Life between buildings: Using Public Space: The history of Jan Gehl's book and the legacy of its philosophy for designing cities at human scale

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Abstract

The scope of this essay is to provide a brief overview of the history and legacy of the book *Life between buildings: Using Public Space* written by Jan Gehl, Danish architect and urban consultant, renowned for his pioneering work towards the promotion of human-centered urban design. The paper starts with explaining the concept of the Human Scale in urbanism studies, both as a means to view the city focusing on what is happening at ground level and as a design priority. It continues with the story of the making of the book, back in 1971, and the impact it has had in establishing the human-centered approach in urban design as a rising trend, especially in the last two decades. The essay concludes with the three major lessons that we can extract from the book: (1) knowledge about human senses; (2) learning from observing; and (3) putting people first.

1. The Human Scale

1.1 How we understand the city differs depending on our point of view

The city is the subject matter of urban design, but primarily it is the habitat, the everyday environment for the human beings who live in it. How we talk about the city and how we examine it demands from an urban designer to temporarily shed the role of professional and to look at cities with the eyes of "the common man," of ordinary people. As French novelist George Perec proposes in this book *Species of Spaces* (Perec 1997: 61-62):

You must either give up talking of the town, about the town, or else force yourself to talk about it as simply as possible, obviously, familiarly. Get rid of all preconceived ideas. Stop thinking in ready-made terms, forget what the town planners and sociologists have said. […] We shall never be able to explain or justify the town. The town is there. It's our space, and we have no other. We were born in towns. We grew up in towns. It's in towns that we breathe. When we catch the train, it's to go from one town to another town. There's nothing inhuman in a town, unless it's our own humanity.

How does "the common man" feel when he or she looks at the city from high above (see Fig. 1)? The philosopher Michel de Certeau in his classic study *The practice of everyday* life starts the chapter entitled "Walking in the city" with a description of the experience of looking at Manhattan from the 110th floor of the World Trade Center —a building that since September 2001 no longer exists (De Certeau 1984: 91-92):

Beneath the haze stirred up by the winds, the urban island, a sea in the middle of the sea, lifts up the skyscrapers over Wall Street, sinks down at Greenwich, then rises again to the crests of Midtown, quietly passes over Central Park and finally undulates off into the distance beyond Harlem. A wave of verticals. Its agitation is momentarily arrested by vision. The gigantic mass is immobilized before the eyes. […] Having taken a voluptuous pleasure in it, I wonder what is the source of this pleasure of "seeing the whole," of looking down on, totalizing the most immoderate of human texts.

The city, which is perpetually in motion, is "immobilized" when the human eye looks at it from high above, when the human being lifts up from the ground, and "his elevation transfigures him into a voyeur" (De Certeau 1984: 92). Down, on the ground, ordinary users of the city live their everyday experiences, walking in the city (see Fig. 2).

Fig. 1: Viewing the city from high above: Manhattan seen from the top of Rockefeller Center (own depiction, Jonas Lamberg)

Fig. 2: The walking experience of the city: In contrast to the view from above, in which vision dominates and immobilizes the observed object, everything is dynamic and all senses, especially kinesthesia, are important (own depiction, Jonas Lamberg)

Walking experiences are not based on visions, on what the eyes perceive, but on the body as a whole: the users of the city are walkers and trailers, having no distance from what goes on inside the bustling urban tissue. On the contrary, their body is “clasped by the streets that turn and return it according to an anonymous law” (De Certeau 1984: 92).

Fig. 3: If we see an aerial photograph of Central Park, it is hard to imagine what exactly goes on at ground level. Photograph: Leonhard Niederwimmer via Pixabay. Content license: Free to use.

If we see an image of Central Park from above (see Fig. 3), with the high-rise buildings of Manhattan lining its perimeter, it is hard to imagine what exactly goes on at ground level. How big is it? What type of vegetation does it contain? How does a person feel like when he/she is inside it? If we find ourselves inside the park, at eye level, the sense of it becomes much more detailed (see Fig. 4)

In spatial science, the view of a city from above is mostly represented by an urban plan: it allows us to comprehend undoubtedly many of its constituent elements. We can understand its geographical location, whether it is a seaside city or it is traversed by a river. We can see its street pattern and understand, for example, if it was planned based on an orthogonal grid or it grew organically or in other ways(?). We can even see if it has large open spaces. But we cannot perceive the experience of the user of this city, or its unique identity.

Fig. 4: If we find ourselves inside Central Park, at eye level, the sense of it becomes much richer (https://upload.wikimedia.org/wikipedia/commons/7/7a/Central_Park_Scene_-_Manhattan_-_New_York_City_-_USA_-_01_%2841147016205%29.jpg. Creative Commons Attribution-Share Alike 2.0 Generic license)

1.2 City space as the space of the everyday life

The perception of the city in our everyday experience, when we walk, stand, or sit in a public open space or look at it from the ground level of buildings is quite distinct. We are so accustomed to seeing the city from this viewpoint that we are often "blind" to what surrounds us. However, at ground level, every detail of the city is of utmost importance.

Georges Perec in his laconic, precise "attempt at exhausting a place of Paris," (Perec 2010) in the book with the homonymous title, describes what he observed sitting for three days at a table looking over Place Sainte-Sulpice, in one of the surrounding cafés one day, in another one the other. He leaves out of the description the buildings and monuments and describes the ordinary things that one sees on the streets, sidewalks, and the square itself (from road signs and trees to benches and parking meters) and delves into the chorus of people of any age and gender as he watches their short passage in front of his field of vision: their trajectories, their facial expressions, the movements of their bodies, the objects that they carry, their groupings.

We can parallel Perec's investigating eye to the uncommon, different kind of observation we are called upon to do if the scope is to perceive the city at the human scale in depth. This kind of observation is not only visual but demands all of our senses, either when we sit or stand or when we are in motion, while we explore it by walking. The city is too big and too complex to understand it by observing only a small part of it. It demands to walk between its buildings, on its streets and in its public spaces, where our experience is framed by a wide variety of elements –from the height of the buildings and their morphology to their street facades and from the dimensions of a public space to whether or not there is a place to sit in it, whether this place is at an attractive and protected spot, or exposed to the sun when it is hot (Whyte 1980).

Often our observation entails observing how people use the city: What kind of activities take place between the buildings, in open spaces, on the sidewalks, crossings, along the facades? Where do people walk, how do they walk? Where do they sit or stand in public space and for how long? Why some public spaces are empty while others are full of people? And, most importantly, how can design create lively spaces, spaces which are safe and attractive, protected from annoying weather elements, with good conditions to walk through them and stay in them? These are the main issues that concern us when we seek to understand the city at human scale.

2. The human-centered approach in urban design

2.1 Life between buildings: An idea that started from a trip

About sixty years ago, Jan Gehl was graduating from the School of Architecture of the Royal Academy in Copenhagen (Matan and Newman 2016). One of his first projects was to design a new housing complex. It was exactly in that context, immersed as he was in his drawings, when his girlfriend, and later wife, Ingrid Mundt, a psychologist, started asking him questions he had never thought about before: How can he be designing spaces for living for people he knows nothing about? Without any idea of how they move around, what their needs are regarding their houses, whether they like spending time outdoors, what communal spaces they would like to have, etc. It was the first time that Gehl came to realize that there was a missing piece of the puzzle of his architectural training: he had never been taught anything about the human being, about Homo Sapiens και his/her natural capabilities, and about his/her needs and preferences.

In 1965, the then young architect, with his wife and their two little children, set off on a trip to southern Europe, mainly Italy but also Greece (ibid). In the villa-

ges and towns where they stopped, what attracted their attention were the lively public spaces. The medieval cores of Italian towns contained plenty of squares and streets teeming with life, full of people, who either on their own or in groups seemed to enjoy simply being in the open public space. The atmosphere could not be more different from the housing areas that were dominant back in Denmark, designed in the manner that young Jan had been trained to do. What was the secret for the livelihood of these urban districts?

Sitting for hours at a quiet corner of these public spaces, Gehl went on into documenting what was happening in the space in front of him, taking notes on a diagrammatic plan of it (see Fig. 5). He would observe, for example, that most people tended to walk along the facades of buildings, especially preferring them if there were arcades. If someone had to wait, he/she seemed to prefer having his/her back against a wall, a pillar, or a post. The facades of the buildings determined a street's attractiveness: shops with their windows, awnings, entrances, and steps, all made the street interesting, safe, and friendly. In the planning scale, a mix of uses and functions characterized these old towns, which were not transformed into ghost spaces after sunset, as it happened in the monofunctional centers of new urban areas or in the dormitory areas of the Modernist doctrine.

Sembra ma non è un «beatnik»

Da diversi giorni abbiamo notato un giovane straniero aggirarsi per la Piazza del Popolo. Abbiamo subito pensato: «I beatnick» in Ascoli?

Ma il suo fare aveva qualcosa di particolare. A parte le misurazioni ed i rilievi con strani apparecchi ottici, lo straniero prendeva in continuazione appunti su tutti i passanti. Insomma chi era?

Poche parole di presentazione e di saluto e subito si è scoperto l'arcano. Si tratta dell'architetto danese Jan Gehl, che avendo ricevuto una borsa di studio per studiare la forma e la vita delle piazze italiane da un punto di vista architettonico e sociologico, ha incluso la nostra Piazza del Popolo nei suoi itinerari.

Il giovane e simpaticissimo architetto, che si avvale della collaborazione della gentile consorte laureata in psicologia, si va chiedendo perché mai — nei centri storici italiani — con tanti viali e belle strade nuove, la popolazione insista a passeggiare sulle antiche piazze.

Saremmo interessati, al termine delle sue indagini, di conoscere se ha svelato l'arcano del nostro inguaribile «passeggiar piazza». (Foto Riga)

Fig. 5: Jan Gehl portrayed in a local newspaper article in Ascoli Piceno, Italy. He would sit for hours and days observing and sketching the life happening in front of him, in a public square. The title of the article is "He is not a 'beatnik' although he looks like it" (Courtesy of Jan Gehl)

"Something is happening because something is happening because something is happening," Gehl wrote (Gehl 1987). Upon his return to Denmark, he had a unique chance to further these observations by analyzing the changes happening in his hometown, Copenhagen, as the main commercial street, Strøget, became partly a pedestrian street. It was a process that took years, but slowly the center of Copenhagen was transformed from a car-centered space to a people-centered space, as the network of pedestrian streets expanded through the years. Based on all these experiences and field research, Gehl thought of the idea of "life between buildings." His book *Life between buildings: Using Public Space* (Gehl 1987), written in simple, easy-to-understand language, was first published in 1971 in Danish. It took sixteen years for the appearance of the English translation, in 1987, which helped in reaching a much wider audience and started to make its author famous worldwide. Today, it has been reprinted many times and published in more than thirty languages around the world. It is by now considered a classic text on urbanism.

2.2 Human-centered urban design philosophy today

In the years that have passed since the first edition of Gehl's book, there have been significant changes in urban planning and city design, but also – more generally – in living conditions, in the culture of cities, and even more so in the state of the planet as our habitat (Calthorpe 2011).

Especially from the turn of the millennium onwards, the world economic crisis and the COVID-19 pandemic, have also contributed to bringing cities and their design and management to the foreground of public discussion, as defining elements for individual and collective wellbeing. Both crises have been mainly urban crises, as cities and their inhabitants were impacted the most from them and had to develop resilient mechanisms to cope (Florida et al. 2020). The importance of public spaces at the scale of the neighborhood, as the places shaped and shared by local communities, in particular, becomes more and more acknowledged as a defining parameter for quality of life in a city, especially in relation to opportunities for fulfilling everyday needs for outdoor activities of recreation and sociability at close proximity to one's home (Moreno et al. 2021). Another important change is that, compared to 1971, when *Life between buildings* first appeared, the philosophy of human-centered approach in city design is by now a central and emerging trend, with various names: livable cities (Grothaus 2023), human cities (Kotkin 2016), cities for people (Gehl 2010), human-scale cities (Burke 2016), life-sized cities (Colville-Andersen 2014). This prolific production of works – in terms of books, papers, projects etc. – and the rising public interest on the subject is a sign that in our era there is an ongoing turn

towards human-centered urbanism that would be unthinkable in the previous century.

There is a close relation between human-centered urban design and the notion of “life between buildings.” At the core of human-centered design lies the universally accepted concept that although the subject of design is physical space, this space would actually be void of meaning without the life that occurs in it, without the people who use it. When COVID-19 was declared a pandemic by the World Health Organization, governments around the world implemented forced lockdowns and mobility restrictions to contain its spread, resulting to the out-of-the-world experience of “empty” cities, which showed that public space without people is the most unfamiliar environment.

Human-centered approach of urbanism is based on a set of knowledge that is not limited to formal composition, taught in architecture and planning schools, or solely to rules and practices of regulatory urban planning. As a design practice, human-centered urbanism invites us to think about the users more than a design model or aesthetic preference. And in its core, it entails taking a moral stance as designers, in recognition of the responsibility one has when in change of designing: it puts people first, the people who live, work, and move about in the city – the ones we so condescendingly call ‘users’, as Henri Lefebvre in his *Critique of Everyday Life* writes (Lefebvre 1991). As its compass, it has everyday life in the city, in its ordinariness and its exceptionality, at the same time.

3. Three lessons for urban designers

The philosophy of human-centered urban design is based on three pillars: (1) knowledge about human senses, a kind of knowledge that is often missing in architecture and planning curricula; (2) learning from observing public life, meaning that the observation of how people and space interact is valuable for designing better spaces; and (3) putting people first, from the planning to the microscale level, which means integrating a human-centered approach in all scales of spatial planning, from land use plans to microscale design.

3.1. Knowledge about human senses

The history of urban form provides important evidence to the fact that until the dawn of Modernism, human settlements had always been designed so as to organically serve human needs (Mumford 1961). In particular, urban public spaces for movement and for gathering had been consistently formed, developed, and transformed through time with an instinctual knowledge of and ad-

aptation to the human scale. Historic settlements and towns present a remarkable adaptation to topography, the local microclimate, and the various needs of users. Their open spaces have an excellent connection to the landscape, their site is central in the street network, their dimensions of a scale intimate to humans, while their "urban furniture" consists of organic, simple elements, such as stoops and stairs, which create excellent opportunities for staying in public space (Gehl 1987) (see Fig. 6).

Fig. 6: Open public spaces in historic towns, such as Venice, are made for human beings and are friendly to users of all ages (own depiction, G. Katsavounidou)

As Gehl (1987) points out in *Life between buildings*, this knowledge, however, about what constitutes a good public space was apparently "forgotten" in the 20th century. Caring for public spaces so as to serve, promote, and provide good conditions for public life has been very low in design priorities. Together with the promotion of abstract notions, analytical tools, and design models that were promoted by technocratic urban planning, the physical design scale was neglected in city design, although it is this exact scale that essentially defines the everyday life in a city (Appleyard and Jacobs 1982). The spaces for movement and for staying, appearing as colored surfaces in an urban plan, truly determine – with their dimensions, layout, morphology, urban furniture, building materials – what kind of public life there will be in that specific street or square;

whether people will use it or it will become a deserted place (Whyte 1980).

3.2 Learning from observing

An important argument in *Life between buildings* (Gehl 1987) is that the knowledge about what works and what does not in the public space, once instinctual, has to be rediscovered and become part of urban design education. In its basis, it is a practical knowledge, acquired through observing life in public space, where vision may be dominant, but all senses take part in the experience. For this end, the city is the perfect source field for acquiring this knowledge. As Jane Jacobs wrote, at the heyday of Modernism (Jacobs 1993: 9):

Cities are an immense laboratory of trial and error, failure and success, in city building and city design. This is the laboratory in which city planning should have been learning and forming and testing its theories. Instead the practitioners and teachers in this discipline (if such it can be called) have ignored the study of success and failure in real life, have been incurious about the reasons for unexpected success, and are guided instead of principles derived from the behavior and appearance of towns, suburbs, tuberculosis sanatoria, fairs, and imaginary dream cities – from anything but cities themselves.

There is not a more direct way of understanding, studying, and extracting knowledge about the human senses and how humans interact with space than observational study. As a methodology, it was developed through a series of researchers, with various objectives, tools, and analytical frameworks. Pioneer researchers of the field include British architect and planner, founder of the "Townscape" movement Gordon Cullen (1961), who used sketches to convey the visual perception of a person walking in the city and a few years later Kevin Lynch (1960) who introduced the concept of the mental image and worked with mental maps and interviews to show the importance of urban form for the everyday life of citizens. About the same time, Jane Jacobs (1993), an "ordinary citizen," by mere observing through her eyes, pointed to the fact that planning interventions implemented in New York by Robert Moses were destroying neighborhoods with a vibrant street life and strong community ties, replacing them with dangerous and hostile housing complexes. A decade later, Oscar Newman (1972) studied which design elements in social housing projects were responsible for the lack of safety and their failure to create livable neighborhoods. Later on, William Whyte (1980) used various kinds of mapping and visual documentation to extract conclusions about how New York's public plazas were being used, and Donald Appleyard (1981) studied the influence of vehicular traffic on urban streets and their profile, especially on the quality of life of the people who

live on them. These are few of the many examples of empirical studies what brought to the center of the urban design discipline the need to combine spatial studies with field observations on how people interact in public space and how space influences their everyday lives and especially sociability. It is among them that *Life between buildings* stands, forming a genealogical line of public life studies (Gehl and Svarre 2013)

Jan Gehl, in *Life between buildings* and in his subsequent studies, used many of these different observational methodologies, basing his theoretical approach entirely on first-hand, empirical research. He observed how people moved around and used the streets and open spaces. He studied in detail how various factors, such as the dimensions of a square or the facades of a street, influenced how a space is used, by whom and for how long. Based on this detailed analysis on how human senses work, he summarizes this human-space interaction into five main elements which are defining parameters regarding life between buildings (see Fig. 7):

1. *Presence or absence of walls between the street and the ground level of buildings*. To be able to see what is happening in the interior of the ground floor of the buildings lining a pedestrian passage makes it safe and attractive to walk on, adding to life between buildings.

2. *Long or short distances.* The dimensions of a public space are extremely important for ensuring that people using it will have the opportunity to see and hear each other, and in that respect, short distances are key.

3. *High or low speeds.* For hundreds of thousands of years, human senses have developed for the speed of the walking man. Therefore, when we experience the city by walking, this experience is much richer than the one we would have if we were driving. We have the time to see the details of the physical environment and to come to contact with other people.

4. *Multiple levels or one level*. Most people feel uncomfortable going up and down when moving around in urban space. The failure of many elevated or submerged public places shows that when it comes to vertical movement, human beings are particularly hesitant to change levels.

5. *Back-to-back orientation or face-to-face orientation.* In the microscale design of public spaces, we should keep in mind that, for example, placing benches back-to-back will definitely not promote contact between users. Being able to see others is the first and utmost prerequisite for any kind of social interaction.

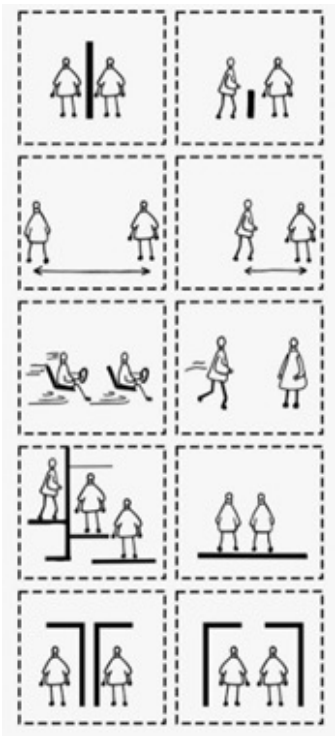

Fig. 7: How physical arrangement influences senses and communication, either inhibiting or promoting contact. Sketch: Evangelia Oikonomou, based on (Gehl 1987: 22).

3.3. Putting people first – from the planning to the microscale level

Emphasis on the intimate experience of the human being, the user of the city is at the core of the human-centered philosophy. However, human-centered urbanism is not confined to the scale of physical design only. To ensure that people are given priority, the microscale is often not enough (Gehl 1987). There is also the need for an urban planning approach that takes into account and prioritizes people, in the macroscale, too. Often it is in this macroscale decisions that the framework of life in a city is defined. This kind of decisions include the placement of various functions, distribution of land uses, definition of densities, and the planning of transit systems. It would be a mistake to try to study each such parameter on its own, since it is the interconnection of all of them that shapes the entire urban form. For human-centered city design, it is important to keep in

mind that the main idea – that of putting people first – in fact traverses all design scales, all the spectrum of design decisions taken on the level of the regulatory urban plan to the scale of physical design and that of the microscale design of streets and open spaces.
In this holistic approach, Gehl proposes to examine how the concept of life between buildings informs decisions on various scales through the lens of four binary oppositions, of four dilemmas:

1. *To Assemble or Disperse.* This opposition refers to large scale planning regarding mainly how land uses are distributed – for example, the doctrine of Modernism promoted a strong separation of uses and a territorial expansion of the city, especially through the creation of housing-only areas such as housing estates in the periphery of the central city or through extensive areas of single-family houses. To assemble uses, on the other hand, means that every part of the city is being used 24-hours a day, changing character or even users from morning till night, securing that there is always human presence and street life, as in the case of the compact city model.

2. *To Integrate or Segregate.* This dilemma is related to decisions about where specific functions – for example, a university – should be planned and developed; for example, would a separate campus, with specific borders work better for establishing a relation with the city, or would an urban campus, located in various buildings around the city, provide maximum benefits, both for the academic community and for the city? The same opposition can be applied in other city design parameters, such as transport. It shows how decisions regarding the integration or separation of various modes of mobility in the street network influence public life. Urban streets designed as traffic corridors, for example in the case of Los Angeles, create a totally different environment from an urban network in which pedestrians, cyclists, and – occasionally – motorists use the streets on equal terms, as in the case of traffic-calmed streets (see Fig. 8).

3. *To Invite or Repel.* Human beings are used to experiencing the city by walking, and when one walks, very detail of a street or open space becomes important. This dilemma signifies the need to incorporate in public space design well-planned elements that will ensure users enjoy safety (from traffic, from harsh weather), have plenty of opportunities (to sit and stay, to play, to spend time) and to be aesthetically pleased when using a public space. If we cater, as designers, to these needs, then people will feel invited to come, stay, and make a place “their own.”

4. *To Open up or Close in.* The fourth opposition refers to the importance of

Fig. 8: An example of integration: Pedestrians, cyclists and occasionally motorists share street space in the center of Delft, the Netherlands. Photograph: Lefteris Bozis.

facades and specifically of the 'edge effect' for life between buildings. To "open up" means that a space is surrounded by facades that permit walkers to see inside the ground level, that have physical elements such as steps or awnings that provide opportunities for stopping and taking a rest, or even staying and enjoying life unfolding in front of you. It is a positive experience to be able both to participate in what goes on in the public space and at the same time to be a secure, semi-private zone in front of residences, shops, cafés, workshops, or other street-level uses.

4. Epilogue

The legacy of Jan Gehl's book, a book written in simple language and with a wide use of examples, easy-to-grasp even by non-experts, is still very much alive today, more than fifty years after its first publication. Designing cities at human scale can be astonishingly easy if designers are trained in and become conscious of the importance of caring for human needs. To accomplish this, empirical observation is paramount, so that abstract notions such as, say, "mix of uses" or "active facades" become concrete, as part of personal, lived experience. This transformative learning process can contribute to applying such lessons learnt via empirical study into conscious design practice, as common-sense solutions to design problems.

It is quite optimistic to observe how cities around the world have been transformed in the past decade, reinventing themselves and showing how the human-

centered approach can be applied to towns and cities of all sizes – even in metropolises such as New York and Paris (see Fig. 9). In the midst of the environmental crisis, to which cities have unfortunately contributed and continue to do so, this approach is also a reply to the urgent need for cities to move away from a technocratic rationale and a car-centric mentality towards a humanistic view of urban issues, based on sustainable mobility and eco-friendly solutions.

Fig. 9: A "beach" along the Seine, where vehicular traffic used to dominate. (Sharat Ganapati, CC BY 2.0 <https://creativecommons.org/licenses/by/2.0>, via Wikimedia Commons https://upload.wikimedia.org/wikipedia/commons/2/2b/Paris_Plage_July_25%2C_2012.jpg)

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