HOW TO STUDY PUBLIC LIFE

Jan Gehl and Birgitte Svarre

Translation by Karen Ann Steenhard

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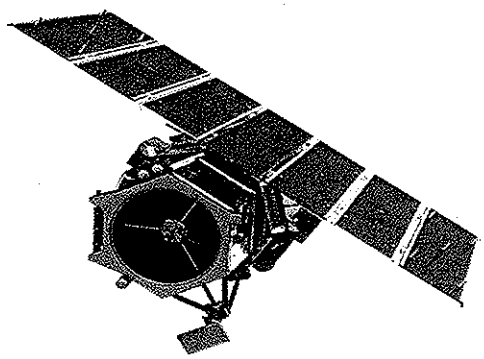

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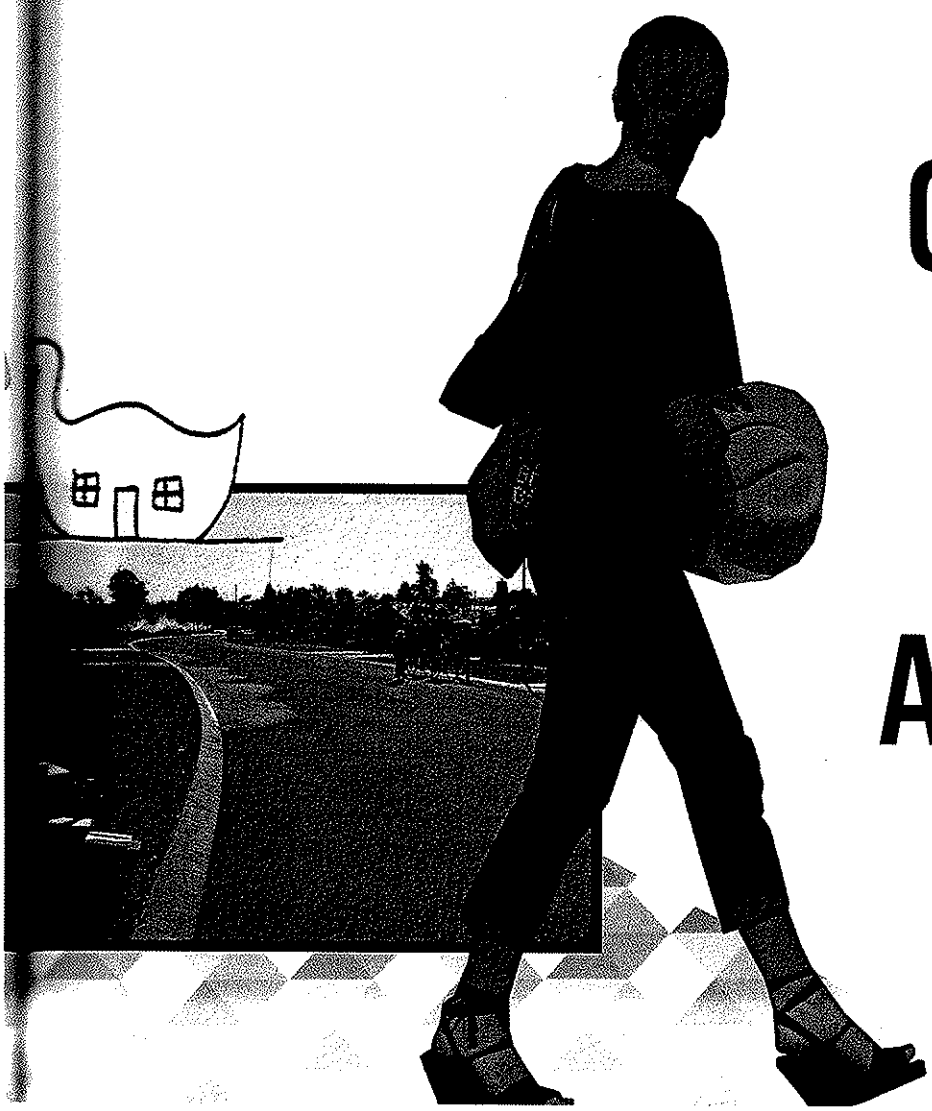
COUNTING, MAPPING, TRACKING AND OTHER TOOLS



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.

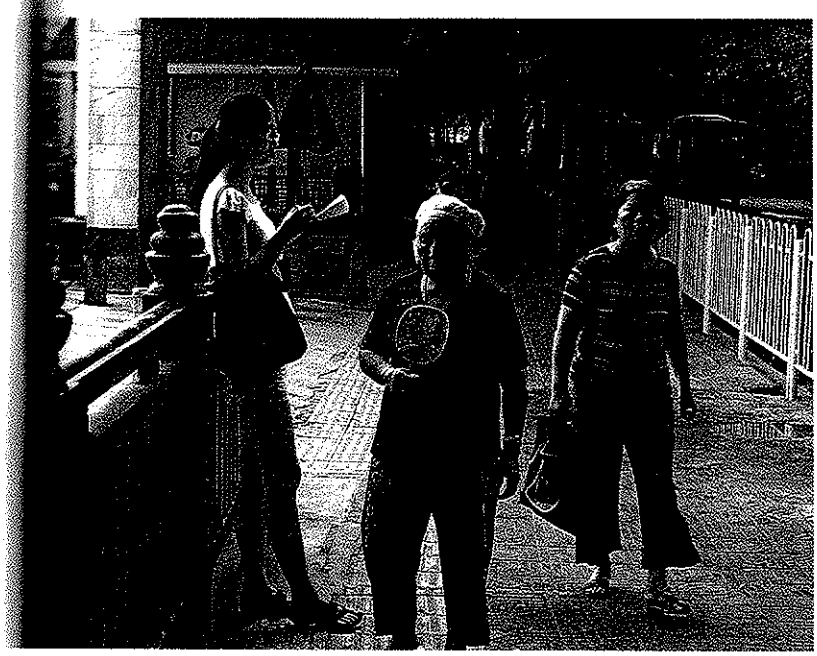
What is often registered is how many people are moving (pedestrian flow) and how many are staying (stationary activities). Counting provides quantitative data that can be used to qualify projects and as arguments in making decisions.

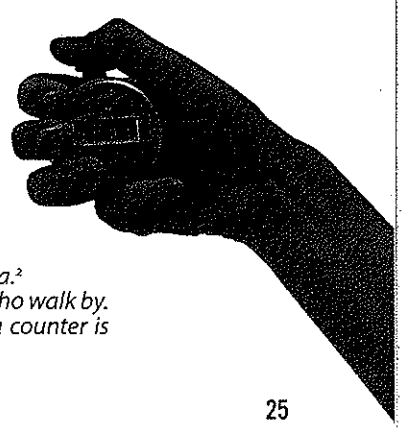
Numbers can be registered using a handheld counter or by simply making marks on a piece of paper when people walk past an imaginary line. If the goal is to count people staying, the observer typically walks around the space and does a headcount.

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.

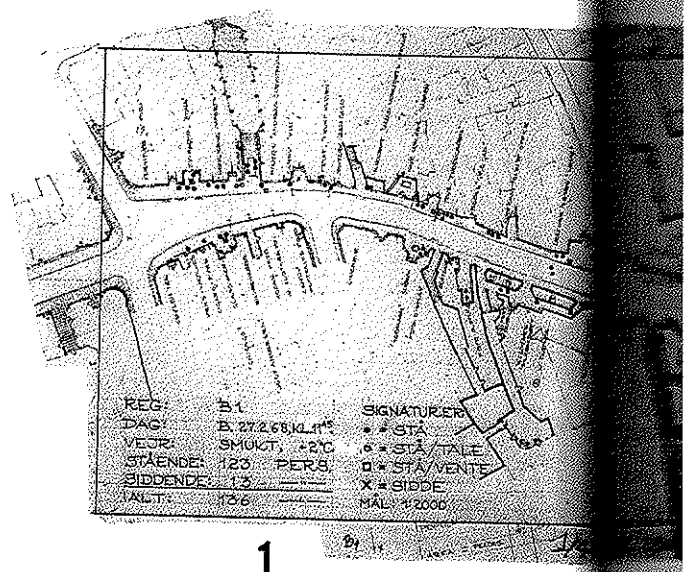
By conducting headcounts before and after initiatives in city space, planners can quickly and simply evaluate whether the initiative resulted in more life in the city, broader representation of age groups, etc. Counting is typically conducted over a longer period in order to compare different times of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



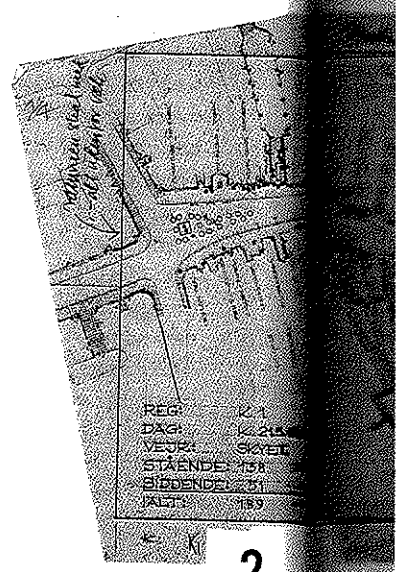


Headcounts in Chongqing, China.[2] Registering all the pedestrians who walk by. If there are many pedestrians, a counter is invaluable (right).

Mapping



1.



2.

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.

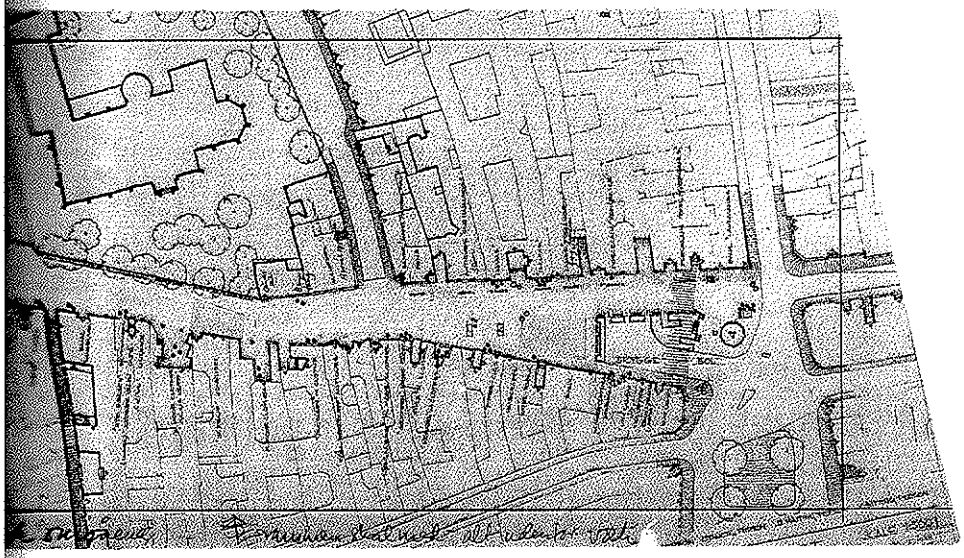
This method provides a picture of a moment in a given place. It is like an aerial photo that fast-freezes a situation. If the entire space is visible to the observer, he or she can plot all the activities on the plan from one vantage point. If the space is large, the observer must walk through it, mapping 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.

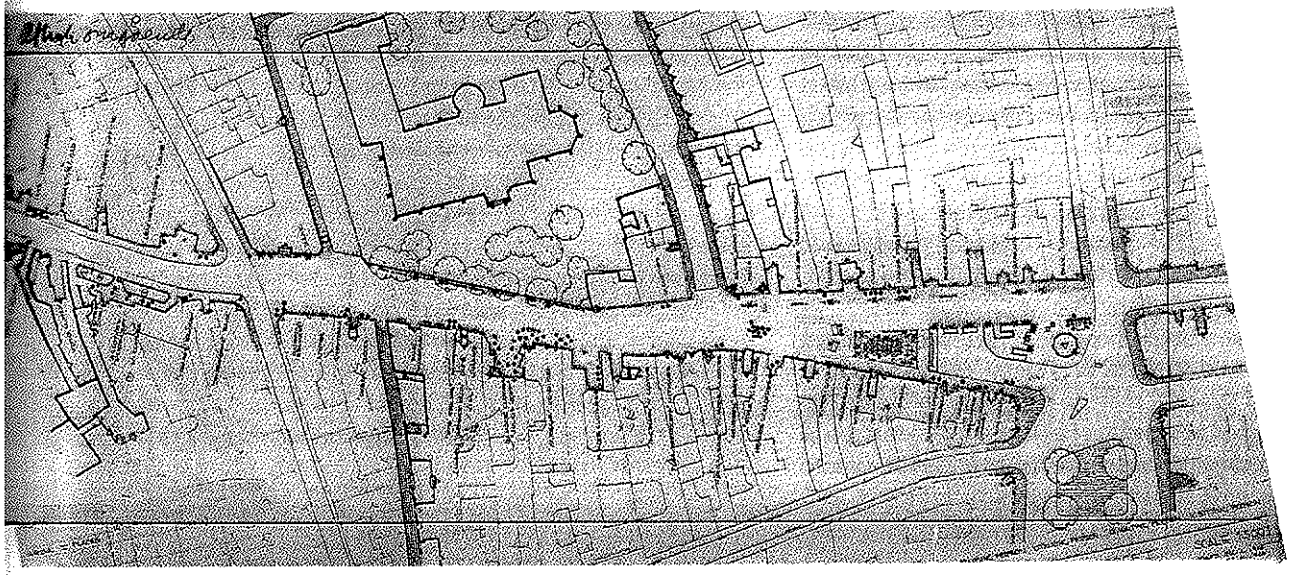
Original captions from "People in Cities", Arkitekten *no. 20, 1968:*

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."[3]





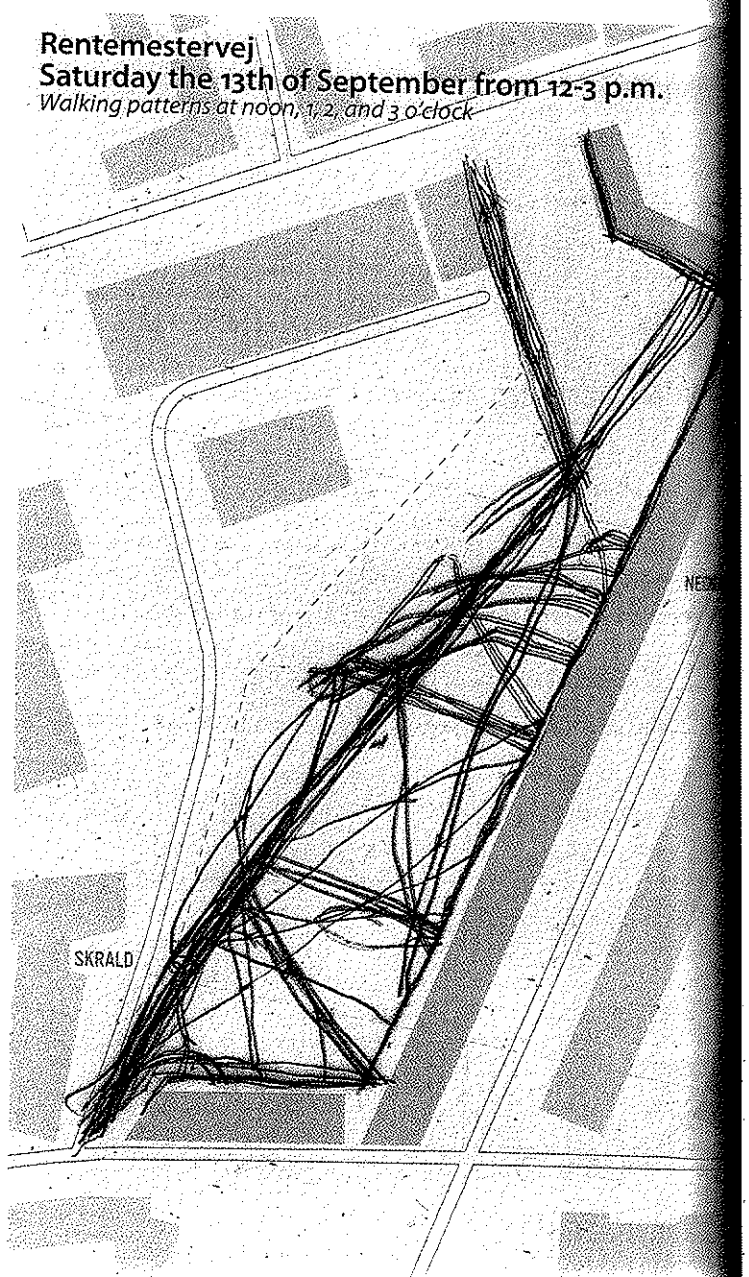
3.

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

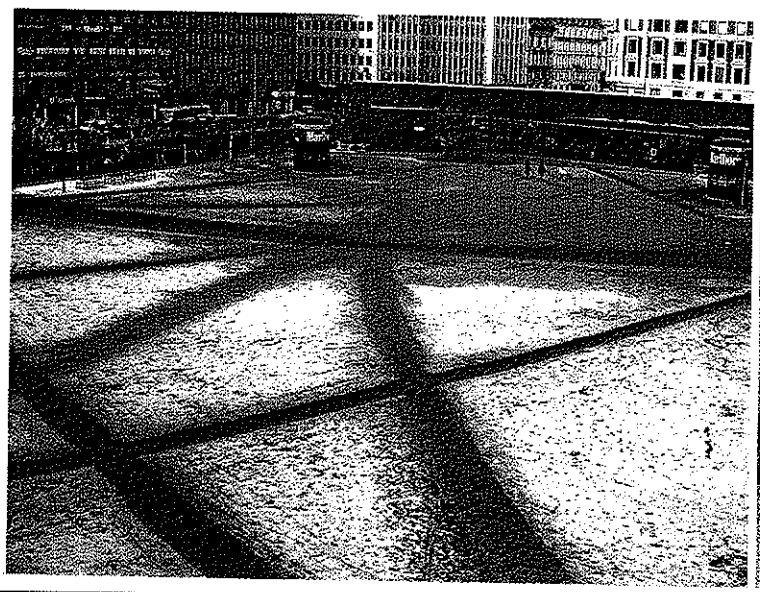
Human activity can also be observed indirectly by looking for traces. Indirect observation requires observers to sharpen their senses just like detectives on the trail of human activity or the lack hereof.

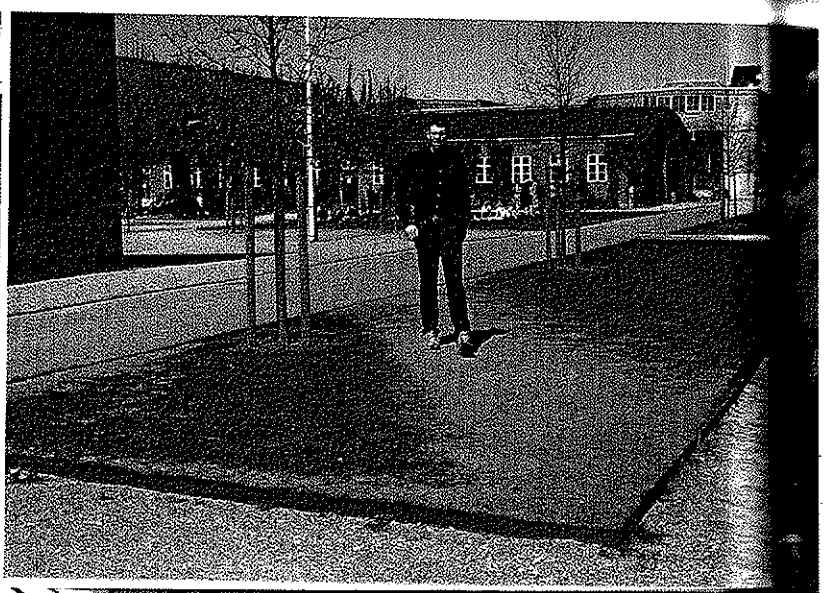
A core tenet of public life studies is to test the actual conditions in the city by observing and experiencing them firsthand and then considering which elements interact and which do not. What is relevant for testing differs from place to place.

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.

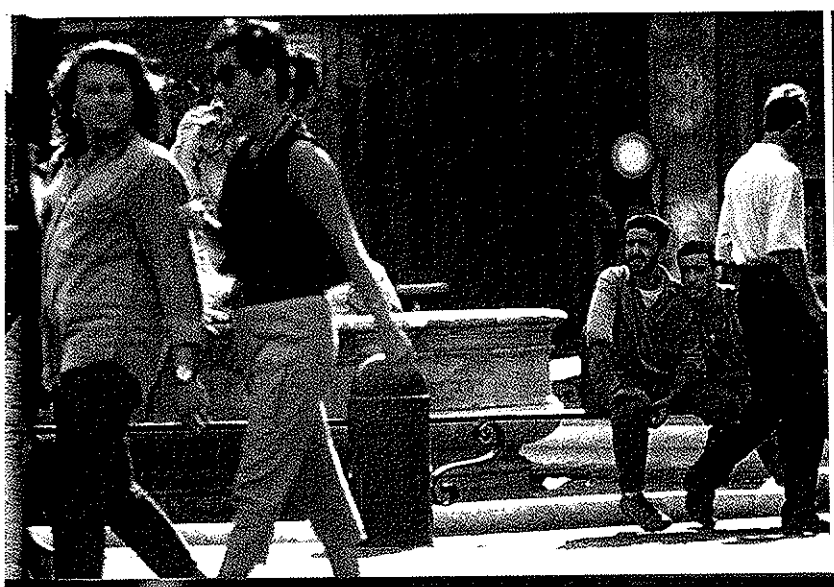
While the human eye can observe and register, photographs and film are good aids for communication. Photographing and filming can also be a good tool for fast-freezing situations for later documentation and analysis. By later studying photographs or film, it is possible to discover new connections or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

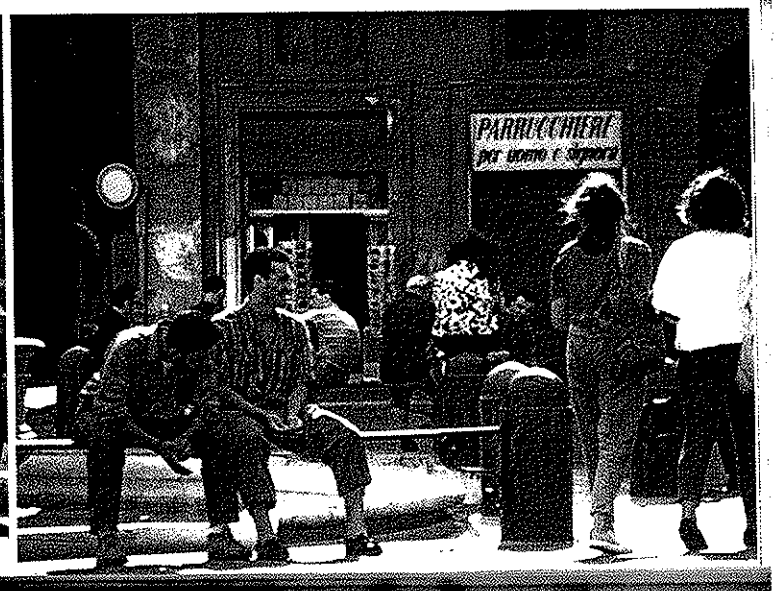
Photographs often illustrate and enliven data. In the field of public life studies, photographs of public life scenes are not subjected to the usual aesthetic principles so dear to the hearts of architects generally. Here the emphasis is not on design but rather on situations that occur in the interaction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

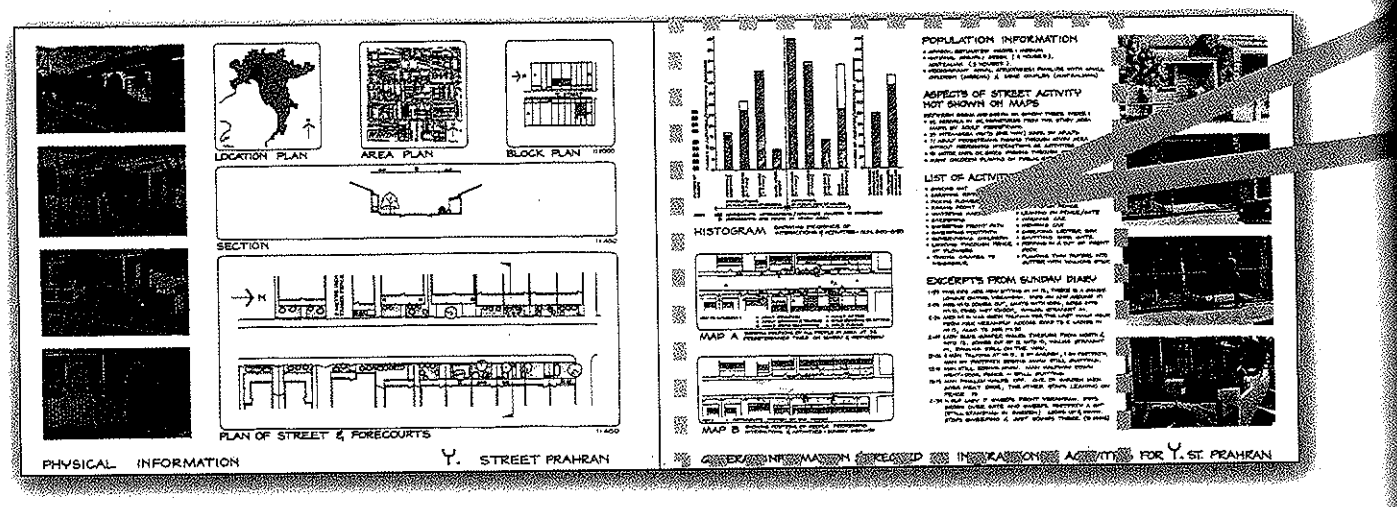
Noting details and nuances can increase knowledge about human behavior in public space for individual projects as well as to add to our more basic understanding in order to develop the field. The method is often used as a qualitative supplement to more quantitative material in order to explain and elucidate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

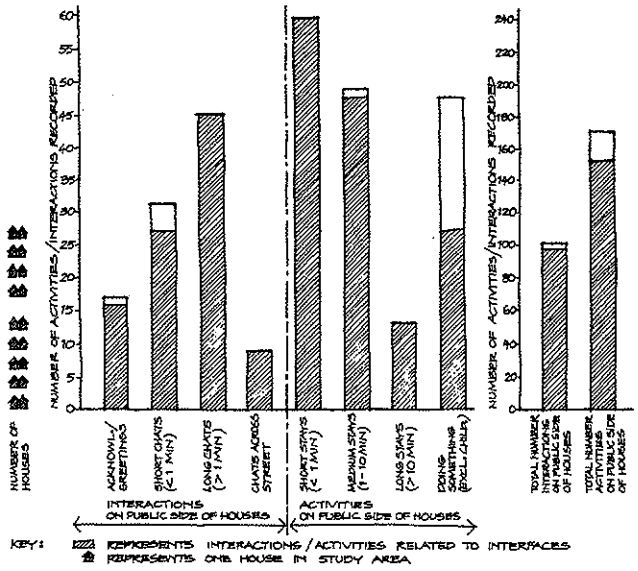
Keeping a diary is a method of noting observations in real time and systematically, with more detail than in quantitative 'sample' studies. The observer can note everything of relevance. Explanations can be added to general categories such as standing or sitting, or brief narratives can aid our understanding 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.

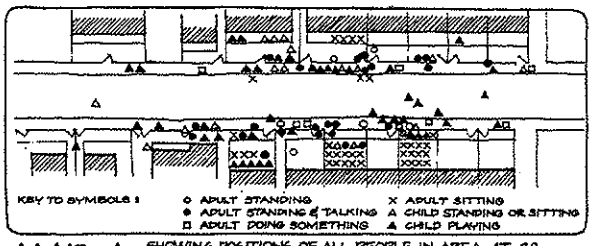
Keeping a diary can register events that cannot easily be documented using more traditional methods. This example shows notes from a study of residential streets in Melbourne, Australia. Shown at right is a page from a diary for the Melbourne study.[5]

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.

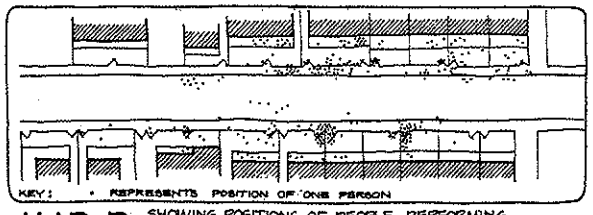




HISTOGRAM SHOWING INCIDENCE OF INTERACTIONS & ACTIVITIES - SUN. 8·00-6·30



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

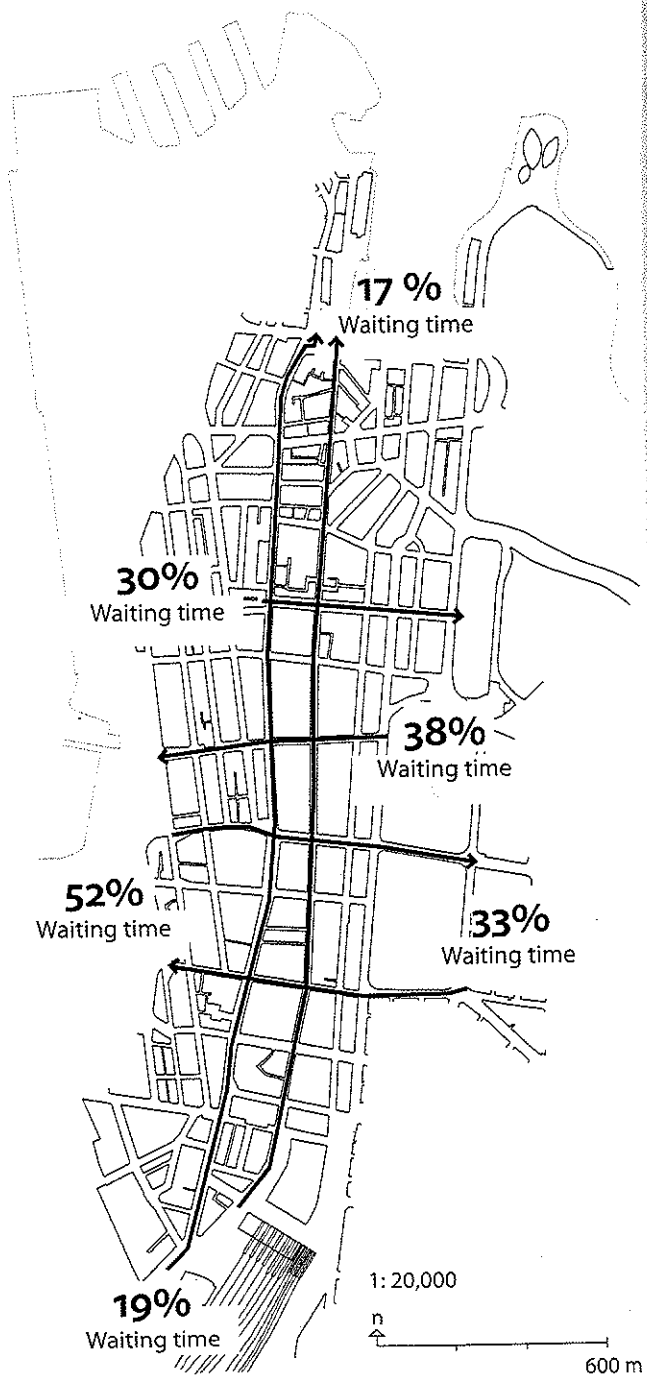
12·13 MAN FINALLY WALKS OFF. ONE OF GARDEN MEN GOES NEXT DOOR; THE OTHER STAYS LEANING ON FENCE 13.

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)

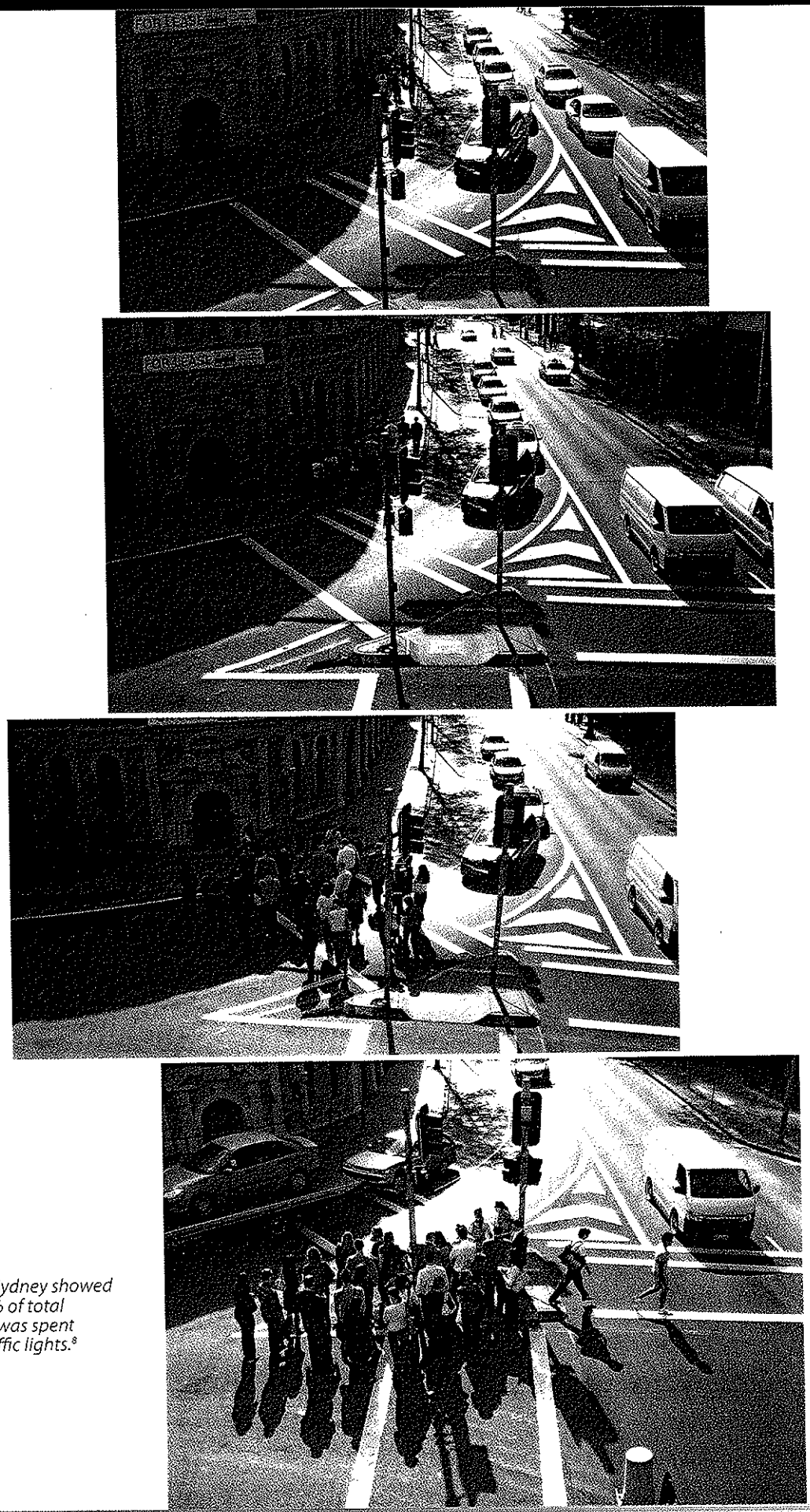
Test Walks

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]

GOOD PLACES TO STAND

Studying preferred places to stand at a public square

Who:	Jan Gehl
Where:	Piazza del Popolo, Ascoli Piceno, Italy
When:	Friday, December 10, 1965, 5:30 pm
Method:	Behavioral mapping
Published:	Jan Gehl together with Ingrid Gehl, "Mennesker i byer" (*People in Cities*. In Danish), *Arkitekten* 21/1966[1]

Activities in public space can be divided fundamentally into those that are transitory and those that are stationary. Transitory activities can be recorded simply by using a counter to count the number of pedestrians who walk selected stretches. Other methods of 'counting' are needed to get an idea about stationary activities. Behavioral mapping is a simple tool well-suited for a space that is not too large.

The 1965 studies of the good places to stand at the square in the Italian town of Ascoli Piceno illustrate this method. By plotting in the position of all the people at the square who are not walking, the observer needs to make only one registration to get a good overview of the good places to stand.

On this rather cool (9°C) December day at Piazza del Popolo, 206 people were recorded at the square at 5:30 p.m., of which 105 were walking across the square, while 101 were standing. The study was carried out in less than 10 minutes.

Like similar studies, the one at the square in Ascoli Piceno shows that pedestrians typically crisscross the space, while people standing have carefully chosen their spots at the edge of the space.

Clearly preference is for standing by the columns of the archways, under the archways and along the facades. On the square itself, all the people found standing are involved in conversations. If someone meets an acquaintance while walking in town, they tend to stop and talk at the place where they met, even if it is in the middle of the square.

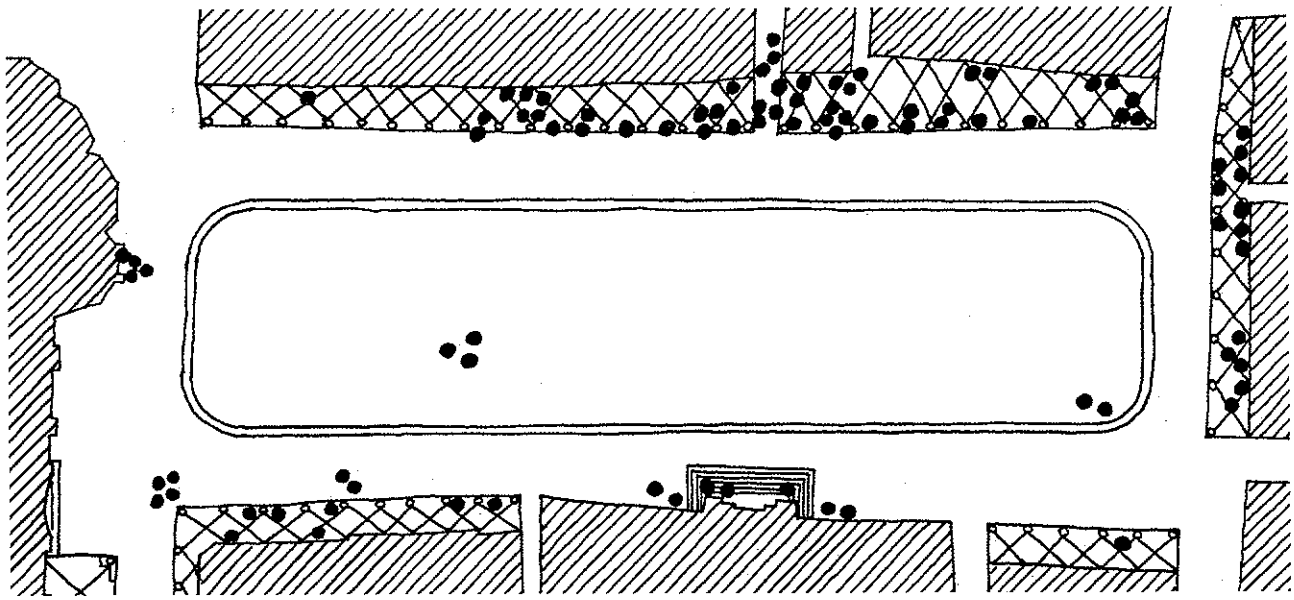
Studies like this have helped draw attention to the importance of edges, a topic that has since played a key role in our understanding of the interaction between public life and public space.

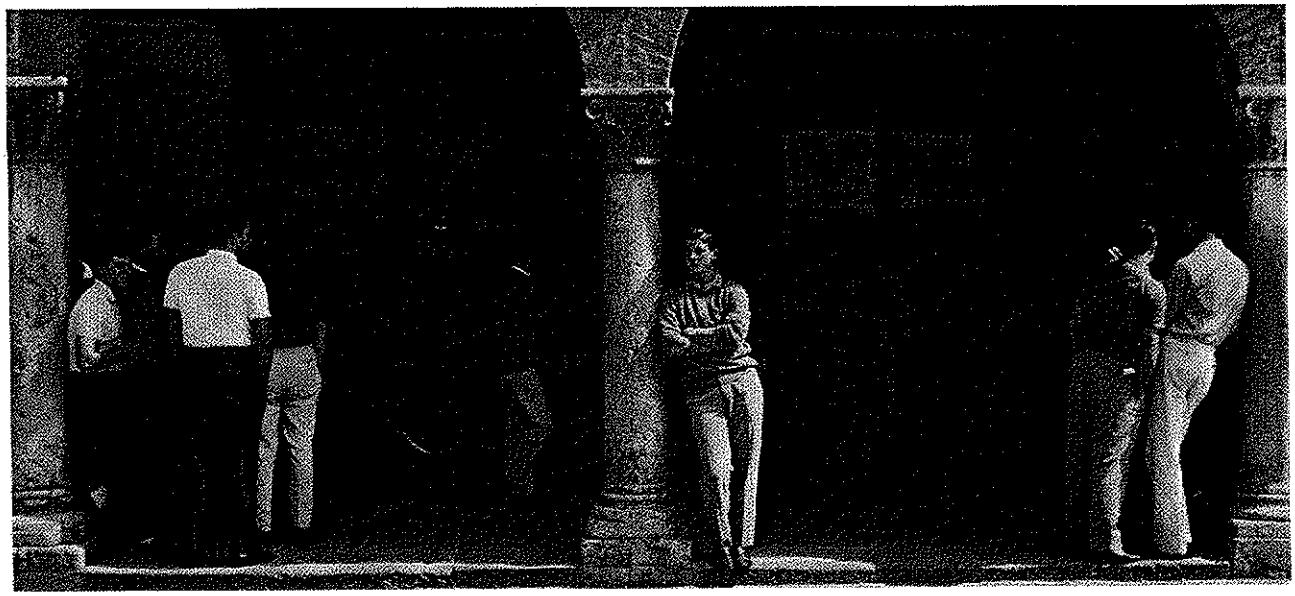
In Piazza del Popolo, behavioral mapping was used to register stationary activity, and patterns formed where there were few and many stays relative to the buildings, design of space, other people, etc. These studies clearly show what was later described as the edge effect: the fact that people were more likely to stay at the edge of spaces.[2] Behavioral mapping can provide a clear picture of how people stay in a selected public space.

Plan and photograph: Piazza del Popolo, Ascoli Piceno, Italy, 1965.

Top: Behavioral mapping is used to show where people are standing; everyone standing on the piazza at a given point in time is indicated on the plan.

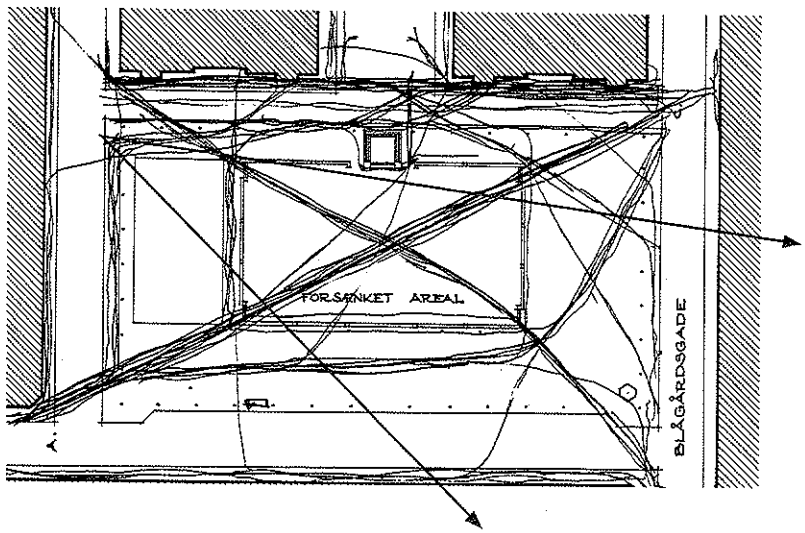
Bottom: "Here in semi-darkness or by the pillars, one can be present and yet discreet, can see everything that is going on but remain partially hidden."[3]





Top: Plan of Blågårds Square, Copenhagen. Pedestrian traffic was registered from 4 to 4:30 p.m. one Wednesday in May, 1968. The lines were not drawn with surgical precision, but rather to show the general pattern of movement.[6] If the movements are registered over a day, they can either be seen individually or compared to point out differences depending on time of day. Registrations can also be layered to provide a combined picture of the movements over the course of the day. This also works for different days, weekdays/weekends, summer/winter, and so on.

The footprints that can just be made out at the bottom of the photograph below of Blågårds Square on a winter day in 2013 show that people still cut through the middle of the square – even in the snow.



THE DIRECT PATH

Studying movement patterns across a square

Who:	Jan Gehl
Where:	Blågårds Square, Copenhagen, Denmark
When:	Afternoon in May, 1968
Method:	Tracing
Published:	Jan Gehl, "Mennesker til fods" (*People on Foot*. In Danish), *Arkitekten* 20/1968[7]

This 1968 study of the lines of movement across Blågårds Square in Copenhagen served a dual purpose: to see which routes pedestrians chose to cross the square, and to shed light on what impact a four-step depression in the middle of the square had on the selection of pedestrian route.

Observations were made from a second-story window, from which there was a good view of the square. The study was made by indicating the lines of movement for all pedestrians on a drawing of the square.

After only 30 minutes of observation, the dominant movement patterns were clear from the drawing. Almost all pedestrians chose the shortest path, even though the diagonal route across the square meant walking up and down the four steps of the depression. The pedestrians who walked around the depression were almost all pushing a baby buggy or walking a bicycle.

A new pattern was observed in the evening. Almost all pedestrians crossing the square walked along the edges, which were well lit, seldom choosing the dark center of the square.

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.

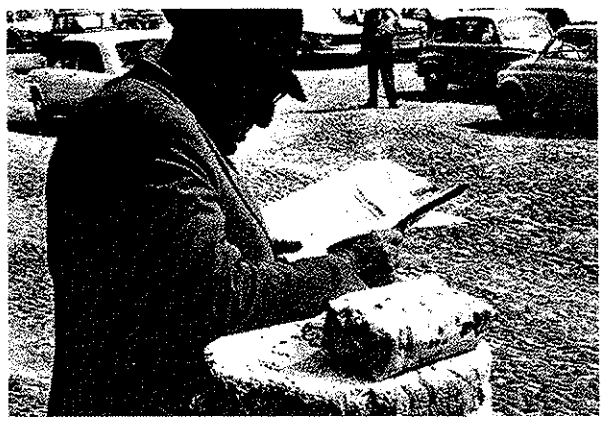
The photographs illustrate several ways of embracing public space, various types of activities. Motifs are people in public space, and how public space and buildings can support – or discourage – human activity. In contrast to traditional architectural photographs, here individual architectural traits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

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]

EXCERPTS FROM SUNDAY DIARY

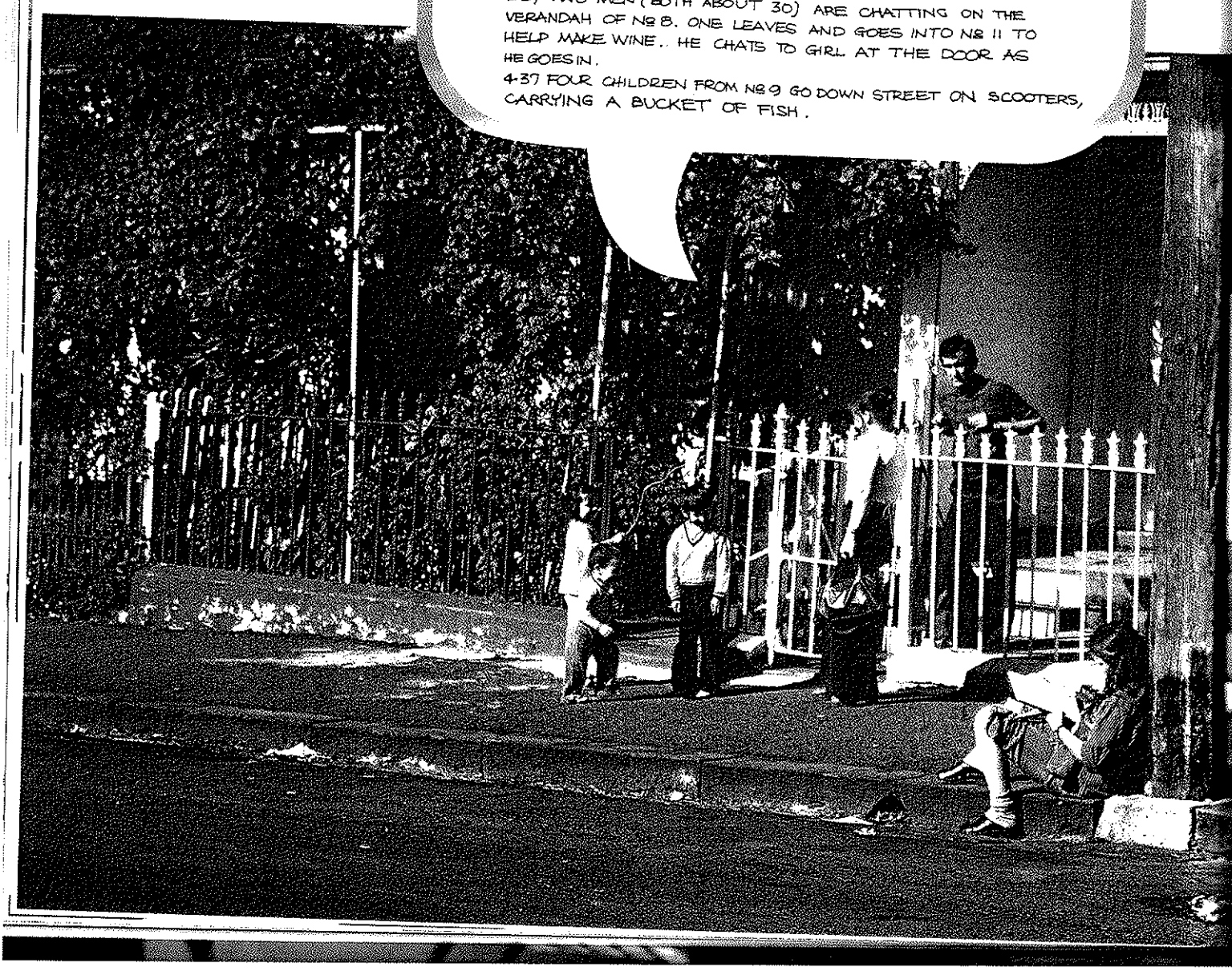
9.53 MR № 8 COMES OUT OF HOUSE YELLS TO BRUNO, HIS DOG, WHO IS FIGHTING WITH DOG AT № 15. COMES DOWN ROAD WITH CHAIN IN HAND, PUTS LEAD ON DOG AND DRAGS HIM HOME.

12.48 LADY (WHO LIVES IN № 18) COMES OUT OF № 9, GOES OVER TO № 10 & ASKS MAN TO DINNER.

1.26 MR. № 9 (ABOUT 40) COMES OUT TO WASH OUT CUP FROM TAP ON FRONT VERANDAH.

3.37 TWO MEN (BOTH ABOUT 30) ARE CHATTING ON THE VERANDAH OF № 8. ONE LEAVES AND GOES INTO № 11 TO HELP MAKE WINE. HE CHATS TO GIRL AT THE DOOR AS HE GOES IN.

4.37 FOUR CHILDREN FROM № 9 GO DOWN STREET ON SCOOTERS, CARRYING A BUCKET OF FISH.



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.

THE IMPORTANCE OF FRONT YARDS

Studying the connection between the design of residential streets and the extent and character of activities

Who:	Jan Gehl with a study group from the School of Architecture, University of Melbourne
Where:	17 streets in older sections of the city and new suburbs, respectively, in Melbourne, Australia
When:	Sundays in April-May, 1976
Method:	Behavioral mapping and keeping a diary
Published:	Jan Gehl et al. *The Interface Between Public and Private Territories in Residential Areas*, 1977[17]

Thirty-three architecture students from the University of Melbourne conducted a comprehensive and ambitious study in April-May of 1976. The study comprised a total of 17 streets in older parts of the city of Melbourne as well as in newer suburbs. The streets represented a wide spectrum of types of residents plus ethnic, economic and social factors. The purpose of the study was to illuminate the connection between the physical conditions in the streets - the design of street space, front yards and building facades - and the activities that took place in the various types of street space. In short: what is the influence of the physical conditions on the extent and character of life in the individual streets?

Characteristic of older city streets in Melbourne was a semi-private zone in front of residences in the form of a front yard, typically bordered by a low fence facing the street space. While many streets had this typically traditional Australian transition zone, some did not have this feature in front of the houses, and in the suburbs a small lawn encircling the whole house was typical. Did the semi-private front yards have an influence on life in the streets, and what significance did street design and housing density have on the pattern of activities?

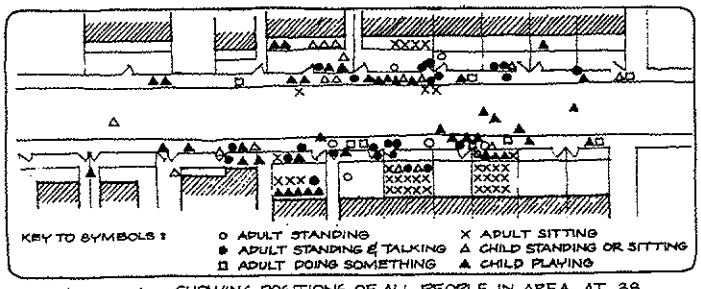
The studies were conducted on days with good weather for staying outdoors, and Sunday was selected as the specific study day because many residents were expected to be home then. Each study area comprised a 100-meter stretch of street, and the studies included measuring the physical relationships of the street as well as registering activities according to the 'diary method' developed in preliminary pilot studies. With this starting point, all activities on the streets were registered for an entire Sunday from sunrise to sunset, including noting the time expended on each activity. At the same time, a map was plotted once an hour throughout the day in order to have a graphic depiction of how the various activities took place in the individual spaces.

Together, the registrations gave a comprehensive and detailed picture of life - or in some cases lack of life - in the various streets. It was possible to determine with great accuracy that the semi-private front yards played a decisive role on the extensive activity level of the streets with 'soft edges'.[18]

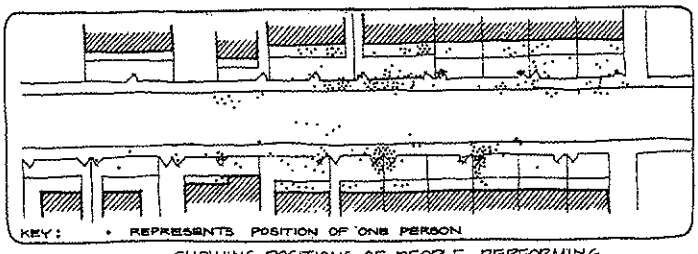
The studies illuminated many interesting sub-topics. For example, there were often as many activities taking place per household in the suburbs as in the more densely populated city streets with front yards, but the activity patterns were very different. While many people were outside in the suburbs, they were all engaged in mowing lawns or maintaining large gardens. In the denser city streets, residents sat in their front yards and spent time on minor tasks, eating and recreation, and engaged in far more social activities. These studies also showed that by far the majority of all events taking place on residential streets were brief. They also showed that the many brief events were a prerequisite for bigger and longer events.

After the studies were published showing that front yards played a large role in the social life of city streets, building regulations were tightened to ensure that front yards could not be isolated behind walls or fences. In addition, public housing regulations were changed in favor of building more housing in the style of row houses with front yards rather than large concentrated multi-story complexes. All in all, many small observations had large – and positive – consequences.

General information and registration of interaction and activities on Y Street, Prahran, Melbourne.

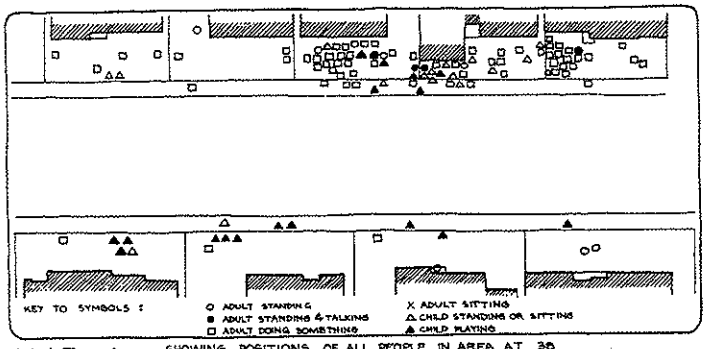


MAP A SHOWING POSITIONS OF ALL PEOPLE IN AREA AT 38 PREDETERMINED TIMES ON SUNDAY & WEDNESDAY

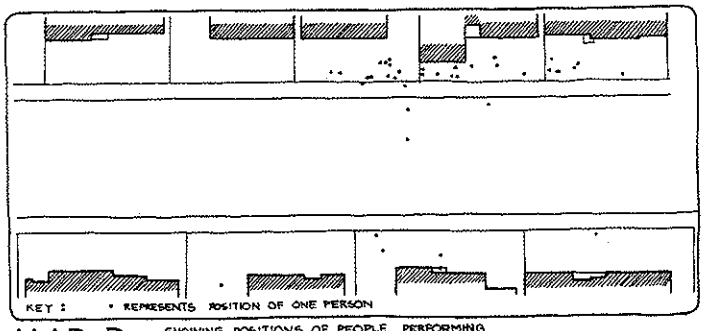


MAP B SHOWING POSITIONS OF PEOPLE PERFORMING INTERACTIONS & ACTIVITIES - SUNDAY 8·00-6·30

General information and registration of interaction and activities on C Avenue, Vermont, Melbourne.



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



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

Map A shows activities on residential streets plotted in according to type of activity. Map B shows social activities exclusively, such as greetings. A comparison of the street with more dwellings and more clearly defined front yards (above) with the street with fewer dwellings and open lawns (below) shows clearly that there are more social activities on the street with front yards.[19]

MEASURING FEAR AND APPREHENSION

Studying the influence of traffic on the behavior of adult and child pedestrians

Who:	Jan Gehl with study groups from the School of Architecture, Royal Melbourne Institute of Technology and the University of Melbourne, 1978
Where:	Traffic streets and pedestrian areas in Adelaide, Melbourne and Sydney
When:	October 1978
Method:	Counting, behavioral mapping, systematic observation of parents and children
Published:	Jan Gehl, *Life between Buildings*, Van Nostrand Reinhold, New York, 1987[22] (reprinted by Island Press, 2011)

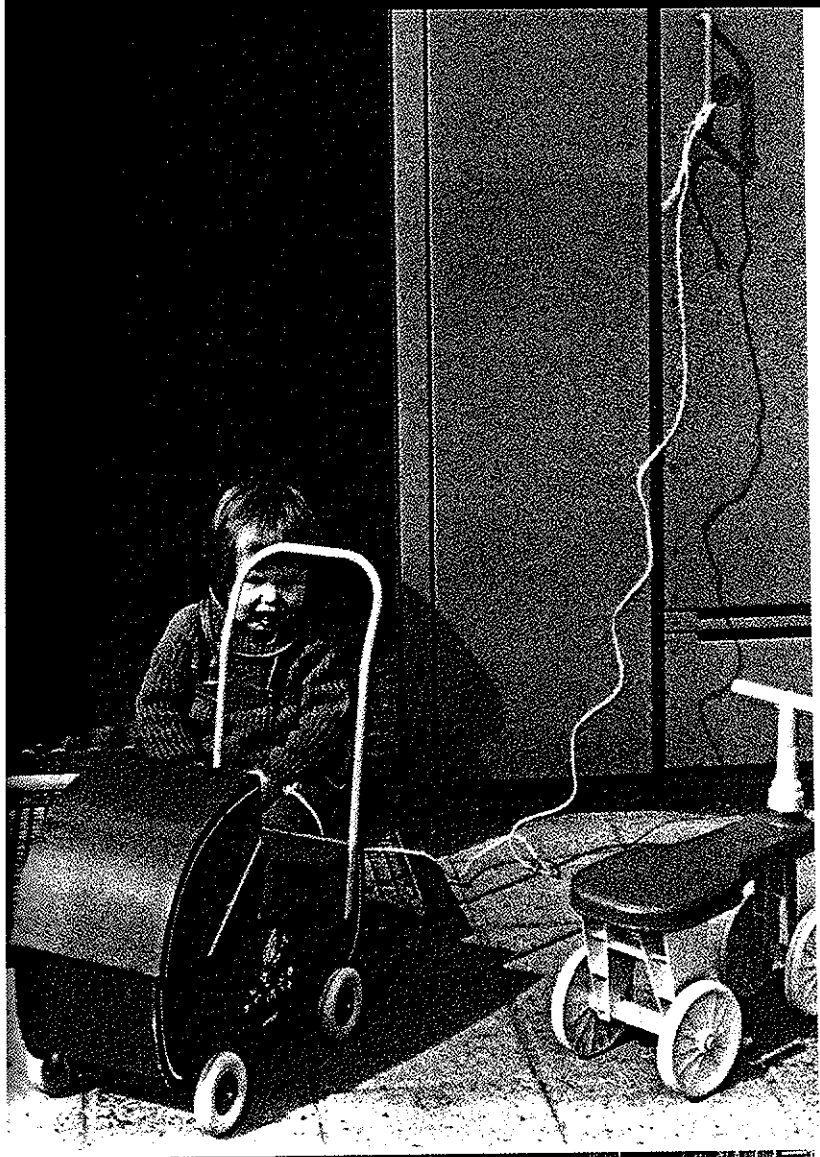
In 1978, study groups from the two schools of architecture in Melbourne conducted a series of field studies to gain knowledge about pedestrian behavior in streets with different traffic statuses. They sought answers to what vehicular traffic means to the way people move and stay in various types of streets. Three street types were studied: traffic streets with sidewalks, pedestrian streets with limited traffic (such as streetcar-pedestrian streets) and totally traffic-free pedestrian streets.

The methods used to study selected streets in Adelaide, Melbourne and Sydney included counting pedestrians, behavioral mapping and systematic observations of selected themes.

The result was that traffic-free streets provided the opportunity for more – and more varied – activities for all age groups. The traffic streets were crowded, noisy, noxious, and pedestrians needed to take many safety precautions. The behavior patterns of pedestrians on pedestrian streets with streetcars or limited traffic were much closer to the results from traffic streets than from areas that were totally free of cars. Even limited traffic apparently placed surprisingly great limitations on opportunities for human activities.

One of the themes studied was how safe pedestrians felt in the various types of streets. Some of the students observed that young children apparently had different opportunities to roam freely in the different types of streets. Their observations were systematized by noting whether children under the age of six were held by the hand or were allowed to walk on their own. The study showed clear distinctions between traffic streets and streets that were free of cars. Almost all children (approximately 85%) were held by the hand on sidewalks along traffic streets, while most children were allowed to move about freely on pedestrian streets – to the obvious delight of both children and adults.

This little study is an example of inventiveness with regard to new but simple ways of illuminating complex and important aspects of the interaction between public space and public life that heavily influence urban life quality.



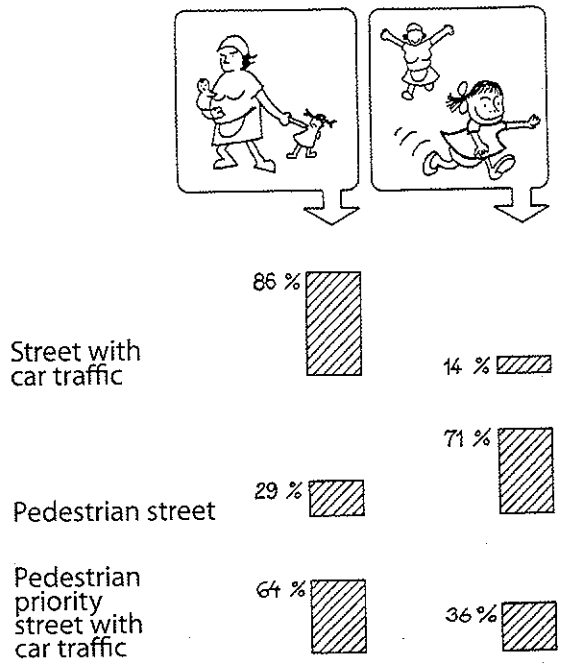
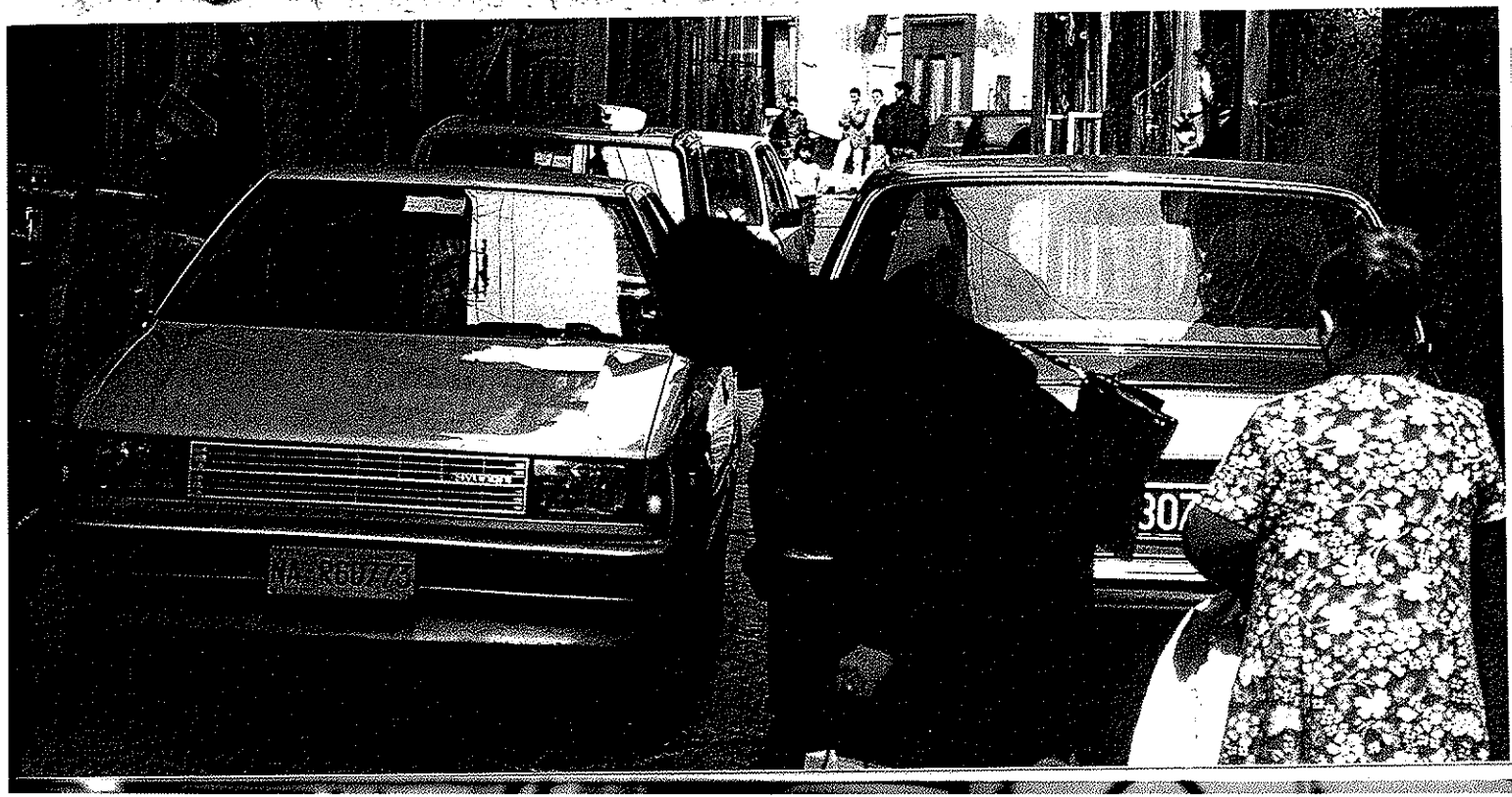


Diagram from Jan Gehl, Life Between Buildings: *"The price of fear. Registration of 0-6-year-old children in Australian traffic and pedestrian streets. Almost no children are allowed to run freely on the sidewalks on traffic streets, while almost no children are held by the hand on pedestrian streets."*[23]

Photograph left: "The price of fear", boy tied outside housing complex on the outskirts of Copenhagen in the 1970s.

Below: Street scene, Napoli, Italy.



GOING FROM 43 TO 12 CRITERIA

Developing a check-list to assess public space qualities

Who:	Jan Gehl et al (1974-)
Where:	Department of Urban Design, The Royal Danish Academy of Fine Arts, School of Architecture, Copenhagen, Denmark
When:	Ongoing
Method:	Checklist for assessing public space qualities
Published:	Not published[29]

What makes a public space a pleasant place to be and thus used? For several decades, numerous criteria for evaluating this question have been gathered, sorted and categorized into a tool known as "the 12 quality criteria".[30]

These 12 quality criteria (and there used to be many more) can be used in a delimited public space, where the observer evaluates and notes the extent to which the individual public space lives up to the criteria for inviting people to come and stay. A three-point scale is usually used for graphic illustration; for example, in three shades of gray, in order to compare public spaces.

The list of quality criteria was developed on the basis of fundamental knowledge about human senses and needs, as well as many years of public space studies in all parts of the world.[31] The underlying knowledge about human senses, needs, and what it takes to make people feel comfortable and stay in public space has been adapted over the years in a close dialogue with practice, so that it is functional.

The keyword chart on the opposite page was drawn up in the 1970s by Jan Gehl at The Royal Danish Academy of Fine Arts, School of Architecture for classroom use. Many more criteria were described in the beginning, because criteria important for urban and site planning were included, in addition to those relevant for public space.

Over the years, the idea has evolved into a checklist so simple that it is self-evident to most people and can serve as a tool that is easy to grasp, for example, in comparing various public spaces. At the same time, the checklist has to have a sufficient amount of detail and dimensions to enable assessments of the extent to which the individual public spaces meet the human need for protection and expression.

Today the tool is used as the starting point for dialogue. For example, a project team might use the checklist to examine how people experience the extent to which an existing or planned public space lives up to specifications about places to walk and stay, scale and climate conditions.

The drawing from 1974 shown opposite illustrates some of the categories found in later versions. Points were later redefined or eliminated, and those remaining were structured according to three main themes: protection, comfort and enjoyment.[32]

Even though the list was drawn up at a school of architecture, there is only a single point – the last one on the list – dealing with aesthetic qualities. This means that public space assessment does not take its starting point in aesthetic parameters. First we must consider people's need for protection from cars, noise, rain and wind, as well as their need to walk, stand, sit, look, speak, listen and express themselves. People also need to be able to utilize the positive aspects of the local climate and surroundings on a human scale. Experience has shown that much more than aesthetic qualities determine whether a public space is valued and used. However, it is important for overall quality that all the functional and practical aspects are dealt with within an architectural framework that respects visual qualities. Many of the world's best public spaces beautifully fulfill the 12 quality criteria on the list. Piazza il Campo in Siena, Italy is a prime example.

Opposite: A checklist devised by Jan Gehl for urban design students at The Royal Danish Academy of Fine Arts, School of Architecture, Copenhagen, 1974.

URBAN DESIGN — A LIST OF KEY WORDS

A. TASK ANALYSIS ⇒ DECISION ⇒ BASIC PROGRAMME

TASK ANALYSIS
DECISION
PRIMARY PROGRAMME

ANALYSING THE TASK
who is giving the task?
what are the objectives?
who will benefit?
etc.
⋮

- DECISION -
can task be accepted?
- if yes on what conditions?

BASIC PROGRAMME / GROWTH & CHANGES
overall goals
- what is to be planned and what is not?
- what is to be planned now and what is not?
- future developements
  alterations - growth/changes
- who decides?

B. PROGRAMME

SOCIAL STRUCTURE

1. A POLICY FOR THE SOCIAL STRUCTURE
considerations on the subdivisions into:
- primary groups
- secondary groups
- neighbourhoods
- townships
- towns etc.

2. A POLICY FOR THE DECISION MAKING
- who is to decide what?
- how can the decision making strengthen social structure?

3. A POLICY FOR INTEGRATION / SEGREGATION
- living / manufacturing / service
- different age groups
- social classes
- private - public spaces

4. A POLICY FOR THE PUBLIC SPACES
- how can social structure be strengthened by public spaces?
- what kind of public spaces? active/inactive diverse/specific inviting: ongoing/repulsive
- location of attracting pole

SERVICES AND COMMUNICATIONS

1. SERVICES
which services and facilities are needed?
where are they to be located in social structure?
where are they to be located on site?

2. INTERNAL COMMUNICATIONS
- see below -

3. RELATIONS BETWEEN INTERNAL & EXTERNAL COMMUNICATIONS
- distances to points of exchange
- quality of way
- quality of exch. point
- waiting time, frequency
  emergency traffic

4. EXTERNAL COMMUNICATIONS
kind of traffic
public/private
distances
speed - frequency
directions
etc.

C. DESIGN

STRUCTURE OF PEDESTRIAN SYSTEMS
- organizing the movements

1. NUMBER OF DIRECTIONS (LENGTH OF WALK)
to concentrate:
- one direction (compact ped. system)
to disperse:
- several directions (widespread ped. system)

2. NUMBER OF ALTERNATIVE ROUTES
to concentrate
- one street
to disperse
- several parallell streets
- skywalks etc.

3. NUMBER OF ALTERNATIVE TRANSP. SYSTEMS
to concentrate
- one system: walking
to disperse
- several systems

4. STRUCTURABILITY
- a logical "easy to find your way around" overall structure
- using topography
- etc.

- organizing the buildings / functions in relation to the pedestrian systems

1. DISTANCES BETWEEN BUILDINGS / FUNCTIONS
to concentrate
- compact ped. system
- attractions close together
- narrow facades
to disperse
- attractions far apart

2. NUMBER OF STOREYS / LEVELS
to concentrate
- one level
to disperse
- several levels

3. ORIENTATION OF BUILDINGS / FUNCTIONS
(entrances, doors, windows etc.)
to concentrate
- orientation towards public spaces
to disperse
- orientation away from public spaces

4. RELATIONS BETWEEN MOBILE & STATIONARY PEDESTRIAN ACTIVITIES
to concentrate
- same spaces for moving and staying
to disperse
- separate spaces

DESIGNING THE SPACES
DESIGNING THE EDGES

1. DIMENSIONS (LENGTH, WIDTH, AREAS)
- designing in relation to human senses / no. of persons
- small dimensions
- [illegible]

2. STRUCTURE / FORM
- spatial sequences
- closed vistas

1. INTERFACE BETWEEN PUBLIC & PRIVATE SPACES
to concentrate
- soft borders / overlapping
- semi public front [illegible]
- phys. & psych. accessibility
- [illegible]

2. DEGREE OF TRANSPARENCY BETWEEN PUBLIC & PRIVATE
to concentrate
- windows
- short distances
to disperse
- [illegible]

DESIGNING / DETAILING THE PUBLIC SPACES
(the pedestrian landscape)

1. PROTECTION AGAINST TRAFFIC & ACCIDENTS
- traffic accidents
- fear of traffic
- other accidents

2. PROTECTION AGAINST CRIME & VIOLENCE
- lived in / used
- streetlife
- streetwatchers
- social structure & identity
- overlapping / isolation in space & time
- lighting (when dark)

3. PROTECTION AGAINST UNPLEASANT CLIMATE
- wind
- rain, snow
  cold / heat
- draft

4. PROTECTION AGAINST UNPLEASANT SENSE-EXPERIENCES
- noise
- smog
- stench - smell
- dirt - dust
- blinding

5. POSSIBILITIES FOR WALKING
- space for walking (climate)
- lines of walk (organized)
- distance of walk (m/foot)
- distance of walk (experienced)
- surface (material)
- surface condition (snow)
- change of level etc.

6. POSSIBILITIES FOR STANDING
- standing zones
- standing spots
- support for standing

7. POSSIBILITIES FOR SITTING
zones for sitting
maximizing advantages
- primary sitting poss.
- secondary sitting poss.
- benches for resting

8. POSSIBILITIES TO SEE
seeing - distances
unhindered lines of vision
views
lighting (when dark)

9. POSSIBILITIES FOR HEARING / TALKING
- noise level
- talking distances
- bench arrangements
  a.o.

10. POSSIBILITIES FOR PLAY / UNWINDING
- play
- dance
- music
- theatre
- soapbox speeches are different age groups different people

11. POSSIBILITIES FOR A MULTITUDE OF OTHER ACTIVITIES
- space / area
- permission / accept
- "challenges"
- "generations"
  summer / winter / day / night etc.

12. POSSIBILITIES FOR PEACE / ISOLATION / INACTIVITY

13. PHYSIOLOGICAL NEEDS
- eat / drink
- rest
- run / jump / play
- public toilets!

14. SMALL SCALE SERVICES (FRIENDLY GESTURES)
- signs
- telephonebooths
- postboxes
- notice boards
- maps of town
- pushcarts / babycarts
- waste paper baskets

15. DESIGNING FOR ENJOYING POSITIVE CLIMATE ELEMENTS
- sun
- warmth / coolness
- breeze / ventilation

16. DESIGNING FOR POSITIVE SENSE-EXPERIENCES
- aesthetic qualities
- views
- nature - plants trees, flowers, animals

THE 12 CRITERIA

D. MAINTENANCE / CHANGE

1. DAILY MAINTENANCE
"built in" reasonable possibilities for:
- cleaning
- snowremoval
- icemelting
- etc.

2. REPAIR / UPKEEPING
"built in" sturdiness
- repairing
- painting
- re-planting
- etc.

3. BUILT IN CHANGEABILITY - FLEXIBILITY
- daily
- day to day
- summer / winter
- time to time

4. A POLICY FOR PUBLIC DECISIONMAKING - ON CHANGES

JAN 1976 OOT. 1976

SENSES AND SCALE IN PRACTICE

Experiencing distances in an ordinary context

Who:	Jan Gehl, et al.
Where:	Copenhagen, Denmark
When:	1987-2010
Method:	Testing theories, measuring, taking photos, collecting examples
Published:	Jan Gehl, *Cities for People*, Washington DC, Island Press 2010[33]

In order to focus more closely on public life and its interaction with public space, it has been essential to learn more about human senses. We need this knowledge in order to carefully adapt the city to the human scale. American anthropologist Edward T. Hall and environmental psychologist Robert Sommer, among others, have written on the topic.[34] However, it is one thing to read about human senses in relation to the scale of the city and public space, and quite another to test them in practice.

Distance is a significant aspect of the work with human senses in relation to public space. Often the scale of city space is much too large relative to the movement possibilities and senses of humans. Despite technological and social development, we are still pedestrian animals at a height of about 175 centimeters and with a predominantly horizontal field of vision with clear limitations as to what we can see, at what distance and within what angles.

Our sight allows us to detect human movements at a distance of 100 meters, but we can first interact socially and determine detail at much shorter distances. This impacts on how we arrange our surroundings – whether outside in public space, at the opera, in the classroom, or home around the dining table.

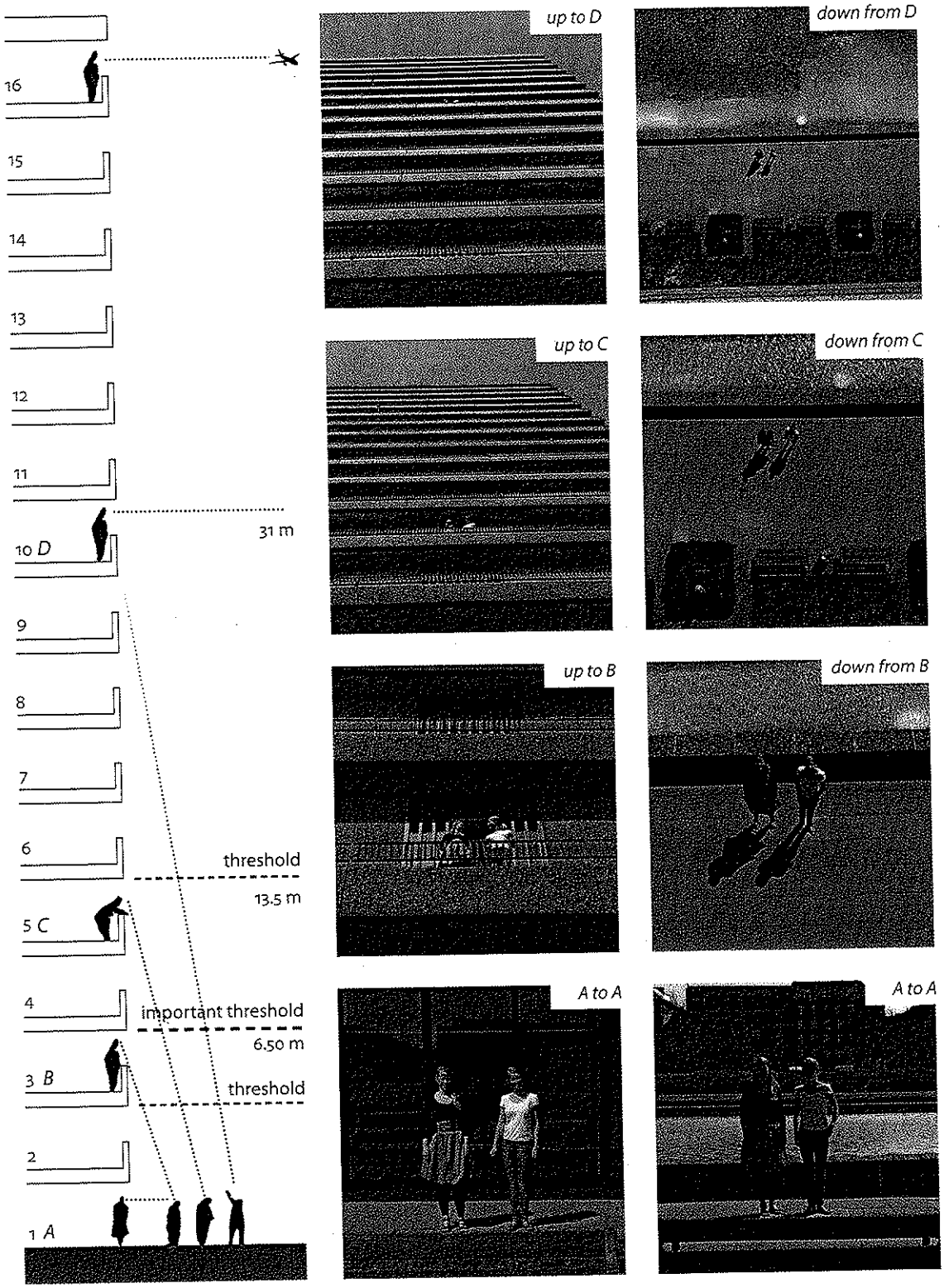
Naturally, the best kind of testing is to go to the opera or other public space and sense in relation to one's own body whether the spaces seem to large, too small, or perhaps just right. Personally experiencing spatial relationships and scales will always have the most useful impact.

Once we begin to measure, gather and systematize our own observations and examples, concepts like human scale, human senses and need take on a more concrete meaning. They are no longer incorporated as an afterthought at the end of a project, but can naturally form the starting point for designing cities, buildings and public space for people.

The increasing use of computer simulations to design cities, public space and buildings increases the importance of personally experiencing the interaction between public space and public life.

The page opposite shows an example of our knowledge about distance and human senses and scale tested in practice. The underlying idea is for the observer to go out and experience how the existing situation functions by conducting small tests that turn abstract knowledge into ordinary situations in order to better understand the practical consequences, as well as to better communicate this information to laymen and professionals. Testing scale is also highly recommended as a teaching method.

From Jan Gehl's book, Cities for People, *2010, illustrating one example of the theories of human senses tested in practice. The diagram and photographs show a test of the contact between people on the ground floor and various upper floors in a high building. Contact is already lost above the fifth floor.*[35]


16
15
14
13
12
11
10 D
31 m
9
8
7
6
threshold
13.5 m
5 C
4
important threshold
6.50 m
3 B
threshold
2
1 A
up to D
down from D
up to C
down from C
up to B
down from B
A to A
A to A

LIVELY CITY SPACE

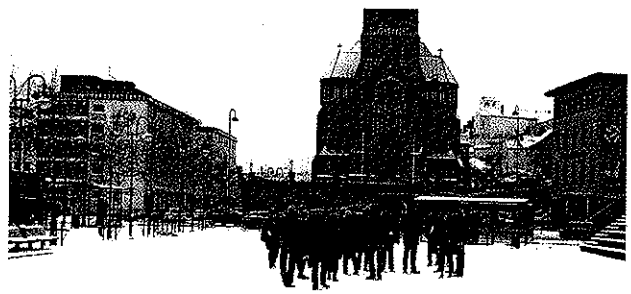
William H. Whyte's statistics from New York tested in a small Norwegian city

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

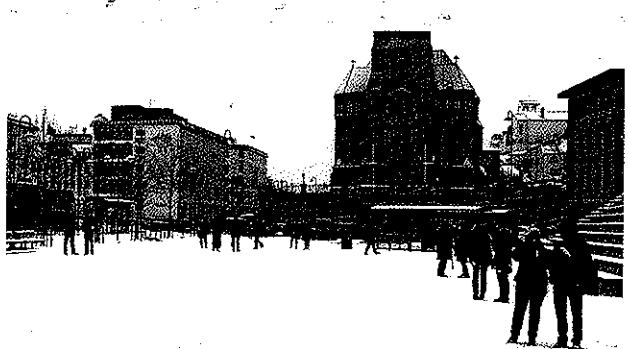
How many people does it take to make a public space lively, and is it at all possible to generate public life in small communities? Planners from small Norwegian towns were presented with William H. Whyte's theory that it takes about 16.6 pedestrians within the human visual field to make a public space 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.



In the middle



On the edge

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

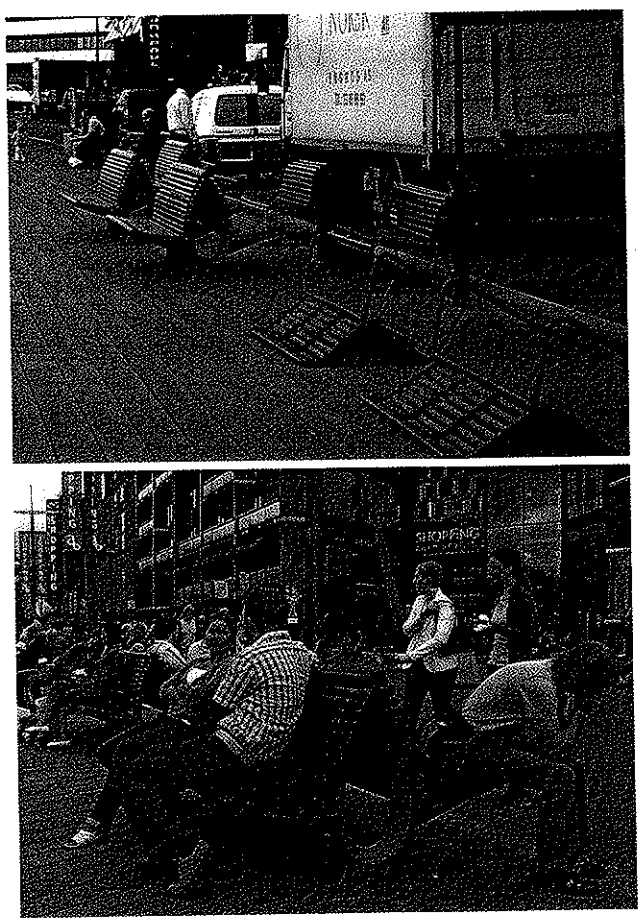
When the number of seats is doubled, do more people sit?

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.

STREET BALLETS ON FILM

Time-lapse studies of small scenes in public space

Who:	William H. Whyte
Where:	Street life project, New York, USA
When:	1971-1980
Method:	Time-lapse photography
Published:	William H. Whyte, *The Social Life of Small Urban Spaces*, New York: Project for Public Spaces, 1980[47]

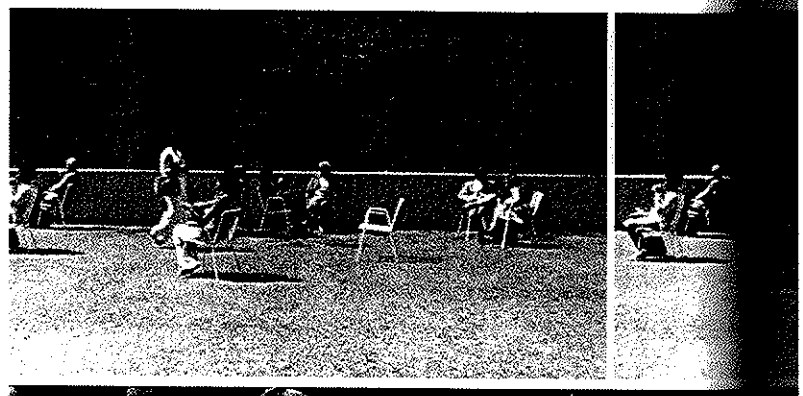
Life in public space consists of numerous small, unremarkable situations, but how can we register and illustrate these small everyday happenings?

Anyone who has ever tried to photograph telling situations in public space knows how much patience is required to capture the narrative moment one has just witnessed, if that is even possible. Many moments are exactly that: moments. Or perhaps situations cannot be reduced to a single photograph, because while the situations may play out in a split second, over time they are sequences that cannot be frozen into a single snapshot.

William H. Whyte had an eye for the way that small everyday situations provide much information about how people use public space. He used time-lapse photography to reproduce what Jane Jacobs called small street ballets, which are performed on the city's streets, squares and sidewalks, particularly street corners.

On this page and the next is shown one of the scenes Whyte captured with time-lapse photography on a street corner in Manhattan in the 1970s: A businessman is showing another how to swing a golf club. The first businessman adjusts the position of the second man's arm, the invisible golf club swings through the air, and the golfer finishes the swing with final adjustments being made to his back leg. Whyte was in the city to capture and describe situations that take place and to understand why it was precisely this corner and not in the middle of the sidewalk that the two men stopped to talk.

Whyte's point is that this type of situation does not happen just anywhere, and he describes what characterizes the best street corner: "One of New York's best corners is 49th Street



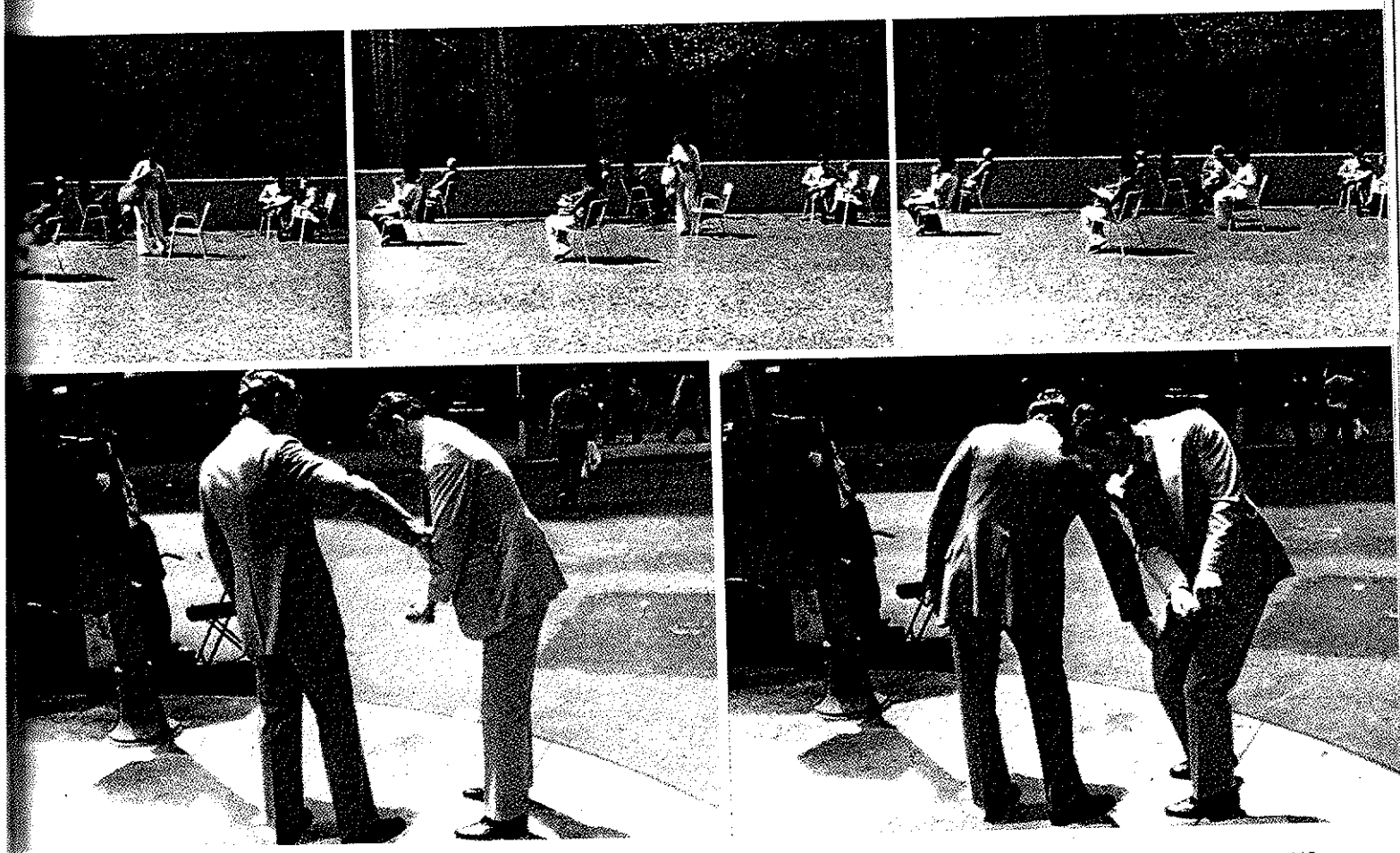
and the Avenue of the Americas, alongside the McGraw-Hill building. This corner has all of the basics: sitting space, a food vendor, and a heavy pedestrian flow, the middle of which is a favorite place for conversations."[48]

The top sequence of pictures shows another example taken by time-lapse photography, of a woman moving her chair just a bit – not to move into the sun or away from it or anything else, but to own the space or to show she is in charge. She has the opportunity to mark where she will sit. Illustrating someone's desire to mark their surroundings with a little photo sequences is stronger than any verbal description – even though Whyte's lively description in words supplements the pictures with an interpretation that guides the reader.

There has been a technological development in time-lapse photography since Whyte conducted these studies in the 1970s. All the same, Whyte's in-depth description of the use of time-lapse photography at the end of his book *The Social Life of Small Urban Spaces* continues to be useful and instructive. For example, Whyte writes about placing the camera so that it is not visible from the street, what time-lapse cannot capture and about interpreting the material: "Let me emphasize again that you have to know what to look for or you will not see it. Direct observation is the prerequisite."[49] For Whyte, direct observations are a prerequisite for being able to make a qualified analysis of the photographic material.

Captions from The Social Life of Small Urban Spaces.
Top series: "The impulse to move chairs, whether only six or eight inches, is very strong. Even where there is no functional reason for it, the exercise of choice is satisfying. Perhaps this is why the woman above moved her chair a foot – neither into the sun nor out of it."[50]

Bottom series: "A corner of Wall Street is a great place for business conversations."[51]



400 m
800 m

400 m
800 m

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.