlin: a gigantic glass dome. The Elephant House has two domes. The building lies partly underground and visitors can walk on the roof and look down into the elephants' indoor space, which gets plenty of daylight. The idea has been to make the new building airy and friendly, in contrast to so many other elephant houses.

The Zoo has taken great care to improve the big animals' welfare. The elephants have half a meter of sand to protect their feet, as they would in their natural habitat. The new Elephant House is part of an overall effort to blur the border between the Zoo and Frederiksberg Gardens. Unsightly fences and hedges have been removed and it is possible for visitors in the gardens to watch the elephants. The elephants' outdoor enclosure, which was designed as a partly dried-out riverbed, forms the transition between the romantic palace gardens and the Zoo.



Model: Foster & Partners



Photo: SLA

Time frame

Inaugurated in 2008

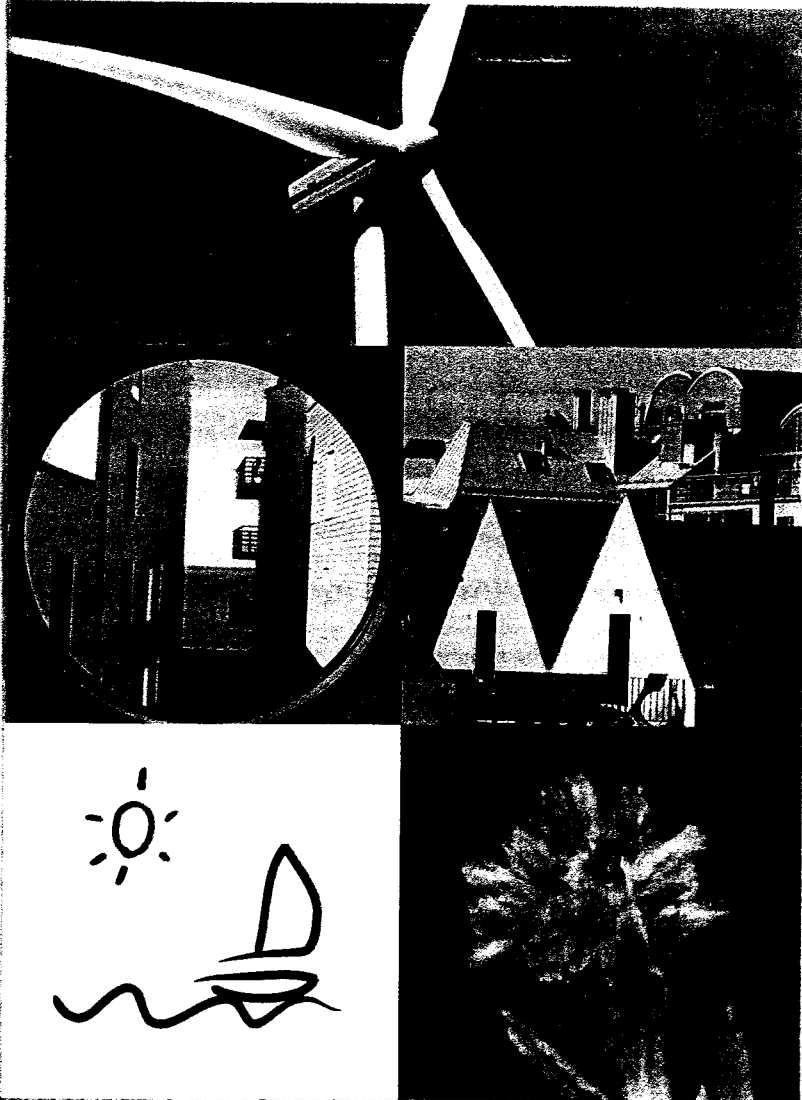
Client

Copenhagen Zoo in collaboration with Realdania and the Palaces and Properties Agency

Architects

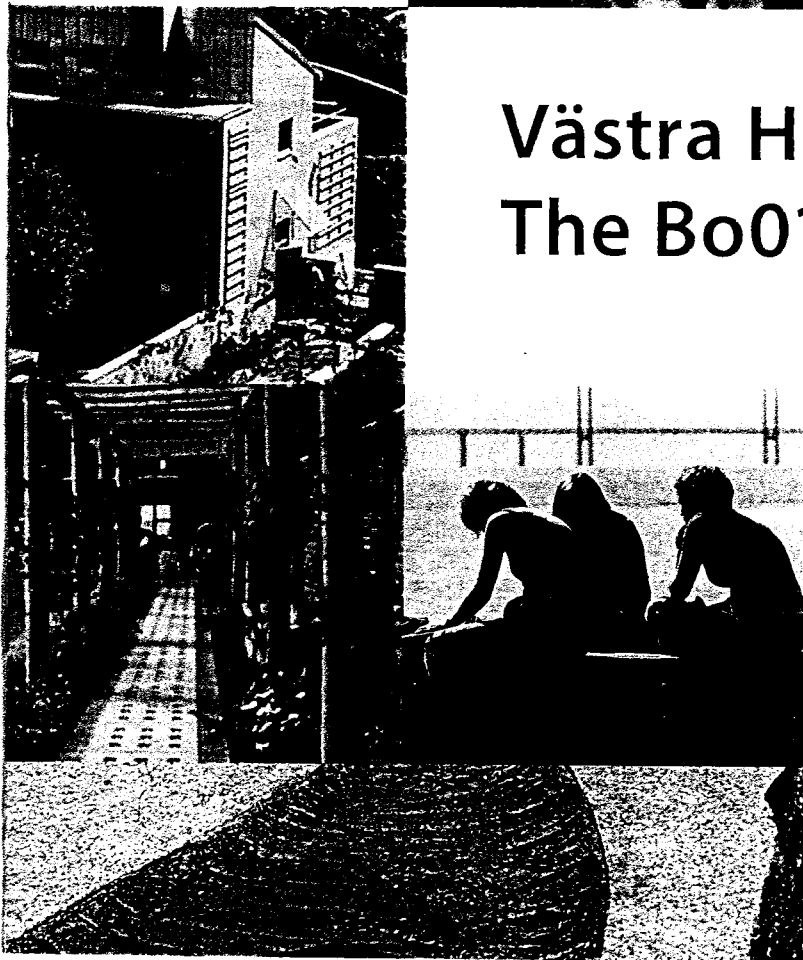
Foster & Partners

Landscape architects
SLA



Västra Hamnen The Bo01-area

*A city for people
and the environment*



From industrial site to a new sustainable city district

The change from harbour, shipyard and industrial area into a new urbanised district has started. There are plans for housing for 10,000 people and 20,000 employees and University students in the area.

The first stage, the Bo01 housing estate, was built and completed for the European Housing expo in 2001 as the "City of Tomorrow". The site shows a multitude of architectural solutions, forming an exciting and sustainable urban environment. Measures for a renewable energy supply and increased biodiversity go hand in hand with other initiatives to create a strong sustainability concept for the whole area. The project has received a great deal of international attention and recognition.

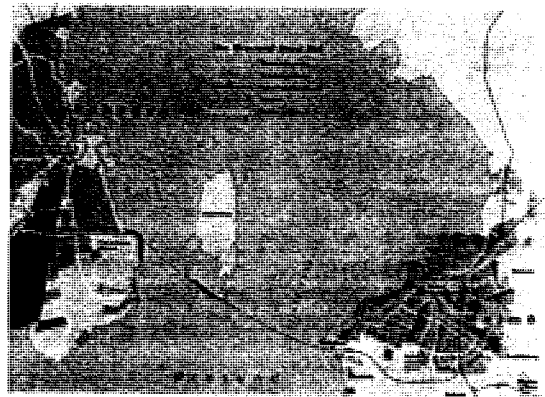
A strategic position in a cross-border region

Malmö is the third largest city in Sweden with 270,000 inhabitants, strategically situated in the centre of the Öresund region, with good communications in all directions. The city is a centre of culture, commerce and education. Malmö is inhabited by people from all over the world, 160 nationalities speaking over 100 different languages live here.

Structural changes in Malmö's economy have distanced the city from its traditional industrial background. Modern day Malmö has small and medium sized industrial, service and trading companies, the IT-business being the largest sector. Several strategic decisions have led to a positive development for Malmö, amongst them the bridge to Copenhagen, which was completed in the year 2000, and Malmö University with over 20,000 students bringing new ideas, research and knowledge to the city.

Västra Hamnen (the western harbour) is a developing urban area. A new modern city district, with housing, offices, shops and local services is emerging. Västra Hamnen's continued development is focused on the sustainable society based on the lessons learnt from the first phase development in Bo01. The aim is to

make Västra Hamnen an international leading example of a densely populated, environmentally sound neighbourhood. A city district that inspires creativity, develops further knowledge and stimulates economic growth. Västra Hamnen is a high priority development area in the city and an important part of the plans to improve Malmö as an attractive city in which to live and work.



Above: Västra Hamnen lies in the centre of the Öresund region, close to Malmö city centre with good communications in all directions.

Below: The Bo01-area was completed for the European Housing expo in 2001. The area offers diversity of design and a rich urban landscape. The higher buildings on the outer edge of the area serve as a protection against the strong winds for the small-scale interior.

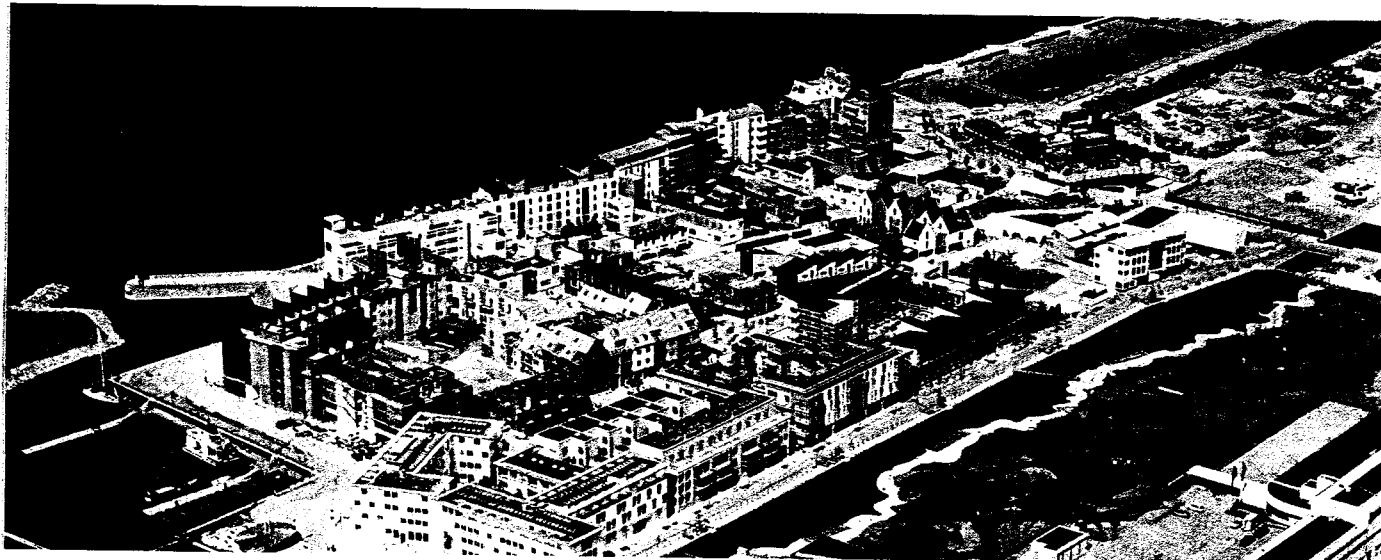


PHOTO: RONNYBERGSTROM

Clean soil

A marine area in the harbour has been filled up in different stages since the end of the 18th century in order to create space for the growing harbour and various industrial activities. The landfill consists of sand, clay, limestone, excavations and demolition waste and small amounts of production waste. The last landfill took place in 1987.

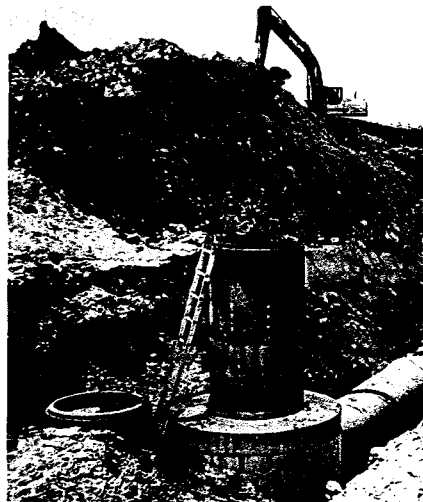
Previous industrial activities and the varying sources of landfill made it necessary to investigate the quality of the soil before the construction could start. The search for contaminants concentrated on oil components, i.e. polyaromatic hydrocarbons, which are suspected of being carcinogenic or mutagenic. The whole site was examined by test excavations and sampling. The results showed only

limited areas with a toxic content in excess of acceptable levels for housing. A total of 6000m³ had to be removed for decontamination and treatment. It was replaced by class A soil to a depth of 2 m, and the topsoil was increased to 1,2 m over the whole area. After these measures have been taken, the soil in the Bo01-area is of equal or superior quality to that of the parks in Malmö. Other actions taken for environmental purposes were radon safe foundation and also the choice of waterpipe material.

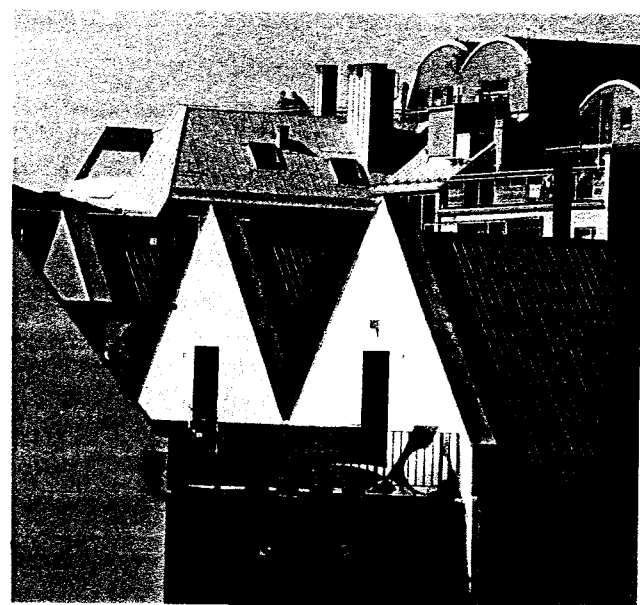
The seabed by Västra Hamnen is rich in marine life, with fish and thick carpets of eelgrass. The only exception was the area where the canal joins the sea. Examinations showed increased amounts of heavy metals and petroleum hydrocarbon and the sediment was removed.



Filago Vulgaris, a rare herb in the region was found in the Scania park before the construction work started.



Extensive investigations of the soil took place before construction works started, and the soil in the Bo01-area is of equal quality to that of the parks in Malmö.



A city for people – and for the environment

When the Bo01 housing area was planned, the architects discussed how a sustainable city could be attractive. This was thought to be an important selling point, when comparing it with other less sustainable areas. People should want to live in this part of the city for its inherent qualities. The ecological sustainability would be a bonus. The emphasis on human sustainability should lead to a supportive human habitat. Research has shown that close contact with green areas, sun and water make people healthier, both physically and mentally. Beauty, as for instance in art, also has a proved positive effect on health. These research results were all taken into account by the planners.

Magnificent openness versus small scale diversity

Contrasts are important in the Bo01-area. Tall houses on the outskirts form a wind shelter around a small scale and green interior. There are many small blocks and they are all very different. The variation makes you curious. It is exciting to discover the narrow alleys, what will I find when I turn around the next corner?

Cars are not allowed to dominate, pedestrians rule.

No overall idea existed regarding design of house facades. On the contrary, the aim was to create an abundance of expressions. The city specified a basic colour scheme: pale facades facing the sea and more colour towards the inner areas.

PHOTO BY: JAN-ERIK ANDERSSON



PHOTO BY: TOR FOSSUM

Twenty-six different architectural firms have designed the houses, and they have been given a lot of freedom of expression. Diversity characterises the area. There is no special "ecological look" to the houses. It is not possible to tell by looking from the outside which solutions have been chosen when it comes to measures taken for ecological sustainability. Many houses in the Bo01-area are equipped with advanced technology to cut energy needs. Others use simpler techniques to reach the same goals. Some buildings sport large solar collectors reaching towards the sky, clearly demonstrating the use of solar energy.

Twenty property developers have worked with various types of houses, apartment sizes and types of ownership. In the area you find tenant-ownership apartments, rental apartments and private housing.

Quality Programme

All houses are built to the standards set out in the Quality Programme jointly established by Bo01 expo, the property developers and the City of Malmö. The programme sets guidelines for architectural qualities, choice of materials, energy consumption, green issues and technical infrastructure.

Along the seafont

The new Dania park and promenade have become the obvious places for a quiet stroll and are among the most

beautiful places in Malmö. The park provides a wealth of opportunities for discovering nature's seasonal changes, as well as being a place used for musical happenings, games, sunbathing and picnics. The park and the promenade meet at Scaniaplatsen, which is to become the local town square and meeting point. These recreational areas connect to the green stretch of Ribersborg beach and lead further around Västra Hamnen.

The harbour

At the southern end of the Bo01-area, right by one of the entry points, lies Malmö's latest marina, bringing the water further into the urban environment and adding the hustle and bustle of a guest harbour.



Streets, squares and pathways

One of the main ideas with the area, was to create an exciting structural mix of individually designed streets, pedestrian walks, alleyways and open squares. The use for these varying interior open spaces caused by the structure and the social interaction resulting from this, is of great importance in creating a character for the area as a whole.

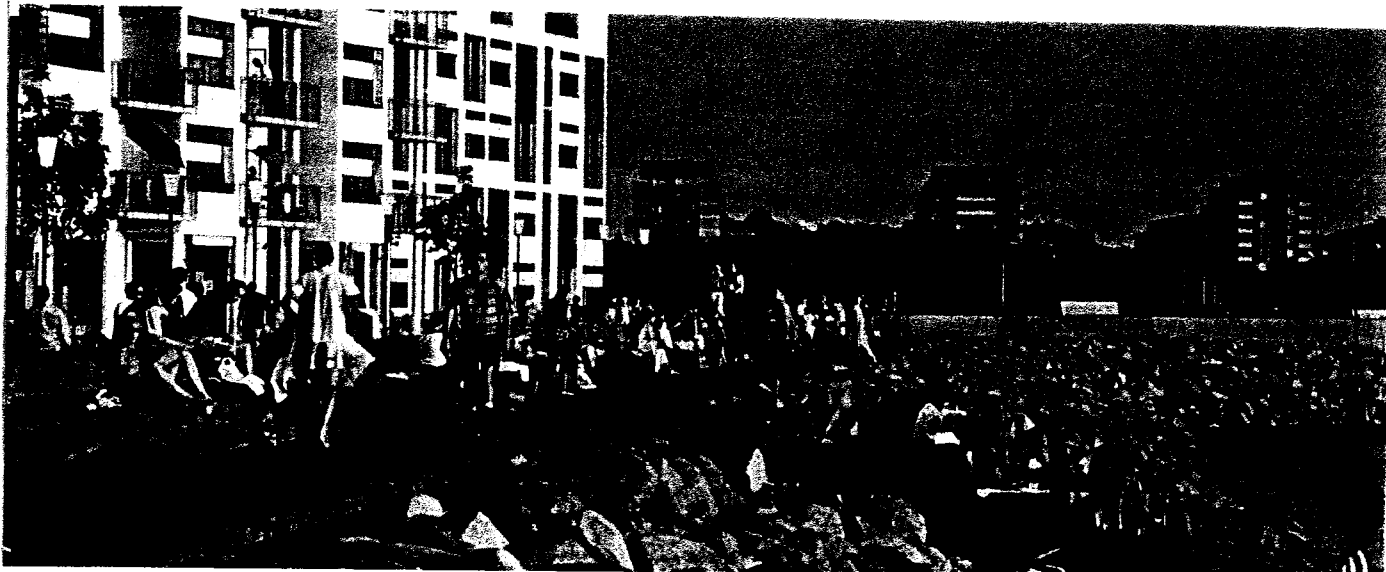


PHOTO BY: JAN-ERIK ANDERSSON



The Green City District

Cities grow and green areas shrink, both in Malmö and the rest of the world. Biodiversity is threatened. A great deal of the rainfall cannot infiltrate into the ground or be taken up by plants. Hence, the open stormwater run-off system forms an important feature in the Bo01-area.

Rain is delayed on green roofs, in ponds in the courtyards and public spaces and then transported in open channels to the sea. The visible waterways combined with trees and lush undergrowth provide exciting and beautiful qualities to an otherwise rather sterile urban environment. It gets more and more difficult to satisfy increasing need for access to nature. The ideas implemented in the Bo01-area show how you can minimise the consequences of urban sprawl and make the local environment greener.

Houses are built close together – the ecological and sustainable society has to use valuable ground space efficiently. A green space factor system that has been applied ensures that not only the inner courtyards are green with plenty of vegetation and ponds – green roofs and climbing plants on the walls are also a part of the solution. To ensure quality in the green areas at least 10 Green Points have been used in every courtyard promoting eg. bat nesting boxes, butterfly flower beds, wild Swedish flower meadow, country gardens and enough soil depth to grow vegetables.

Before the area was developed, many seabirds nested on the old industrial sites. A compensation biotope has been created in the northern harbour of Malmö.

The green space factor system will also be in use in the continued development of Västra Hamnen. In the revised quality programme there is a list of green points as a good practice guide. Key words for green spaces in the courtyards will be biodiversity, natural biotopes and a varied flora and fauna.

The Anchor park

In the Anchor park various habitats have been created. An alder carr, an oak grove and a beech grove appear like islands in a large grassy area. The habitats are also a form of exhibition: "This is what nature outside the city looks like". The idea behind this is linked to the city's ambition to use parks for education, so called environmental education parks. An important part of the Anchor park is the wide canal with salt water taken from Öresund, creating a pleasant view with its curved shoreline against the park.

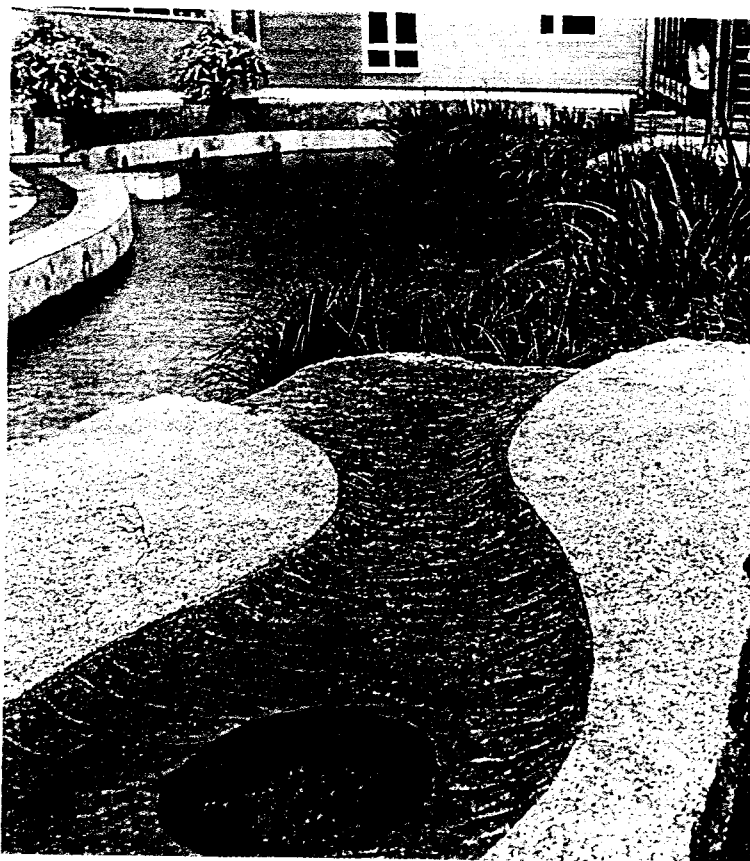
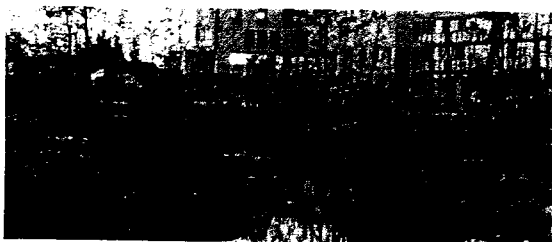


PHOTO BY: JAN-ERIK ANDERSSON

Recycling

The waste management system in the Bo01-area was developed with the aim to create a system that minimises the amount of waste, makes reuse and recycling possible and enables the use of waste and sewage as an energy source. Having waste separation units close to home is an important part of the planning of the area. The inhabitants usually have a separation room in their house or close by, making it easy for them to sort paper and packaging materials. In the area two parallel systems for taking care of food waste are tested; food waste disposers in the sink and a centralised vacuum waste chutes system.

Material in the streets and public spaces have been chosen from the aspects of long life span and possibility of future reuse. Recycled material has been used in the underlying layers of the streets and alleys.

PHOTO: NICKLAS RUDFELL



PHOTO: DANIEL NILSSON



In the food waste disposer the organic waste are grinded and disposed in separate pipes to a collector tank under ground. From there the sludge is taken to a biogas plant together with other organic waste. Through the anaerobic digestion the organic waste are transformed to biogas that can be used as fuel in cars and buses or to produce heat and electricity.

100% locally renewable energy sources serves the area

E.ON has developed a unique concept based on 100% locally renewable energy for the new city district. The concept is based on local conditions for energy production. In the Bo01-area 1000 homes get their energy supply from renewable sources; solar energy, wind power and water – the latter through a heat pump that extracts heat from seawater and an aquifer – a natural water reserve in the bedrock that facilitates seasonal storage of both heat and cold water.

1,400 m² of solar collectors, placed on top of ten of the buildings complement the heat produced by the heat pump to supply the area. A large wind power station (2MW) placed in Norra Hamnen (the north harbour) and 120 m² of solar cells produce electricity for the apartments, the heat pump, fans and other pumps within the area. A unique part of the energy concept is that the plants are linked to the energy systems in the city for district heating, district cooling and the electricity grid. The 100% renewable energy equation is based on an annual cycle, meaning that at certain periods of the year the city district borrows from the city systems and at other times the Bo01-area supplies the energy systems with its surplus. This connection also provides reserve capacity for the area.

An important part of the concept is low energy use in the buildings. Each unit is only allowed to use 105 kWh/m²/year, including household electricity.

Boel, the wind power plant is 120 m high to the tip of the wings, is placed in the northern harbour in Malmö. The maximum effect is 2 MW and the calculated annual electricity production is 6300 MWh



PHOTO BY: BERNE LUNSKVIST

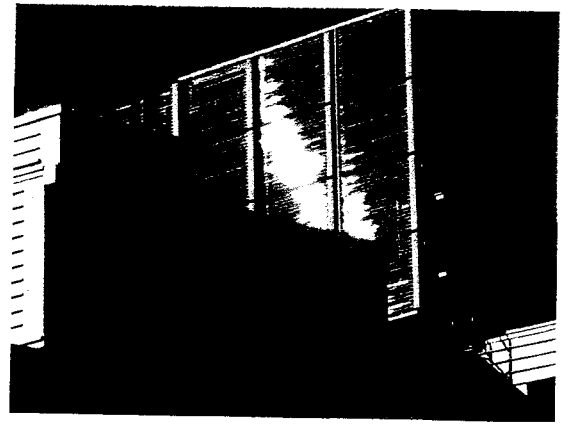


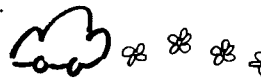
PHOTO BY: JAN-ERIK ANDERSSON

In the area 1400 m² solar collectors have been installed on ten buildings. Of these there are 200 m² vacuum collectors, these are more effective than the other flat-plate collectors. Calculated annual heat production is 500 MWh.

Several of the buildings have met the targets. But there is a number of buildings where the energy consumption exceeds the target excessively. Investigations on why the targets not has been met is ongoing, and the energy consumption is measured continuously. The energy concept is in line with the EU Commission goals to increase the share of renewable energy in Europe substantially. The solutions used in the Bo01-area have attracted much international interest, and in the autumn of 2000 the project was given the Commission's energy award "The Campaign for Take-off Award".

Environmentally sound Transport

In order to reduce the need for transport, the area has been planned with lots of different types of services and recreation. The inhabitants are encouraged to use environmentally friendly modes of transport. Pedestrians and bicycles have priority in the area, and the area is car free. Bus stops are within 300 m's distance from the flats. The bus service which connects with several of the main central points in town run in seven minute intervals. There is only 0,7 parking spaces per household.



Businesses and homes in the area have been given information and guidance. The mobility office has carried out travel habit enquiries, developed information material and continually work with various campaigns.

IT-solutions

In some of the properties there are IT-solutions for reading meters and control of energy use and ventilation. The broadband net in the area gives excellent conditions for distance work and electronic trade, which minimises the needs for transport for the inhabitants. In the future there will be digital displays for real-time information on bus arrivals at the stops.

The website www.ekostaden.com has been established for the inhabitants and also for others seeking information on the area. On the web site the concept of Web-TV is being tested, with informative films, interactivity and news.

Local investment programme

The City of Malmö has received support from the government for a local investment programme for the environmental measures taken in the Bo01-area. The money has mainly been used for physical investments, covering some of the extra costs the developers have incurred in order to meet the high goals set. Part of the money has been invested in technical systems, soil decontamination and infrastructure. Funds have even been used for information and educational projects. The EU has also given some support for the energy measures taken.

Research and evaluation

Money from the local investment programme was earmarked for the Bo01 project, with the explicit requirement that a scientific evaluation be made. The goal was to capitalise on the experience gathered on urban sustainable development, and to be able to use it in future projects, both locally and in other parts of the world.

The project has generated a lot of attention. No less than 10 universities and colleges were involved in the evaluation work. And the area receives studyvisits from all parts of the world.

Studying the infrastructure and the function of the technical systems is an important part of the evaluation, for example waste disposal system and energy supply. As the technology has to be used by people, the inhabitants are instrumental in the evaluation. Some studies focus on the use of the systems, others on perception of housing and surroundings.

There are ongoing research within all areas of priority: soil decontamination, traffic, energy, green structure and storm water, building and living, recycling, environmental information and education and sustainable development.

An anthology presenting the assessments can be ordered from www.formas.se:

"Bo01 - experiences of a Swedish housing expo".

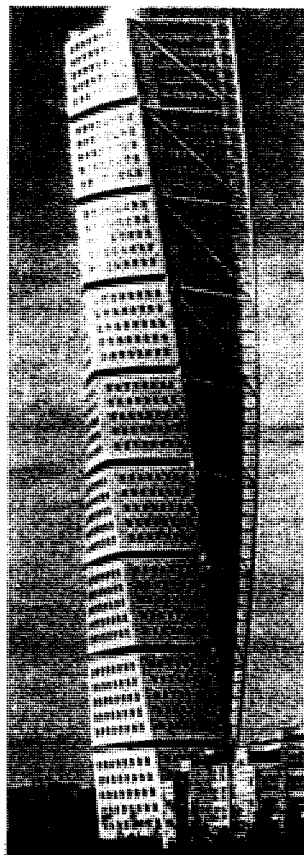


PHOTO BY TOR FOSSUM

Turning Torso designed by the architect Santiago Calatrava is the new landmark of Malmö with its imaginative design and height of 190 m. 54 storeys with a total of 147 apartments and offices was ready by autumn 2005.

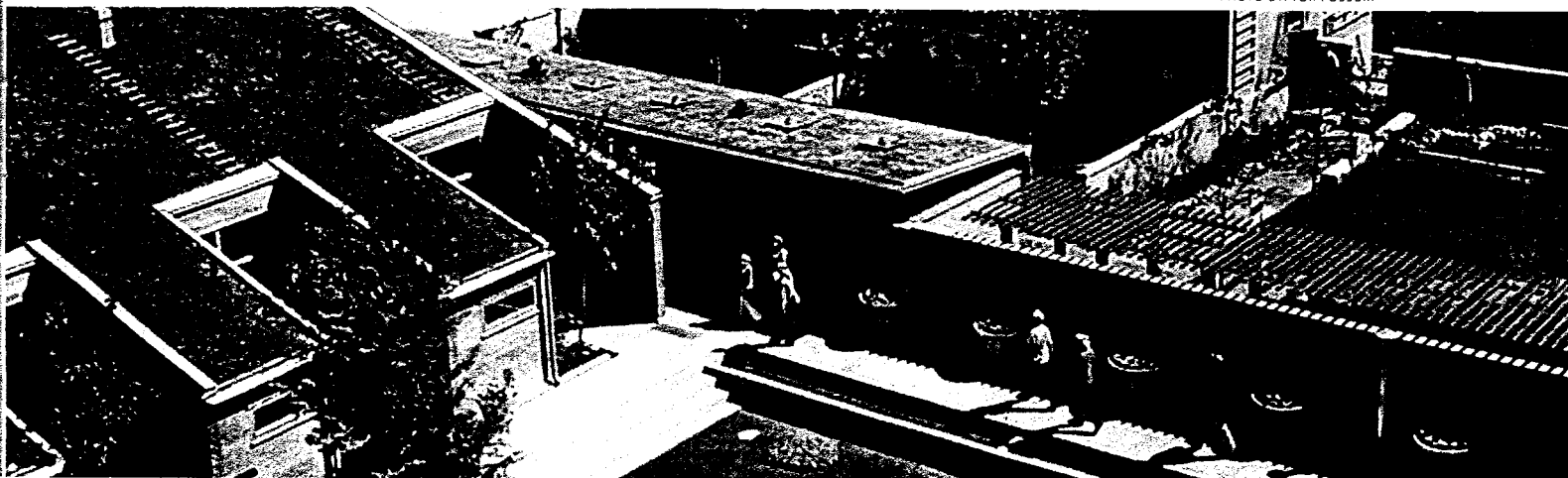


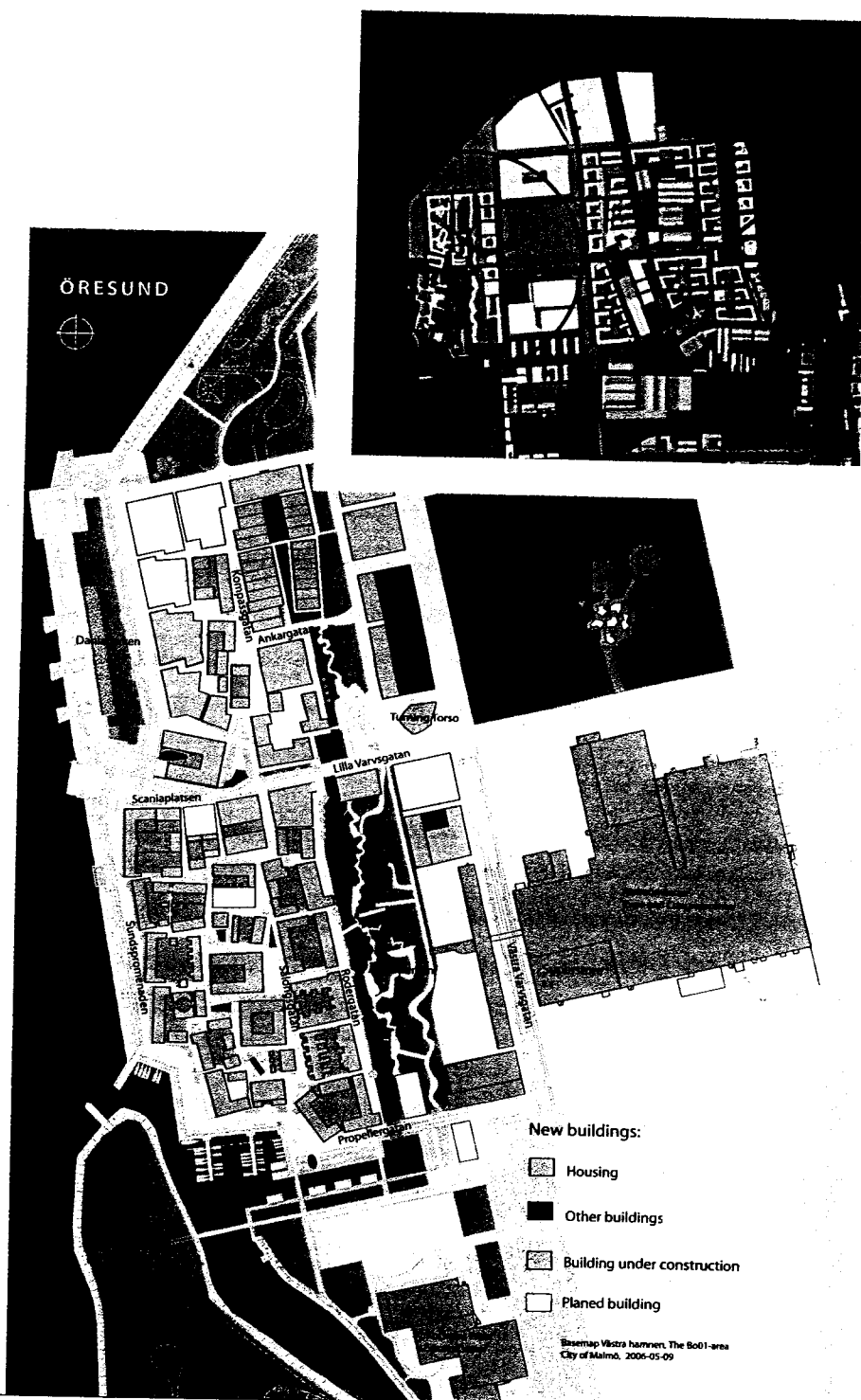
The continuous development of Västra Hamnen

The historical heritage of the area will be preserved by keeping some of the large, and very often beautiful old industrial buildings. This contributes to the specific character of the area and creates a unique sense of identity.

Housing of varying types is planned, providing people with different requirements the chance to settle here. The urban environment should offer natural meetingpoints and a well-balanced mix of housing, activities, education, service and green areas. Human needs for a variety of sensory impressions like beauty, human proportion, nature, water, contact and safety should be met.

PHOTO BY: TOR FOSSUM





FACTS

- Västra Hamnen 160 ha
- Fully developed the area will consist of housing for 10.000, 20.000 will be working or studying in the area
- Malmö University is continuing its extensive expansion and moved into new premises by 2005
- Around 80 large and smaller companies are established in Västra Hamnen
- Today 6000 people are working in the area
- The Bo01-area is 25 ha
- 950 housing units have been completed by 2006
- Eight restaurants/cafés and seven shops have been established by 2006
- A new park will be ready 2007
- A private school started 2002
- Public school is planned
- Public transport serves the area every 7 minutes
- 290 millions SEK have been granted for environmentally related investments through the Local Investment Programme (LIP)



**Environmental investments,
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BIG's Danish National Maritime Museum in Helsingør is an unlikely landmark, situated entirely underground.

Text
Terri Peters

Photos
Rasmus Hjortsh

Under the Radar



← The roof of the museum's auditorium doubles as a bridge, which connects the adjacent Culture Yard with Kronborg Castle.

↘ Three double-level bridges span the dry dock, providing visitors with short-cuts to the museum's various galleries and public amenities.

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The new Danish National Maritime Museum by BIG is quite difficult to find. Uncharacteristically for a BIG project, its form doesn't shout at the viewer. It doesn't even make a mark on the horizon. This unlikely landmark is entirely underground – the museum's centrepiece is a disused 145-m-long dry dock in Helsingør, Denmark.

'When we first saw the site, it was just this old dry dock filled with muddy water, 7 m deep. It had been lying vacant for 20 years, and local firefighters had thrown some cars in there and were practising rescue routines,' says BIG's David Zahle. 'We didn't even get a chance to see the bottom of it until we won the competition.'

To show respect for Kronborg Castle – a UNESCO World Heritage Site and the setting of Shakespeare's *Hamlet* – as well as for the area's marine heritage, represented by the dock, the architects decided to transform the vast concrete ruin into a public courtyard. Because the glazed walls of the galleries face the courtyard, the interiors of the underground museum get plenty of natural light and air. 'We uncovered these absolutely fantastic textures and old concrete forms,' says Zahle, 'so we focused on making the internal façade as precise and

clean as possible, with low-iron windows, no mullions, and the greatest possible contrast with the rough, aged exterior.'

Approaching the museum, visitors are met by an impressive sight; looking down into the dry dock, they can easily imagine the scale of the ships that used to be repaired here. Access to the complex is via double-level steel ramps that crisscross the width of the dock. The sequence of spaces inside – totalling 6,500 m² – includes exhibition rooms, two auditoriums, a café and a shop. Kossmann.dejong was responsible for the exhibition concept and the design of the displays.

'Usually, demolition is the crudest part of the building process,' says Zahle, 'but here we wanted the contractors to be extremely precise. We asked them to cut through the 2-m-thick concrete walls as if they were using a razor blade. The demolition guys actually became responsible for the finer details – how the new building will interact with the old and what that will look like.'

'In many ways a ship's deck is like a public square,' he explains. 'There are no surfaces that are truly flat; there is always a slope for drainage, so when rain hits the surface it flows away. We are used to the feeling that floors inside a →

'The demolition guys became responsible for the finer details'





Visitors in the café have an excellent view of the 7-m-deep dry dock.





‘There are basically no flat surfaces in this museum’

← building should be very flat. We don't even think about it.' In contrast, all floors inside the museum slope slightly – sometimes in two directions – and there are no parallel walls. Moving through the space evokes a curious sense of being aboard a ship. 'The use of sloped floors allowed for a seamless connection from one space to another,' he says. 'Throughout the project, it is the floor level that changes, not the ceiling level. The resulting funnel-shaped spaces expand and contract, each with its own character.' Some of the galleries are low and intimate, owing to a higher floor level, but the museum also has a series of vast industrial-scale exhibition spaces with 'sunken' floors.

Thanks to steel-and-glass ramps inserted into the concrete ruin, visitors can cut across spaces to reach a particular exhibit or amenity, rather than going all the way around. These ramps double as spaces for temporary exhibitions, and one of them includes an auditorium. 'One of my favourite details is the place at which the wooden floor of the auditorium meets the aluminium floor of the exhibition ramp,' says Zahle. The building features many material connections between old and new, meticulously detailed and boldly expressed by the architects. Amidst so much Scandinavian minimalism, it's surprising to find rest rooms in extremely bright colours: floors, walls, ceilings and even radiators in these small spaces are branded in fluorescent orange and green, the museum's signature accent colours.

Although the office boasts other recent competition wins for museum design, including the Museum of the Human Body in Montpellier, France, this is the first completed museum project for BIG. It is also one of the firm's first large-

scale site transformations. In 2013 the office designed a subterranean extension for BIG founder Bjarke Ingles' former high school, Gammel Hellerup Gymnasium. The project comprises a multipurpose sports and meeting hall sunk 5 m below the school's former courtyard. At ground level, a curved timber landscape provides seating for students. Zahle says its angle 'is shaped by the calculations of the ballistic curve of a ball thrown in the air – the ceiling height ranges from 4.5 to 7.5 m'. Like the Maritime Museum, the school extension is highlighted by new sculptural forms that play off existing rectilinear forms, as well as by programmatic elements with dual functions, such as walls and stairs used as seating, and a roof that serves as a social space.

A welcoming, sculpturally designed space at the Maritime Museum – where the circuit loops back to the entrance – is the final gallery, with its grand asymmetric corner staircase, whose fanning steps offer seating and lend access to the gift shop. 'We wanted the floor to lift you back up to the entrance area,' says Zahle. And as the widest point of the building is here, in this space, the designers turned the staircase into an informal auditorium. 'In plan, it is a triangle with steps fanning out from top to bottom – all unique and with varying heights as well, allowing the staircase to be used as seating.' Each step is a doubly curved surface composed of concrete and aluminium. 'There are basically no flat surfaces in this museum,' he emphasizes. 'We tried to be multifunctional and minimal everywhere.' Inspired by the utilitarian beauty of shipbuilding, the design combines circulation areas with seating, and ramps with galleries and public spaces. BIG's gift to Helsingør is a sculptural and surreptitious urban landmark. ←

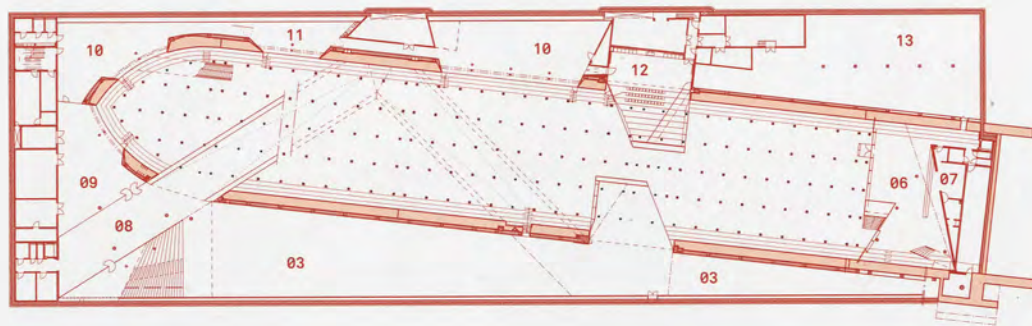
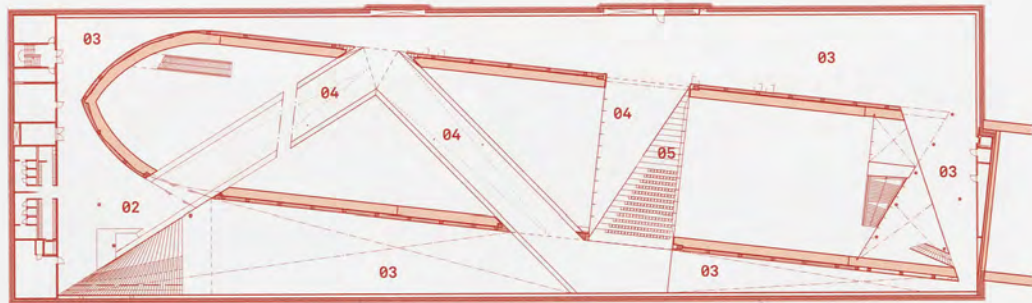
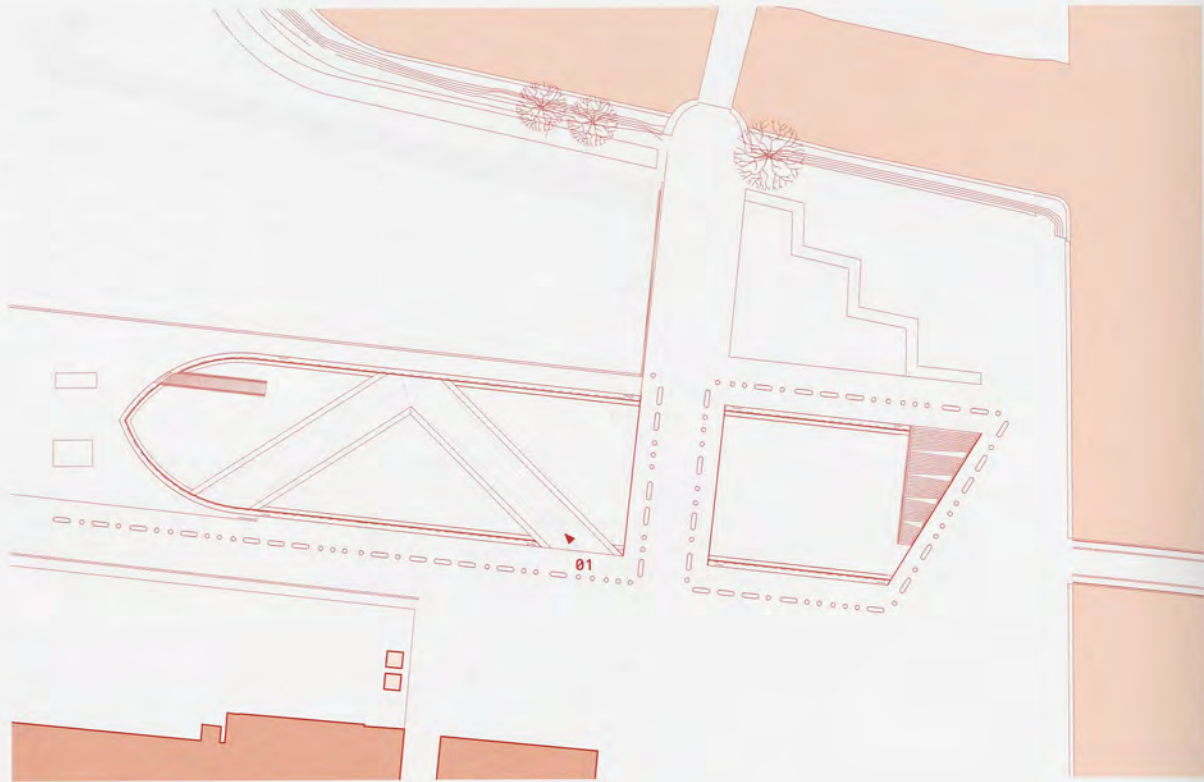
big.dk



← Uniting the two ends of the continuous loop that forms the Danish National Maritime Museum is a triangular concrete staircase.

← Dutch firm Kossmann, de Jong Exhibition Architects was responsible for the exhibition design. Using the metaphor of a long journey, the team developed the idea of a multimedia exhibition that begins with imagery expressing the universal longing for far-distant lands and adventures on the high seas. With themes such as port, ship, navigation, war and trade, the museum guides visitors along the maritime history of Denmark through scenography that responds to the qualities of each space. Very small rooms, for example, evoke the anxiety engendered by war, while broader, more wide-open spaces refer to the expanse of the ocean or emphasize the grand scale of today's globalization.

- 1 Entrance
- 2 Foyer and museum shop
- 3 Permanent exhibitions
- 4 Temporary exhibitions
- 5 Auditorium
- 6 Café
- 7 Kitchen
- 8 Multifunctional room
- 9 Meeting room
- 0 Offices
- 1 Lunch room
- 2 Education
- 3 Inspection area



Long Section



↑ The new Danish National Maritime Museum is in close proximity to Kronborg Castle, whose strategic location is at the narrowest point of Øresund, the strait between Denmark and Sweden.
Photo Dragør Luftfoto

Transformation of the Copenhagen Harbor

Jens Kvorning

エッセイ：
コペンハーゲン港の変革
イエンス・クヴォニング
土居純訳

The transformation of a city is a complex learning process during which different players reassess and redefine their interests and their understanding of the market and the city, and find new ways to interact. The transformation of the Copenhagen Harbor area is a prime example of such a learning process with changing approaches.

Copenhagen Harbor got its river-like shape when the new neighborhood of Christianshavn was built in the 17th and 18th centuries, and when large landfills that were carried out during the industrialization of the late 19th century and early 20th century. Early industrialization along the harbor front and the development of a modern industrial harbor resulted in an elongated, specialized zone located between the civil city and the water. It was only along a couple of the old canals that daily city life came into actual contact with the waterfront.

Industry and specialized harbor functions gradually vanished from the harbor area during the 1970s. However, it was only in the mid-1980s that city planners, politicians and the general public began to realize the harbor's vast potential for a renewal of the city in line with the post-industrial agenda.

In 1985, an architectural competition on the future of the harbor was held. The program was quite open and only requested proposals on how to explore the potential of the harbor.

The first prize project addressed structural issues by attempting to break the harbor's isolation from the civil city by means of large cultural institutions that were to be built in a few select places for the purpose of drawing urban life down to the harbor front. The other proposals submitted by contestants were largely influenced by post-modernistic architectural ideals and the era's fascination with the classic city. Thus, the proposals used that as their point of departure, the types of city living that one traditionally associates with a dense city's more central areas.

This new understanding of the harbor's potential also became apparent to investors and developers alike. During the late 1980s, development projects targeting nearly all the larger, centrally located industrial zones and harbor areas emerged, and the transformation of the harbor became the new, ubiquitous topic of discussion in the public debate. This surge in interest was followed by extensive speculation in the harbor areas, which together with an international crisis in the real estate market caused nearly all development companies to declare themselves bankrupt around 1990. This meant that there were a number of projects showcasing the potential of the harbor. The opportunities for transformation of the harbor front aroused the enthusiasm of the general public, but none of these

都市再生は、複雑な学習過程をとまなう。つまりそこでは、各関係者が市場や都市におけるめいめいの利害や理解を再査定・再確認しつつ、互いの接点を探ることになる。これまで様々なアプローチが試みられてきたコペンハーゲン港地域の再生こそ、そうした学習過程の典型例といえよう。

コペンハーゲン港が現在の河川のような形状と化したのは、17世紀から18世紀にかけてクリスチェンスハウン地区が建設されたのに加え、19世紀末から20世紀初頭にかけての工業化の時期に大規模な埋立地が次々と造成されたためである。臨港地区で進められた初期の工業化と、のちの産業港への近代化により、市民都市と海の間には用途を特化した帯状の区域が立ちはだかってしまった。日常の都市生活と水辺との接点は、わずか2、3本の古い運河沿いに限られた。

1970年代に入ると、港湾地域の工場や産業湾としての機能は次第に姿を消していく。とはいえ、都市計画家や政治家、一般市民は、脱工業化の路線で都市再生を果たすには、コペンハーゲン港が絶大な潜在力をもつことに、1980年代も半ばになってようやく気づく。

1985年、コペンハーゲン港の将来の計画にまつわる建築設計競技が開かれた。この競技ではプログラムはまったく指定されず、港の可能性を探ることのみが求められた。

1等案では、都市構造に関する諸問題が検討され、孤立する港をどうにかして市民都市に引き寄せる方途が探られた。そこで要所要所に大型文化施設を建設し、都市生活を臨海地区にまで拡大させる提案がなされた。それ以外の応募案は、ポストモダニズム的な建築理念であるとか、古典都市という時代の興味などに感化されていた。つまりこれらの応募案が出発点としたのは、高密度都市の中心部という状況から想起されがちな、典型的な都市生活であった。

コペンハーゲン港の潜在力をこのようにとらえ始めた点では、投資家も開発業者も同様である。1980年代終わりには、中心部に位置するおもだった工業地区と港湾地区全域をほぼ網羅する再開発計画がもち上がり、また巷ではコペンハーゲン港再生の話題がそこかしこでとり上げられるようになる。こうしてにわかに注目を浴びた港湾地区への投機が殺到したうえに、その後の世界的な不動産市場の冷え込みがたたって、1990年前後には開発会社が軒並み破産を表明した。それだけコペンハーゲン港の潜在力を売りにしたプロジェクトが相当数あったということだ。臨港地区再生の機会是一般市民の志気を高めたが、あいにく実現に至ったプロジェクトは皆無である。

1990年ごろ——不動産市場の危機がピークに達した時期——には、都市間の競争やグローバリゼーションの動向が世界的な議論の的となった。これを受けてデンマーク政府はコペンハーゲンの立場を強化すべく、様々な策を講じた。そのうちの英断ともいえるべきものが、コペンハーゲン—マルメ（スウェーデン）間の連絡橋の建設である。これに次ぐ決断が——この架橋計画と連関して——新興地区ウールスタッドの建設であり、これにより橋という新たな輸送路のもつ可能性をコペンハーゲンのために最大限に活用しようとし



projects were realized.

Around 1990 – while the crisis in the real estate market was at its height – competition among cities and other aspects of globalization became central themes in the international discourse. This led the Danish government to take a number of initiatives that were meant to strengthen the position of Copenhagen. The most important decision was to build a bridge between Copenhagen and Malmoe, Sweden. Another important initiative, linked to the future bridge connection, was the decision to build a new neighborhood – Ørestad – which was to fulfill the potential of the new line of communication associated with the bridge that would be created for Copenhagen. Ørestad was meant to connect the historic city center with the new line of communication and take advantage of its proximity to the airport. It was also meant to serve as a modern neighborhood featuring research institutions and internationally geared business functions, mixed with a modern residential neighborhood. In addition, Ørestad also encompassed renewal on an organizational level where an independent, publicly owned development company, in charge of the development of the neighborhood, would use the proceeds to fund the construction of a new metro line. These government initiatives – as well as Copenhagen’s role as European City of Culture in 1996 – undoubtedly contributed to the revival of the real estate market with an emphasis on the development potential associated with the harbor areas.

The government made other attempts to kick-start development. In 1997–1998, an expansion of the Royal Danish Library took place in an initial attempt to realize the strategy of using large cultural institutions as a means to revive the harbor front. The government also launched another large-scale project, namely the transformation of a former naval harbor into a civil neighborhood. Yet again, cultural institutions served as a launch pad. The relocation of the Royal Danish Academy of Fine Arts School of Architecture, the National Film School of Denmark and the Danish National School of Theater and Contemporary Dance served as the active center of integration in a harbor area that up until this point in time had been an inaccessible area of Copenhagen. In the late 1990s, a couple of privately funded projects also presented ambitious proposals for how to renew the harbor front. Opposite the Royal Danish Library, a new neighborhood, designed by Henning Larsen Architects, emerged in a former industrial zone. The development includes a bank headquarters, combined with residential buildings, which reinterpret the syntax of the city and accommodate the surrounding neighborhood in a very distinct way. However, the neighborhood does not encompass any urban functions that really make it an integral part of life in the city.

While the vast majority of the development projects that came to life in the later part of the 1980s were functionally complex and relatively ambitious, nearly all of the projects that were presented during the first post-crisis phase were, when seen from an architectural point of view, one-dimensional and devoid of any architectural ambitions.

However, the developers’ attempts to profit from the harbor’s potential without delivering any new urban qualities were heavily curtsied by the public, and this led Copenhagen’s City Council to decide that all future harbor projects would have to include substantially higher architectural and urban qualities. Among other things, this decision meant that Sjoerd

た。ウールスタッドは旧市街と新しい輸送路とをとり結ぶ位置づけにあるうえに、空港に近いという利点ももち合わせていた。また最新の住宅地として計画されたため、当世風の住宅地には研究施設や国際ビジネスの拠点が点在する。さらにウールスタッドでは組織レベルでの刷新も行なわれた。ここでは独立採算制の開発公社に同地区の開発を統轄させ、その収益によって地下鉄新線の敷設費用を賄うことになっている。こうした政府のイニシアティブ——コペンハーゲンが1996年欧州文化首都を務めたことも含め——は、確実に不動産市場の回復に貢献し、また港湾地区開発の可能性をアピールすることにもなった。

政府の働きかけが開発の起爆剤となった例はほかにもある。1997年から1998年にかけて実施されたデンマーク王立図書館の拡張工事は、大型文化施設を臨港地区復興の足がかりとしていく戦略の第1歩となった。次いで政府が乗りだした大型プロジェクトが、旧軍港の住宅地への転用である。またしても文化施設が一種の跳躍台として機能した。港湾地区内に移転したデンマーク王立芸術アカデミー建築学部、国立映画学校、国立演劇学校は、つい最近まで立入り不能であった地区の統一拠点となった。1990年代末には民間資本による2、3のプロジェクトが、意欲的な臨港地区再生案を提示した。王立図書館向かいの工場跡地に出現したヘニング・ラーセン・アーキテクト設計の新地区もその1例である。この再開発は、かつての都市構造を再解釈するかたちで住棟群と銀行の本社屋を配置しつつ、かなり独特な方法でこれらを周辺地区になじませている。とはいえこの地区には、市民生活に本当に不可欠な都市機能が盛り込まれているとはいえない。

1980年代中盤以降に実現された再開発プロジェクトは、建築的に見ても複合的な機能をもちあわせた野心的な計画揃いであったが、たいして経済危機直後に発表されたプロジェクトは、建築という観点から見ると、その多くが皮相的で建築的野心にも欠けているといわざるを得ない。

他方、コペンハーゲン港でひと儲けしようと参入した開発業者たちは、結局何ら新しい都市性をもたらさなかったとして市民の顰蹙^{ひんしやく}を買ひ、そこでコペンハーゲン市議会も腰を上げ、今後すべての港湾プロジェクトは建築的にも都市的にもしかるべき水準に達していなければならない、と制約をつけた。その結果、オランダからシュルト・スータスとウエスト8が喚ばれ、彼らが港の南部と北部地区のプランを練ることになった。スータスの提案は、ブロックを基調とした街区をつくり、運河を張りめぐらし、住宅でほぼ埋め尽くす、というものである。一方ウエスト8の提案は、大小様々なスケールの入り混じった機能的な街区をつくり、なおかつ港内に残るフェリーを生活の一部として活用することである。これらの拡張事業では、新世紀初頭に起こった地価の急騰が追い風となった。この地価高騰は不動産市場ブームの道を開いただけでなく、イースレンス・ボイルグやノアハウネンといった新興地区の開発をも促進した。またこの時期、ホルメンのコペンハーゲン・オペラハウス（本誌掲載）やその真向かいのデンマーク王立劇場（本誌掲載）など、臨港地区に大型文化施設が続々と建設された。

先述したように、1987年の設計競技の応募者ほぼ全員が、コペンハーゲン港を伝統的な高密度都市の一部ととらえ、そこでここに従来型の都市空間をつくれれば、より伝統的・因襲的な都心型生活様式が定着すると考えた。イースレンス・ボイルグ——王立図書館のやや南に位置——では、地元自治会が率先してレクリエーション活動の場として臨海公園の建設に乗りだした。行政側が港内の水質浄化に徹底的にとり組んだ結果、2006年には公園内に遊泳用の小さな入り江が設けられた。まもなくこの中央に位置する入り江つき公園は、従来は郊外にしか見られなかったようなまったく新しい生活様式を出現させる跳躍台となった。コペンハーゲン港の可能性についても、高密度都市における新しい生活様式についても、人々の意識は変化・深化した。海辺に点在する、ほとんど客足の絶えない小さな実験的ビーチ・カフェもまた、港の潜在力にたいする意識を改めるきっかけとなった。

Soetters and West 8 from the Netherlands were asked to draw up plans for both the southern and northern harbor sections. Soetters suggested a block-based city with multiple canals and predominantly residential buildings. West 8 suggested a functional city composed of various scales that at the same time would attempt to take advantage of life around the remaining ferries in the harbor. The expansion of these neighborhoods profited from the steeply rising property prices in the early part of the new century, which paved the way for a booming real estate market that also enabled the development of other new neighborhoods on Islands Brygge and Nordhavnen. At the same time, more large cultural institutions were added to the harbor front, in the form of the new Opera in Copenhagen (*a+u* currents issue) on Holmen and the new Royal Danish Playhouse (*a+u* currents issue) directly across from it.

As previously mentioned, nearly all contestants in the 1987 contest perceived the harbor as part of a traditional dense city with formal urban spaces that would provide the framework for more formal and traditional central-city lifestyles. On Islands Brygge – a little to the south of the Royal Danish Library, local residents' boards took the initiative to build a harbor park that would provide the framework for more recreative activities. Following extensive municipal efforts to clean up the water in the harbor, a small harbor basin for swimming purposes was added to the park in 2006. Within a short time, the combination of a centrally located park and harbor basin served as a launch pad for completely new ways of life, which up until this point had only been seen in the outskirts of the city. The understanding of the harbor's potential, and of the new ways of life, which would unfold within the framework of a dense city, was changed and strengthened. This new understanding of the harbor's potential had also been developed and inspired by a number of smaller experimental beach cafes in areas that were vacant for shorter amounts of time.

This expanded understanding of the dense city's potential to accommodate functionally and socially diverse city living really came to light in the newly executed contest on the development of Nordhavnen. Nordhavnen covers an area equal in size to the historic center, and holds the potential for the development of an independent neighborhood featuring up to 3.5 million m² of floor space. This project may be viewed as the conclusion to the learning process that Copenhagen has undergone with regards to the understanding of the harbor's potential and the post-industrial urban agenda. This is a new neighborhood in which the contact to water has been maximized by means of multiple canals and cuttings. However, the local contact to the water appears in many shapes and forms, supporting a diverse group of lifestyles and activities of different social groups. It is no longer just an office area or a large cultural institution or residential neighborhood that is in contact and has close proximity to the harbor – it is a neighborhood that tries to make room for many diverse ways of life that are all associated with the many possibilities that the water offers. In previous projects, it was only buildings that exposed themselves to the water space, in the form of a view of the water and an open surface. Now, the water space has been merged and integrated as an active urban space in line with other urban spaces.

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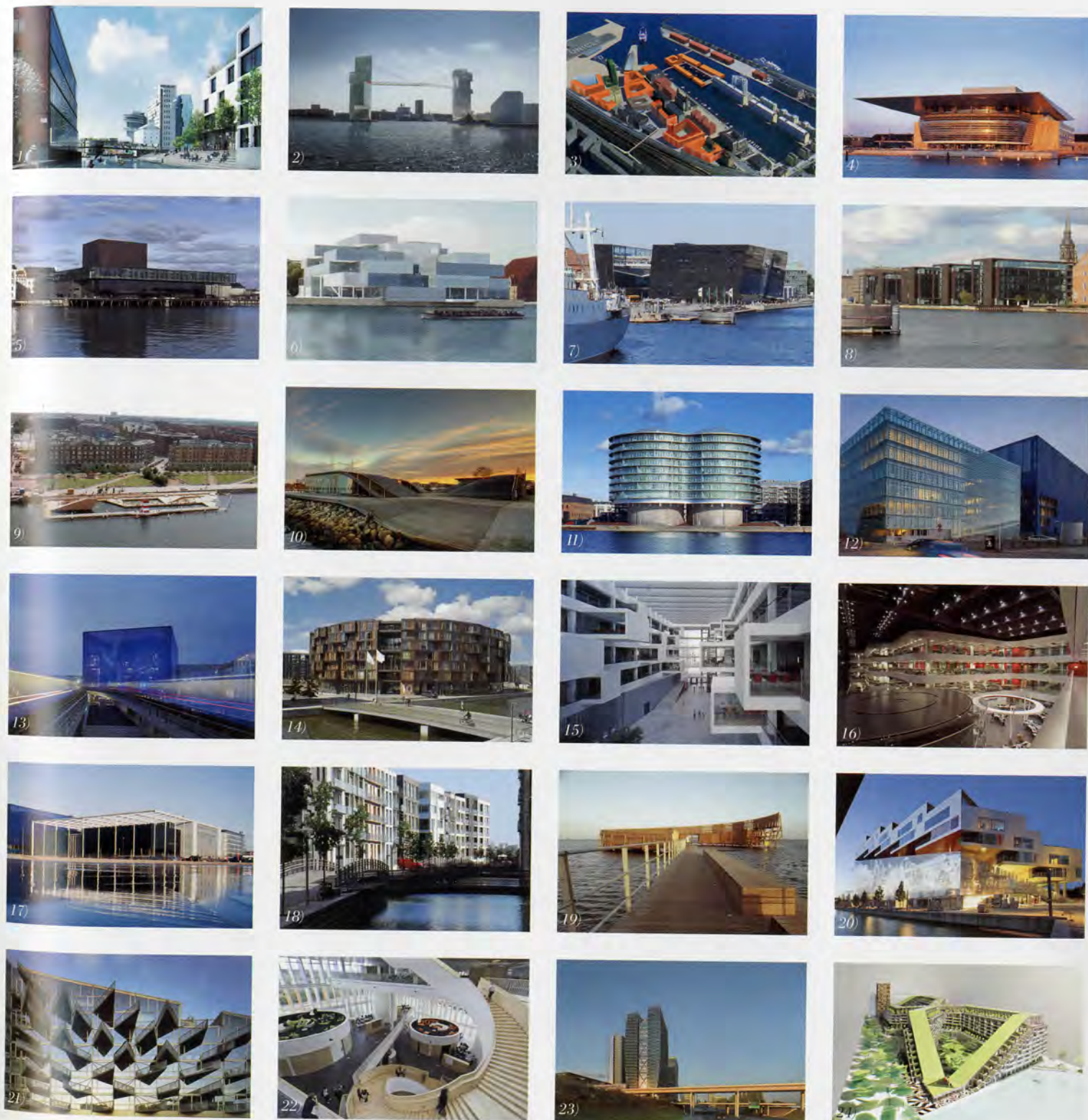
高密度都市コペンハーゲンには機能的にも社会的にも多様な都市生活を提供するための潜在力がある、との理解が実質的に広まったのは、ノアハウネン再開発の設計競技が実施されて以来の、最近のことである。ノアハウネンは広さでいえば旧市街のそれにほぼ匹敵し、単独でも総床面積350万m²に達する規模の地区が開発可能である。これまで港の活用と都市の脱工業化を進めてきたコペンハーゲン市にとって、この再開発事業は一連の学習過程の総仕上げに相当しよう。この新興地区では、幾筋もの運河や入り江のおかげで、親水性が最大限に高められている。もっともその水辺は、形状も形態も一様ではない。これは、住人がどんな生活様式をもつか、どんな活動に従事するか、あるいはどんな社会集団に属しているかにかかわらず、万人に水と触れる機会を提供するためである。もはやオフィス・エリアだけとか、大型文化施設であるとか住宅地だけが優先的に水辺に配置されることはない——ここではどんな暮らしも可能であり、しかもそのいずれもが水のもたらす様々な可能性と結びつけられる。従来のプロジェクトでは、建物だけが水辺空間に面し、水の眺めであるとかオープン・スペースが確保されるに過ぎなかった。ところが水辺空間は今や、ほかの都市空間と同等の、効果的な都市空間としてとり込まれ、融合される。

イェンス・クヴォーニングは都市計画の教授であり、コペンハーゲンのデンマーク王立芸術アカデミー建築学部における都市研究センターのディレクターである。

p. 10: Aerial view of Copenhagen harbor. Photo courtesy of By & Havn / CPH City & Port Development. p. 12: Map of development plan. Image courtesy of City of Copenhagen. Opposite: 1) Nordhavnen by COBE + SLETH. 2) The LM Project by Steven Holl Architects. 3) America Plads by West 8. 4) Opera in Copenhagen by Henning Larsen Architects (*a+u* current issue). 5) Royal Danish Playhouse by Lundgaard & Tranberg (*a+u* current issue). 6) New Realdania Headquarters and Danish Architecture Center by OMA. 7) Royal Danish Library by Schmidt Hammer Lassen. 8) Nordea Headquarters in Christiansbro by Henning Larsen Architects. Photo by a+u. 9) Harbour Baths by PLOT (= BIG + JDS). 10) Maritime Youth House by PLOT (*a+u* 05:04). 11) Gemini Residence by MVRDV (*a+u* 07:01). Photo by Rob't Hart. 12) Danish Broadcasting Corporation, Segment 3 by Gottlieb Paludan + NOBEL (*a+u* current issue). 13) Concert House Danish Radio by Jean Nouvel (*a+u* current issue). Photo by Åke E:son Lindman. 14) Tietgen Dormitory by Lundgaard & Tranberg (*a+u* current issue). 15) IT University in Copenhagen by Henning Larsen Architects (*a+u* 05:02). 16) Danish Broadcasting Corporation, Segment 2 by Dissing + Weitzling. 17) Danish Broadcasting Corporation, Segment 1 by Vilhelm Lauritzen Arkitekter. 18) Sydhavn by Sjoerd Soetters. 19) Kastrop Sea Bath by White Arkitekter (*a+u* 06:08). Photo by Ole Haupt. 20) Mountain Dwellings by PLOT (*a+u* 09:04). 21) VM Housing Buildings by PLOT (*a+u* 06:06). 22) Orestad Gymnasium by 3XN. 23) Copenhagen Towers by Dissing + Weitzling, Foster and Partners. Image by Sjaelso Gruppen. 24) BIG House by

BIG. Photo on opposite page (4, 5, 15, 16 and 22) by Adam Mork, (7 and 18) courtesy of the author, and (12, 14, 17 and 20) by Jens Markus Lindhe. All photos on opposite page except as noted courtesy of the architects.

10頁:コペンハーゲン港の航空写真。12頁:再開発プロジェクト案の地図。右頁:1) COBE+SLETH設計、ノアハウネン新興地区のイメージ。2) スティーブン・ホール・アーキテツク設計、LMプロジェクト。3) ウェスト8設計、アメリカ・プラズ。4) ヘニング・ラーセン・アーキテツク設計、コペンハーゲン・オペラハウス(本誌掲載)。5) ルンゴー・アンド・トランベア設計、デンマーク王立劇場(本誌掲載)。6) OMA設計、リアルダニア財団本社屋およびデンマーク建築センター。7) シュミット・ハマー・ラッセン設計、デンマーク王立図書館。8) ヘニング・ラーセン・アーキテツク設計、ノルデア・クリスティアンスブロ本社屋。9) PLOT(=BIG+JDS)設計、ハーバー・バス。10) PLOT設計、海辺のユース・ハウス(『a+u』05:04)。11) MVRDV設計、ジェミニ(双子座)・レジデンス(『a+u』07:01)。12) ゴットリブ・バルダン+ノーブル設計、DRセグメント3(本誌掲載)。13) ジャン・ヌーヴェル設計、DRコンサート・ホール(本誌掲載)。14) ルンゴー・アンド・トランベア設計、ティッゲン学生寮(本誌掲載)。15) ヘニング・ラーセン・アーキテツク設計、コペンハーゲンのIT大学(『a+u』05:02)。16) ディシン+ヴァイトリング設計、DRセグメント2。17) ヴィルヘルム・ラウリッツェン・アーキテクトゥール設計、DRセグメント1。18) シュルト・スーナス設計、シードハウン。19) ホワイト・アーキテクトゥール設計、カストラップ・シー・バス(『a+u』06:08)。20) PLOT設計、マウンテン集合住宅(『a+u』09:04)。21) PLOT設計、集合住宅VM(『a+u』06:06)。22) 3XN設計、ウールスタッド中等学校。23) ディシン+ヴァイトリングおよびフォスター・アンド・パートナーズ設計、コペンハーゲンタワーズ。24) BIG設計、BIGハウスの模型。





Moesgård Museum
Henning Larsen Architects
Aarhus
Photo Jens Lindhe



Grundfos Kollegiet Dormitory
CEBRA
Aarhus
Photo Mikkel Frost



The Iceberg
CEBRA | JDS | Search | Louis
Paillard
Aarhus
Photo Mikkel Frost



Lighthouse
3XN | UNStudio
Aarhus



Danish National Maritime Museum
BIG
Helsingør
Photo Rasmus Hjortsh



Nørrebro Library
COBE | Transform
Copenhagen
Photo Rasmus Hjortsh



UN City
3XN
Copenhagen
Photo Adam Merik

Good Things, Small Packages

Danish architecture is experiencing an undeniable heyday. How is it that such a small country has such a high level of architectural success?

O

One important reason is the presence of a design culture. In all aspects of Danish society, design is greatly valued. Good furniture is everywhere, the country has a national architectural policy, and architects are unionized and well paid. Danes have high expectations of the built environment and a strong sense of national pride. A new building should be excellent. It should be designed to last, and people count on the government to refrain from cutting corners in erecting cultural institutions, such as museums.

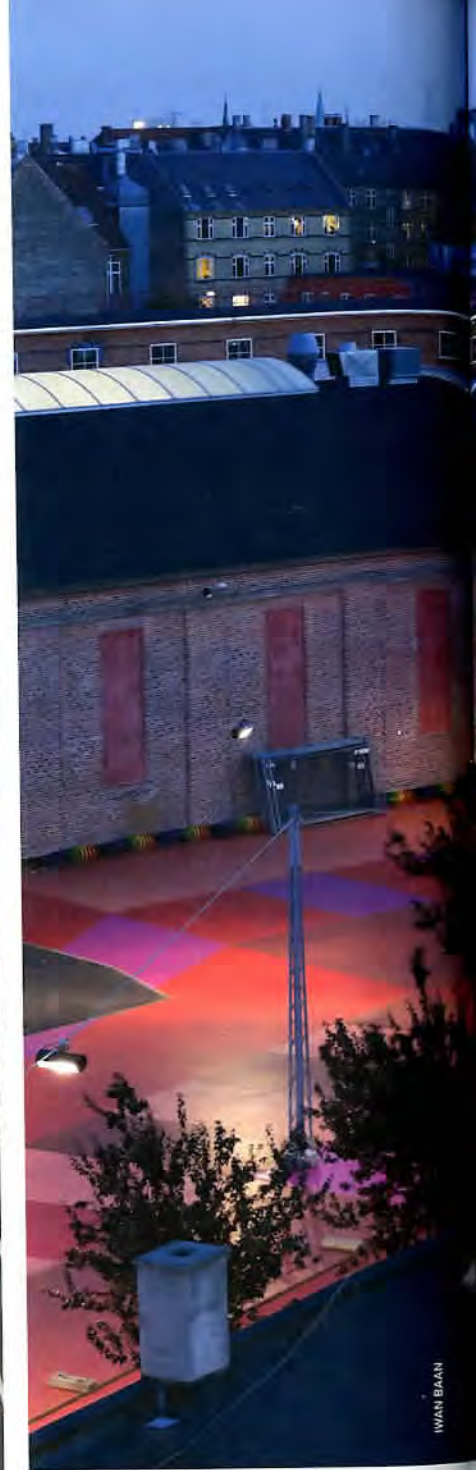
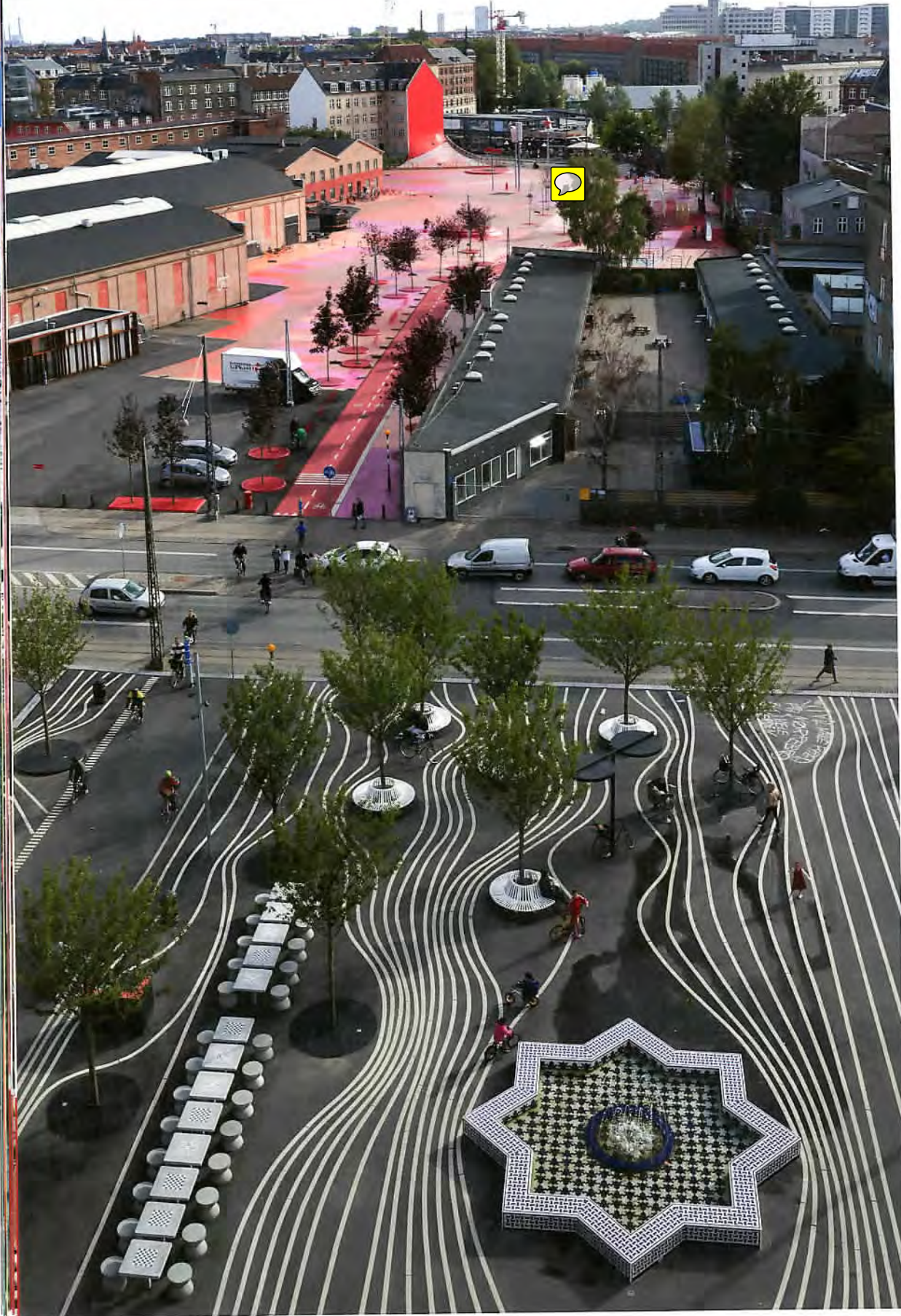
Denmark is known for fostering young architects and giving newcomers the opportunity to build cultural buildings. A good example is COBE (featured in this issue), a virtually untested outfit involved in the massive Nørreport train station, as well as in the smaller Nordhavn station. In many other European countries, COBE would not have been considered for such projects, owing to a lack of experience. Long-term planning, as seen in the 50-year master plan for Nordhavn, is a vital part of Denmark's approach to the built environment. Long-term thinking in general seems to permeate all aspects of society and to underpin the Danes' take on sustainability. A case in point is the nation's bicycle

infrastructure, aimed at a type of transport that requires only human energy.

Another factor is an interactive network for the promotion of design. All major Danish companies – Realdania, Carlsberg and dozens of others – set aside funds for sponsoring architecture- and art-related initiatives. It's relatively easy for those in creative professions to procure both financial support and in-house expertise from big business. The Danish Architecture Centre and the Danish Design Centre assist up-and-coming architects and designers through direct funding, but also by supporting festivals, biennales and exhibitions.

Denmark's architectural success is also a consequence of the country's relatively strong economy, as evidenced by the current number of building projects in the works. Nor can the high standards of Danish schools be overlooked. Architecture education is well developed, well funded and free. Both of the nation's architecture schools, one in Aarhus and one in Copenhagen, prioritize quality over fashion and view architecture as material culture.

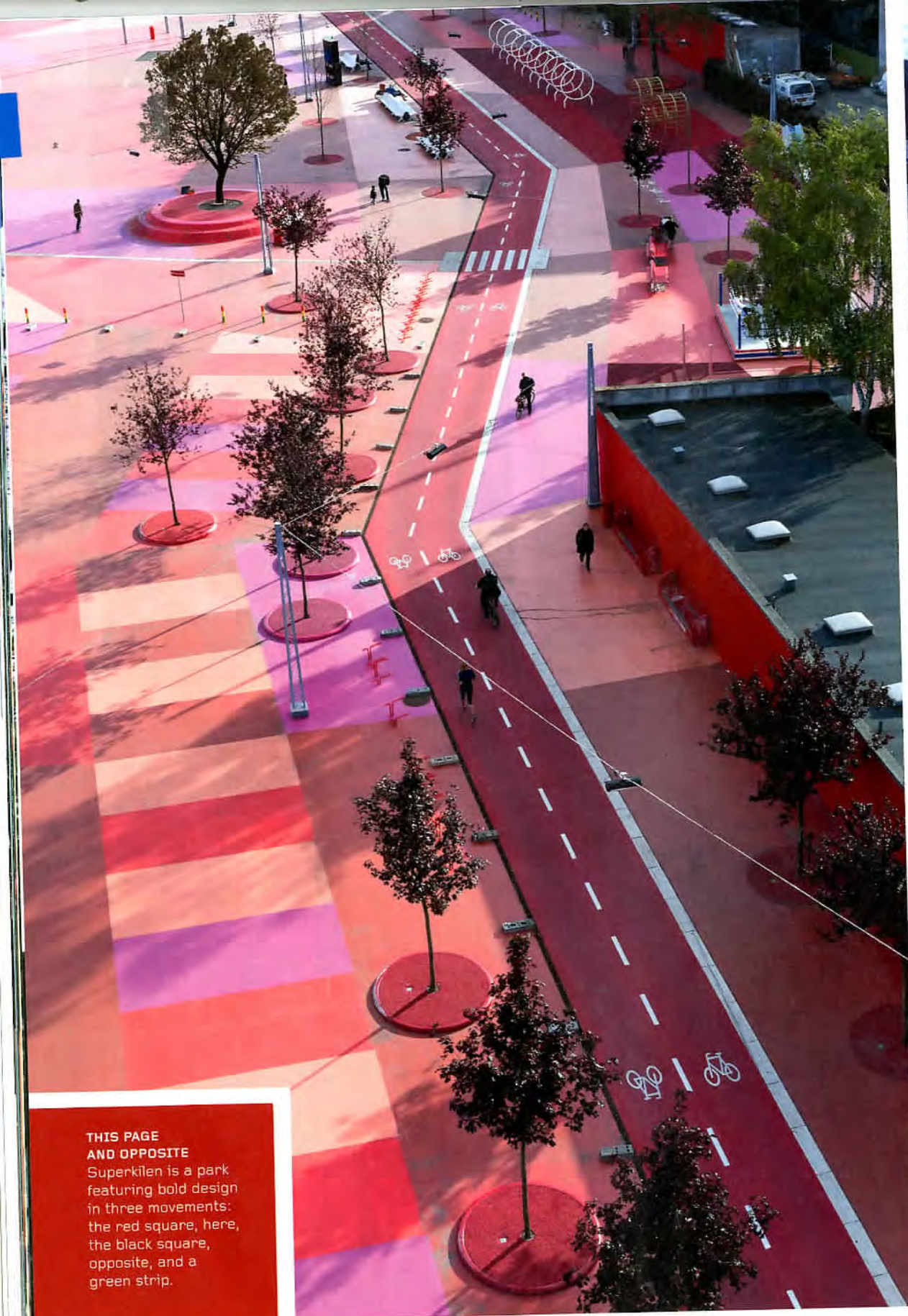
The latest results of this mix of favourable influences appear on the following pages.



IWAN BAAH

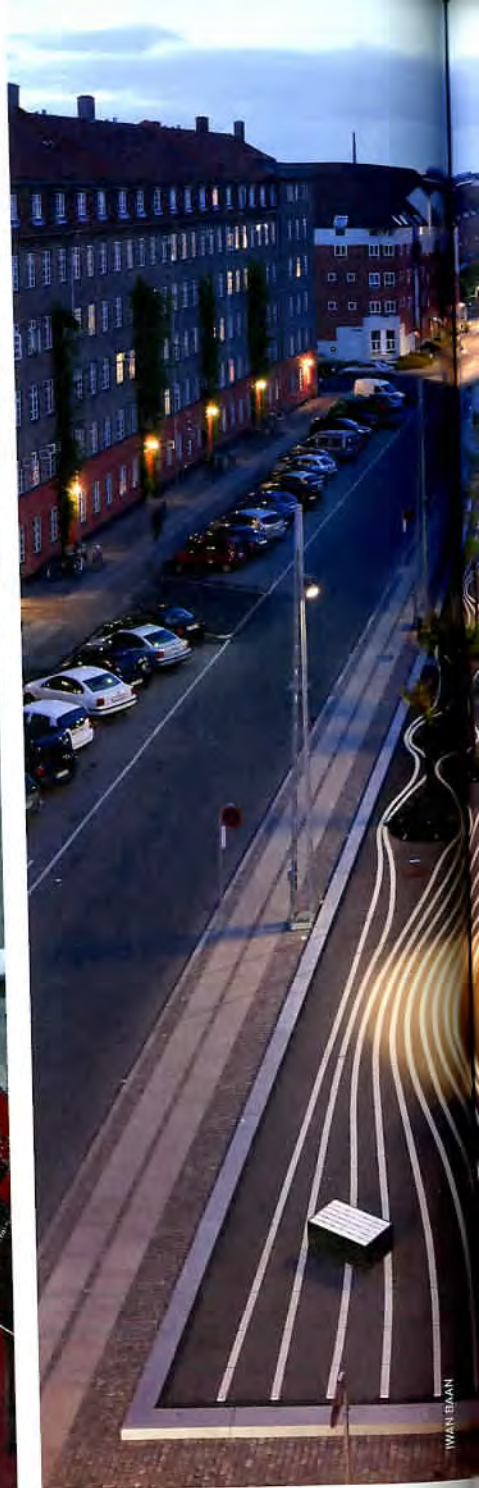
LEFT AND ABOVE
Three distinct stretches
of park form a pastiche
of cultures and
countries.





**THIS PAGE
AND OPPOSITE**

Superkilen is a park featuring bold design in three movements: the red square, here, the black square, opposite, and a green strip.



WIM VAN DER SAN



LIFE ON THE WEDGE

IN COPENHAGEN, SUPERKILEN ROLLS OUT A HALF-MILE MASH-UP OF GLOBAL CULTURE.

BY JESSICA BRIDGER



A NEIGHBORHOOD at the margins of the mainstream and beset by the problems of poverty: Arriving at Nørrebro Station is a bit of a shock for anyone who's been in central Copenhagen's pristine fairy tale. From Tivoli, the city's famed historical amusement park, to the perfectly maintained metro stations that still look brand new years after construction, a perfect urbanism seems to be the project here. Yet Nørrebro Station is completely covered in graffiti. The layers of paint obscure the windows, something more out of New York City in the 1970s or present-day Detroit. The streetscape in Nørrebro is less shocking and perhaps looks more like central Copenhagen, just a little more down at the heel. After all, this Scandinavian country has a robust social support network and provides housing, health care, and basic subsistence to all its residents.

Yet graffiti in a train station is a maintenance issue, and, stewardship notwithstanding, efforts are made citywide to improve the city fabric, the quality of life in urban public space. That perhaps Nørrebro has more room for improvement is unsurprising, and in recognition of this the city has made efforts tailored to the area. Nørrebro is home to Superkilen, a new park in this area north of Copenhagen's city center. Superkilen ("super wedge" in Danish) was designed by the landscape architects at Topotek 1, the architects at Bjarke Ingels Group, and the artists of Superflex. The park occupies a narrow stretch of land between 1980s housing projects and old neighborhood fabric. Nørrebro has a relatively high crime rate—high enough that the American embassy in Copenhagen warns travelers about the area, a surprise in peaceful Denmark—and its

share of gang activity. The violent crime in the area is bad enough that, before Superkilen was built, the area the park occupies was known as the "shooting gallery" for the number of violent incidents, many presumably related to drug use, in what was essentially an extended abandoned lot and small derelict green space. As with most European public space projects, the designers were chosen through a competition. The competition brief asked entrants to address the immense challenges of the site. A park alone cannot solve complex social problems, but it can elevate an area, render visible things otherwise unseen, and bring simple pleasures to what was once a no-man's-land.

Parks are not neutral. Parks reflect their context—their time, their place, their political and economic conditions. The best parks distinguish

themselves as radical answers to their context—be it their immediate setting or the milieu that will become their birthplace in history. One need only look back to Parc des Buttes-Chaumont in Paris, one of the first parks, created out of the sooty filthy desperation of the first industrial revolution. Laying open the establishing elements of the park and proffering even controversial topics, taking the visibility to a degree of relevance outside aesthetic fashions, a park might create within it a polemic, a position that public space communicates. This mode of design as argumentation is expressed at Superkilen with forms and elements that escape any single cultural norm and instead vividly present a radically multicultural pastiche. Here, landscape architecture—and ultimately urbanism—is about the recognition of difference. It cel-

brates the hypervisual and public participation for everyone.

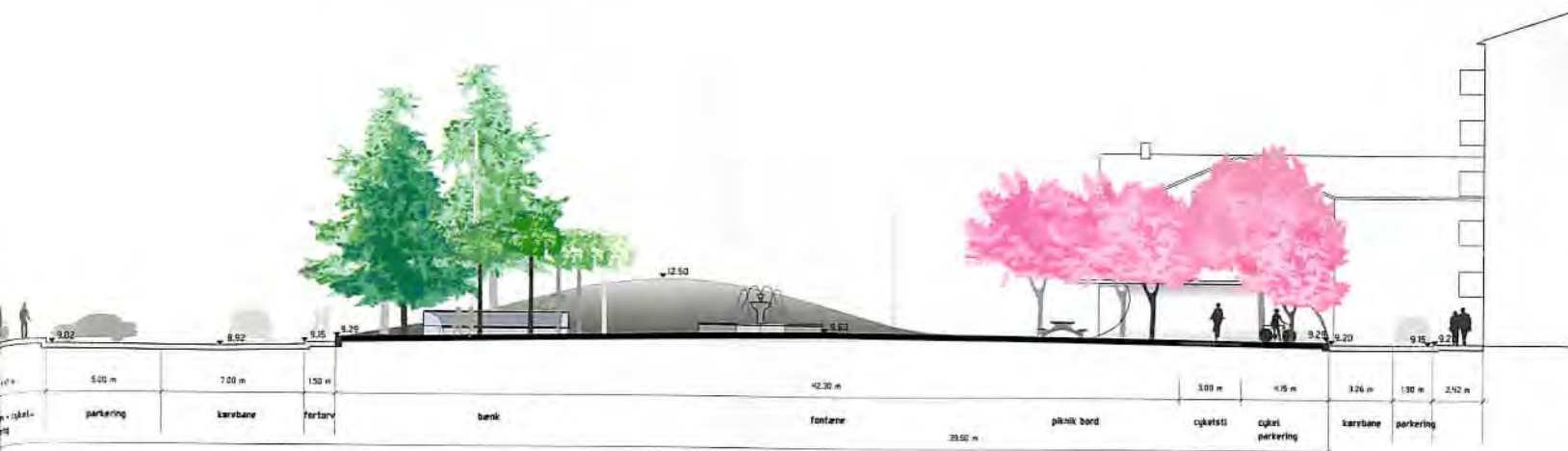
The framework for the design is simple: Three narrow spaces form a half-mile-long linear site, each with a distinct character. A large open red square connects the park with the heart of the north-central Copenhagen neighborhood at Nørrebro Station. A black square figured in striped and torqued asphalt, dense with program, serves as the heart of the park, and a stretch of artificially rolling green invites "big" recreation with a basketball court/skatepark hybrid. All three sections endorse an open-ended program by including special objects and unique landscape elements, chosen by the public and curated by the designers. Although the wedge-shaped park is clearly defined in form, it can be seen as a smorgasbord of ideas.



OPPOSITE
Superkilen threads through the dense Nørrebro neighborhood.

LEFT
The park provides a place for meeting, playing, and mingling.





Markers, reminders, and mementos. The stuff of our past, the stuff of our cultural background, has immense power. The designers of Superkilen strove to activate this force. As the site is located in one of the most culturally diverse neighborhoods of Copenhagen, this ambition made the park design into a celebration of difference. The inclusion of the people who live nearby in choos-

ing items and furniture created a direct reflection of their cultural backgrounds. The design team solicited the residents of Nørrebro to suggest site furniture that would represent their home countries, their ancestry. This selection includes more than 150 objects from more than 60 countries, all present and accounted for by metal plaques that identify their origins. The objects represent the

pleasure of cultural memory, things once lost and now found.

These artifacts bring a visual or decorative reference into the park and also activate in public various unique kinds of recreation. This is "crowdsourcing" and participation beyond a mediocrity that often arises from group efforts. This park is not "groupthink." It is group things.

The designers acted as curators of these suggestions, adding items of their own to augment the selection. Most of the objects are copies of the originals, fabricated in Denmark—translations of sorts. One of the best-loved parts of the park was also a favorite of the design team: A large octopus, originally from Japan and cast in concrete, is a slide and a playhouse. Craftsmen from Japan came





TOP

A Thai boxing ring is one of many foreign elements at Superkilen.

RIGHT

Neighborhood residents helped the design team to choose site fixtures, including this octopus slide from Japan.



to Copenhagen to build the immigrant octopus—granted permanent residency by concrete of course. The park does not claim to be a space for the assimilation of objects or, more important, of people. It acknowledges their differences.

At Superkilen, the manifestation of culture is as diverse as the inhabitants of Nørrebro. There are neon signs from Russia, Turkey, and beyond that advertise dental care, nightclubs, or restaurants that don't really exist at Superkilen. A towering sign for "Donuts" with a puffy, golden-brown wonder promises a delicious goodie that can't be bought for love or money. There's something a bit wistful in this advertised narration. This creates an atmosphere where culture becomes shared. People are drawn into the park to take a share of its novelty and participate in its oddity. Thai boxing, a sport seen and misunderstood by some as a vicious excuse for violence, comes into the open at Superkilen. The regulation Thai boxing ring is a favorite of many park visitors, of both the fighters who use it and the spectators who watch. Not least among them are kids passing by who are ready for a kiddie bout. A new Thai boxing course is offered in the adjacent recreation center, itself transformed from a once-derelict train depot, for those casual users who want to transform passion into competitive expertise.

TORRENT ESKEJERUD

RIGHT
Street furniture
takes on various
forms throughout
Superkilen.





The freehearted clash of character and identity brings something wholly new to Nørrebro, and to the more general idea of cultural sharing in public space. The mishmash park is a polemic; it is in itself a conception of what a park is meant to do and what people are meant to do in a park. It can be seen as an exercise in pushing back against given assumptions, be they of trash cans that are the standard specification in one city or another, or whom a park is for by the signals it sends. A gigantic tower of speakers, originally from Jamaica, is meant to invite visitors to share their music with the park, bringing the noise out of headphones or car radios and into the public sphere. There is something hedonistic about Superkilen and its seemingly permissive environment—anything goes, as long as you can do it in public.

You find little precedent about what to do at Superkilen or how to behave. The spaces are open for interpretation, for the invention of new games, new ways of using each area and the objects within it. Yet Superkilen as a park in the canon of landscape architecture is not without historical precedent beyond its response to context. It is a spectacle, following in the tradition of the 19th century landscape gardens—where follies (as translated from China, Greece, or Italy) lent drama to a carefully choreographed version of

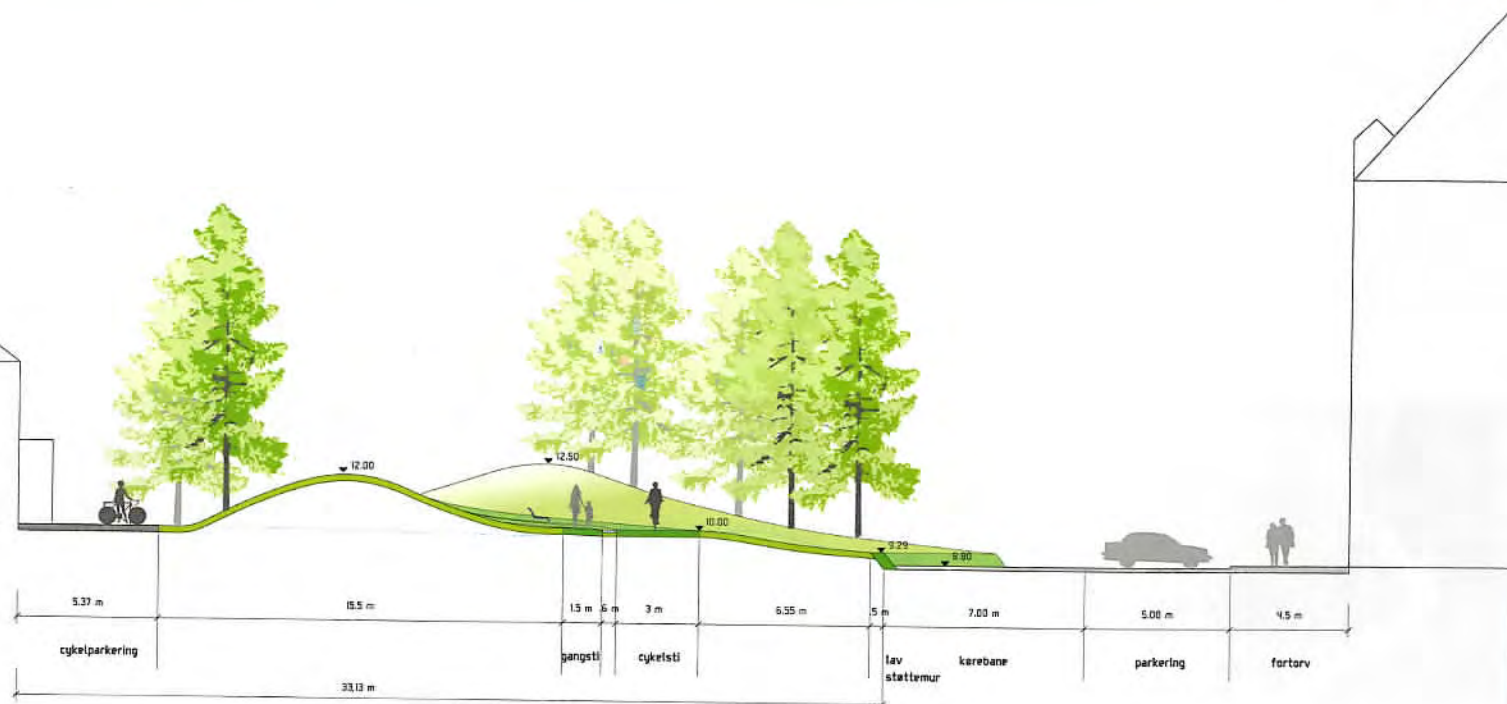
IWAN BAAH

LEFT

Superkilen's stretch of green knits housing projects into the city fabric.

OPPOSITE

A basketball court also serves skaters.





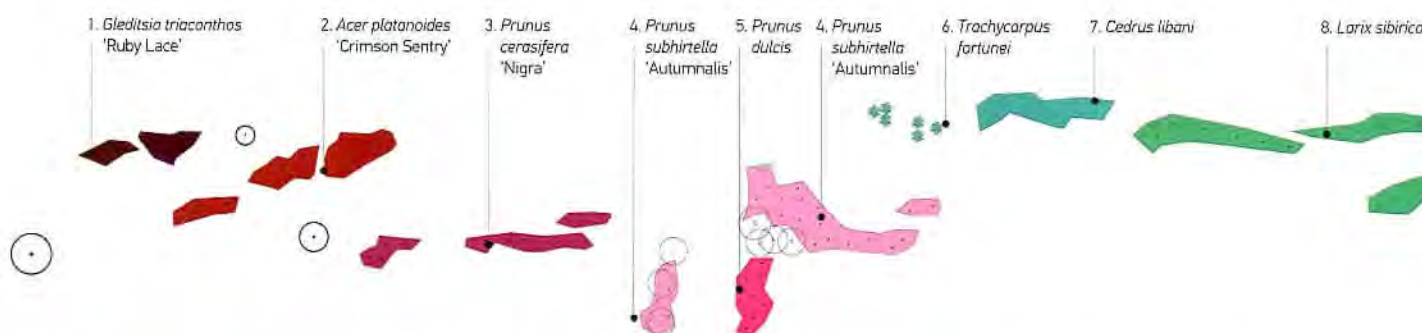
nature—and in this sense, Superkilen brings drama to the city. Here, the appearance of the topographically morphing landscape itself also holds a certain fascination. Its twisted ground plane, with three parts in three dominant colors—red, black, green—is just as present and seductive as the skin of the latest architectural wonder, but it is fully haptic and inviting. The landscape, in all degrees from urban to rural, is both a reflection of and a backdrop

for culture, and at Superkilen it is transformed into a literal profusion of signs and symbols remixed into a single—and singular—space.

Opened to the public in late 2012, Superkilen has quickly gained resonance beyond disciplinary boundaries. Inside the discipline it has excited, delighted, and irritated some; outside the discipline it has invited comment and interest in the concept. The lack of polite

neutrality, appropriate to the site, is also a magnet for attention. One can do a bit of gawking at Superkilen, and not because it has an excessive price tag like some of the more notable landscape projects of recent memory. The budget for Superkilen was small, but the idea is big, and like any good 21st century capitalistic symptom it is scalable, global, and sexy. As well, it is emphatically urban and unmistakably landscape architecture.

We don't often question the basic stuff of the place we're in, especially in the landscape or a park—the average urban dweller in the United States or Europe is simply glad for the bench or the trees: We simply accept public spaces as given. Rarely are spaces so literal a translation of other places, and this also brings attention to Superkilen—far beyond the neighborhood of Nørrebro, beyond the city limits of Copenhagen or Denmark's borders.





slowly, parts of Superkilen will integrate into greater Copenhagen.

Much has now changed in the space that Superkilen has come to occupy, if not the more complex problems nearby. The life of the city passes through the park, as an important bike lane, part of the Copenhagen Green Cycle Route, runs the length of the site. On my numerous visits to the park in cold weather, it hummed with activity; a recreation center and café to one side of the red square provided extra activity spaces and a sense of a fixed public presence on site. On one particularly gray day, two boys in early adolescence progressed through the park, making up their own games: hopping from stone backgammon table to table, taking the time to teach each other the “right” way to approach benches originally from the Czech Republic, for example—evidently, leaping from the top was much preferable to leaping from the seat. The park can be taken quite like an amusement park, in fact—and the two boys were clearly amusing themselves in a circuit of fun.

Projects like Superkilen hint at a new way for designers to work with the public. By engaging the local population and acknowledging the true complexity of urban environments in design, we can get beyond aesthetic questions and beyond even questions

of use and program. Design in the public realm must respond to broad cultural and social inputs, remixing our notions of global and local, client and stakeholder. In a project like Superkilen there is an inherent mediation set up by the designers between the user groups adjacent and the larger cultural context. Nørrebro’s complex situation—a demographic island of heterogeneous minorities in a homogeneous country—has forced new thinking for how a public space could be a participative element in urban culture. The park presents a strong position about who should feel welcome in a park, and how even mundane cultural objects can communicate a tendency toward assimilation in something seemingly neutral like a park if presented in homogeneous force. Getting beyond the received notions of who belongs in the city, and in turn whom it belongs to, can sometimes begin with questioning something as simple as a park bench. ●

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Project Credits

CLIENT CITY OF COPENHAGEN AND THE REALDANIA FOUNDATION, COPENHAGEN. **LANDSCAPE ARCHITECT** TOPOTEK 1, BERLIN. **ARCHITECT** BJARKE INGELS GROUP, COPENHAGEN. **ARTIST** SUPERFLEX, COPENHAGEN. **SITE CONSTRUCTION** LEMMING & ERIKSSON, KØGE, DENMARK. **GENERAL CONTRACTOR** AARSLEFF, COPENHAGEN. **ASPHALT** COLAS, GLOSTRUP, DENMARK.

It would be easy to sit in a living room in Detroit or Tehran or Seoul and project yourself into the park space of Superkilen, to become a user by fantasy, to participate by proxy through your projections. Imagine running up the striped hill, swinging on the swings, breezing down the red bike corridor with the colors of the park flying past. The park’s appeal lies in its coy ability to be of anywhere, yet to be possible only in its highly specific site context—thanks to its users’ active participation in its conception. Its genetic mix is global yet fully local.

Even the plant life at Superkilen has a multinational heritage. The

discussion of native, invasive, and ornamental species with plants is usually presented as something that bears the weight of a moral or ethical dilemma. Topotek 1, however, prides itself on understanding vegetation as part of our ever-shifting biotopes and included it as one of the items up for community suggestion and designer specification. Plants immigrate nearly as freely as people: borne by winds or birds, adapted but not assimilated into their new contexts. Some, like the *Araucaria* from South America, are quite happy living in Copenhagen at Superkilen. As plants have the wonderful ability to reproduce, one wonders whether,

9. *Liquidambar styraciflua* & *Paulownia tomentosa*

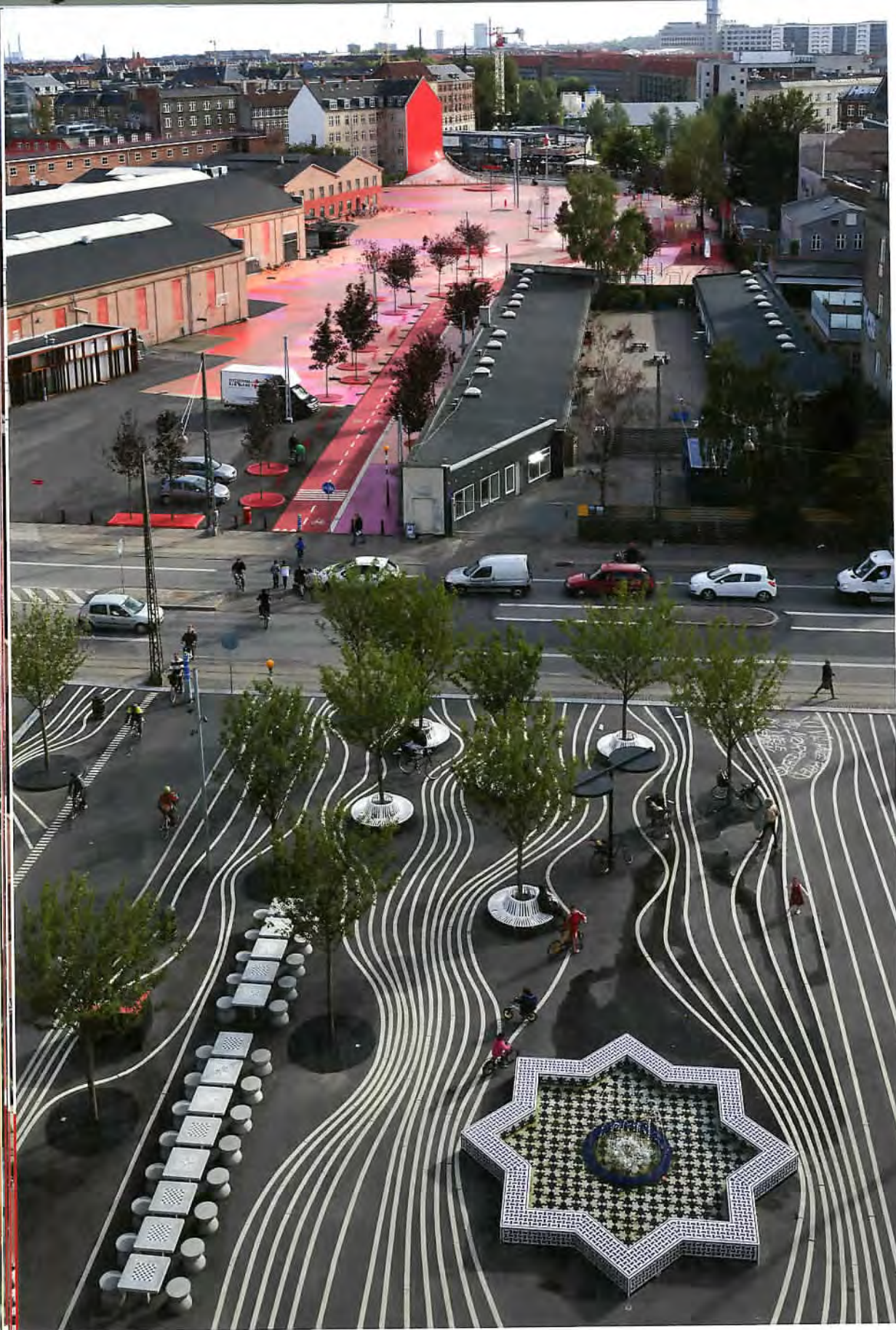


TOP

The donut sign copies one in Los Angeles.

LEFT

Plant choices came from around the world.



IWAN BAAH

LEFT AND ABOVE
Three distinct stretches
of park form a pastiche
of cultures and
countries.

