

## **Are Pedestrians Invisible in the Planning Process? Copenhagen as a Case Study.**

**Lars Gemzøe**

### ***Abstract***

Are pedestrians invisible in the planning process?

The vehicular traffic is very visible in the planning process. One of the reasons is that there is always plenty of data on the problems of car traffic but what about the pedestrians and their needs? There are no city that has a "pedestrian department" recording the numbers, flow and behaviour of people on foot on the same regular basis as traffic departments record the vehicular traffic, so the pedestrians tend to be invisible in the planning process - because there are no data about them.

Copenhagen is different in this respect because researchers from the School of Architecture has supplied the city, the general public and politicians with detailed data on the volume and character of the life that has taken place in the public spaces of the inner city. During the last 35 years the inner city of Copenhagen has changed character slowly, step-by-step, from a car-dominated to a pedestrian oriented environment. The public spaces that used to be full of cars have gradually been turned into nice and well functioning public "living rooms" where people stay - longer and longer. The number of parking lots have been reduced 2-3% pr. year to give space for the flourishing public life that has increased 3-4 times since the late 1960's. Data on pedestrians has played an important role in this planning- and decision making process by documenting the growing need for more public spaces of high quality for people on foot.

This presentation is based on a research project by Jan Gehl and Lars Gemzøe who have studied the character and volume of the public life in relation to the quantity and quality of the public spaces in Copenhagen through the last 35 years. The project is presented in the book "Public Spaces - Public Life, Copenhagen 1996" which was given the EDRA/PLACES 1998 research award in USA.

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## **Are Pedestrians Invisible in the Planning Process? Copenhagen as a Case Study.**

**Lars Gemzøe**

### ***Introduction***

All major cities have traffic departments that for years have collected great numbers of data on the vehicular traffic. All changes in the flow and parking of cars are carefully studied and lots of data are collected and analysed before decisions are made on the engineering and design of spaces for vehicular traffic. All this information makes the cars very visible in the planning process when it comes to solving problems for the vehicular traffic. City traffic engineering departments have traditionally taken care of the planning of the public domain where the focus has been the view from the road rather than the view from the sidewalk.

Have anyone heard of a city that has a peoples department that for years would have collected data on the pedestrian traffic and the activities in the public spaces where people are staying and enjoying public life?

There is generally no data collected and very little knowledge on how public spaces are used when it comes to planning of people places. People are always out of focus and invisible in the planning process because there is no data and no tradition for using statistics on pedestrian activities when decisions are made that influence public outdoor life.

The growing number of cars driving and parking in the cities have for years lead to more and more space turned over to the vehicular traffic resulting not only in congestion, pollution, fear of accidents but also to the deterioration of the quality of public spaces for people. The car has invaded the public domain to such an extend that to protect pedestrians streets are turned into defence systems that resembles the ditches and barbed wire of a minor war. Endless rows of bollards, fences along sidewalks or in the middle of the streets to prevent contact between cars and pedestrians. Because the cars do not behave well a lot of the public domain has been rebuild or given all up to cars.

Environments where cars are dominating are often difficult to use for pedestrians. Some spaces are becoming large and boring to cross or difficult to find your way in. Others are turned into "traffic tunnels" where the facades of the buildings have been closed with no doors or windows to the sidewalks creating extremely dull and uninteresting landscapes for people on foot.

To give cars the first priority or to give people on foot first priority implies an important choice between different solutions that has a tremendous effect upon the traffic culture and character of the public life.

When pedestrians become visible other issues are getting in focus than the problems for the car drivers. The question here is what is the quality of the space you have to use? Is it good for walking? Walking is different than other modes of transportation because it is so easy to stop, to sit down and take a break – without having to park any vehicle so walking is closely connected to staying.

***The Inner City of Copenhagen as an example of major changes in the use of public spaces that has been making the city better and better for people on foot year by year.***

In the beginning I mentioned that no cities have “pedestrian departments” that collect data on the pedestrian traffic and the spaces where people are staying and enjoying public life. But in this respect Copenhagen is outstanding because it does have systematic data on how people use the Inner City and how public life has developed through the last 35 years.

Three major studies from 1968, 1986 and 1995 carried out as research projects at the Urban Design Department at the School of Architecture in Copenhagen have supplied politicians, professionals and the general public with information about a remarkable change in the way people use the public spaces in the Inner City of Copenhagen. A series of minor studies have also been made investigating single aspects of the use of public spaces.

In the 1960's there were no tradition for use of public outdoor spaces for meeting and staying. People would be walking on the narrow sidewalks of the inner city squeezed between parked cars so walking was not a great pleasure.

In a series of steps the old main streets of the inner city have been changed from car streets to pedestrian streets and a total other picture has been emerging. Walking is still a fine way of transporting yourself from the public transit to your job or to get to a shop or to a university classroom but walking is also a pleasure.

Copenhagen's first pedestrian street, Stroget, has about 80.000 people walking on any nice summer day and night through a rather narrow street of 10-12 m width.

Stroget was the old main street through the Inner City and when it was changed in 1962 from a street with busses, lorries and cars to a pedestrian only street the number of people walking was surprising to traffic planners. It was far more than any of the wide streets for cars would have. Actually only the most travelled of the national highways would have as many or more cars pr. 24 hours. So the quantity of pedestrian activity alone was already suggesting how successful the first streets were seen from the pedestrian point of view. Here was space for walking and so people did.

The 1968 study showed that the activities in the pedestrian streets at that time were mainly walking and window-shopping. When the next study was carried out in 1986 more streets and several squares had been pedestrianised and the character of the activities had changed a lot. Now a multitude of activities were taking place. The whole scene had changed as music and other sorts of entertainment, political activities, small trade and a growing number of outdoor cafes had taken over.

The data on what people were doing when they stopped walking and were engaged in the many different activities that take place on pedestrian areas clearly showed that spaces that are of high quality in relation to locality, climate, furnishing and design were used more than spaces of low quality. Walking is not necessarily a sign of quality in itself. But when people are stopping up, sitting down and staying that is a sign of quality.

The study in 1995 showed in comparison with the previous studies that the number of people staying in the pedestrianised spaces in the Inner City had multiplied 3-4 times since the first study. The number of people walking through the streets had been rather constant whereas the number of people staying in the spaces had been growing proportionally with the number of car-free square meters that had been made available to pedestrians!

People walk as part of an urban recreation experience where they might have a purpose of their visit but they do a lot of other things while on foot. Studies of people walking in Copenhagen show that the number varies very much with the weather and the seasons. Only half as many people walk in the winter as in the summer. In the winter one may limit the walking to the things one has to do whereas in the summer people come just to enjoy walking. Staying activities are even more linked to the climate as they drop to 1/8 of the volume of a summer's day.

Some of the streets in Copenhagen are "summer streets" while others are "winter streets". Summer streets are more than doubling the number of pedestrians in the summer in relation to the winter period whereas winter streets are streets that have almost the same number of people summer and winter. Most winter streets are streets that are well connected to the major traffic terminals for public transit and thus linked to walking out of necessity whereas the summer streets are used more to walking for pleasure.

Copenhagen has in the last 35 years been through a process that has changed the functions of the public spaces from primarily being traffic to more people oriented urban recreation forms. Today the inner city as a whole is dominated by pedestrian traffic as 80% of all traffic is on foot.

In a long and slow process Copenhagen has reduced the access to the city centre by car, taking away traffic lanes and reducing parking by 2-3% per year in order to change public spaces from parking- and traffic places to people places. Data that did document the growing need for more space for people on foot -versus the never ending need for more parking- has been important for the technical and the political decisions that had to be made.

Through the last 35 years this has changed the whole idea and the use of public spaces in the Inner City. It has also changed the traffic culture in Copenhagen. More and more bicycle lanes have been built. Bicycles have priority in many crossings with traffic lights and driving through the central city districts is faster and easier on a bicycle than in a car. To-day more than one third of all the people going to work in the Inner City districts are using a bicycle and only a third are using private cars. Also in this way the Inner city has become better for walking.

The Copenhagen city centre has - also in comparison with other Scandinavian Capitals - a rather low number of parking places (about 2.500 public parking spots in 1996, most of these in streets and very few parking garages. The gradual reduction in parking spaces (about 600 have been eliminated in the last decade) and the growing cost (app. 4 US dollars per. hour) have gradually taught drivers not to go by car to the city centre - unless they really need to. The city works fine and the low number of parking spaces does not seem to be a great problem.

***The most important changes can be summed up as follows:***

- Since 1962 people in Copenhagen has got six times more square meters for pedestrian use. By 1996 a total of 96.000 car free square meters are available. Practically all of the pedestrian streets were made between 1962 and 1973. After that it has been the development of squares that has dominated.
- 40% of the square meters of pedestrian areas are streets for walking and
- 60% are squares for resting and enjoying life.
- Walking in the city has been remarkable stable since the first pedestrian streets were introduced as they have been full to capacity on any good summer day since then.
- What has changed most dramatically is the development of staying activities. Staying in the Inner City has increased 3-4 times since the first study in 1968. The number of inhabitants in the Greater Copenhagen Area (1,3 million) has been stable but the number of people spending time, staying in the public spaces, has been constantly growing.

Each time 13-14 square meters have been added - an additional person has settled down to enjoy city life. This is a constant correlation through the three main studies of 1968, 1986 and 1995. So each time the city has taken one parking lot away and changed it into a space for people two more people have settled in! An increasing part of the staying activities are taking place at the growing number of out door cafes (from 2900 to 4800 cafe seats during the last 10 years).

***A slow and gradual process***

An important aspect of the development in Copenhagen is the gradual, slow process:

- Car drivers and bicyclists have had time to change traffic habits.
- People on foot have had time to find out ways of using the new spaces.
- Politicians have had time to think and to make decisions based on the success with the first streets. They could make their decisions based on the studies of public life that were published in 1968, 1986 and latest in 1996 which supported the need for more space for the growing number of pedestrian activities. They did not have to make decisions on one big plan but could decide from one successful project to the next in an incremental process.

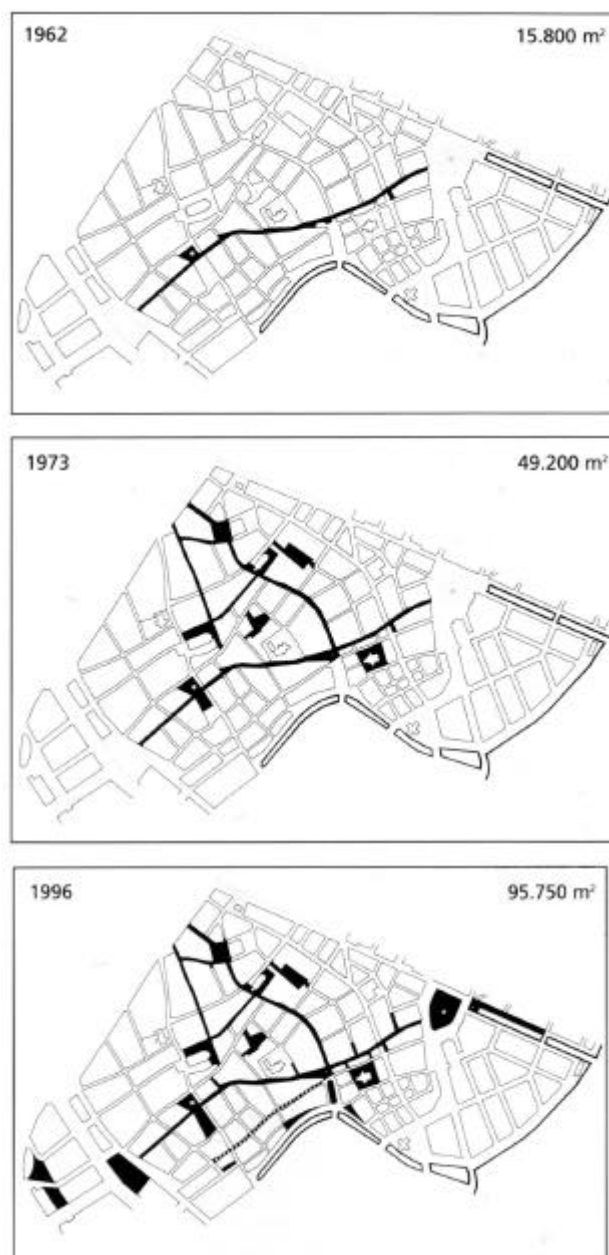
***Conclusions***

- Data on pedestrian activities have played an important role in the decision making and planning process in Copenhagen as it has been making people visible to politicians, planners and designers as well as to the general public.
- Knowledge on design criteria based on detailed studies of people on foot are also of great importance when it comes to design of public spaces.

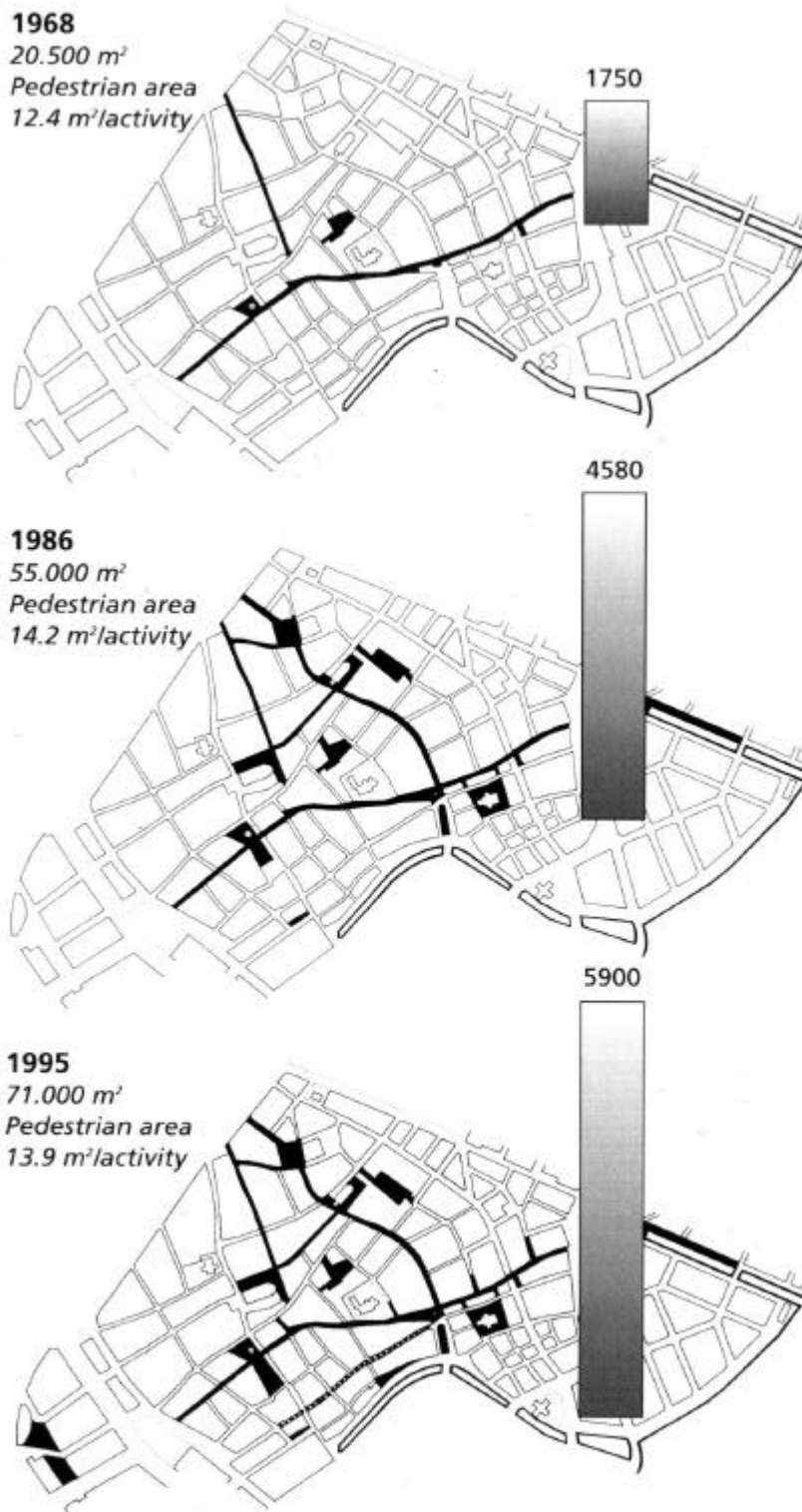
- The data supplied on pedestrian activities have been showing other sorts of problems than the data on the vehicular traffic usually do. In this way the focus of the planning has changed and other priorities have been considered.

***For years we have known that more roads equals more traffic. Now we also know that more space for people of high quality and on the right spot equals more public life.***

The full data on the Copenhagen studies are available in English in a research project: *Public Life - Public Space, Copenhagen 1996* by Jan Gehl and Lars Gemzoe, The Danish Architectural Press and the Royal Danish Academy of Fine Arts School of Architecture Publishers. A general outline of the development in North American city centres and the European city centres is published in English and Danish by the same authors in *Arkitektur DK - 1, 1996*, The Danish Architectural Press. It also covers the renovated public spaces in Copenhagen seen from the architectural point of view.



The development of pedestrian streets and squares in Copenhagen 1962 - 1996.



Average number of people engaged in stationary activities throughout the city center at any time between 12<sup>00</sup> and 16<sup>00</sup> on summer days in 1968, 1986 and 1995.

Development of staying activities in the Inner City of Copenhagen  
The graph is showing the proportional growth of staying activities in relation to the growing number of car-free square meters