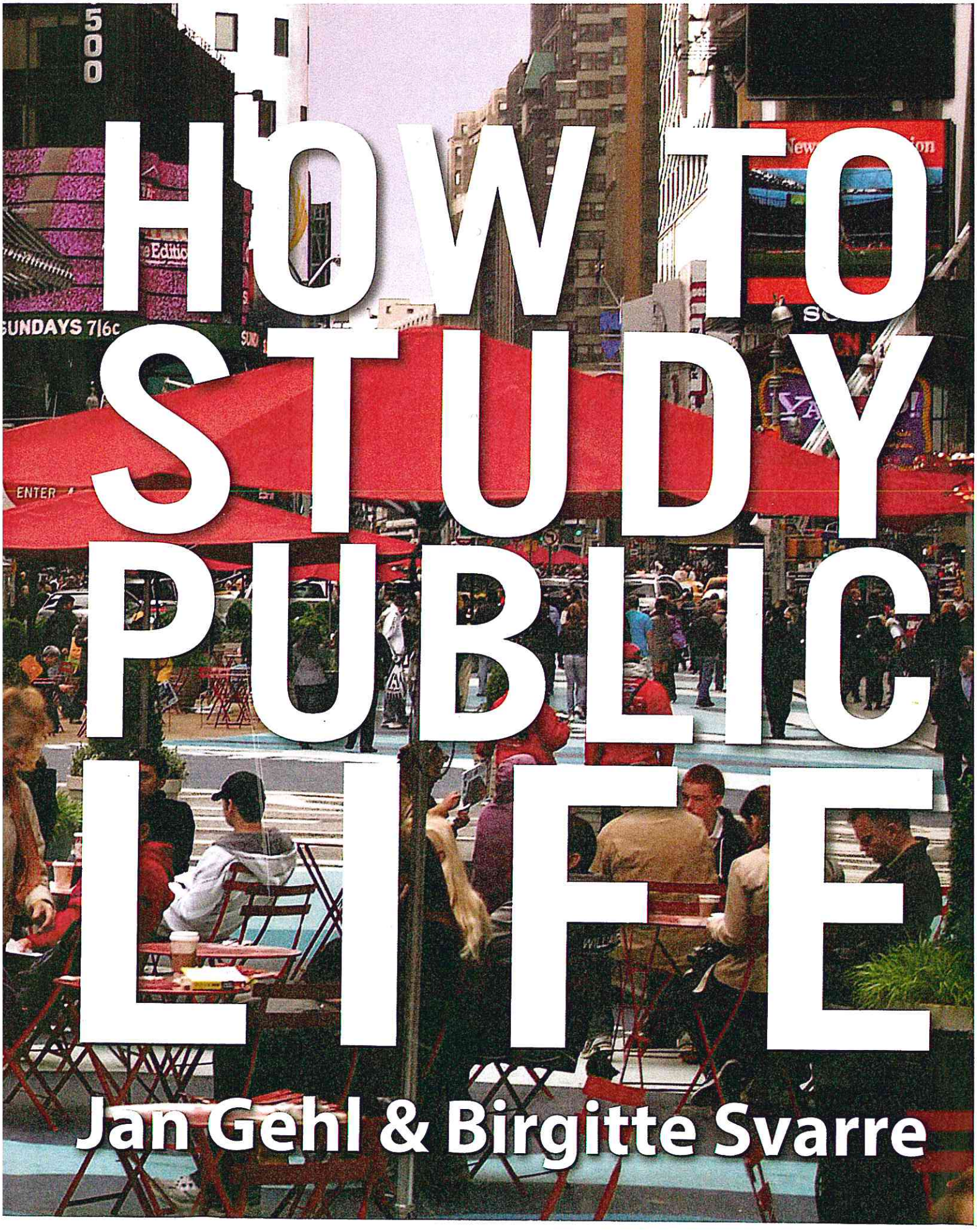
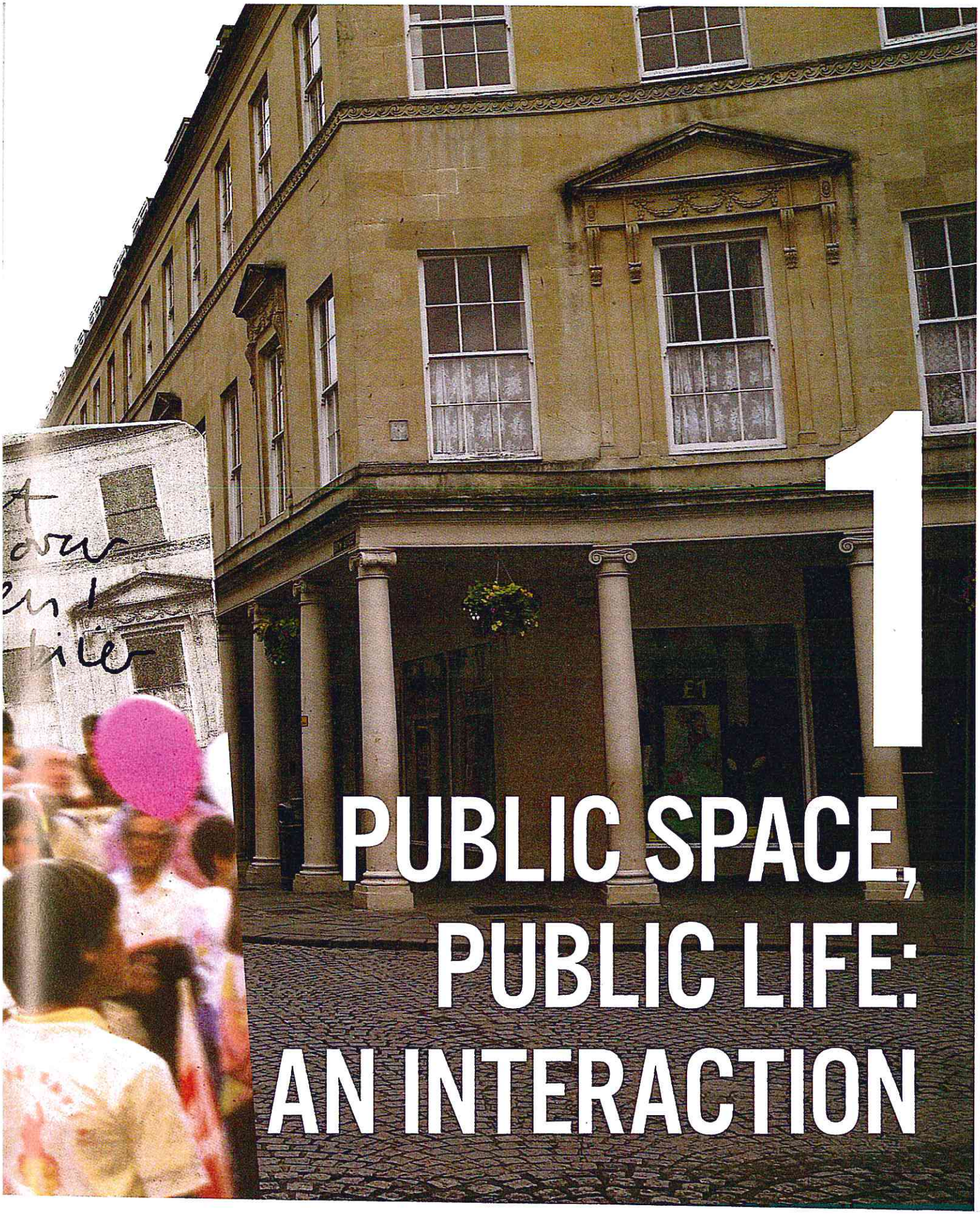


HOW TO STUDY PUBLIC LIFE

Jan Gehl & Birgitte Svarre



1 PUBLIC SPACE, PUBLIC LIFE: AN INTERACTION

Like the weather, life is difficult to predict. Nonetheless, meteorologists have developed methods enabling them to predict the weather, and over the years their methods have become so refined that they can make forecasts with greater accuracy and reach. The methods described in this book also deal with foreseeing phenomena in constant flux, but the focus here is how life unfolds in city space. Just as with weather forecasting, this doesn't mean that anyone can develop a sure-fire method to predict how people will use a particular city space. Masses of data have been gathered over the years concerning the interaction of life and space in cities, and just like meteorologists' knowledge about the weather, this data can provide greater understanding of city life and predict how it will presumably unfold in the given framework.

This book describes the methods that have been developed over the past 50 years to study the interaction between public life and space. They are tools to help us understand how we use public space so that we can make it better and more functional. Observation is the key for most of the studies presented in the book.

It has been necessary to develop, almost from scratch, special tools for looking at people because people's use of cities has been overlooked, while abstract concepts, large structures, traffic challenges and other amorphous issues have dominated urban planning.

Public Space and Public Life – on Speaking Terms

Good architecture ensures good interaction between public space and public life. But while architects and urban planners have been dealing with space, the other side of the coin – life – has often been forgotten. Perhaps this is because it is considerably easier to work with and communicate about form and space, while life is ephemeral and therefore difficult to describe.

Public life changes constantly in the course of a day, week, or month, and over the years. In addition, design, gender, age, financial resources, culture and many other factors determine how we use or do not use public space. There are many excellent reasons why it is difficult to incorporate the diverse nature of public life into architecture and urban planning. Nonetheless, it is essential if we are to create worthy surroundings for the billions of people who daily make their way between buildings in cities around the world.

In this context, public space is understood as streets, alleys, buildings, squares, bollards: everything that can be considered part of the built environment. Public life should also be understood in the broadest sense as everything that takes place between buildings, to and from school, on balconies, seated, standing, walking, biking, etc. It is everything we can go out and observe happening – far more than just street theatre and café life. However, we do not mean city life to be understood as the city's psychological well-being. Rather it is the complex and versatile life that unfolds in public space. It makes no difference whether our point of departure is Copenhagen, Dhaka, Mexico City, or a small city in Western Australia. The nub is the interplay between life and space in all its guises.

The Missing Tools

At the beginning of the 1960s, critical voices began to point out that something was very wrong in many of the new districts being built, in record numbers, during this period of rapid urban growth. Something was missing, something

that was difficult to define, but was expressed in concepts like 'bedroom communities' and 'cultural impoverishment.' Life between buildings had been forgotten, pushed aside by cars, large-scale thinking, and overly rationalized, specialized processes. Among the critics of the time were Jane Jacobs and William H. Whyte in New York City, Christopher Alexander in Berkeley, and one of the authors of this book, Jan Gehl in Copenhagen.

Public life and public space were historically treated as a cohesive unit. Medieval cities grew little by little in accordance with changing needs, in contrast to the rapid tempo of modernism's large-scale planning.

Cities have grown gradually for hundreds of years, rooted in many years of experience and an intuitive feeling for human senses and scale. The organic growth of medieval cities encompassed a building tradition based on generations of experience in how to create cities with well-functioning interaction between life and space. But this knowledge was lost somewhere in the process of industrialization and modernization, which led to dysfunctional city environments for the important and yet ignored segment of city life on foot. Of course, society has changed since the Middle Ages. The solution is not to recreate pre-modern cities, but to develop contemporary tools that can be applied analytically to once again forge an alliance between life and space in cities.

The Contours of an Academic Field

The environmental design pioneers of the 1960s took the basic steps needed to better understand the ephemeral concept of public life and its interaction with public space and buildings. Their method was to study existing, and as a rule pre-industrial, cities and public space to gain basic knowledge about how we use and get around in cities.

Several books published from 1960 to the mid-1980s are still considered the basic textbooks for public life studies.[1] Although the methods described were later refined and new agendas and technologies emerged, the basic principles and methods were developed in that period.

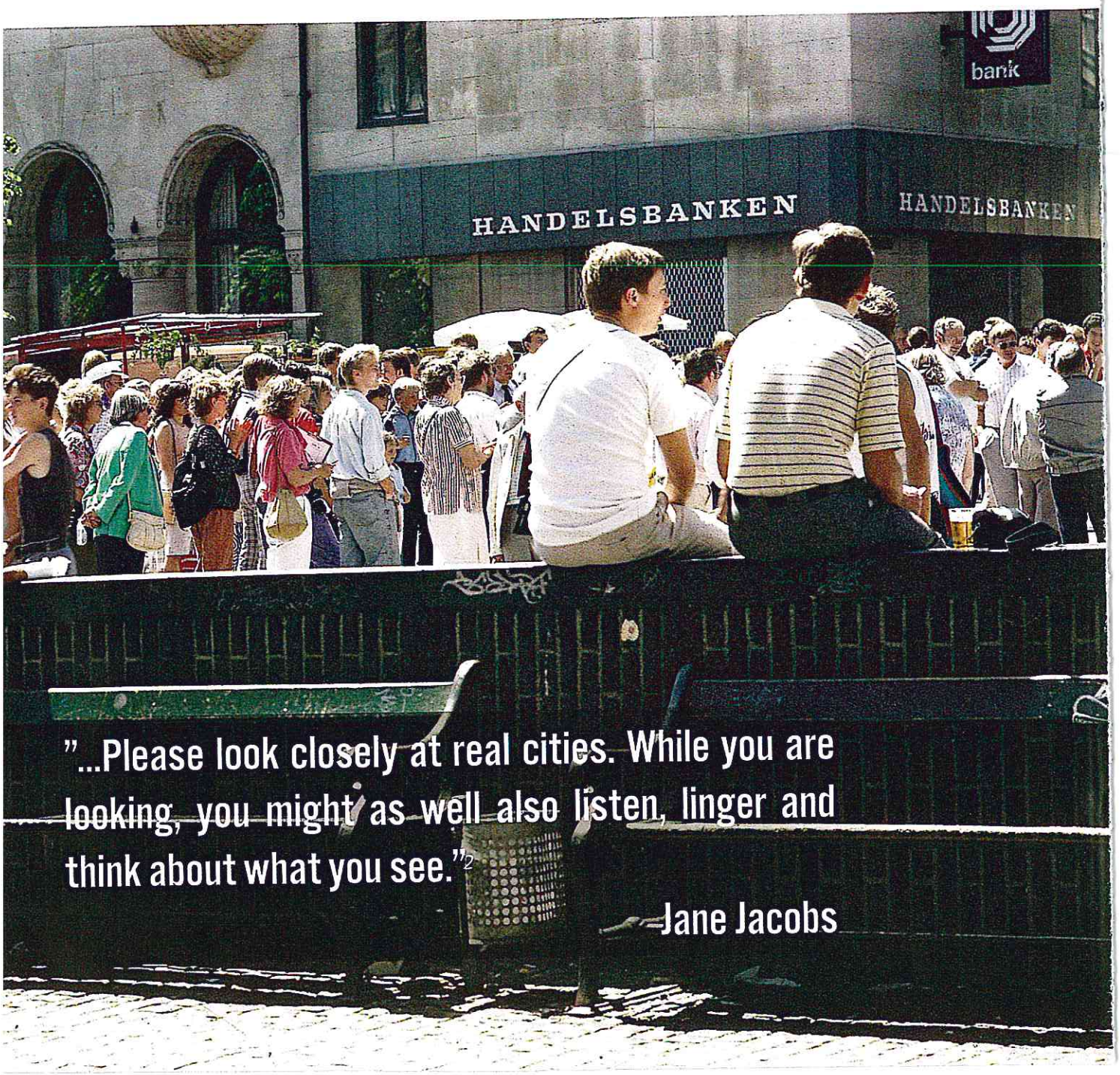
Up to the mid-1980s, this work was carried out primarily at academic institutions. However, by the end of that decade, it was clear that the analyses and principles regarding public life and public space should be converted into tools that could be used directly in urban planning practice. City planners and politicians wanted to make conditions better for people in order to have an edge in inter-city competition. It became a strategic goal to create attractive cities for people in order to attract residents, tourists, investments and employees to fill new jobs in the knowledge society. Meeting this goal required understanding people's needs and behavior in cities.

From about the year 2000, it increasingly became taken for granted in the fields of architecture and urban planning practice generally that working with life in cities was crucial. Much bitter experience had shown that vibrant city life does not happen by itself. This is particularly noticeable in cities that are highly developed economically, because apart from commuters, people are no longer on the street by necessity to work, sell trinkets, do errands, and so on.

However, less economically viable cities are also impacted, because the rapidly growing volume of motorized traffic and related infrastructure provides obstacles for pedestrians and produces noise and air pollution for many people in their daily lives. The core of the matter is to get the large volumes of life in public spaces to function in a way that allows daily life to take place under decent conditions and partner with the physical framework instead of fighting against it.

Observations in the City

Direct observation is the primary tool of the type of public life studies described in this book. As a general rule, users are not actively involved in the sense of being questioned, rather they are observed, their activities and behavior mapped in order to better understand the needs of users and how city spaces are used. The direct observations help to understand why some spaces are used and others are not.



"...Please look closely at real cities. While you are looking, you might as well also listen, linger and think about what you see."[2]

—Jane Jacobs

Studying people's behavior in public space can be compared to studying and structuring other forms of living organisms. They could be animals or cells: counting how many there are in total, how quickly they move under various conditions, and generally describing how they behave on the basis of systematic observation. People's behavior is documented, analyzed, and interpreted, but this is not done under the microscope. The observations are conducted with the naked eye and occasionally using cameras or other aids to zoom in on situations or fast-freeze the moment in order to analyze the situation more closely. The point is to sharpen the gaze of the observer.

A literary author who made a virtue out of describing ordinary life as it unfolds in public space was Frenchman Georges Perec (1936-82).[3] In *Species of Spaces and Other Pieces* (1974), Perec instructed his readers in how to see what is overlooked in the city.[4] He encouraged them to practice by occasionally taking notes of what they see, preferably using some type of system.

Perec wrote that if you don't notice anything, it is because you have not learned to observe. "You must try more slowly, almost foolishly. Force yourself to write down what is not of interest, the most banal, ordinary, colorless."[5] Life in the city can seem banal and fleeting, and therefore, according to Perec, the observer must look and take the time needed to really see the ordinariness unfolding in public space.

In *The Death and Life of Great American Cities* (1961), Jane Jacobs wrote in the preface to her descriptions of public life, primarily gathered from her own neighborhood of Greenwich Village in Manhattan: "The scenes that illustrate this book are all about us. For illustrations, please look closely at real cities. While you are looking, you might as well also listen, linger and think about what you see."[6] According to Jacobs, when you are in the city you should take the time to reflect over what you are sensing – note: using all your senses. Certainly the sense of sight is key to observation, but this does not mean closing down our other senses; on the contrary. It means focusing our attention and noticing the surroundings we move through quite unconsciously every day.

According to the *Macmillan* online dictionary, to observe means "to watch or study someone or something with care and attention in order to discover something".[7] And watching with care and attention is precisely what it takes to wrest useful knowledge from ordinary scenes. Anyone who decides to observe life in the city will quickly realize that you have to be systematic in order to get useful knowledge from the complex confusion of life in public space. Perhaps the person being observed is actually running an errand, but takes time to look at other people along the way, or catches sight of a protest march in the street that becomes all engrossing.

In general, the observer must be as neutral as the proverbial 'fly on the wall' – the party's benchwarmer rather than its lion, an invisible non-participant who takes in the big picture without taking part in the event. An observer can play various roles depending on the character of the study. The role of registrar, for example, counting units, where precision is the most important function. The registrar can also have an assessment role, categorizing people by age group, for example. Here the ability to evaluate is the most important function. Or the registrar's role can be analytical, keeping a detailed diary with a feeling for nuance, a trained eye and experienced sense of what type of information is relevant.

It is possible to train your eye in the art of observation. Naturally, there is a difference between the eye of a professional and a lay person, but in principle, anyone can observe city life. Beginners will need to hone their skills, see the world through new eyes and use tools advisedly, while the trained, professional eye can perceive new connections. However, there are great differences in the degree to which observers will understand the form aspects. If observers are also expected to interpret, they will need spatial training.

Man or Machine

In their revolt against modernism's abstract planning, city-life study pioneers such as Jane Jacobs, William H. Whyte and Jan Gehl encouraged people to see the interaction of

city life and space with their own eyes, because it provides greater understanding. We believe this is still the critical starting point for going into the city to observe, using one's senses, common sense and simple registration techniques with pen and paper, which is why we emphasize these manual methods.

In using these manual methods, the observer is the human factor for good and ill. Technical solutions such as video surveillance cameras or GPS (Global Positioning System) tracking devices can sometimes serve as more objective solutions. The decision must be made as to the degree of precision needed and the form of knowledge wanted. The key difference is that human registration always brings more than cold facts to the table. When people are doing the counting, for example, they can add information from the site that can have decisive influence on interpretation. Observers often bring extra material home by using their senses and common sense. An automatic bicycle counter is set up on a bike path to count passing bikers. One day almost no bicyclists are registered. What the human registrar can see is that a van is parked on the bike path a few feet ahead of the automatic counter, so on that day the bicyclists veer around the counter. Naturally, the human registrar counts the bicycles anyway, noting the conditions and taking a picture, while the automatic counter simply registers a low number of bicyclists.

Ethical Considerations

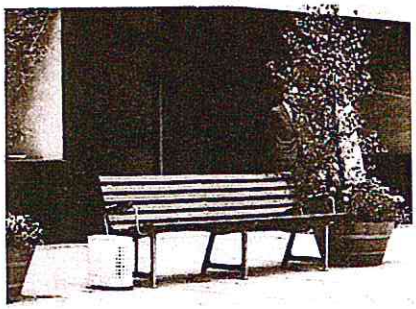
When gathering data on human behavior, it is always important to weigh how and where ethical considerations should be made. Data should be anonymized. Legislation varies from country to country.

Observations are often accompanied by photo documentation. In Denmark, it is legal to photograph as long as the photos are taken from places that are 'freely accessible'. In other words, you are not allowed to enter private property without permission, but you can take a picture of someone standing in his own front yard, if that person can be seen with the naked eye from a public street. The rules serve a double purpose: to protect individuals from invasion of privacy and to protect the freedom of journalists and others to freely gather information.[8]

Photo series from Strøget, Copenhagen's main pedestrian street, illustrating what Jane Jacobs calls "sidewalk ballet."[9] The ballet is rendered in brief scenes in which life unfolds like a dance in public space. The example opposite shows a little ballet involving a bench in inner Copenhagen. The study of the nuances of bench use originate from an article by Jan Gehl, "People on Foot", from 1968.[10] The running dialog under the photographs was originally written in Danish by Jan Gehl together with Mark von Wodtke, who was part of the study group that conducted Copenhagen's first large public life study in 1968.

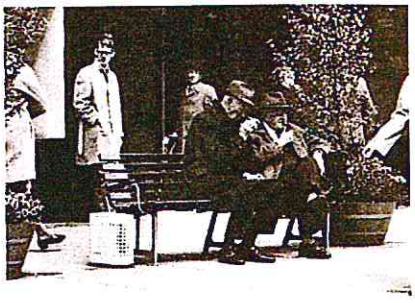
How is a bench used?

Jan Gehl, "People on Foot", Arkitekten no. 20/1968"
- Mark Von Vodtke



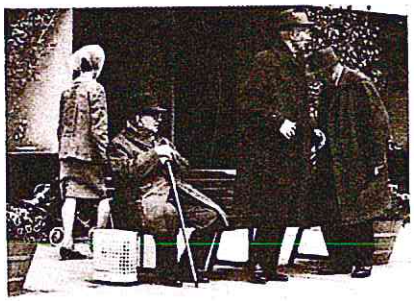
There's a bench.

A+B: "Great, let's sit..."



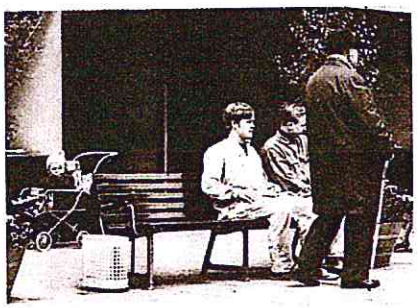
A+B: "... so I can puff on my pipe"
(The man in the background is still waiting.)

C: "Ah, an empty seat on the end: I'll grab that."

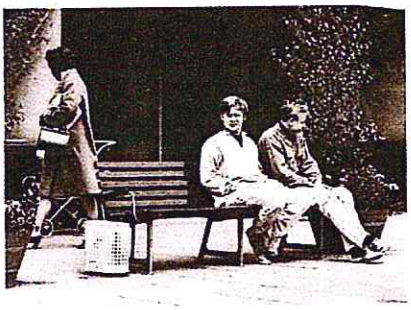


A+B: "Well, time to move on."

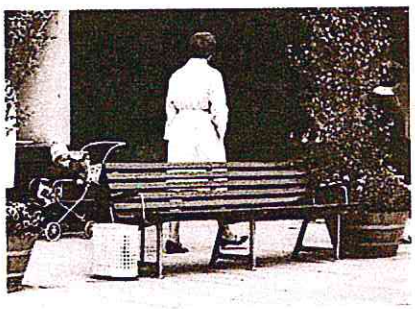
C: "This is a good place to sit."



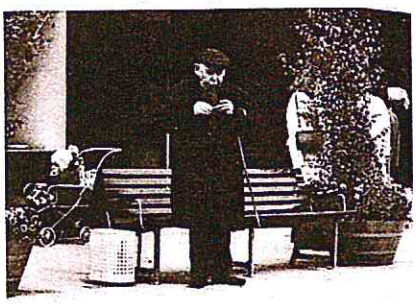
C: "Here come two apprentices with paint all over their pants. I think I've been here long enough."



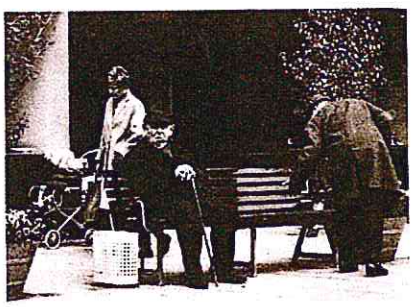
D+E: "Wow, did you get a look at her?"



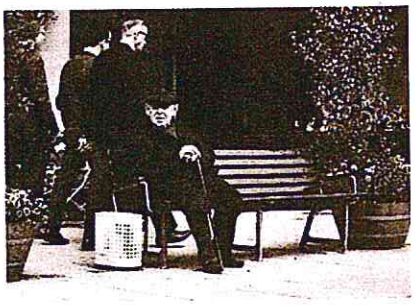
There's an empty bench.



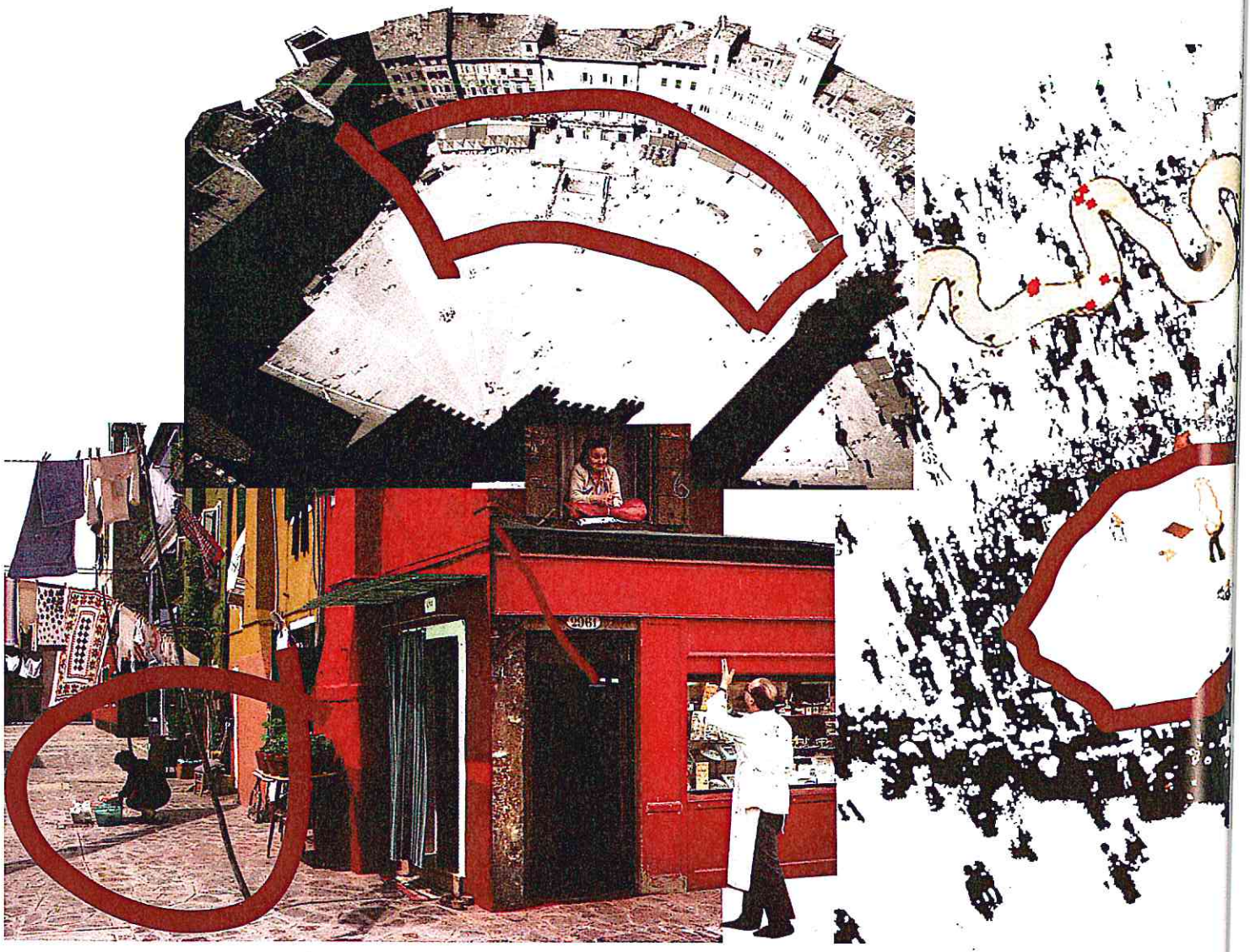
F: "Ah, an empty bench. I wonder if there are any red ones left?"

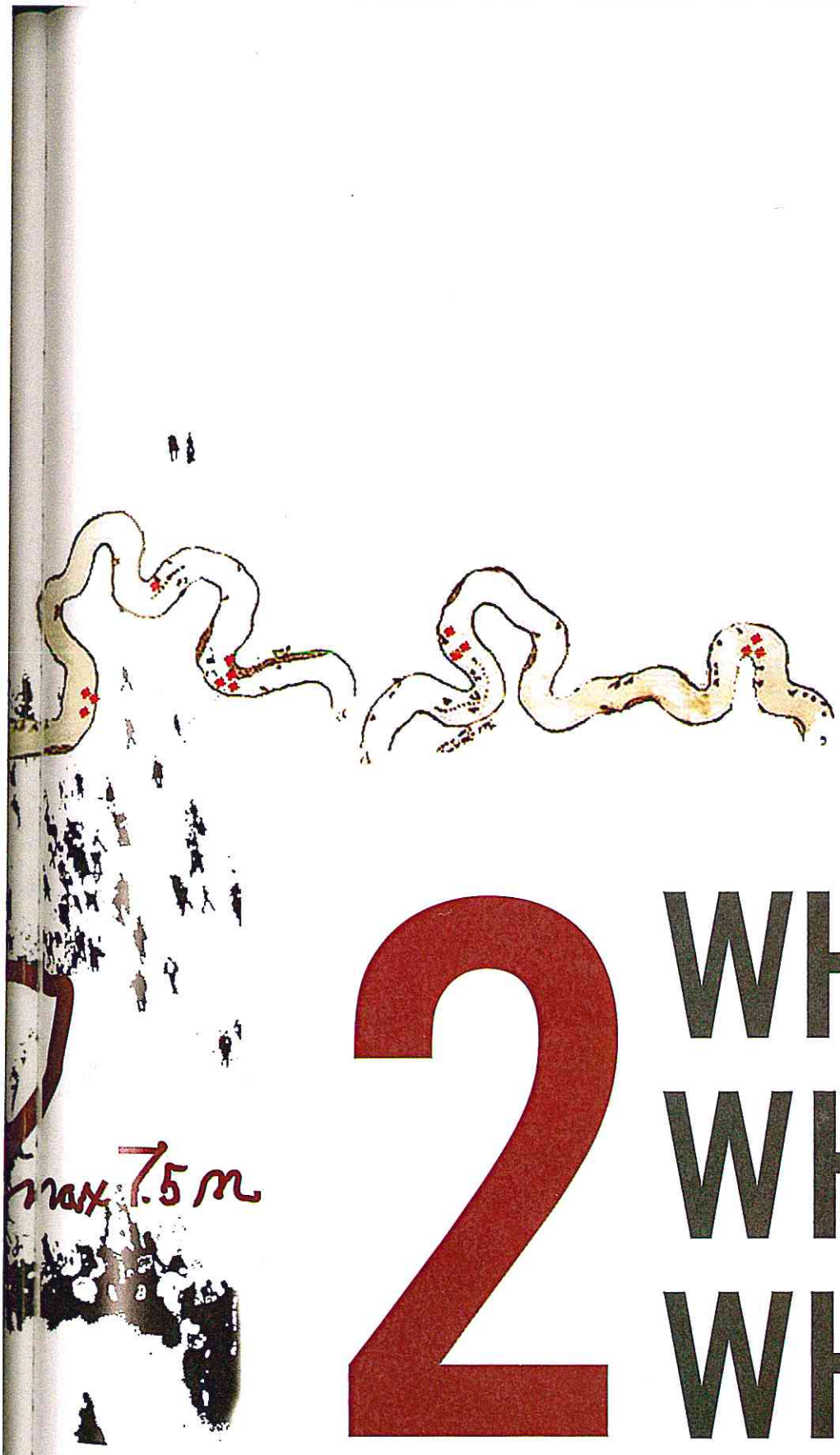


G: "This is a nice place. I'll sit at the opposite end. What on Earth is that white stuff? Fresh paint! – well, I'm not going to sit there"



F: "So he didn't really want to sit down. I guess I'll manage with my own company"... (The little guy is still waiting patiently in his stroller.)





2 WHO, WHAT, WHERE?

It is necessary to ask questions systematically and divide the variety of activities and people into subcategories in order to get specific and useful knowledge about the complex interaction of life and form in public space. This chapter outlines several general study questions: how many, who, where, what, how long? An example is given showing how each basic question has been studied in various contexts.

The list of questions that can be asked about the interaction between life and form is essentially endless. The questions listed in the paragraph at left are the most basic, and, naturally, can be combined in any way. When asking where people stay, it is usually relevant to ask who they are, how long they are staying or some other combination of questions.

It is not possible to draw up a list of fixed questions that can be investigated in all areas or cities. Every city is unique, and observers must use their eyes, other senses and good common sense. Most important is that the context and site determine the methods and tools, and on the whole, how and when the study should be conducted.

However, common to all sites and situations is that at the very moment observers fasten their gaze on a group of people or types of activities or otherwise fix their attention on the diversity of activities, groupings, tendencies, etc., it becomes patently clear that the prospect is complex, overlapping and not easy to study. Different types of activities are interwoven: recreation and purposeful activities take place side by side. We can speak of chains of events – and of continuous change. Precisely because the interaction between life and space is so complex and difficult to pin down, it can be useful to ask basic questions in an insistent, journalistic manner, and to ask them again and again.

To focus attention on who, what, where and other basic questions can provide general knowledge about behavior in public space and special knowledge of a specific issue in practice. Studying these key questions can provide documentation and understanding of a given pattern of activity or concrete knowledge about who goes where or not in a given place. Thus these elementary questions can be used in practice as well as for more basic research purposes.

Once we begin observing city life and its interaction with physical surroundings, even the most ordinary street corner can provide interesting knowledge about the interplay of city life and form - anywhere in the world. We can systematize our observations by asking basic question like who, what and where.

Left: Cordoba, Argentina, where architect Miguel Angel Roca formulated a holistic strategy for an architectural and social urban policy in 1979-80.[1]

New Road, Brighton, England

How many people are walking and how many are stationary? In Brighton New Road, a public life study helped to determine use before and after improvements were made. The number of pedestrians rose by 62% after the street was converted into a pedestrian-priority street in 2006. The number of stationary activities increased by 600%.[2]

This type of before-and-after headcount quantifies the extent to which the initiative is used. In Brighton, the numbers document that New Road has shifted status from a transit street to a destination. Statistics like these can be used as a good argument for prioritizing other pedestrian projects, both local and general.

Question 1. How Many?

Making a qualitative assessment by counting *how many* people do something makes it possible to measure what might otherwise seem ephemeral: city life. Almost all cities have a traffic department and precise data on how many cars drive through major arteries while departments for 'pedestrians and public life' are almost unknown, as are headcounts of people.

Counting provides quantitative data, which can be used to qualify projects and as arguments one way or the other in decision-making processes. Indisputable measurements can often serve as convincing arguments.

Starting with the question of *how many* is basic to public life studies. In principle, everything can be counted, but what is often registered is *how many* people are moving (pedestrian flow) and *how many* are staying in one place (stationary activity).

The question of *how many* or *how few* comes in several varieties in public life studies, such as before and after urban improvement projects. If we know *how many* people are staying in a square, and we then improve the square and count the number of people again, we can evaluate the success of the renewal project. If the objective was for more people to stay at the square, counting *how many* using the same methodology on comparable days will quickly reveal the degree of success or failure. Usually quite a number of counts have to be made in order to be able to compare different times of day, different days and different seasons.

A number on its own is seldom of interest. It is important that results can be compared. Therefore, it is essential to register precisely and comparably. Factual conditions like weather and time of day must also be noted consistently and precisely so that similar studies can be conducted at a later date.

Question 2. Who?

We see gathering knowledge about people's behavior in public space as the cornerstone of a public life study. When we say 'people', we mean widely different groups of people measured by various parameters. It is often relevant to be more specific about precisely *who* uses various public spaces. While registration can be done on the individual level, it is often more meaningful to investigate more general categories such as gender or age.

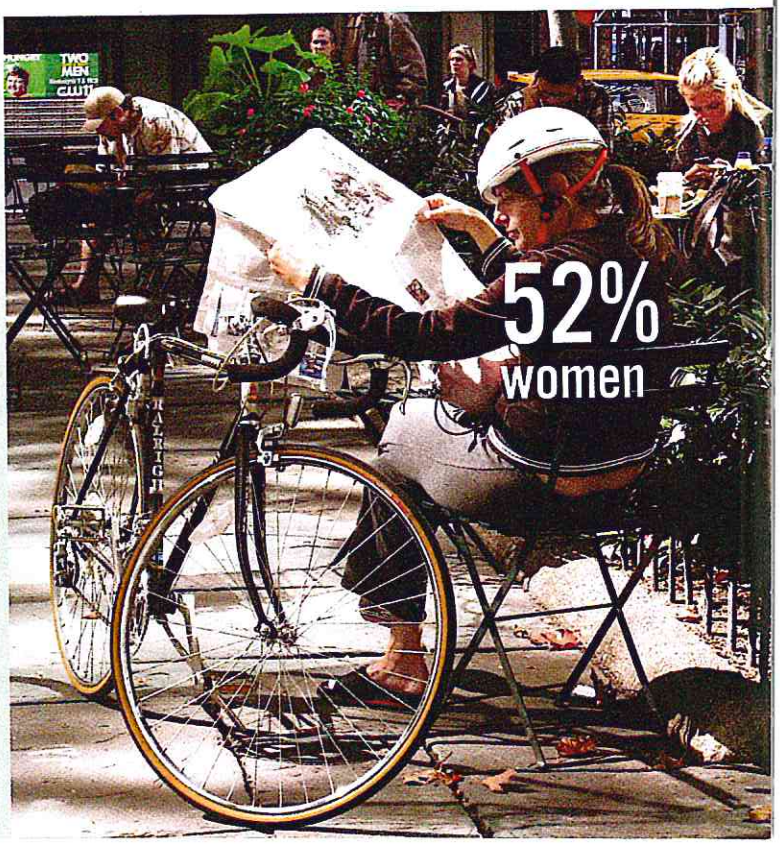
Basic knowledge about the behavior of various groups of people can be used to plan more precise ways of accommodating the needs of women, children, the elderly and disabled, for example. We emphasize these groups here because they are often overlooked.[3]

The general question of gender and age can be registered by observation, naturally allowing for a certain degree of inaccuracy in making a subjective evaluation of age group. It is difficult or impossible to categorize people with respect to job or economic situation, for example, on the basis of observation alone.

Bryant Park, New York City

Bryant Park is in the middle of Manhattan between Times Square and Grand Central Terminal. One possible indicator for whether a park is safe is the presence of a sufficient number of women. Every day at 1:00 and 6:00 p.m., the park officer walks systematically through Bryant Park and clicks on two counters to record the number of men and women, respectively. The park officer also notes weather conditions and temperature.[4]

In Bryant Park the ideal gender division is on the order of 52% women and 48% men. If the percentage of women falls, it could be a sign that park safety is on the wane. Weather conditions do play a role, however, as Bryant Park's data show that the number of women in the park increases in warmer weather.[5]



Question 3. Where?

Planners and architects can design public space on the basis of *where* people are expected to go and to stay. However, many trampled footpaths across otherwise pristine lawns attest to the fact that people do not always act as intended. In order to encourage crowds of pedestrians to flow smoothly and still create the best conditions for inviting people to use public space, it is vital to have basic and specific knowledge of *where* people move and stay in individual spaces. Studies of movement and staying can help uncover barriers and pinpoint where pedestrian paths and places to stay can be laid out.

If the study area is a delimited city space, it is often relevant to study where people stay: on the edges, in the middle or evenly distributed in the space? In public, semi-public or private zones? The *where* question allows observers to zoom in on positioning relevant to function or elements such as furniture, garden gates, entrances, doors, bollards, etc.

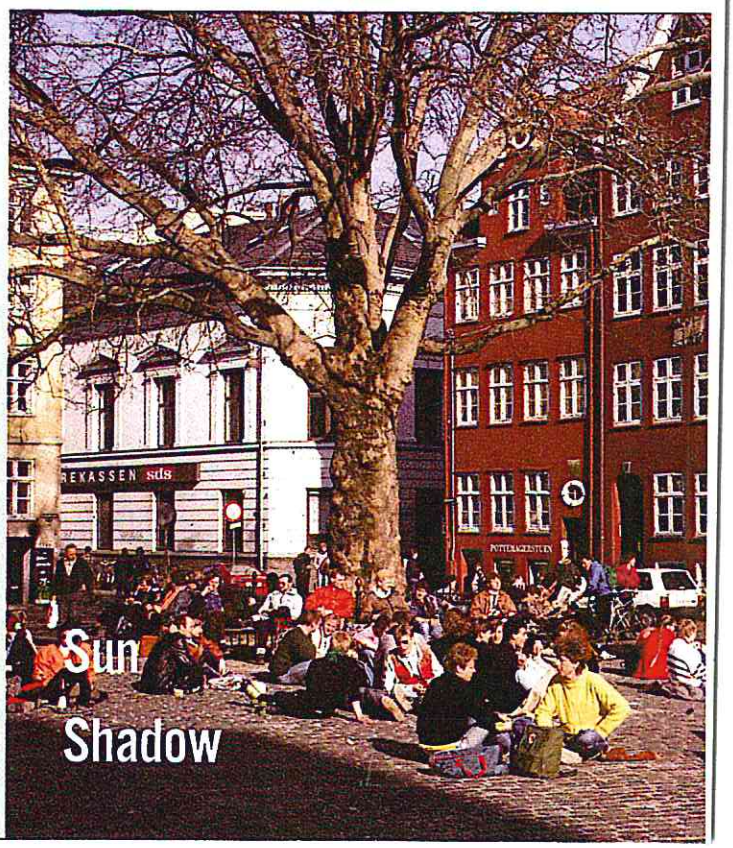
If the study area is a neighborhood or quarter, it can be relevant to determine *where* people and activities are gathered or dispersed to a greater or lesser degree. On the city level this can mean registering or localizing numerous functions, activities, direction of pedestrian flow and preferred places to stay.

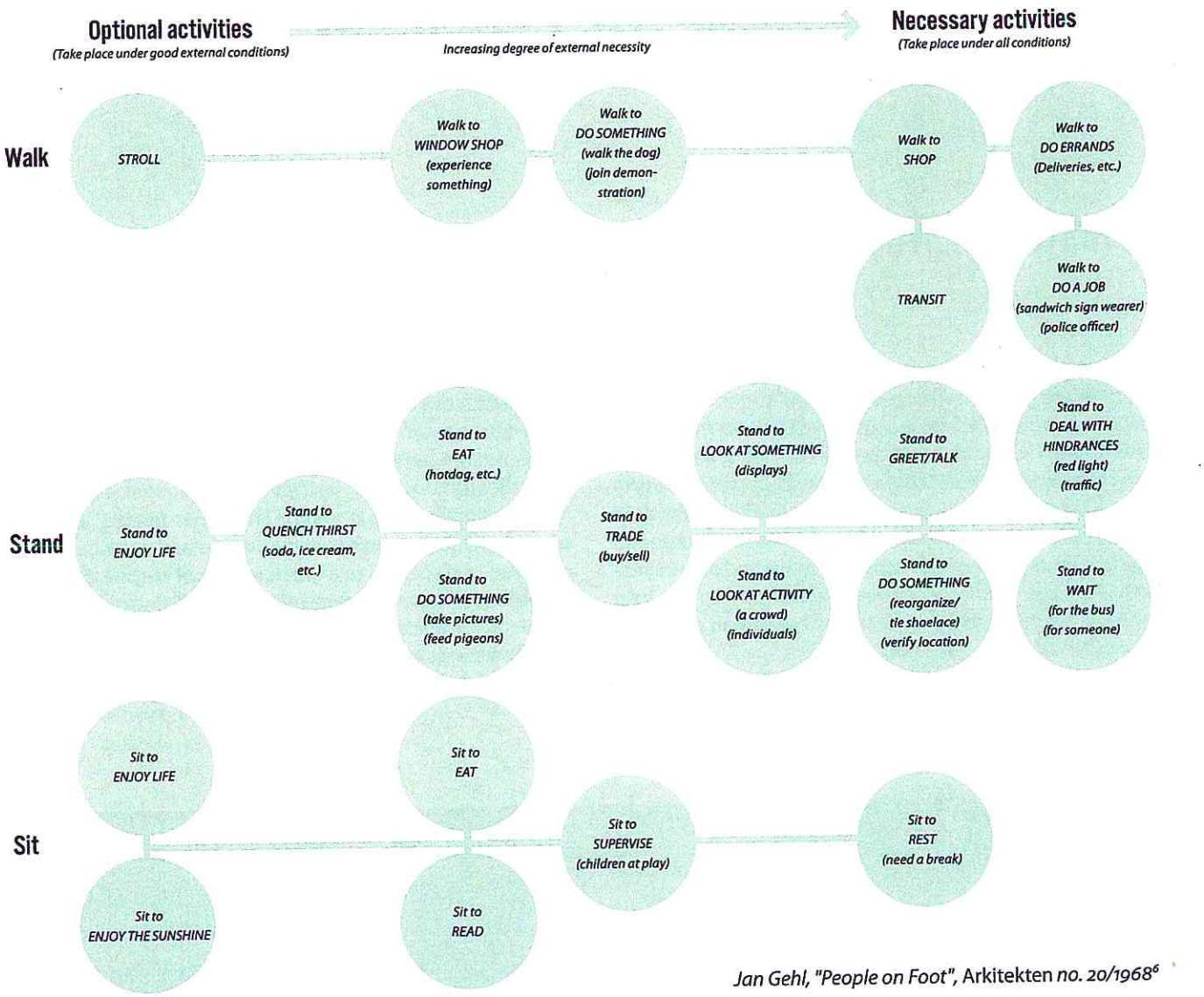
Gråbrødre Torv, Copenhagen

Microclimate, the local climate of a specific site, can heavily impact whether people stay there. If people are walking from point A to point B, they can usually live with sub-optimal wind, sun or shadow conditions, but for staying activites a place needs a higher level of climate quality.

This springtime photo from Grey Friars' Square in Copenhagen clearly shows the significance of climate on whether people stay in a given space. In cold Northern European climes, people want a place in the sun. The photo also illustrates how trees serve as a focal point, how many people use benches, and the fact that people keep a certain social distance between themselves. That people attract more people is also exemplified.

The *where* question can relate to where people situate themselves relative to other people, buildings and city spaces or to the climatic conditions. If we try to picture the same place on a gloomy overcast day or at night, where people stay will most probably be very different.





Jan Gehl, "People on Foot", Arkitekten *no. 20/1968*[6]

Necessary and Optional Activities

This illustration of necessary and optional activities comes from "People on Foot" by Jan Gehl in the architectural journal *Arkitekten* in 1968. It was part of the first large study of the correlation between public space and public life.

This early categorization of activities is part of Gehl's basic work to describe life in city spaces. Later, the general categories of necessary and optional activities were described in a historical perspective in the book *New City Life.*[7]

In the course of the 20th century, fewer necessary activities took place in public space. If this illustration of activities had been made in 2012, it would include new activities such as talking on cell phones – while walking, standing and seated – smoking in public space due to changes in smoking legislation and many types of exercise. And the type of activities would vary widely from place to place.

Question 4. What?

Mapping *what* happens in city space can provide specific knowledge of the types of activities in an area, such as staying, commercial or physical activities, and the requirements these various activities make on the physical environment. This can be relevant for shop owners, for city planners with regard to designing city space, and more generally or politically, in relation to a given theme such as health or safety.

Broadly speaking, the primary activities in public space are walking, standing, sitting and playing. The list of activities that can be registered is almost endless. It is often most meaningful to note several types of activities at the same time. However, it is important to find the categories that best cover registering the various events. While activities can also be noted less categorically, being systematic will sharpen your general awareness.

In general, public space activities can be divided into two categories: necessary and optional. Necessary activities could include shopping, walking to and from a bus stop, or working as a parking enforcement attendant, police officer or postman. Optional activities comprise strolling or jogging, sitting on a stair step, chair or bench to rest, reading the newspaper, or simply enjoying life while walking around or seated. Activities that are necessary for some people may be freely chosen by others.

In a historical perspective, the use of public space has gradually evolved from activities primarily motivated by necessity to those more optional in nature.[8]

Social activities can be developed around either necessary or optional activities and are conditional on the presence of others: people in the same space, passing each other or looking at each other in connection with other activities. Examples include children playing, greetings and conversations, common activities, or the most widespread social activity of all: passive contact in the form of just watching and listening to other people.[9]

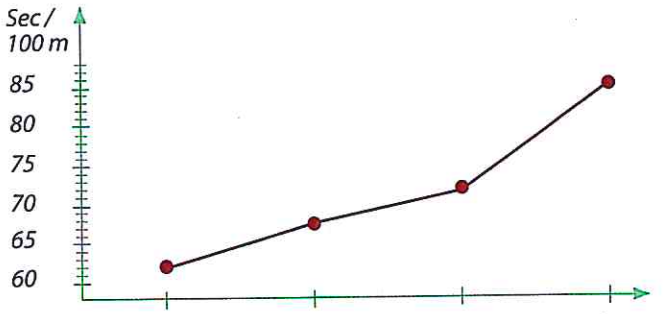
It is important for public life studies to define and record social activities in order to support the function of public space as meeting place. Here is where people meet others who live in the quarter, community and city. Meeting others can be stimulating and interesting and, in a broader sense, heavily impact the individual's understanding of the social context of life.

One can differentiate between social activities with people who know each other and encounters with strangers on the street. While it is less common to talk to strangers, it is easier to strike up a conversation with people standing nearby, even strangers, if you experience something together in common space. William H. Whyte uses the term *triangulation* to define the scenario where two people who don't know each other start talking due to an external event. The catalyst could be a street artist or physical object like a sculpture. Or it could be an unusual condition such as hail in summer, power failure, fire in a neighboring building or anything else that spurs people who do not know each other to start talking.[10]

Sunday morning on Swanston Street, Melbourne, Australia.

The average speed it took randomly selected pedestrians to cover 100 meters. Four registrations were made on Strøget, Copenhagen's pedestrian street, in January, March, May and July, respectively.

The photographs and captions are from an article by Jan Gehl entitled "People on Foot" in Arkitekten, *1968."*



Fastest man: 100 m in 48 seconds.

A convoy has to follow its slowest member.

Slowest man: 100 m in 137 seconds.

How Fast People Walk?

The 1968 study above comprises four registrations of the average speed of pedestrians covering a 100-meter stretch along the walking street in Copenhagen. The entire 1.1 km-long street can be walked in 12 minutes, but in practice, speed is influenced by weather, age, mobility, errands and whether the pedestrian is alone or part of a group.

A representative segment of pedestrians was shadowed through a 100-meter stretch and their speed registered in seconds per 100 meters. The graph clearly shows the tendency to walk slower in warmer weather. Shown at bottom is how different people walk at different speeds: "... individual pedestrians walk faster than people in groups. Individual men walk fastest (record: 48 seconds/100 meters), with teenagers and women slightly slower. Then come people in groups, and just like in any other convoy, they are forced to follow the speed of the slowest participant. The slowest time (137 seconds/100 meters) was clocked by a police officer on patrol."[12]

Question 5. How long?

Walking speed and the amount of time spent staying can provide information about the quality of physical frameworks. It is often the case that people walk slower and stay longer in places relative to the qualities and pleasures offered.

Registering human activity in relation to the physical environment presents a number of special problems, first and foremost because the question involves processes – chains of events – undergoing continuous change. One moment is not like the previous or the one to follow. In contrast to measuring buildings, for example, time is an important factor in activity studies.

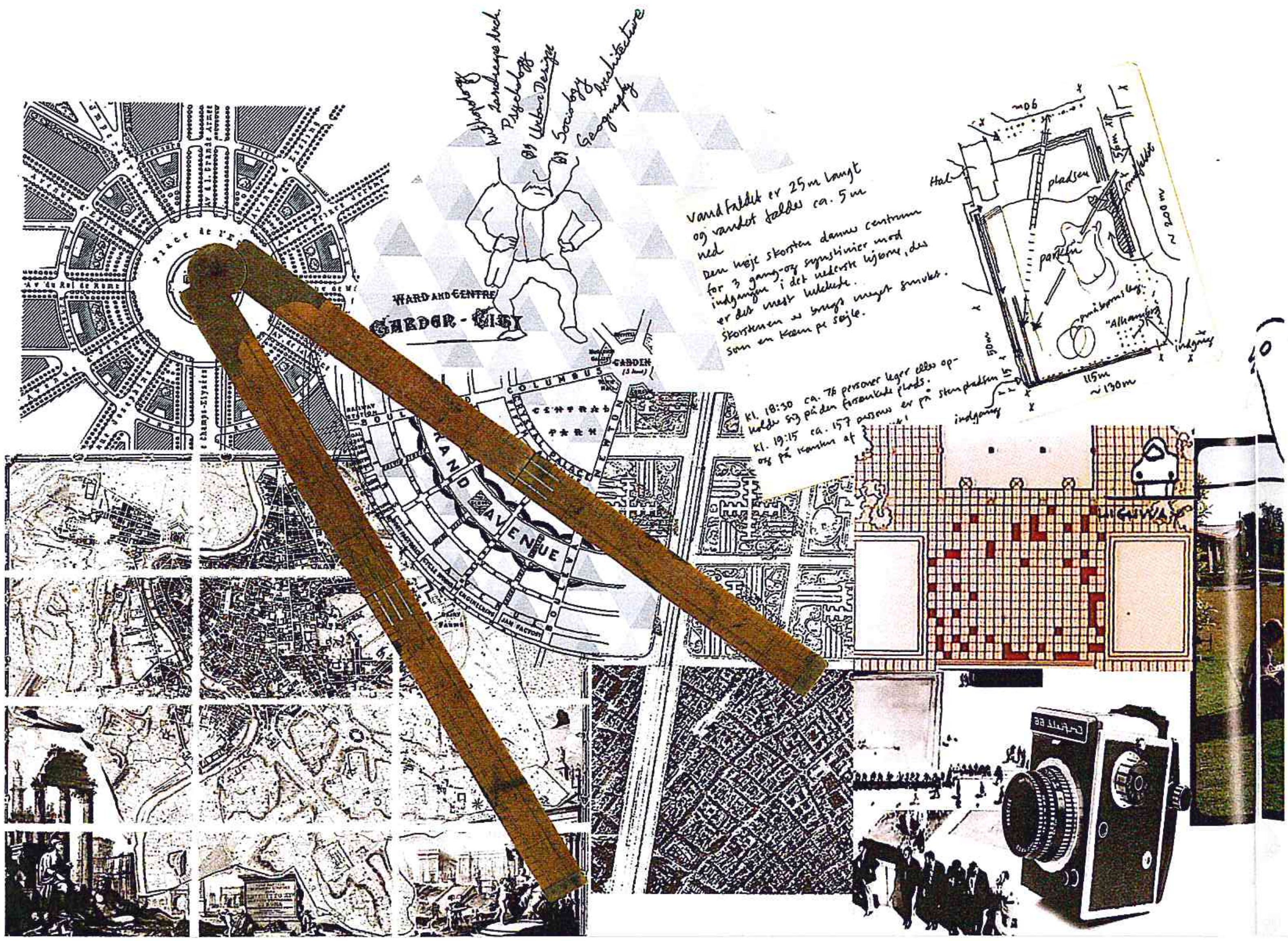
The time dimension is essential to understanding life in public spaces, which makes *how long* a key question. In addition to the passing of days, weeks and months, the individual study also concerns *how long* it takes people to cover a certain distance, *how long* they stay in a certain place, and how long the activity lasts.

The answers to these questions are relevant for finding out *how long* we are willing to walk in order to use public transport, or to determine which activities contribute to the whole activity level, for example.

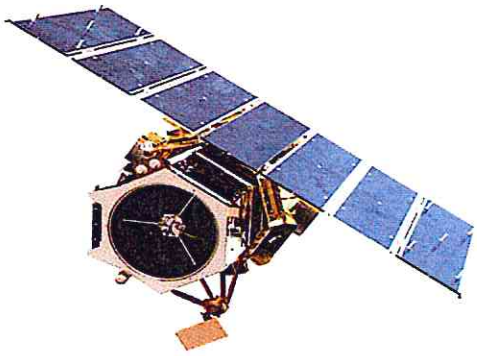
Basic knowledge about *how long* various activities last can qualify the work of orienting selected public spaces toward inviting people for longer periods of staying while allowing other spaces to have a transient character. In some places, it is desirable for people to hurry by as quickly as possible in order to make room for others.

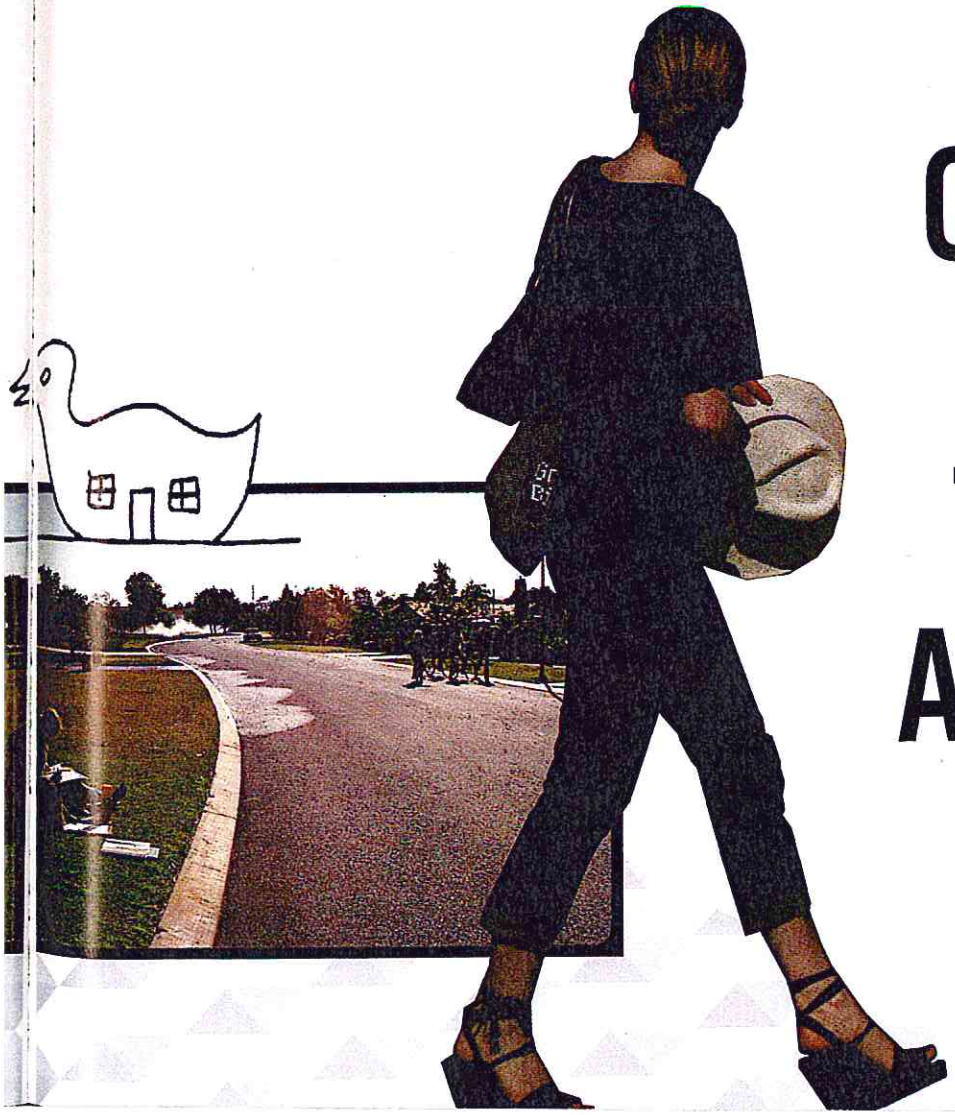
Studies of the duration of various activities can illustrate more precisely how much time is spent on specific activities. For example, it doesn't take long to walk to and from a parked car on a residential street, and only slightly longer to empty the mailbox, while activities such as gardening or children's play can take considerably longer.[13] Obviously, establishing numbers for the relationship between activities of short and long duration can provide new insights. In addition, the time spent by individuals is often easy to influence through careful planning and design.

As a rule, it does not take a major expensive initiative to invite people to stay longer. However, if they do stay longer, an invitation can significantly influence their perception of whether or not a place is vibrant and worth a stay, or if they would rather move on as quickly as possible to something better.


Anthropology
Landscape Arch.
Psychology
Urban Design
Sociology
Architecture
Geography
WARD AND CENTRE
GARDEN-CITY
COLUMBUS
CENTRAL
PARK
GRAND AVENUE
Vandfaldet er 25m langt
og vandet falder ca. 5m
ned
Den høje skorsten danner centrum
for 3 gang- og synslinier mod
indgangen i det nederste hjørne, der
er det mest hektiske.
Skorstenen er brugt meget smukt.
som en krans på søjle.
Kl. 18:30 ca. 76 personer leger eller op-
holder sig på den forsænkede plads.
Kl. 19:15 ca. 157 personer er på stenpladsen
og på kanten af
Hal
pladsen
parken
"Alhambra"
indgang
50m
115m
~130m
~200m

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.

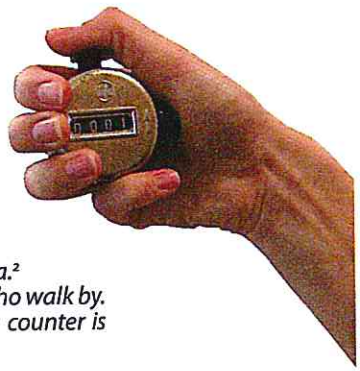
What is often registered is how many people are moving (pedestrian flow) and how many are staying (stationary activities). Counting provides quantitative data that can be used to qualify projects and as arguments in making decisions.

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]

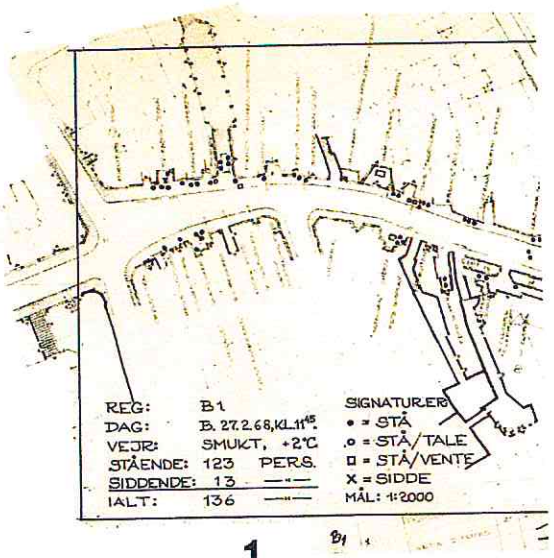
Naturally, it is crucial to conduct the count for exactly ten minutes, because this is a random sample that will later have to be repeated in order to calculate pedestrian traffic per hour. All of the individual hours will then be compiled in order to get an overview of the day. Therefore, even small 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



1.

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.

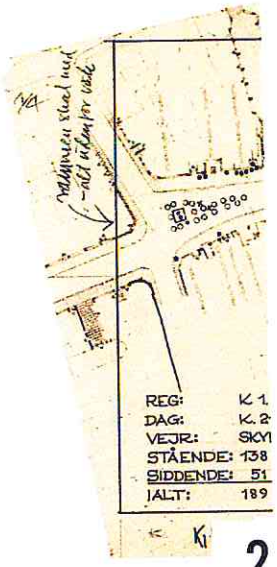
This method provides a picture of a moment in a given place. It is like an aerial photo that fast-freezes a situation. If the entire space is visible to the observer, he or she can plot all the activities on the plan from one vantage point. If the space is large, the observer must walk through it, mapping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

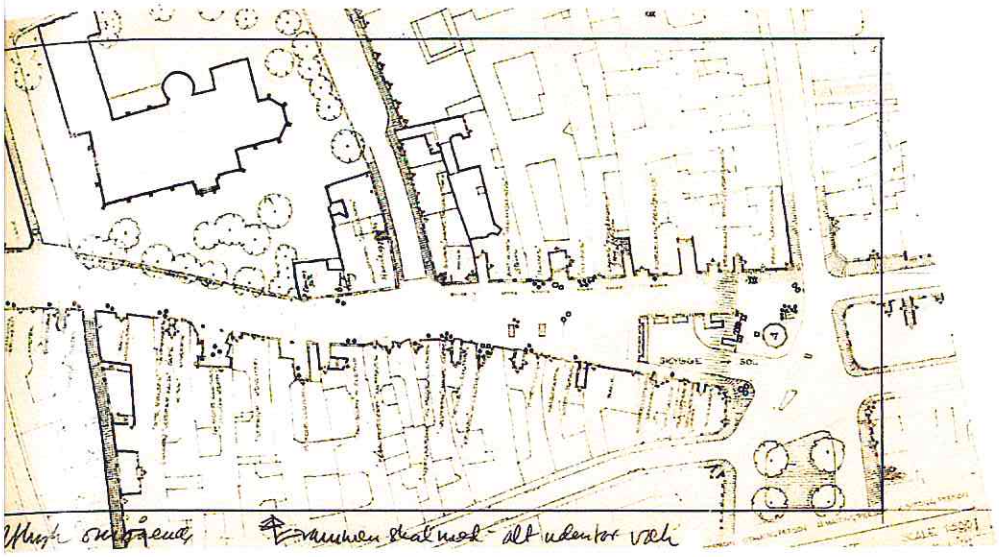
1. "Winter day. Tuesday, 2.27.68 (...) Plan B1, which indicates standing and seated people in the area at 11.45 a.m., shows that all the seating in the sun is occupied, while none of the other benches in the area are being used. The largest concentration of people standing is near the hotdog stand on 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."

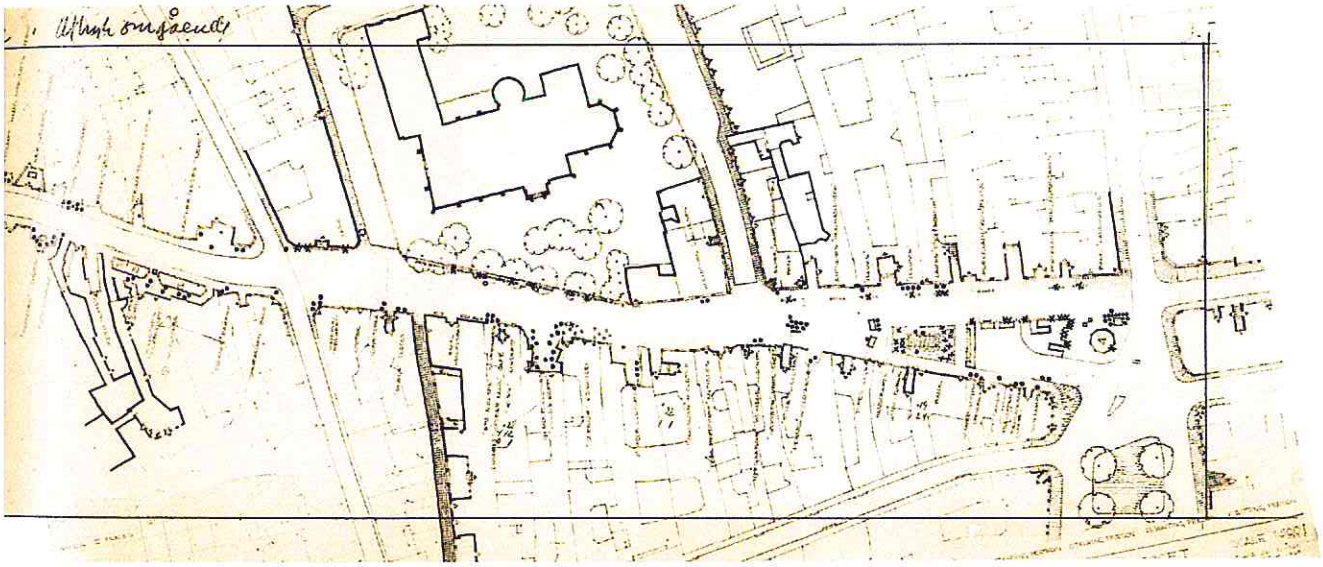
2. "Spring day. Tuesday, 05.21.68 (...) As in February, about 100 people on average are standing in front of shop windows, but all other forms of activity have increased. Most marked is the growth in the number of people standing and looking at what is going on. It is warmer now, and more is happening,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

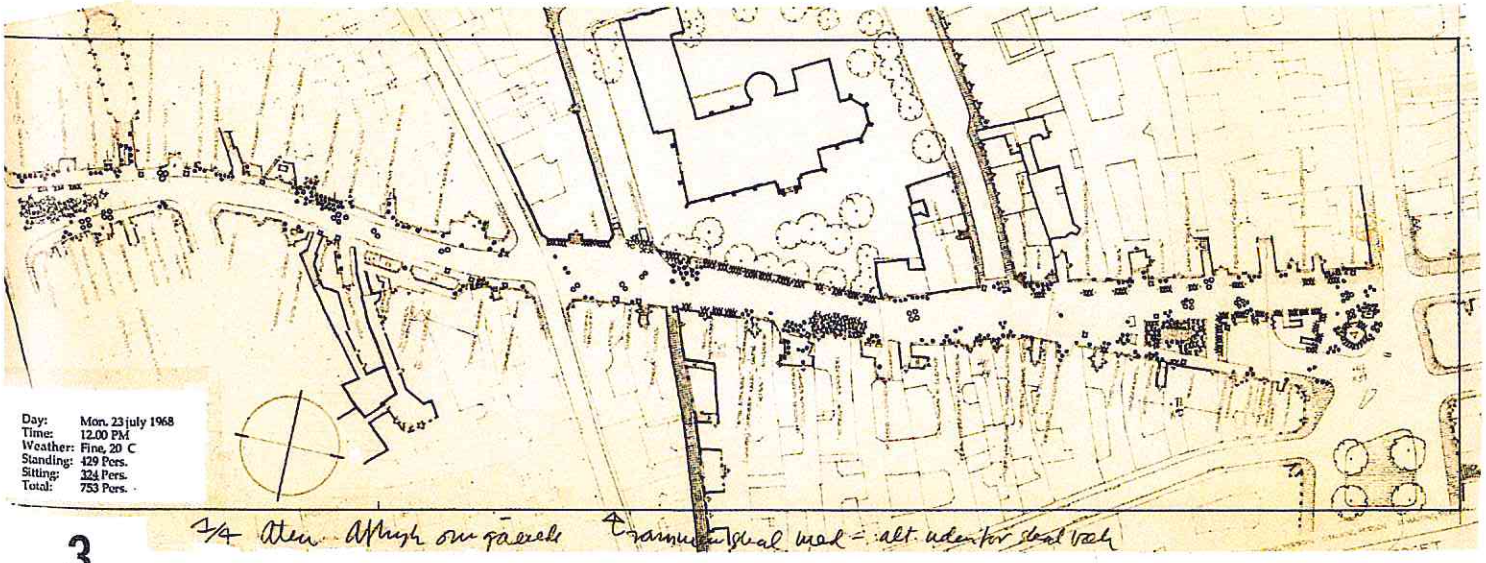
3. "Summer day. Wednesday, 07.24.68 (...) The number of pedestrians, about 30%, standing in front of shop windows is unchanged. This would appear to be a constant. (...) In general it can be observed that the center of gravity in the area has shifted from the commercial street Vimmelskaftet to the more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



2.






Day: Mon. 23 july 1968
Time: 12.00 PM
Weather: Fine, 20 C
Standing: 429 Pers.
Sitting: 324 Pers.
Total: 753 Pers.

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.

Rentemestervej
Saturday the 13th of September from 12-3 p.m.
Walking patterns at noon, 1, 2, and 3 o'clock

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.

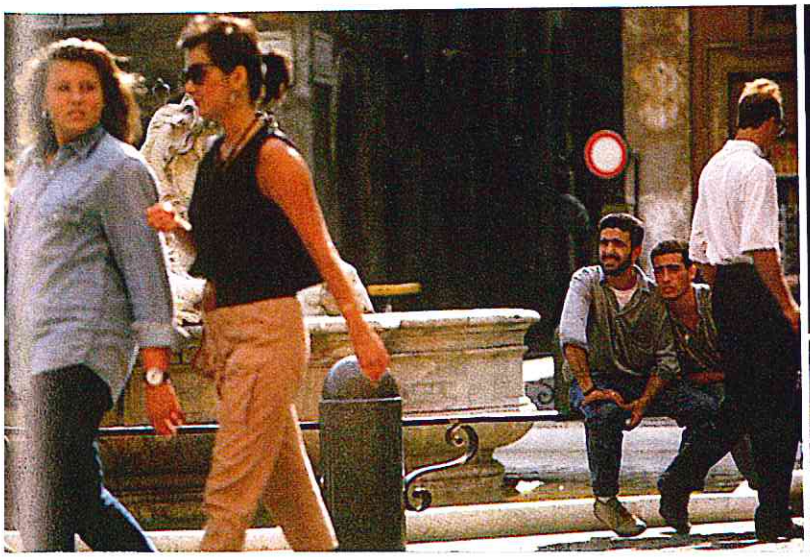
While the human eye can observe and register, photographs and film are good aids for communication. Photographing and filming can also be a good tool for fast-freezing situations for later documentation and analysis. By later studying photographs or film, it is possible to discover new connections or 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.

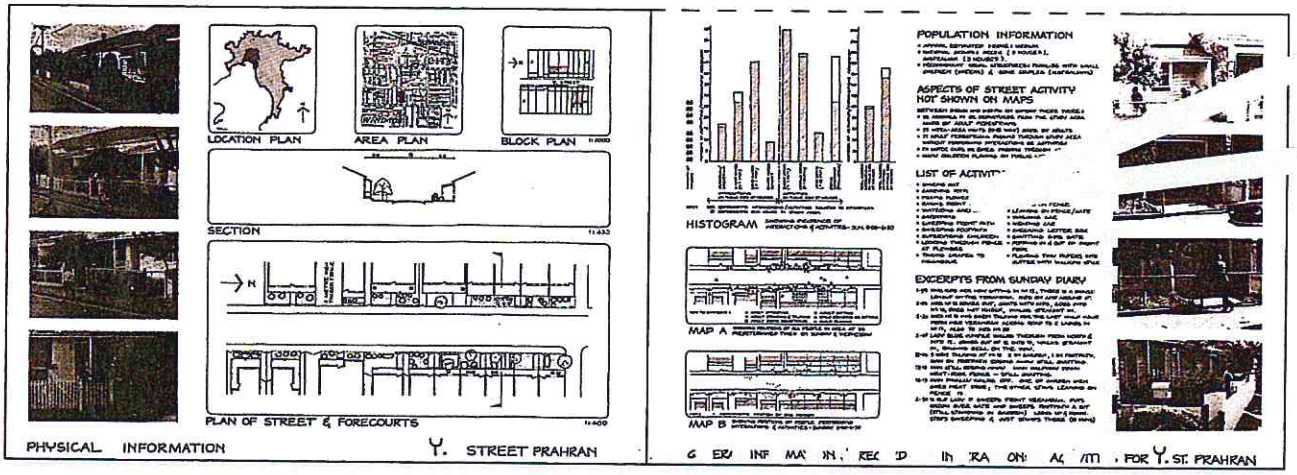
Noting details and nuances can increase knowledge about human behavior in public space for individual projects as well as to add to our more basic understanding in order to develop the field. The method is often used as a qualitative supplement to more quantitative material in order to explain and elucidate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

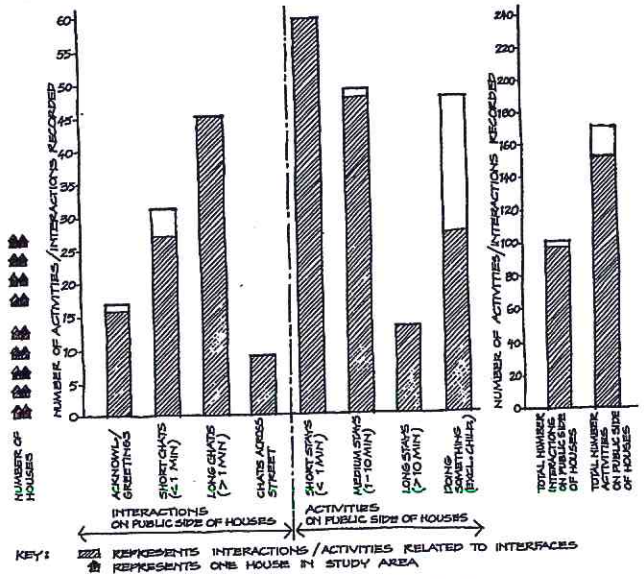
Keeping a diary is a method of noting observations in real time and systematically, with more detail than in quantitative 'sample' studies. The observer can note everything of relevance. Explanations can be added to general categories such as standing or sitting, or brief narratives can aid our understanding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

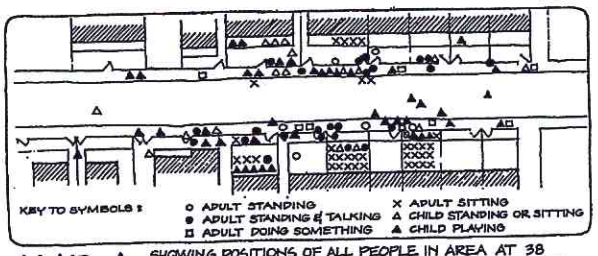
Keeping a diary can register events that cannot easily be documented using more traditional methods. This example shows notes from a study of residential streets in Melbourne, Australia. Shown at right is a page from a diary for the Melbourne study.[5]

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.

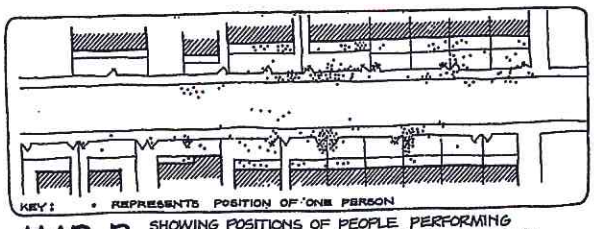




HISTOGRAM SHOWING INCIDENCE OF INTERACTIONS & ACTIVITIES - SUN. 8·00-6·30



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

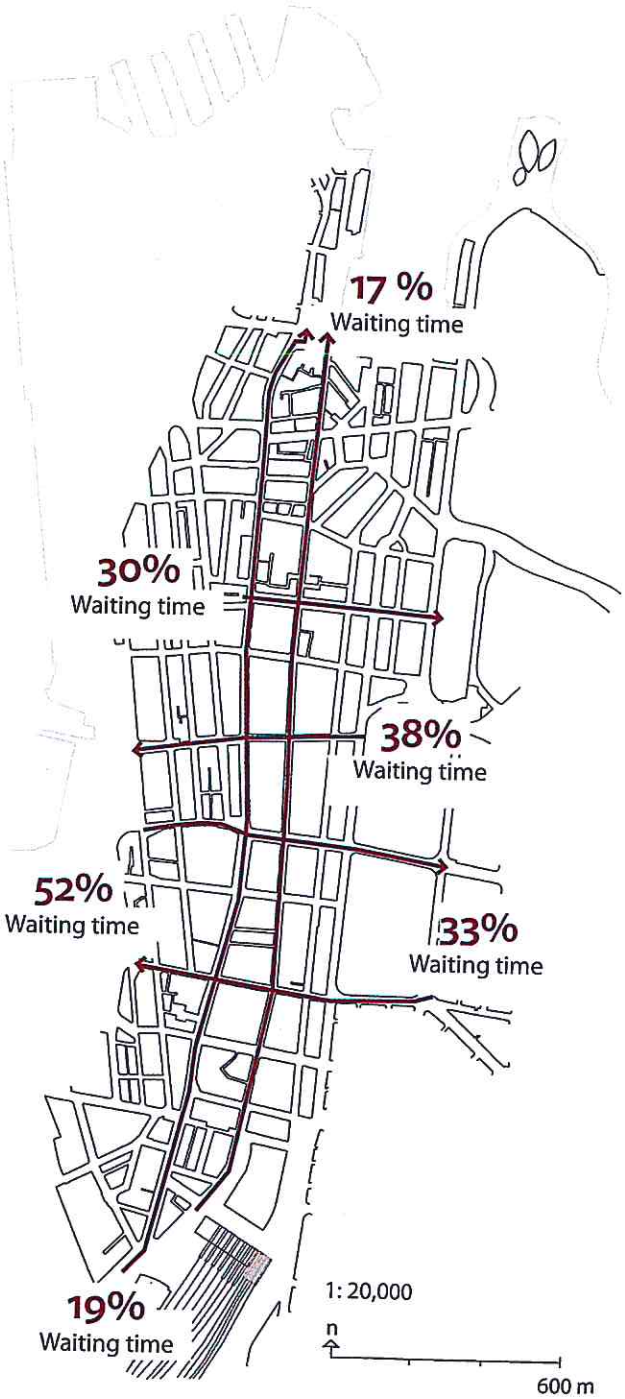
12·13 MAN FINALLY WALKS OFF. ONE OF GARDEN MEN GOES NEXT DOOR; THE OTHER STAYS LEANING ON FENCE 13.

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]