HOW TO STUDY PUBLIC LIFE

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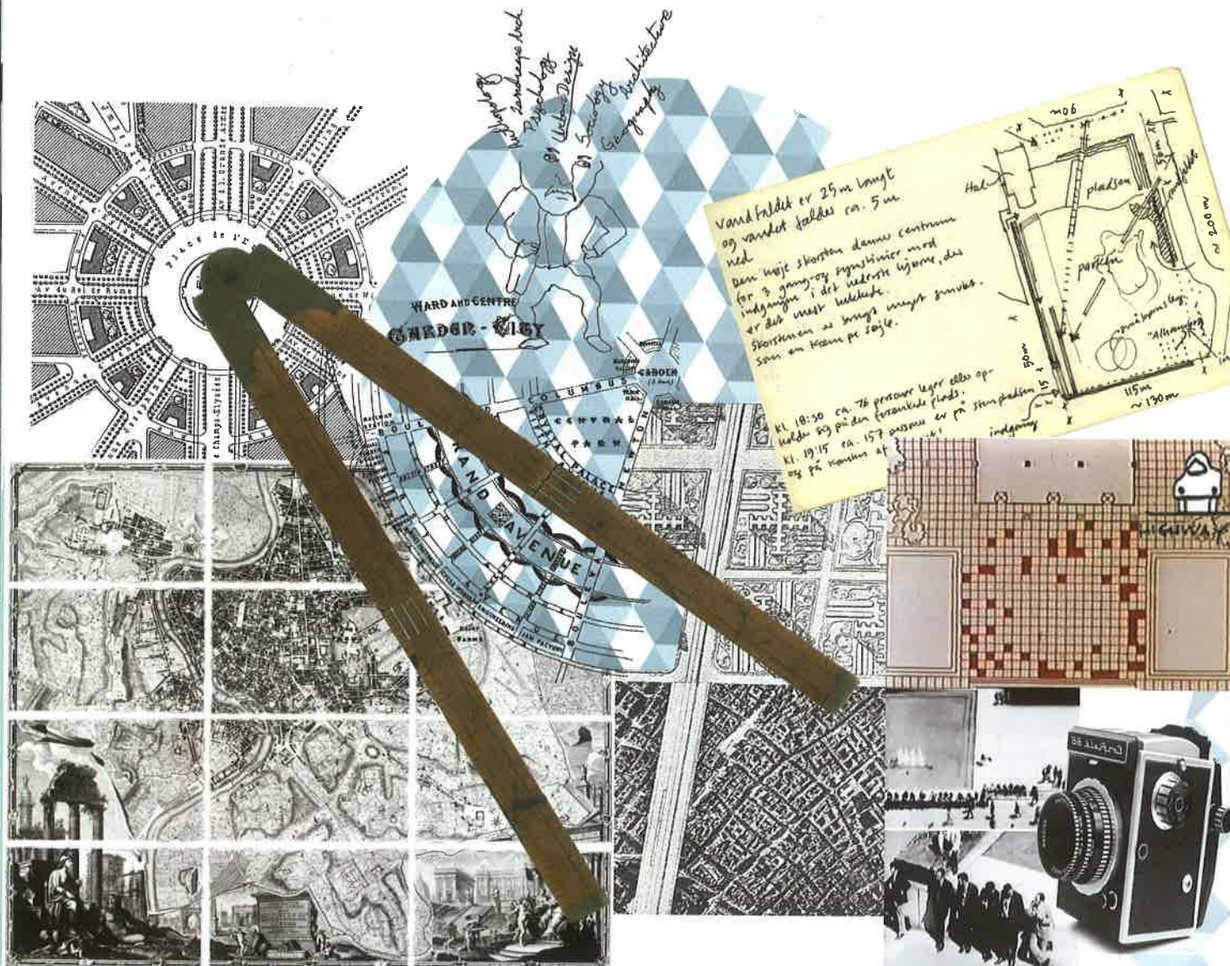


3

COUNTING, MAPPING, TRACKING AND OTHER TOOLS

This chapter describes various tools for systematizing and registering direct observations of the interaction between public space and public life. A few cases of indirect observations are mentioned, such as using cameras or other technical devices to register or look for traces of human activity.

Regardless of the tools selected, it is always necessary to consider the purpose and timing of the study. General questions of this type are dealt with briefly in this chapter, and the key registration tools described. Other tools exist, of course, but we present those that the authors of the books consider the most important, based on their own experiences.

Purpose of Study and Tool Selection

Purpose, budget, time and local conditions determine the tools selected for a study. Will the results be used as the basis for making a political decision, or are some quick before-and-after statistics needed to measure the effect of a project? Are you gathering specific background information as part of a design process, or is your study part of a more general research project to gather basic information over time and across geographic lines?

The choice of tools is dependent on whether the area studied is a delimited public space, a street, a quarter or an entire city. Even for a delimited area, it is necessary to consider the context of the study holistically, including the local physical, cultural and climate aspects. A single tool is rarely sufficient. It is usually necessary to combine various types of investigation.

Choosing Days – Wind and Weather

The purpose of the study and local conditions determine which points in time are relevant for registration. If the study area has a booming night life, the hours right up to and after midnight are important. If the area is residential, perhaps it is only relevant to register data until early evening. Registration at a playground can be wrapped up in the afternoon. There is a big difference between weekdays and weekends, and in general, patterns change on days leading up to holidays.

Since good weather provides the best conditions for outdoor public life, registrations are usually made on days with good weather for the time of year. Naturally, regional differences are dramatic, but for public life studies, the criterion is the kind of weather that provides the best conditions for outdoor life, especially staying. The weather is particularly sensitive for registering stays, because even if inclement weather clears up, people do not sit on wet benches, and if it feels like rain, most people are reluctant to find a seat. If the weather no longer lends itself to staying in public space in the course of a registration day, it can be necessary to postpone the rest of an investigation to another day with better weather. It is usually not a problem to combine registrations from two half days into one useful full-day study.

Registration can be interrupted by factors other than weather. A large crowd of fans on their way to a game or a demonstration would significantly change an ordinary pattern of movement.

The results of registrations will always be a kind of modified truth because, hopefully, nothing is entirely predictable. Unpredictability is what makes cities places where we can spend hours looking at other people, and unpredictability is what makes it so difficult to quite capture the city's wonderfully variable daily rhythm. The impulsiveness of cities heightens the need for the observer to personally experience and notice the factors that influence the urban life. Herein lies one of the principal differences between using man as registrar rather than automated tools and machines.

Manual or Automated Registration Methods

The observation tools described are primarily manual, which by and large can be replaced by automated registration methods. In the 1960s, 70s and 80s, most studies were conducted manually, but newer technological solutions can register numbers and movements remotely. Automated registration makes it possible to process large amounts of data. It does not require the same manpower to conduct observations, but does require investments in equipment as well as in manpower to process the data collected. Therefore, the choice of manual or automated method is often dependent on the size of the study and the price of the equipment. Much of the technical equipment is either not very common or in an early stage of development, which makes it even more relevant to consider the advantages and disadvantages. However, it is likely that automated registration will play a more prominent role in public life studies in future.

In addition, automated registration must often be supplemented by a careful evaluation of the data collected, which can end up being as time-consuming as direct observation.

Simple Tools Almost for Free

All the tools in the public life toolbox were developed for a pragmatic reason: to improve conditions for people in cities by making people visible and to provide information to qualify the work of creating cities for people. It is also important for the tools to function in practice. The tools can be adapted to fit a specific task, and are usually developed to meet the general professional, societal and technological development.

Generally, the tools are simple and immediate, and the studies can be conducted on a very modest budget. Most studies only require a pen, a piece of paper, and perhaps a counter and stopwatch. This means that non-experts can conduct the studies without a large expenditure for tools. The same tools can be used for large or small studies.

Key for all studies are observation and the use of good common sense. The tools are aids for collecting and systematizing information. The choice of one tool over another is not as important as choosing relevant tools and adapting them to the purpose of the study.

In order to compare the results within a study or compare with later studies in the same or some other place, it is essential to make precise and comparable registrations. It is also important to carefully note weather conditions and time of day, day of the week and month in order to conduct similar studies later.

Counting

Counting is a widely used tool in public life studies. In principle, everything can be counted, which provides numbers for making comparisons before and after, between different geographic areas or over time.

Mapping

Activities, people, places for staying and much more can be plotted in, that is, drawn as symbols on a plan of an area being studied to mark the number and type of activities and where they take place. This is also called *behavioral mapping*.

Tracing

People's movements inside or crossing a limited space can be drawn as lines of movement on a plan of the area being studied.

Tracking

In order to observe people's movements over a large area or for a longer time, observers can discreetly follow people without their knowing it or follow someone who knows and agrees to be followed and observed. This is also called *shadowing*.

Looking for traces

Human activity often leaves traces such as litter in the streets, dirt patches on grass etc., which gives the observer information about the city life. These traces can be registered through counting, photograping or mapping.

Photographing

Photographing is an essential part of public life studies to document situations where urban life and form either interact or fail to interact after initiatives have been taken.

Keeping a diary

Keeping a diary can register details and nuances about the interaction between public life and space, noting observations that can later be categorized and/or quantified.

Test walks

Taking a walk while observing the surrounding life can be more or less systematic, but the aim is that the observer has a chance to notice problems and potentials for city life on a given route.

Counting

Counting is basic to public life studies. In principle, everything can be counted: number of people, gender division, how many people are talking to each other, how many are smiling, how many are walking alone or in groups, how many are active, how many are talking on their cell phones, how many shop windows have metal bars after closing, how many banks there are, and so on.

What is often registered is how many people are moving (pedestrian flow) and how many are staying (stationary activities). Counting provides quantitative data that can be used to qualify projects and as arguments in making decisions.

Numbers can be registered using a handheld counter or by simply making marks on a piece of paper when people walk past an imaginary line. If the goal is to count people staying, the observer typically walks around the space and does a headcount.

Counting for ten minutes, once an hour, provides a rather precise picture of the daily rhythm. City life has shown to be quite rhythmic and uniform from one day to the next, rather like a lung that breathes. Yesterday is very much like tomorrow.[1]

Naturally, it is crucial to conduct the count for exactly ten minutes, because this is a random sample that will later have to be repeated in order to calculate pedestrian traffic per hour. All of the individual hours will then be compiled in order to get an overview of the day. Therefore, even small inaccuracies can invalidate the results. If the site is thinly populated, counting must be continued for a longer interval in order to reduce uncertainly. If anything unexpected happens, it must be noted: for example, a demonstration involving lots of people, road work or anything else that might influence the number of people present.

By conducting headcounts before and after initiatives in city space, planners can quickly and simply evaluate whether the initiative resulted in more life in the city, broader representation of age groups, etc. Counting is typically conducted over a longer period in order to compare different times of day, week or year.

Headcounts in Chongqing, China.[2] Registering all the pedestrians who walk by. If there are many pedestrians, a counter is invaluable (right).

Mapping

Mapping behavior is simply mapping what happens on a plan of the space or area being investigated. This technique is typically used to indicate stays, that is, where people are standing and sitting. The locations of where people stay are drawn at different times of day or over longer periods. The maps can also be combined layer on layer, which gradually provides a clearer picture of the general pattern of staying activities.

In order to envision activities throughout the day, it is essential to register several samples in the form of momentary 'pictures' in the course of a day. This can be done by mapping stays on a plan of the area being investigated at selected points in time throughout the day. Thus mapping shows where the stays are made, and the observer can use a symbol (an X, a circle, a square) to represent the different types of stationary activities – what is going on, in other words. One registration answers several questions, and the qualitative aspects about where and what supplement the quantitative nature of the counting.

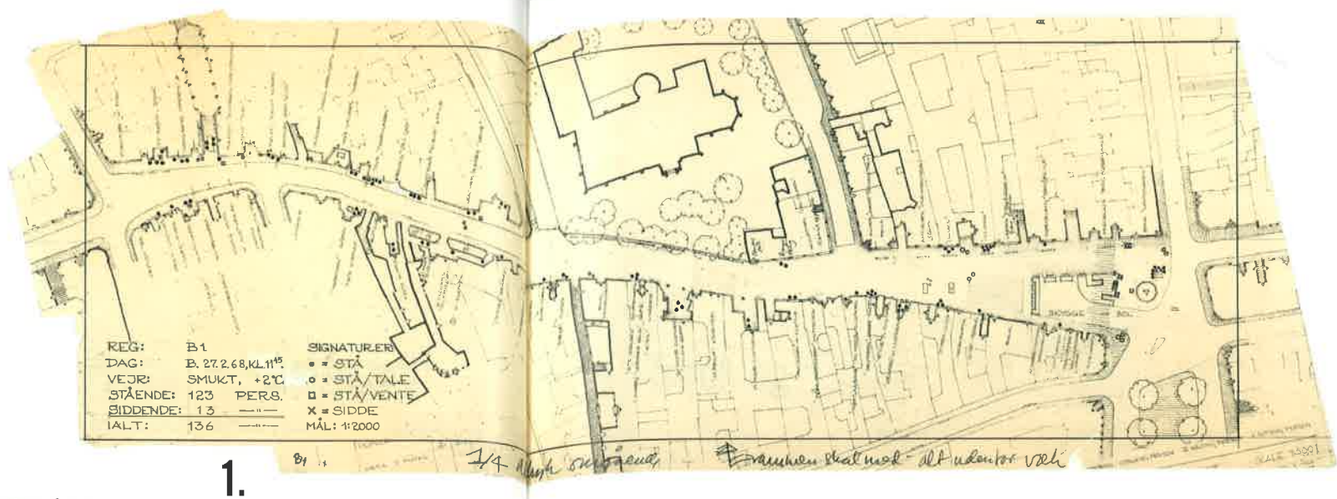
This method provides a picture of a moment in a given place. It is like an aerial photo that fast-freezes a situation. If the entire space is visible to the observer, he or she can plot all the activities on the plan from one vantage point. If the space is large, the observer must walk through it, mapping stays and putting the many pieces together to get the total picture. When walking through a space, it is important for observers not to be distracted by what is going on behind them, but rather to focus on what is happening abreast. The point is to capture one single picture of the moment rather than several.

Original captions from "People in Cities", Arkitekten *no. 20, 1968:*

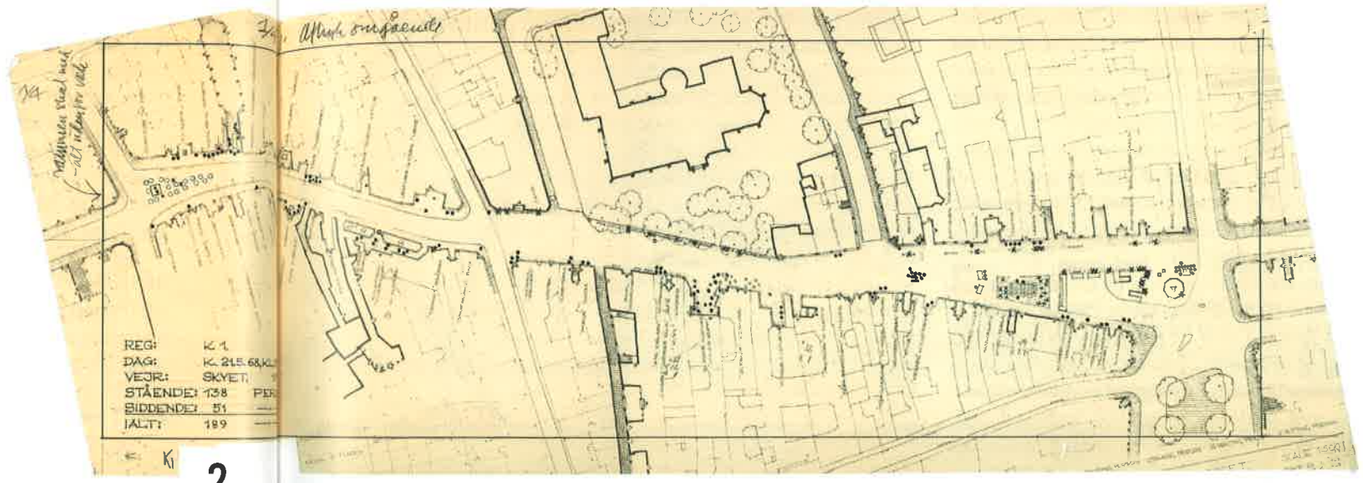
1. "Winter day. Tuesday, 2.27.68 (...) Plan B1, which indicates standing and seated people in the area at 11.45 a.m., shows that all the seating in the sun is occupied, while none of the other benches in the area are being used. The largest concentration of people standing is near the hotdog stand on Amagertorv. The plan also shows that people standing to talk and standing to wait are either in the middle of the street or along the façades."

2. "Spring day. Tuesday, 05.21.68 (...) As in February, about 100 people on average are standing in front of shop windows, but all other forms of activity have increased. Most marked is the growth in the number of people standing and looking at what is going on. It is warmer now, and more is happening, therefore more to look at."

3. "Summer day. Wednesday, 07.24.68 (...) The number of pedestrians, about 30%, standing in front of shop windows is unchanged. This would appear to be a constant. (...) In general it can be observed that the center of gravity in the area has shifted from the commercial street Vimmelskaftet to the more recreational square Amagertorv."[13]



1.



2.

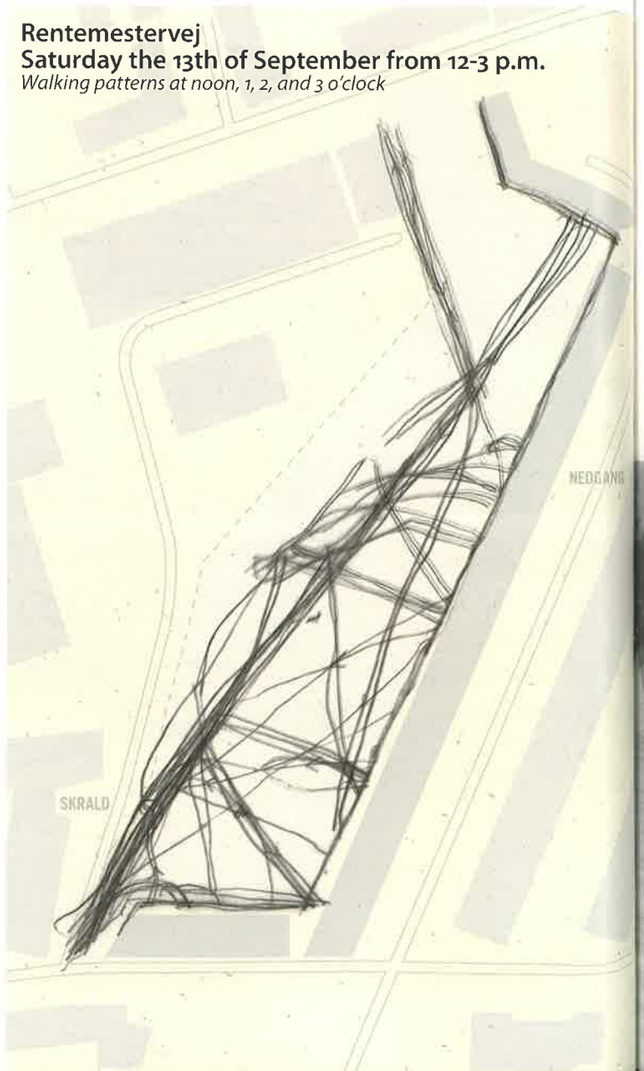
3.

Tracing

Registering movement can provide basic knowledge about movement patterns as well as concrete knowledge about movements in a specific site. The goal can be to gather information such as walking sequence, choice of direction, flow, which entrances are used most, which least, and so on.

Tracing means drawing lines of movement on a plan. People's movements are watched in a given space in full view of the observer. The observer draws the movements as lines on a plan of the area during a specific time period, such as 10 minutes or half an hour.

Tracing is not exact, as it can be difficult to represent lines of movement if there are many people moving through a given space. It may be necessary to divide the space into smaller segments. Tracing movements on a plan provides a clear picture of dominant and subordinate lines of flow as well as areas that are less trafficked. GPS equipment can be used to register movements in a large area such as an entire city center or over a long period.



Registration, hand-drawn sketch: Movements on a plan made in the courtyard of the Emaljehaven housing complex in Copenhagen, by Gehl Architects in 2008. Every line represents one person's movements in the space. Lines were drawn every 10 minutes on tracing paper, which was then layered to provide an overall picture of the movement patterns.

Tracking

In addition to standing in one place to register movement, observers can also follow selected people in order to register their movements, which is called *shadowing* or *tracking*. This method is useful for measuring walking speed, or where, when and to what extent certain activities take place along a route. Activities could be actual stays or more subtle acts such as turning the head, stopping, making unexpected detours, etc. The method could also be used, for example, to map the route to and from a school in order to make it safer.

Speed observations can be made with the naked eye and a stop watch by following the person whose speed you want to measure. Observers must keep a reasonable distance so that the person being observed does not get the feeling that he or she is being followed. Another option is to observe speed over a measured distance from a window or other site above street level.

If the goal is to get a total picture of an individual's movements over a period of time, a pedometer is useful. GPS registration is also useful for measuring speeds on given routes. A variation of shadowing is to follow someone who knows and agrees to being followed and observed. GPS registration can be used for remote shadowing of selected people.

Photo from the tracking registrations on Strøget, Copenhagen's main pedestrian street, in December 2011.[4] The observer follows randomly selected pedestrians (every third), using a stop-watch to time how long it takes the person to walk 100 meters. When the person being shadowed passes the imaginary 100-meter line, the watch is stopped. If the pedestrian does not follow the pre-measured route, tracking that particular person is abandoned.

Looking for Traces

Human activity can also be observed indirectly by looking for traces. Indirect observation requires observers to sharpen their senses just like detectives on the trail of human activity or the lack hereof.

A core tenet of public life studies is to test the actual conditions in the city by observing and experiencing them firsthand and then considering which elements interact and which do not. What is relevant for testing differs from place to place.

Looking for traces could mean recording footprints in the snow, which attest to the lines people follow when they cross a square, for example. Traces might also be found in trampled paths over grass or gravel, or as evidence of children's play in the form of temporarily abandoned toys. Traces could be tables, chairs and potted plans left outside in the evening, which indicate a quarter where residents confidently move their living room into public space and leave it there. Traces could show just the opposite: hermetically sealed shutters and bare porches can indicate a quarter with no signs of life. Traces can be things left behind or things used in ways not originally intended, such as traces of skateboarding on park benches.

Left: Tracks left in the snow at Town Hall Square, Copenhagen, Denmark

Right: Like everyone else, architecture students take the most direct route: The Royal Danish Academy of Fine Arts, School of Architecture, Copenhagen, Denmark.

Photographing

Photographs are frequently used in the field of public life studies to illustrate situations. Photographs and film can describe situations showing the interaction or lack thereof between urban form and life. They can also be used to document the character of a site before and after an initiative.

While the human eye can observe and register, photographs and film are good aids for communication. Photographing and filming can also be a good tool for fast-freezing situations for later documentation and analysis. By later studying photographs or film, it is possible to discover new connections or to go into detail with otherwise complex city situations that are difficult to fully comprehend with the naked eye.

Photographs often illustrate and enliven data. In the field of public life studies, photographs of public life scenes are not subjected to the usual aesthetic principles so dear to the hearts of architects generally. Here the emphasis is not on design but rather on situations that occur in the interaction between public life and public space.

Photographs can be used generally as well as in specific projects to document life and conditions for life in public space. And even though it is a bit of a cliché, one picture can be worth 1000 words, particularly because the viewer can identify with the people in the pictures, which are often snapped at eye level.

Variations include time-lapse photography or video sequences to show situations over time, with or without the presence of the observer. The angle and size of the lens is relevant if either film or photograph is to correspond to the human field of vision.

Good observation post, good company and good study objects: Piazza Navona, Rome, Italy.

Keeping a Diary

All of the tools described above provide only random samples of the interaction of public life and public space. These samples of what is taking place can rarely provide all the details. However, details can be vital additions to our understanding of how life in public space develops as sequences and processes. One way to add detail is to keep a diary.

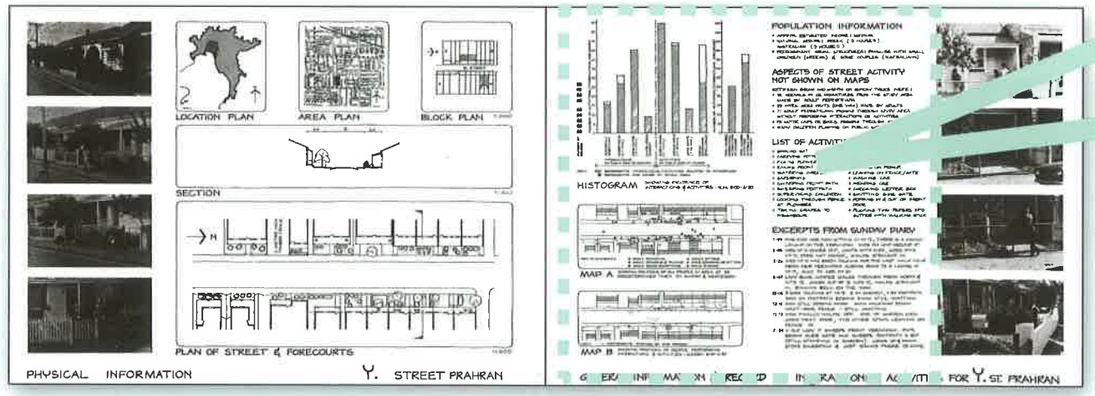
Noting details and nuances can increase knowledge about human behavior in public space for individual projects as well as to add to our more basic understanding in order to develop the field. The method is often used as a qualitative supplement to more quantitative material in order to explain and elucidate hard data.

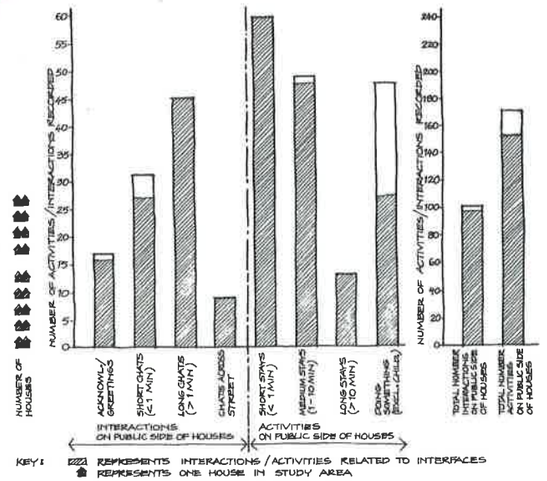
Keeping a diary is a method of noting observations in real time and systematically, with more detail than in quantitative 'sample' studies. The observer can note everything of relevance. Explanations can be added to general categories such as standing or sitting, or brief narratives can aid our understanding of where, why and how life plays out in an event that is not exclusively purpose-driven. Examples could include someone mowing a front-yard lawn at several times during the day, or an older woman who empties her mailbox several times on a Sunday.[6]

Keeping a diary can also be used as a supplementary activity, with the observer adding explanations and descriptions to facts and figures.

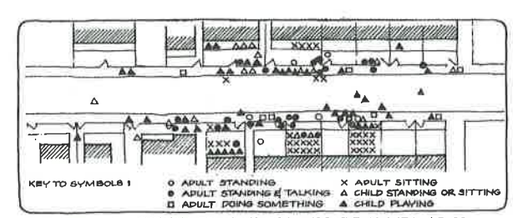
Keeping a diary can register events that cannot easily be documented using more traditional methods. This example shows notes from a study of residential streets in Melbourne, Australia. Shown at right is a page from a diary for the Melbourne study.[5]

The two-page spread below depicts Y Street, Prahran, Melbourne, Australia. The physical framework is described on the left-hand page – the dimensions and form of the street. The right-hand page describes the activities taking place on the street during one Sunday.

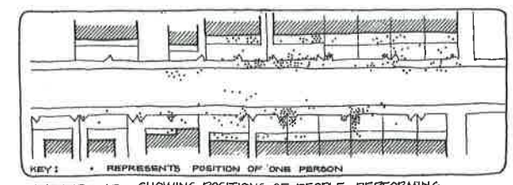




HISTOGRAM SHOWING INCIDENCE OF INTERACTIONS & ACTIVITIES - SUN. 8·00-6·30



MAP A SHOWING POSITIONS OF ALL PEOPLE IN AREA AT 38 PREDETERMINED TIMES ON SUNDAY & WEDNESDAY



MAP B SHOWING POSITIONS OF PEOPLE PERFORMING INTERACTIONS & ACTIVITIES - SUNDAY 8·00-6·30

POPULATION INFORMATION

- APPROX. ESTIMATED INCOME: MEDIUM
- NATIONAL GROUPS: GREEK (9 HOUSES), AUSTRALIAN (9 HOUSES).
- PREDOMINANT SOCIAL STRUCTURES: FAMILIES WITH SMALL CHILDREN (GREEKS) & SOME COUPLES (AUSTRALIANS)

ASPECTS OF STREET ACTIVITY NOT SHOWN ON MAPS

BETWEEN 8·30AM AND 6·30PM ON SUNDAY THERE WERE:

- 92 ARRIVALS IN OR DEPARTURES FROM THE STUDY AREA MADE BY ADULT PEDESTRIANS
- 29 INTRA-AREA VISITS (ONE WAY) MADE BY ADULTS
- 71 ADULT PEDESTRIANS PASSING THROUGH STUDY AREA WITHOUT PERFORMING INTERACTIONS OR ACTIVITIES
- 191 MOTOR CARS OR BIKES PASSING THROUGH STUDY AREA
- MANY CHILDREN PLAYING ON PUBLIC SIDE OF HOUSES

LIST OF ACTIVITIES ON SUNDAY

- SHAKING MAT
- CARRYING POTPLANTS
- PICKING FLOWERS
- RAKING FRONT GRASS
- WATERING GARDEN
- GARDENING
- SWEEPING FRONT PATH
- SWEEPING FOOTPATH
- SUPERVISING CHILDREN
- LOOKING THROUGH FENCE AT FLOWERS
- TAKING GRAPES TO NEIGHBOUR
- WALKING DOGS
- SITTING ON VERANDAH SEATS
- SITTING IN GATEWAY
- SITTING ON FENCE
- LEANING ON FENCE/GATE
- WASHING CAR
- MENDING CAR
- CHECKING LETTER BOX
- SHUTTING SIDE GATE
- POPPING IN & OUT OF FRONT DOOR
- FLICKING TINY PAPERS INTO GUTTER WITH WALKING STICK

EXCERPTS FROM SUNDAY DIARY

1·59 FIVE KIDS ARE NOW SITTING IN Nº 12; THERE IS A CHAISE LONGUE ON THE VERANDAH. KIDS ON AND AROUND IT.

2·06 MRS Nº 12 COMES OUT, CHATS WITH KIDS, GOES INTO Nº 10, DOES NOT KNOCK, WALKS STRAIGHT IN.

2·26 MRS Nº 16 HAS BEEN TALKING FOR THE LAST HALF HOUR FROM HER VERANDAH ACROSS ROAD TO 2 LADIES IN Nº 13, ALSO TO MRS Nº 20

2·47 LADY BLUE JUMPER WALKS THROUGH FROM NORTH & INTO 12. COMES OUT OF 12 INTO 10, WALKS STRAIGHT IN, RINGING BELL ON THE WAY.

12·06 3 MEN TALKING AT Nº 13. 2 IN GARDEN, 1 ON FOOTPATH. MAN ON FOOTPATH EDGING AWAY STILL CHATTING.

12·10 MAN STILL EDGING AWAY. MAN HALFWAY DOWN NEXT-DOOR FENCE – STILL CHATTING

12·13 MAN FINALLY WALKS OFF. ONE OF GARDEN MEN GOES NEXT DOOR; THE OTHER STAYS LEANING ON FENCE 13.

2·34 V. OLD LADY 17 SWEEPS FRONT VERANDAH. PUTS BROOM OVER GATE AND SWEEPS FOOTPATH A BIT (STILL STANDING IN GARDEN) LOOKS UP & DOWN. STOPS SWEEPING & JUST STANDS THERE. (10 MINS)

Test Walks

To make test walks, the observer walks selected important routes, noting waiting times, possible hindrances and/or diversions on the way.

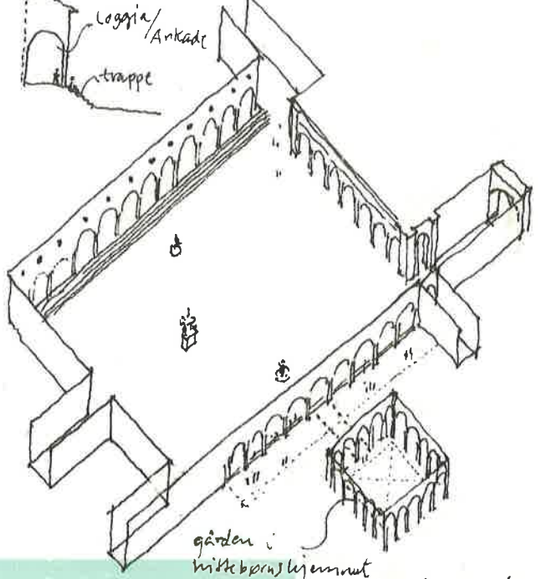
There can be great differences in walking a distance measured in sight lines and a theoretical idea about how long it takes to walk from point A to point B, and the time it actually takes to walk that distance. The actual walk can be slowed by having to wait at stoplights or by other hindrances that not only slow the pedestrian but make the walk frustrating or even unpleasant. Test walks are a good tool for discovering this type of information.

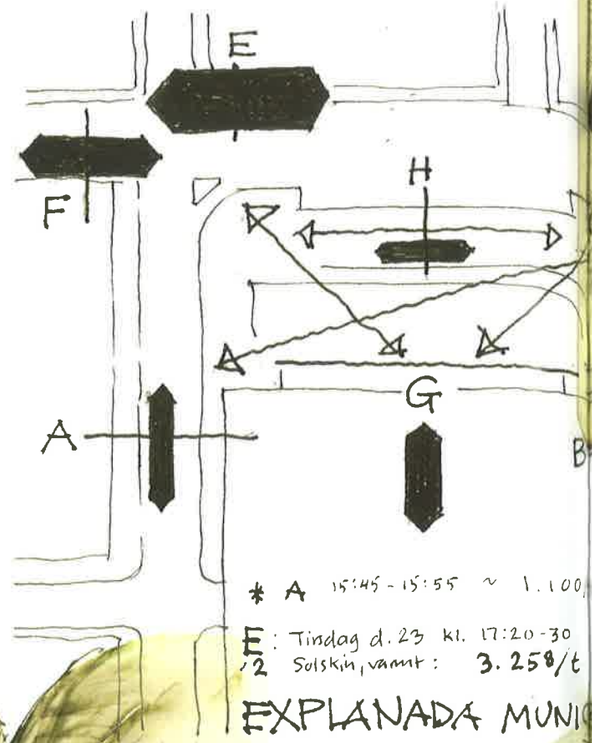
Test walks were carried out as an important element in the public life studies conducted in Perth and Sydney, Australia (1994 and 2007, respectively). In both cities, pedestrians spent a significant amount of their time waiting at the many traffic lights prioritizing car traffic.[7] The test walks proved to be a strong political tool in efforts to provide better conditions for pedestrian traffic.

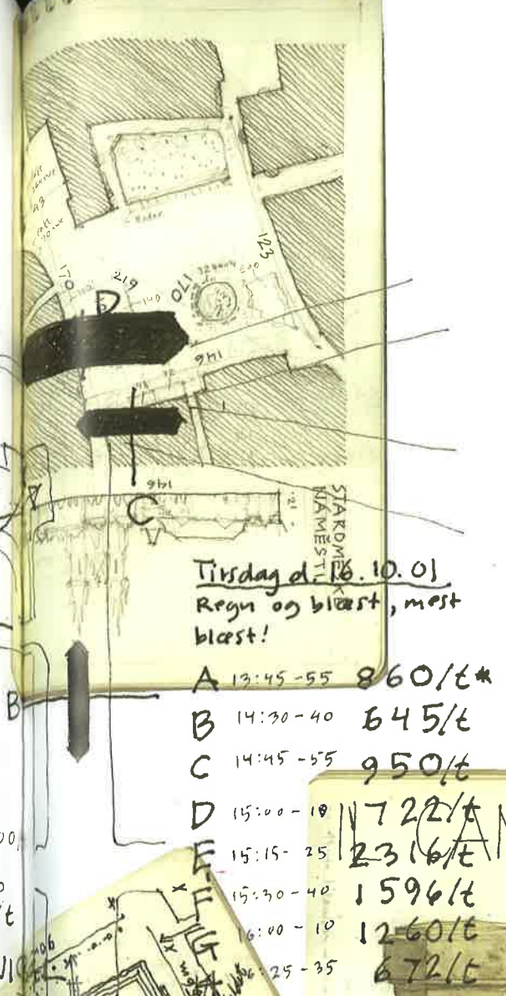
Test walks in Sydney showed that up to 52% of total walking time was spent waiting at traffic lights.[8]

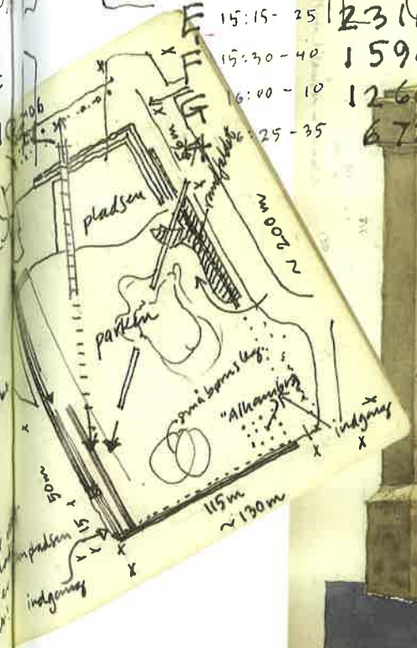
HOW THEY DID IT: RESEARCH NOTES

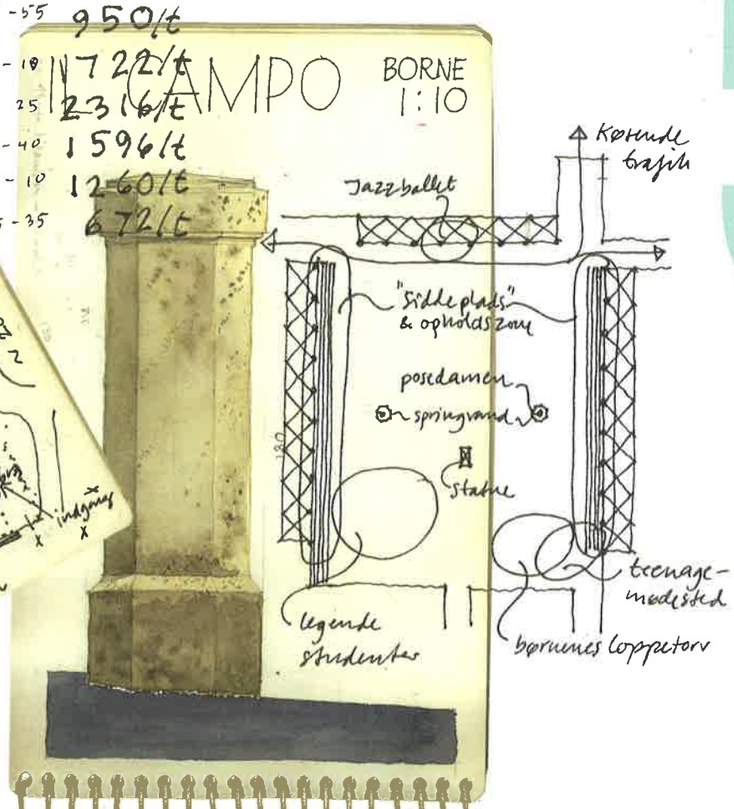
5











It is one thing to read about tools or adopt theories about how people might behave in public space, but something quite different to be observing out in the field.

The references in this chapter are like pages torn from notebooks: pages with notes about why and how various tools were used, which areas selected for study, etc. Together the varied stories provide a picture of the breadth of public life studies, and individually they can serve as specific inspiration for studies.

The brief research stories describe the development and use of tools for public life studies. They are told in retrospect and, as far as possible, from the field where tools are often developed and adapted to the individual situation. Emphasis is on the selection, development and use of tools rather than on the results of the individual studies. Some references are the description of a segment of a larger study.

Examples provide firsthand accounts of why and how the interaction between public life and public space is studied. While the examples are primarily from the authors and others at Gehl Architects, studies by other researchers are included to show other methods and points of view.

Every story is framed by a headline plus factual information about who conducted the study, where and how it was carried out and the source, if the study has been published. In this case the earliest reference will be given, so that the reader can find the original study.

The tools for public life studies are developed, adjusted and adapted to the purpose of individual studies and the local context in the field. The photographs opposite show observers in various cities: top left, studies in Perth, West Australia, 1978; top right, observations in Chongqing, China, 2010; middle left, close-up of the counting process in Adelaide, Australia, 2011; middle right, Jan Gehl photographing in Melbourne, Australia, 2013; bottom, public life registrations in Chennai, India, 2010.

MANY GOOD REASONS

Studying activities and excuses for being in public space

Who: Jan Gehl
Where: City space in Italy and Denmark
When: 1965-66
Method Photo documentation
Published: Jan Gehl and Ingrid Gehl, "Mennesker i byer" (*People in Cities*. In Danish), *Arkitekten* 21/1966[8]

In 1965, Jan Gehl received a grant for a six-month study tour to Italy to gather basic material about the interaction between public space and public life. Situations that supported the data gathered were photographed underway.

It was clear early on in the process that people do not always have an obviously practical reason for being in public space. If you ask them directly, they might tell you that they are in town to shop or run errands. The many good reasons and sensible arguments made for being in public space often prove to be rational explanations for activity patterns that weave together errands and pleasure. In this context, rationally explained behavior can cover stays in public space for the purpose of looking at people and public life in general. The selected photographs from Italy (and one from Denmark) on the opposite page show the ambiguity of actions, including a number of excuses for staying in public space.

Later studies supported this conclusion with data, but in these early studies, it is the photographs that document a number of excuses for people to be in public space.

The observers kept their eyes and ears open while gathering data and taking photographs over a long period, which led them to conclude that people's presence in public space can often be characterized as postponed necessity. While it is true that people leave home for a rational reason, in many situations the real reason for choosing public space is simply to be there – to see and be seen, in other words.

The observations underline the importance of making sure that public space has something to offer, and that this 'something' need not be a huge display of flora and fountains. A bench to sit on or a couple of pigeons for entertainment can be enough to create life in public space – but the most important element is other people.

The photographs illustrate several ways of embracing public space, various types of activities. Motifs are people in public space, and how public space and buildings can support – or discourage – human activity. In contrast to traditional architectural photographs, here individual architectural traits are secondary to the public life unfolding in public space.

Over the years, Jan Gehl has captured innumerable small situations that describe people's behavior in cities. These photographs from the mid-1960s were taken before the digital age, and the motifs were carefully selected indeed, because it was expensive to take and develop pictures.

The function of the city for people

Jan Gehl "Mennesker i byer" ("People in Cities". *In Danish)* Arkitekten *no. 21, 1966*[9]

Need for social acknowledgement. Promenading is one of the ways to satisfy the need to see and be seen. (Rome, Italy)

A newspaper is a handy prop to use as an excuse for staying in an eventful place in the city. (Mantova, Italy)

The need for passivity. The city's active spaces provide highly acceptable conditions for people to be passive. (Lucca, Italy)

Supervising children at play is an excellent reason for these mothers to stay in public space. (Blågårds Square, Copenhagen, Denmark)

The need for movement, light and air. These needs are secondary in the city, because they can be satisfied in so many other places. (Arezzo, Italy)

Hungry pigeons can be the purpose of a walk as well as an acceptable excuse for staying in public space. (Milan, Italy)

ACTION RESEARCH

From empty stretch of gravel to active playground in one day

Who:	Residents from the area and students from Copenhagen universities
Where:	Høje Gladsaxe, newly built public housing complex in a suburb of Copenhagen, Denmark
When:	Saturday, April 29, 1969
Method:	Action research
Published:	Gehl et al., "SPAS 4. Konstruktionen i Høje Gladsaxe" (*SPAS 4. The Construction in Høje Gladsaxe*. In Danish), Akademisk Forlag 1969[13]

"Our Fathers on High" was the title of a highly critical review of the newly built 13-story public housing complex in Høje Gladsaxe. The starting point of the review, written by Jan Gehl and published in the journal *Landskab* (*Landscape*. In Danish) no. 7, 1967, was that the outdoor areas were boring in the extreme: 'Less is more' modernism converted into public housing. Several preliminary activity studies were conducted at the site, which showed that the outdoor areas were seldom used, and that primarily only women and children were in residence during the day. Clearly neither the architecture nor the landscape planning was aimed at these groups, but rather at the fathers of the households in the top stories, who could see all the way to Sweden while they ate dinner.[14]

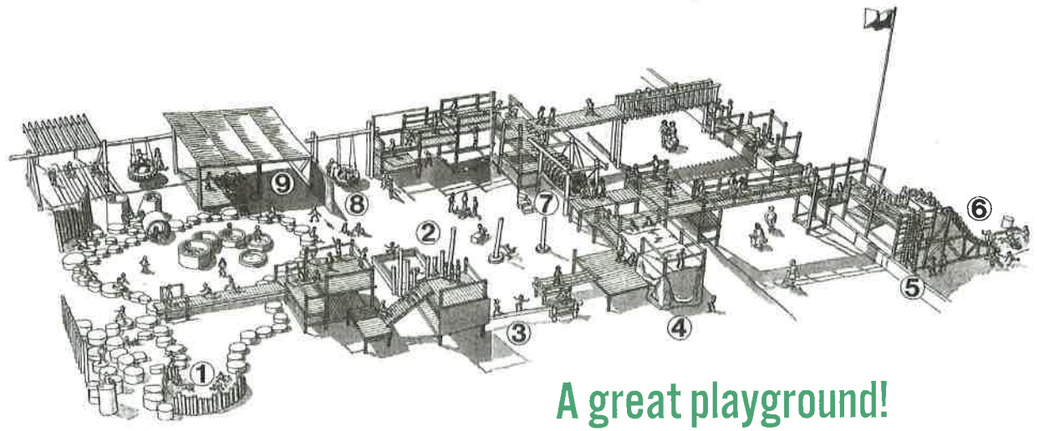
The article created quite a stir and became one of many critical pieces about the wave of modernistic housing being built at the time. This was also the period in which the first studies appeared showing the difficulty children had in using outdoor areas in multi-story housing complexes. All in all, it became clear that there were special problems concerning multi-story housing complexes, and that in Høje Gladsaxe in particular, the outdoor areas were unusually rigid and uninspired.

A large group of parents who lived in the complex lobbied the housing societies and the local authorities to improve playground opportunities for their children, but to no avail. Then the group contacted SPAS (a study group consisting of sociologists, psychologists and architects) at The Royal Danish Academy of Fine Arts, School of Architecture. On April 29, 1969, after intensive and close cooperation, residents and students were ready to embark on the unauthorized building of a large adventure playground on an empty stretch of gravel in front of the multi-story complex.

Working from early morning until late at night, 50 residents and 50 students built the large playground in only one day. The action was so comprehensive and the goal so popular that the authorities made no attempt to halt the illegal endeavor. The playground became a huge success – both while it was being built – and for many years later.

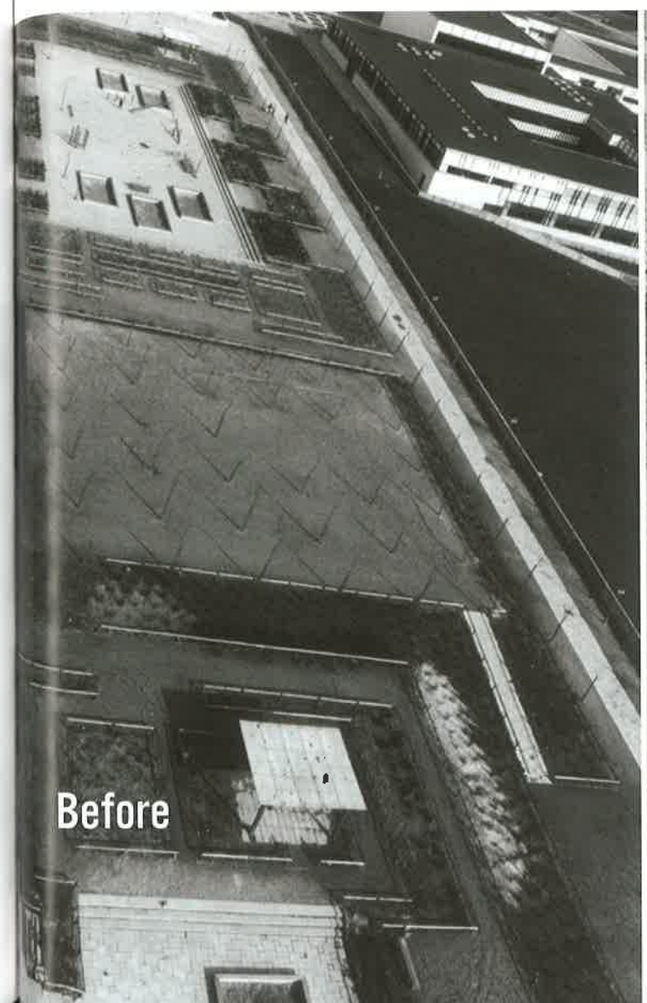
Extract from the original caption from SPAS *4, 1969 for the drawing (above right) from the magazine* Bo Bedre*: 1. The sandbox for the youngest children was located near the housing blocks 9. A playground in the rain is a sad sight, but this playground has a covered area.*[15]

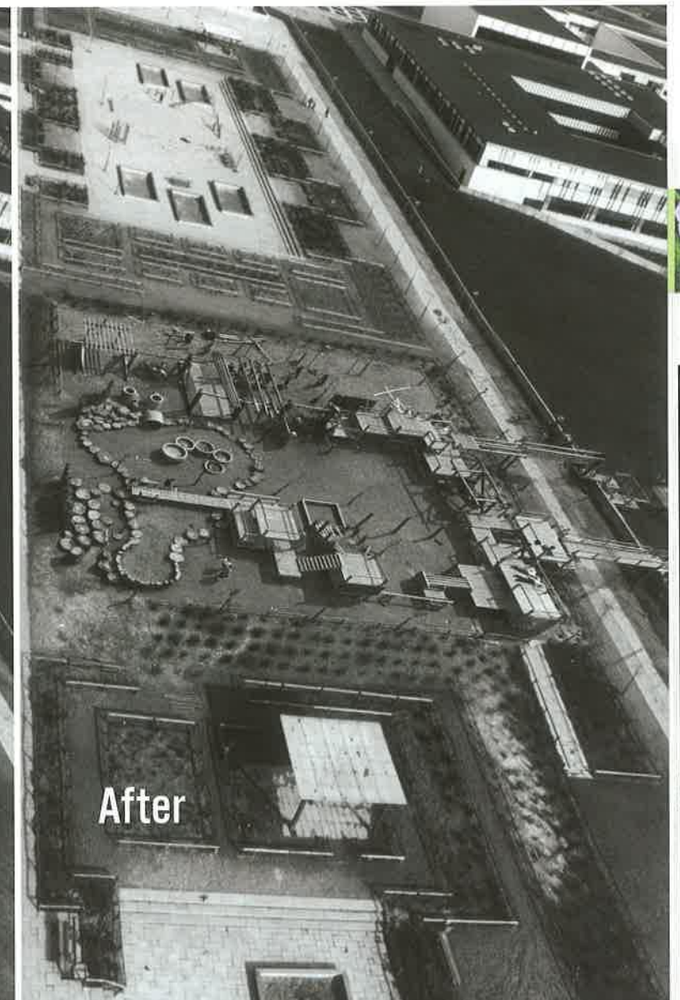
The playground action at Høje Gladsaxe was carried out as a protest against modernism's neglect of human needs. The goal was to give residents – especially children – in Høje Gladsaxe better opportunities for expression, as well as to stir up debate about modernism's ideals and buildings. The before-and-after pictures show how the playground breaks with the straight geometric lines of modernism by 'bridging' the borderlines.



A great playground!

Illustration from Bo Bedre *no. 10, 1969.*





The diary method came into its own on a residential street in the Fitzroy neighborhood in Melbourne in 1976. The observers kept a diary to register details of the activities on the street – from early in the morning until late at night.

The bubble contains excerpts from a similar diary kept in connection with later studies in Melbourne.[16]

DIARY METHOD

Capturing details and nuances

Who:	Jan Gehl with a study group from the School of Architecture, University of Melbourne
Where:	Fitzroy, Melbourne, Australia
When:	Saturdays in March, 1976
Method:	Keeping a diary
Published:	Not published

In March of 1976, students from the School of Architecture in Melbourne were tasked with spending 24 hours in a self-selected site in the city in order to document their experiences. They were divided into groups of two or three and given free choice of tools with which to document their observations by drawing, photographing, counting, writing, making sound recordings or using other techniques. The student groups were spread throughout the city: zoo, market, train station, prison, local newspaper offices, etc.

Two students decided to spend 24 hours in a typical residential street of one- and two-story townhouses, all with front yards. They selected a 100-meter section of the street, and took up their positions in the middle of the night in order to wait for dawn and for residents to begin appearing in their yards and street.

Based on several pilot studies, the decision was made to record all of the activities on the street in the form of a diary. Recording would cover everything that happened on the street from façade to façade, that is, in the front yards, the area around the front fences, the street and sidewalk.

A complete record of everything that happened was noted in the diary. Every time someone came out of one of the houses or passed along the street, the gender, age and street address (if relevant) were noted. Also written down was the type of activity the person was involved in, where it took place, and whether it was a social activity (conversation, greeting, children playing, etc.). A very important element in the process of notation was registering how much time people spent on each activity.

The fact that there were observers on the street noting down everything happening from dawn to dusk naturally aroused the curiosity of the street's residents. In anticipation, the two students had concocted a cover story: that they were architecture students carrying out a study of traffic safety in residential streets. That seemed plausible and residents indicated that such a study was a meaningful activity for architecture students. The acceptance of the residents meant that after a bout of initial curiosity, they quickly ignored the observers, who were able to record hundreds of activity notes from just one day spent observing a 100-meter section of the street.

Their notes provided an overview of what took place along the street: how many people were outside, who they were (gender and age), what happened, what part of the physical environment was used for activities by whom and for what kinds of activities. The more activities on the street, the more meetings between people and social activities. All very interesting indeed.

However, what was most interesting is that by being on site as observers for a long cohesive period, the students were able to note not only activity patterns in rough outline, but also a large number of brief activities that could be measured in seconds: greetings, waves, short stops on otherwise fast walks, heads turning, etc. By far the majority of the day's activities were these brief, spontaneous episodes. In combination with longer activities, these bits and pieces could be formed into a complex and dramatic 'street ballet' in this ordinary residential street.

Being on site for a long uninterrupted period was the key to gaining a detailed understanding of the interaction between public space and public life. Most other methods used to study public life are based on studying limited periods as 'samples' and thus overlook many of the small but important details.

LIVELY CITY SPACE

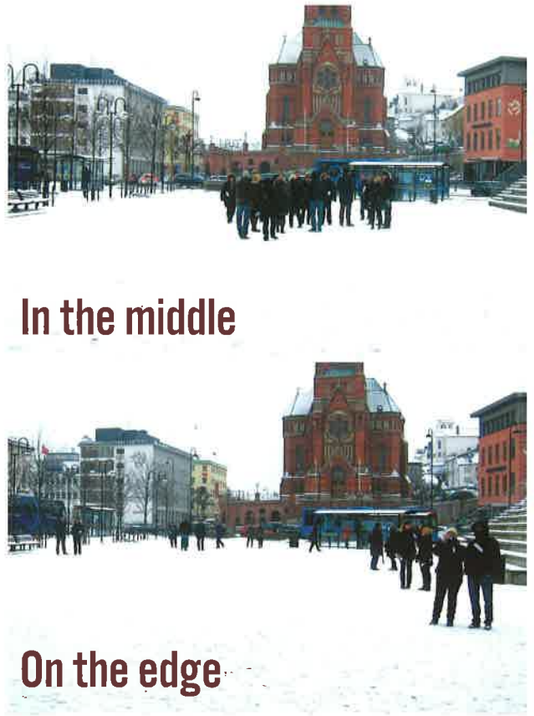
William H. Whyte's statistics from New York tested in a small Norwegian city

Who: Camilla Richter-Friis van Deurs, Gehl Architects and workshop participants
Where: Arendal, Norway
When: Monday afternoon, 23 January 2012, cold, snowing
Method: Testing theories about how public life and public space are experienced
Published: Not published

How many people does it take to make a public space lively, and is it at all possible to generate public life in small communities? Planners from small Norwegian towns were presented with William H. Whyte's theory that it takes about 16.6 pedestrians within the human visual field to make a public space urban and stimulating.[36] At a workshop that included public life studies, Whyte's thesis was tested by sending workshop participants across a central public space: first two of them, then four, then ten, then 14 and finally 20. The remaining participants were asked to evaluate whether the square seemed urban and stimulating. They didn't think so with two to ten pedestrians on the square, but they agreed that the sight of 14 to 20 people on the square gave the impression of an urban, stimulating public space.[37]

The figures from a small Norwegian town support Whyte's test carried out in Manhattan in the 1970s. In the small Norwegian town 14 people were sufficient to make the square seem vibrant. The experiment and Whyte's figures emphasize the importance of gathering functions and thus also people in order to make places lively – in small towns as well as large cities. But it is one thing to hear about it in theory and another to test it in practice.

Subsequently most of the 20 participants were asked to stay along the edge, where people most often stay, and the remaining participants were asked to evaluate what effect that had on the experience of vibrancy. Not surprisingly – and yet quickly and unswervingly – they found the square far less lively. This exercise illustrates the importance of scale, if public space is not to end up devoid of people, because a great deal of public life takes place along edges.



Workshop participants occupy Sam Eydes Square in Arendal, Norway (710 m²), while the rest of the participants evaluate whether or not the square seems lively. The photo shows 20 participants, which in the context was characterized as urban and stimulating

THE EFFECT OF MORE SEATING

When the number of seats is doubled, do more people sit?

Who: Gehl Architects
Where: Aker Brygge in Oslo, Norway
When: August 1998 and August 2000
Method: Registering the amount of seating and the extent of people sitting before and after the area was renovated
Published: Jan Gehl, *Cities for People,* Washington DC, Island Press 2010[38]

"People tend to sit the most where there are places to sit," concluded William H. Whyte in his book *The Social Life of Small Urban Spaces*, based on numerous studies in Manhattan. About his conclusion, he stated: "This may not strike you as an intellectual bombshell, and, now that I look back on our study, I wonder why it was not more apparent to us from the beginning."[39] It certainly sounds obvious, but does it really work that way? Whyte's theory was tested in Oslo at the end of the 1990s.

In 1999, the public spaces of the Aker Brygge quarter at Oslo harbor were renovated on the basis of a study of public life in the area. In the summer of 1998, the public space, furniture and details plus the way the many visitors to the area used the space were carefully studied in a public space-public life study. It was determined that there were apparently too few opportunities for seating in the area, and the quality of those options was poor.[40] As part of the renovation project, old benches were replaced with Parisian-style double park benches placed about where the old benches had been. In total, the changes meant that after renovation of the area there were slightly more than double (+129%) the seating options for visitors.

Exactly two years to the day after the first study, and also on a summer day with good weather, the use of the benches in the area was recorded once again. Four head counts were taken between 12 noon and 4 p.m., and it was possible to determine that the average number of people seated at Aker Brygge had increased by 12%.[41] Put simply, the conclusion was that doubling the amount of bench seating meant a doubling of the number of people seated.

Doubling the amount of seating at Aker Brygge in Oslo, Norway doubled the number of people sitting.

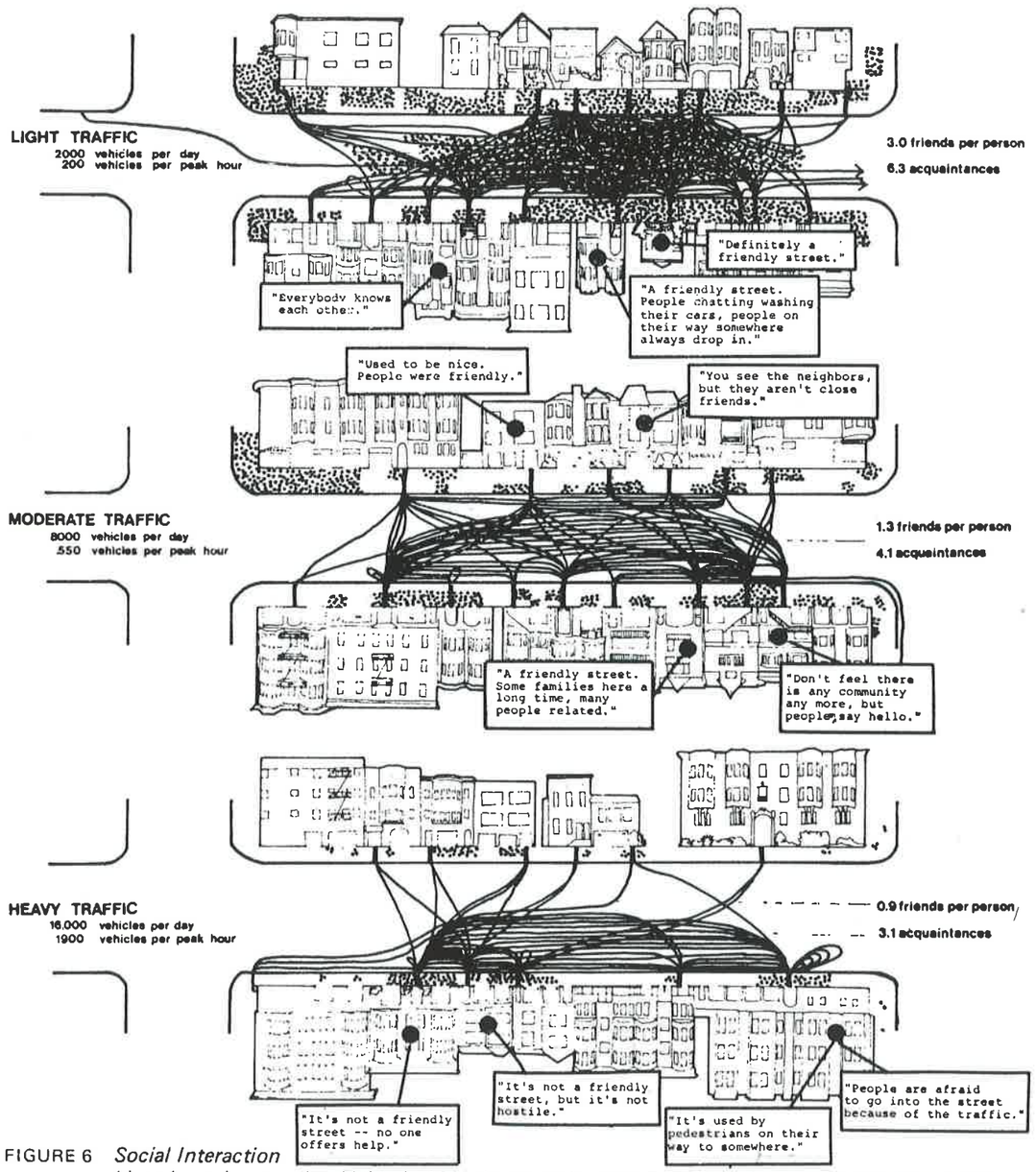


FIGURE 6 *Social Interaction*
Lines show where people said they had friends or acquaintances. Dots show where people are said to gather.

TRAFFIC CORRIDORS OR LIVELY CITY STREETS

Social relationships and traffic

Who: Donald Appleyard and Mark Lintell
Where: Parallel streets: Franklin Street, Gough Street and Octavia Street, San Francisco, California
When: 1969
Method: Mapping and interviews
Published: Donald Appleyard and Mark Lintell, "The environmental quality of city streets: The residents' viewpoint," *Journal of the American Institute of Planners*, March 1972[42]

The increasing amount of traffic in the 1960s was the catalyst for Donald Appleyard and Mark Lintell to study the effect of car traffic on life in residential streets. Until then, the social consequences of traffic had been largely overlooked: "Studies of urban streets (...) have concentrated almost exclusively on increasing their traffic capacity, through devices such as street-widening, signalization, and one-way streets, with no parallel accounting of the environmental and social costs of these alternatives."[43]

Appleyard and Lintell selected three residential streets in San Francisco that were identical in character, but had different amounts of traffic. The three streets were all 23 meters wide and lined by two- and three-story houses and a mix of rental apartments and condominiums. The great difference was the traffic load. In a 24-hour period, 2,000 cars drove down the street with the least amount of traffic, while the next busiest street had 8,700 cars and the most heavily trafficked street 15,750 per day. In order to study the effect of traffic on the activity patterns in the three streets, Appleyard and Lintell plotted their observations on a street map. They also noted which age groups used the various public spaces.

They supplemented their observations by interviewing residents about where they gathered on the street, and about acquaintances in the neighborhood. Friendships and acquaintances were marked with lines between the various residences, while dots marked meeting points on the street.

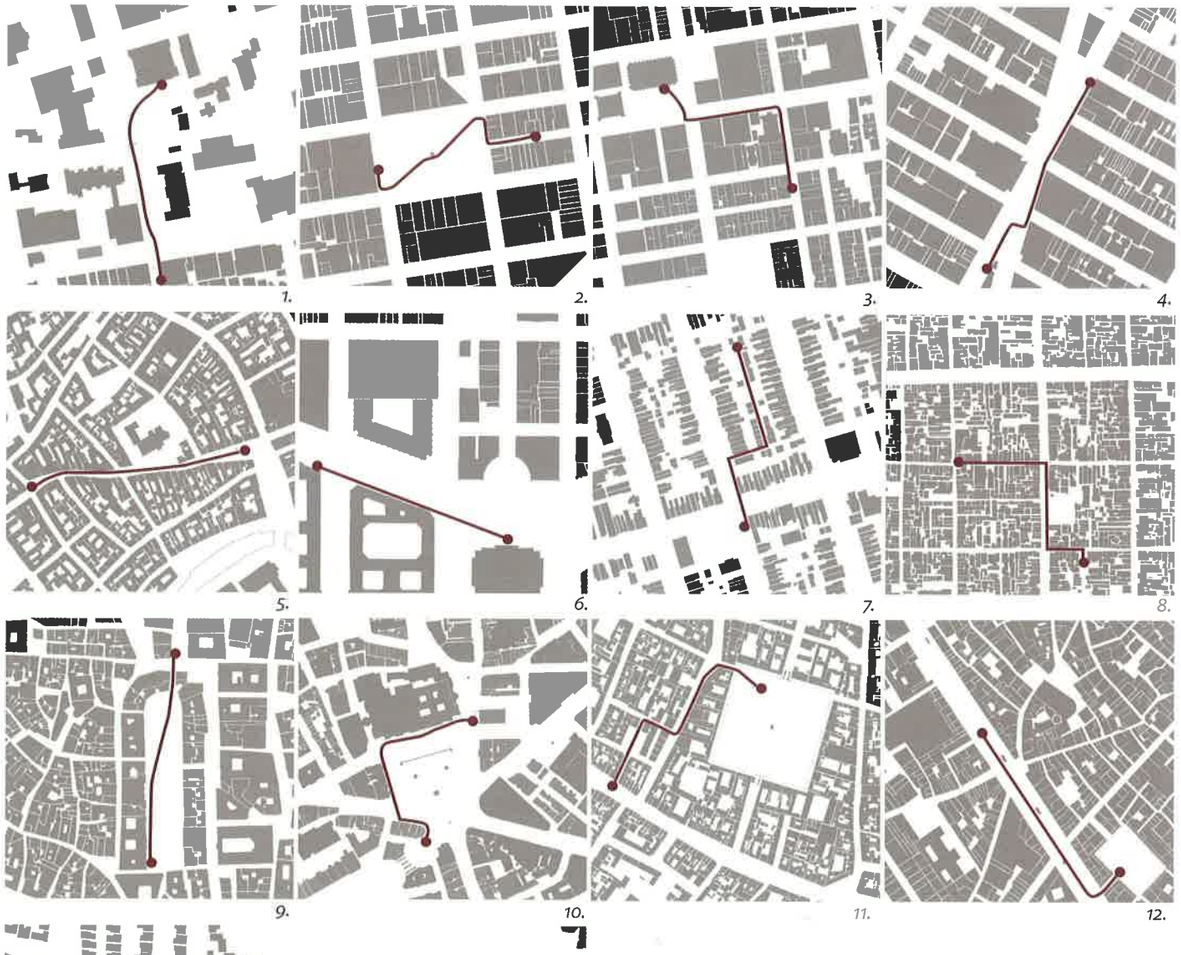
The diagram opposite shows three streets with heavy, moderate and light traffic, respectively. Lines show where people have friends or acquaintances back and forth across streets, and dots show where people gather. With strong graphic clarity, the maps illustrate the conclusion of the study: the more traffic, the less life and social interaction.[44]

Registration showed clearly that there were considerably fewer street activities and far fewer social relations on the street with heavy traffic compared to the one with the least amount of traffic. The conclusion was easy to see graphically, because acquaintances between people on the street were drawn as connecting lines rather than more abstractly with figures and diagrams.

In terms of staying activities, it was also clear that there were by far the most staying places (dots) on the street with the least traffic, and stays absorbed more areas. Children played in the street where there was least traffic, and numerous people stayed on stoops and entrances to houses. There were fewer activities in the street with a moderate amount of traffic, and these took place on the sidewalks. And in the street with the heaviest traffic, which also had narrow sidewalks, activities were restricted to the entrances to buildings.

In order to illuminate the consequences of various amounts of traffic, the focus of the study was not on obvious topics such as traffic safety and accident statistics. Instead the observers studied the influence of traffic on the social life of residents.

Subsequently, Appleyard conducted similar studies on streets with various income levels and mixture of residents. These later studies supported the conclusions of the pilot study about the influence of traffic on social life. Appleyard's study is considered a classic in the field of public life studies. One of the reasons that the study has become so widely known is because the conclusions were communicated graphically in such an unusually clear and visually powerful way. Anyone who looks can see that there is something terribly wrong in the heavily trafficked street.



Bosselmann compares spatial relationships by making figure ground maps of the 14 study areas: 1. Berkeley Campus, University of California; 2. Downtown San Francisco, California; 3. Chinatown, San Francisco, California; 4. Times Square, New York City; 5. Strøget, Copenhagen, Denmark; 6. Pennsylvania Avenue, Washington DC; 7. Old quarter, Toronto, Canada; 8. Old part of Kyoto, Japan; 9. Piazza Novona, Rome, Italy; 10. Trafalgar Square, London, England; 11. Marais, Paris, France; 12. La Rambla, Barcelona, Spain; 13. Gated community, Laguna Niguel, Orange County, California; 14. Stanford Shopping Center, Palo Alto, California. The lines mark the 350-meter routes.

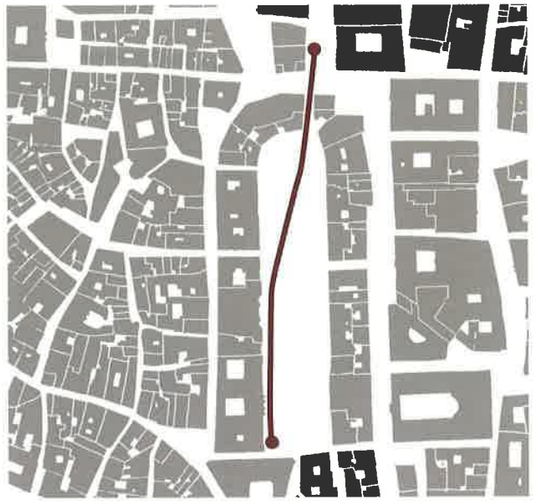
LONG OR SHORT MINUTES

Studies about experiencing public space while on the go

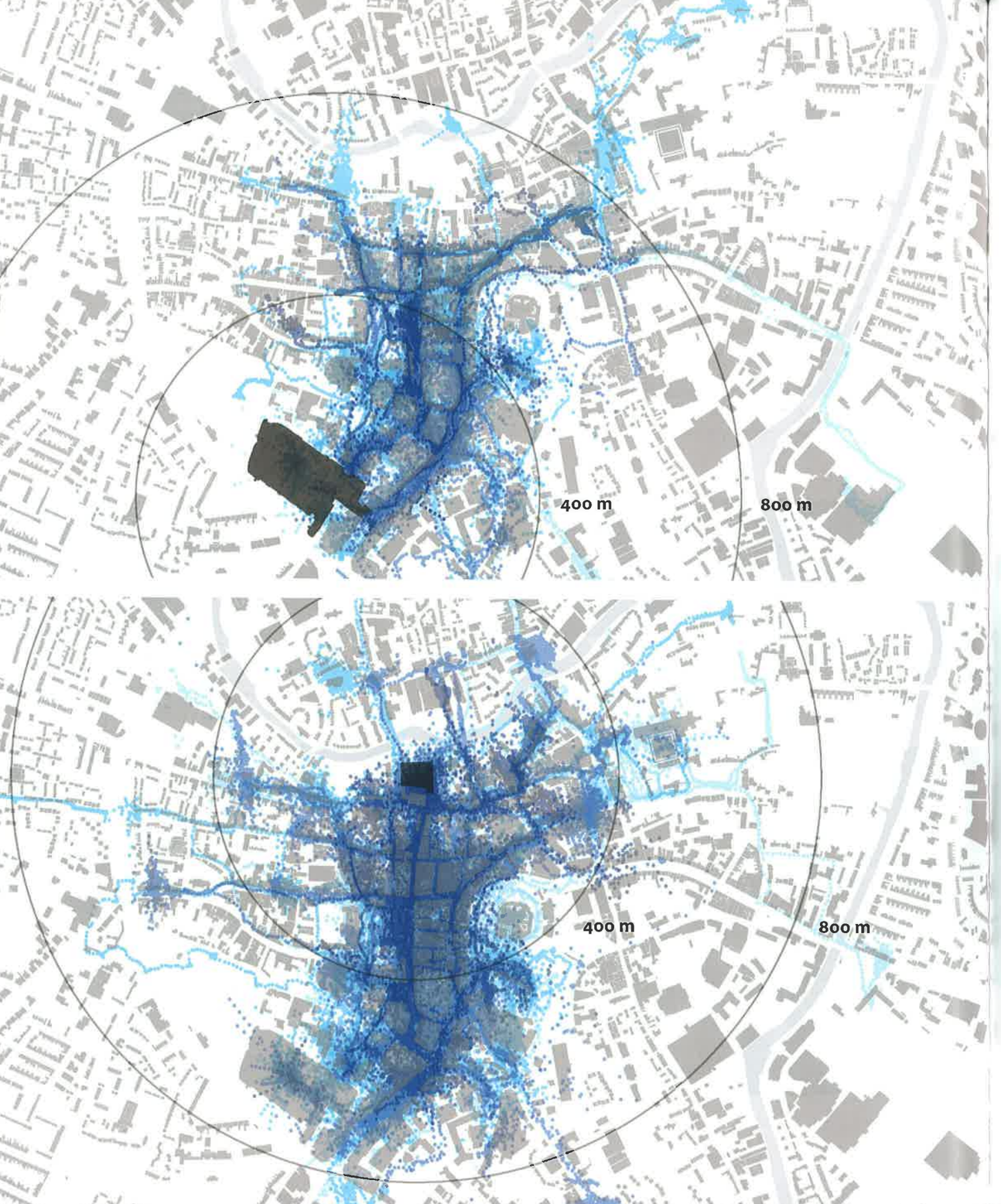
Who: Peter Bosselmann
Where: Various locations
When: 1982-1989
Method: Four-minute walks
Publiceret: Peter Bosselmann, *Representation of Places,* Berkeley: University of California Press, 1998[45]

After drawing sequences in an attempt to reproduce a four-minute walk rich with impressions in Venice, Bosselmann wanted to study other 350-meter routes, which in principle would take just as long to walk as the route in Venice, but would perhaps be experienced differently in terms of time.

Bosselmann selected 14 different routes in various parts of the world with widely different urban structures. In order to compare the spatial characteristics, he worked with figure/ground maps of the study areas. The graphically clear maps showed the different spatial characters of the various routes: from dense traditional urban structures in Barcelona, Spain, for example, to an open campus area in Berkeley, California; a gated community with winding residential streets in Orange County, California; and the large expanses of a shopping center and open space in Palo Alto, California. The maps are accompanied by short texts that describe Bosselmann's experience of the route with the walk in Venice as a reference point. Bosselmann asks whether the routes are experienced as shorter or longer than the 350 meters in Venice. A four-minute walk can be used as a tool for comparing the experience of various routes.



Peter Bosselmann comments on the experience of walking all the routes compared with a four-minute walk in Venice. This is what he says about the walk across the Piazza Navona in Rome (left): "To my great surprise, the walk in Venice equals a stroll through the Piazza Navona in Rome. Although I claim to know it well, I had underestimated its size, assuming that it took only half the time of the Venice walk; but, in fact, crossing the plaza takes four minutes."[46]



CAR DRIVERS ARE ALSO PEDESTRIANS

GPS studies of pedestrians' routes in three European city centers

Who: Stefan van der Spek with a team from Delft University of Technology
Where: City centers in Norwich, United Kingdom; Rouen, France; and Koblenz, Germany
When: Norwich, June 2007, Rouen and Koblenz, October 2007
Method: GPS registrations and questionnaires
Published: Stefan van der Spek, "Tracking pedestrians in historic city centers using GPS" in *Street-level desires. Discovering the city on foot*, ed. Hoeven, Smit and Spek, 2008[52]

In 2007, architect Stefan van der Spek from the University of Technology in Delft, Holland, studied the movements of pedestrians in three European city centers. He equipped pedestrians with a GPS sender in order to map which streets and areas they visited and did not visit. The goal was to be better able to target shopping and recreational opportunities.

The GPS senders were provided to visitors who parked their cars in parking garages at the edge of the city centers. In each of the three cities, Norwich, Rouen and Koblenz, two parking garages on each side of the city center were selected – it was a requirement that they were located with direct access to the city center. The reason that parking garages were selected was to ensure that participants would return with the GPS senders.

Participants were selected by asking what they planned to do in the city center, as shopping and recreation were the selection criteria. If they met the criteria, they were equipped with a GPS sender as well as an information sheet about the purpose and set-up of the study. When they returned to the parking garage a questionnaire with background information was filled in.

As shown on the opposite page, the information from the GPS sender was illustrated by dots on a map of the area studied. The dots mark the positions of participants every five seconds, and with an accuracy of from three to five meters – the precision that GPS senders had in 2007. Each line represents a person or group, and the goal was to make the general lines of movement readable.

In all three cities, car drivers from the parking garages used large parts of the city. There were parts of the city that were not visited, perhaps due to barriers of some kind, but the large picture was clear: the pedestrians from the parking garages walked in the entire city center.[53] The study supports an obvious but important point: car drivers are also pedestrians.

At this time GPS studies are being developed rapidly and in many different contexts, and we assume that this method will become very popular in future.

Above: When participants returned from walking in the city, an interviewer filled in a questionnaire with background information.

Opposite left: Map of Norwich, England. Top: Capelfield parking garage at the edge of Norwich city center, where GPS devices were handed out. Bottom: St. Andrews parking garage, the other access point for the city center, where participants were also equipped with GPS devices. The dots show where participants stayed and moved around in Norwich's city center.