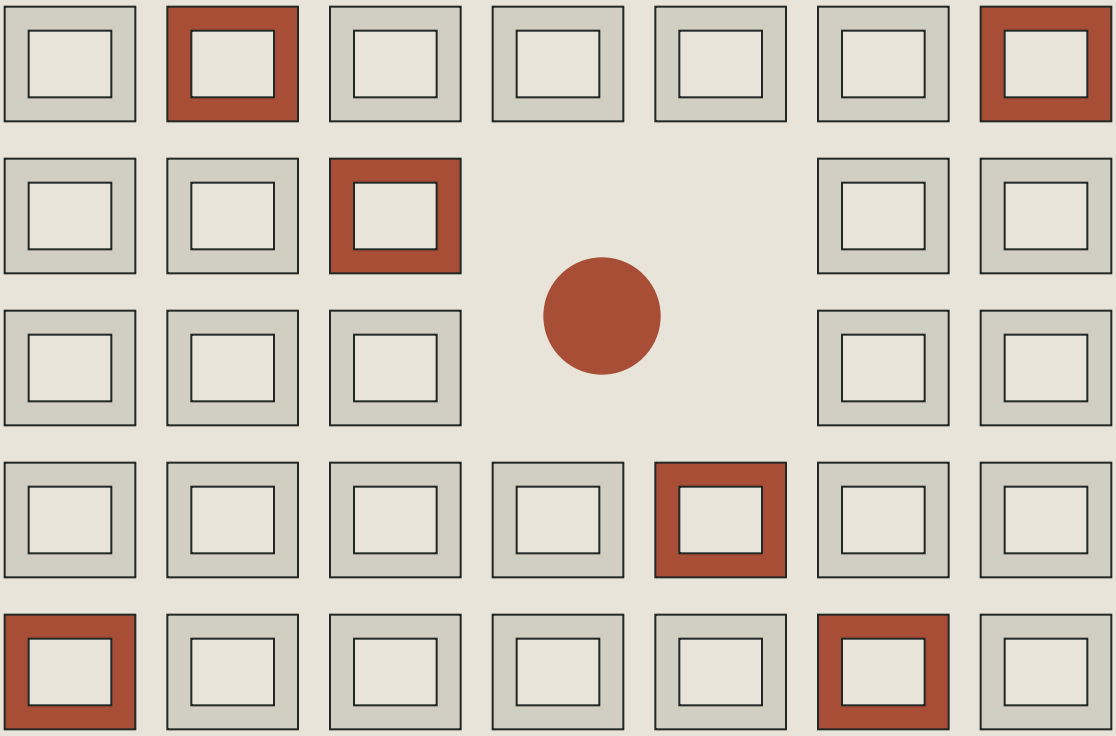
JITKA CIRKLOVÁ

URBAN SOCIOLOGY

How to Read the Social Life of Space



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PREFACE

Introduction

Architects create space—and space, in turn, shapes society. Every wall connects some people and separates others; every threshold welcomes one person while placing an obstacle before another; every square belongs to some while quietly excluding others. Architecture is therefore never merely the art of form and construction: it is always also a tacit proposal for how people will live together. This textbook is based on the conviction that an architect who recognizes this dual nature of their work designs better—and that urban sociology offers the tools with which to read the city in this way.

The aim of this book is to present these tools clearly and practically without sacrificing theoretical depth. It is neither a history of sociology nor a glossary of concepts for their own sake. Rather, it shows how space produces power and inequality, how it tacitly presupposes a particular kind of body, how it carries memory, how it is maintained and controlled, how global flows pass through it—and what all of this means for a concrete design.

The book therefore follows a consistent structure. Each chapter begins with a concrete case, draws a theory from it, and concludes by considering what the case means for the architect's work. Cases have deliberately been selected at two scales: international examples (Pruitt-Igoe, Bijlmermeer, Central Park, High Line, Sidewalk Toronto) stand alongside Czech ones (Prague's riverfront embankment, Karlín, Chanov, Kasárna Karlín), showing that the same mechanisms operate both at home and abroad—albeit at different scales and with different actors. Thirteen thematic chapters are organized around tensions found in every city: center and periphery, norm and body, permanence and temporariness, control and freedom, global and local. The fourteenth chapter is methodological and deals with participation and co-creation; the concluding appendix provides an overview of key authors in the field.

Each chapter includes a recurring set of learning tools: a series of "How to Read…" questions that can be applied to one's own project, an overview of

key concepts, questions for reflection, and a field exercise. The exercises build on one another and together form a short course in research methods. Anyone who completes them all will have conducted a small sociological investigation of the city over the course of a semester.

This textbook is intended primarily for master's students of architecture, but it is written to be useful to anyone whose professional work touches the city: urban designers, planners, heritage conservation specialists, public administrators, and informed general readers. It can be read from beginning to end or chapter by chapter; each chapter stands on its own, while cross-references gradually build the book's overarching argument.

One final observation, small but essential: reading the city sociologically does not mean trading the certainty of a drawing for idle speculation. It means seeing more—and bearing greater, better-informed responsibility for what we design. That is what this book is meant to help achieve.

CHAPTER 1

Why Sociology for Architects?

Between the Drawing and Life

“A house is a machine for living in.”

— Le Corbusier, Towards a New Architecture (1923)

“Modern architecture died in St. Louis, Missouri on July 15, 1972, at 3:32 p.m.”

— Charles Jencks, The Language of Post-Modern Architecture (1977)

1.1 The Building That “Died”

Almost everyone recognizes a particular photograph without knowing what it depicts. An eleven-story concrete slab collapses in broad daylight into a cloud of dust: a charge explodes at the base of the building; for a moment it trembles, as though hesitating, and then the entire structure falls. The image of the implosion traveled around the world in 1972 and became one of the most frequently cited architectural photographs of the twentieth century. Ironically, it is an icon of failure.

The building was part of the Pruitt-Igoe housing development in the northern part of St. Louis, United States. More precisely, it was not a single building: the development consisted of thirty-three identical eleven-story slabs, containing a total of 2,870 apartments on twenty-three hectares, and was designed for approximately ten thousand residents (Bristol 1991). It was designed by Minoru Yamasaki, a gifted modernist who, two decades later, would design the twin towers of New York’s World Trade Center. The development was first occupied in 1954 and initially praised by the professional press. It had everything postwar modernism believed in: light, air, greenery between buildings, “streets in the sky” in the form of wide

shared access galleries where neighbors were supposed to meet, and economical elevators that stopped only on every third floor, encouraging people to walk along communal corridors and thereby, almost inadvertently, form a community.

Less than twenty years later, it was a ruin. Apartments stood empty, elevators no longer worked, and the shared access galleries, designed precisely to encourage encounters between neighbors, were nicknamed “alleys” by residents because walking through them meant risking assault. Maintenance workers refused to enter the buildings. In 1969, tenants launched a nine-month strike for tolerable living conditions, one of the first successful rent strikes in public housing in the United States. By the time the decision to demolish the development was made, only about six hundred residents remained in a complex built for ten thousand people. The first building was blown up on March 16, 1972, the second on April 21, 1972, and it was the photograph of the second implosion that became famous. Demolition continued until 1976.





Fig. 1.1. Demolition of the Pruitt-Igoe housing complex, St. Louis, 1972. A photograph that, according to Charles Jencks, “buried” modern architecture. As this chapter will show, it tells us less about architecture than it seems to.

Architectural critic Charles Jencks turned the implosion into a symbol of an entire era. In the book that gave postmodernism its name, he declared that modern architecture had died at the precise moment of the demolition, even specifying the day, hour, and minute. The dating was a rhetorical exaggeration, and Jencks himself later described it as a deliberate provocation. Yet it caught on because it expressed a conviction already in the air: that the experiment with bright, rational, vertically stacked “machines for living” simply had not worked. Architecture had promised something and failed to deliver.

The very statement “architecture failed” is a useful starting point for this book. It sounds clear and compelling, and yet it is largely untrue. Understanding why it is untrue requires a sociological way of thinking.

1.2 Two Stories About One Building

Two stories can be told about Pruitt-Igoe. Both use the same facts; they differ only in where they locate the cause.

Story one — the failure of form. Architects believed in an abstract vision. They stacked poor families into anonymous concrete towers and cut them off from the street, shops, and everyday life. The long shared corridors belonged to no one, so no one looked after them, and they became dangerous territory. Height, repetition, and bare surfaces produced alienation. Form produced behavior; had Yamasaki designed low-rise houses with small gardens, people would have lived orderly lives. The blame lies in the drawing.

This story is seductive because it attributes enormous power to architecture and thereby flatters it. Decisions made at the drawing board count for more than anything else. That is precisely why we should be wary of it.

Story two — the failure of structure. Behind the drawing, an entirely different picture emerges (Bristol 1991; Freidrichs 2011).

To begin with, Yamasaki did not choose the height or density. The number of apartments, the density of development, and even the decision to build thirty-three eleven-story slabs had been determined by the federal public housing authority long before the architect had a say. Federal legislation, moreover, funded only construction. Operation and maintenance were supposed to be paid for out of rents. But St. Louis was emptying out at precisely that time. Industry was disappearing, middle-class and white families were moving to the suburbs (a movement known as white flight), and between 1950 and 1990 the city lost more than half its population. The complex was initially racially segregated: the Pruitt buildings were intended for Black tenants and Igoe for white tenants. After segregation ended, white residents left almost entirely. The poorest remained. Rents were insufficient to cover maintenance; without it, elevators broke down and water stopped running. Those who could move away did so, rental income fell further, the housing development emptied out, and the vicious circle tightened.

In this account, architecture is not innocent, but it is not the main cause. The main causes lie outside the design: in how money is distributed, who is allowed to live where, where capital flows, and whom the state abandons. In the words of revisionist historians, Yamasaki became the scapegoat for forces he could not control.

European parallels show that Pruitt-Igoe was not an American exception. Amsterdam's Bijlmermeer, built from the late 1960s according to CIAM principles as a honeycomb of ten-story megablocks for one hundred thousand inhabitants, followed a similar trajectory. Once celebrated as a vision of the "city of the future," it became a symbol of decline. Later reassessments identified the principal causes as delayed infrastructure (the metro and public amenities arrived years late), housing-allocation policies, and the concentration of newcomers without support, including migrants from Suriname after 1975 (Wassenberg 2013). London's Robin Hood Gardens, designed by the Smithsons, was completed in the same year Pruitt-Igoe came down and rested on the same idea of "streets in the sky." Beginning in 2017, it was gradually demolished, but the Victoria and Albert Museum rescued a three-story section of its facade and displayed it at the Venice Architecture Biennale. The same building was thus declared both a social failure and a monument of world architecture. The pattern recurs from French grands ensembles to Central European prefabricated housing estates. The story that "architecture failed" is told everywhere, and later research everywhere complicates it in the same direction: toward money, management, maintenance, and the allocation of housing.

The facts, then, are the same; the interpretations are two. One seeks the cause in the shape of the building, the other in the organization of society. The ability to recognize which interpretation is more accurate — and above all, the ability to see the second story at all — has a name in sociology and is one of its fundamental tools.

Question about the case. If Pruitt-Igoe had been built as low-rise family houses, but under the same economic and political conditions (a shrinking city, no funds for maintenance, the poorest residents), would it have fared better? Conversely, would Bijlmermeer have ended up the same way if the metro, schools, and shops had arrived on time? Your answers reveal a great deal about what you currently believe has power.

1.3 The Sociological Imagination

The American sociologist C. Wright Mills named this ability in his book The Sociological Imagination (1959). It is perhaps the most important concept in this textbook.

Mills noticed that people experience their lives as a sequence of personal stories (work, family, housing, debts, good luck, bad luck), and that they also interpret most of what happens to them in personal terms. I could not find a job because I did not try hard enough. I have nowhere to live because I managed my life badly. Such explanations are often appropriate. Just as often, however, they conceal something larger.

Mills illustrated this through unemployment. If one person is unemployed in a city of one hundred thousand, this is a personal trouble. It relates to that person's abilities, character, and the opportunities they did or did not have, and the solution is individual. But if, in a country with fifty million working people, there are fifteen million unemployed people, it is difficult to speak of the personal failure of fifteen million individual characters. This is now a public issue. Something has gone wrong in the organization of society, in the economy, in institutions, in the structure of opportunities; the solution therefore cannot be found in individual biographies. Only a change in that organization can help.

The sociological imagination is the ability to see the connection between an individual's biography and the history of the society in which that individual lives. Someone who possesses it can shift their gaze from the detail to the whole and back again. They take a personal experience and ask what broader forces have shaped it; they take a large structure and ask how it affects a particular life.

In Pruitt-Igoe, the two readings can be located precisely. The first story is a reading without the sociological imagination. It sees only the building and its immediate effect, the "personal trouble" of the architect and the residents. The second story shows the sociological imagination in action. It takes the same ruin, asks what historical and structural forces produced it, and finds deindustrialization, racial segregation, the funding model, and capital flight.

The entire question concerns more than sociology alone. It is urgent for architecture because architects work precisely at the boundary Mills described. A building is always both things at once. It is concrete matter on a particular plot, which a particular person will inhabit tomorrow: a piece of biography. At the same time, it is the product and instrument of large structures (money, laws, norms, power relations), and therefore a piece of history. Those who see only the first dimension draw attractive plans into a void. Those who see only the second write manifestos and build nothing.

Architecture needs both, and it is precisely this double vision that lies at the heart of urban sociology for architects.

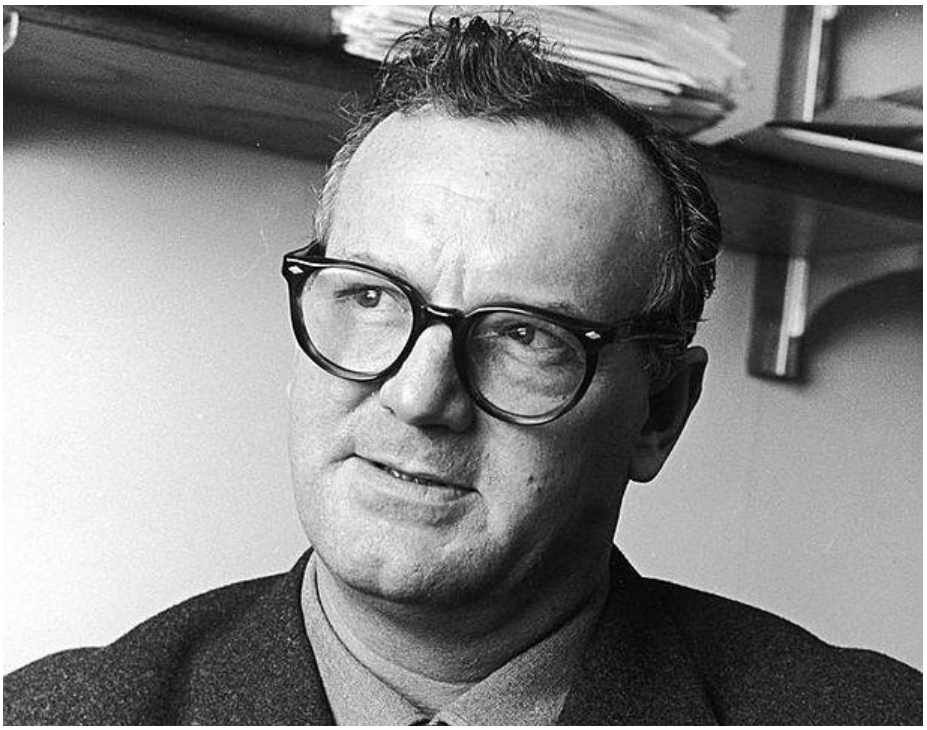

Fig. 1.2. C. Wright Mills (1916–1962). The concept of the “sociological imagination” is the best tool against the temptation to interpret everything in personal terms.

1.4 Social Fact: Why “Society” Is Not Merely the Sum of Individuals

An objection to the argument so far immediately suggests itself. Society does not build or inhabit anything. People build and live in buildings. “Structure” is an abstraction; only specific people and their decisions are real. This is a good objection and carries considerable philosophical weight. Sociology answers it with a concept older than Mills, one that belongs to the very foundations of the discipline: the social fact.

The term was introduced by Émile Durkheim, one of sociology’s founders, in The Rules of Sociological Method (1895). According to him, there are ways of acting, thinking, and feeling that have three properties in relation to the individual. They are external (they existed before the person and will exist after them), coercive (they exert pressure whether the person is aware of it or not), and collective (they are shared by society rather than

being anyone’s private invention). Durkheim called such phenomena social facts and insisted that they be studied “as things,” as objectively as a natural scientist studies a stone.

Language is an example. None of its speakers invented it. It existed long before them; they learned it and cannot change it at will, because if they began assigning their own meanings to words, no one would understand them. Language is external, coercive, and collective: it is a social fact. The same applies to money, laws, fashion, rules of politeness, and traffic regulations. None of these is “natural”; all were made by people, yet they resist individuals as firmly as gravity.

Durkheim went further still, demonstrating his thesis through the most personal act imaginable: suicide (Suicide, 1897). He showed that even where one might expect nothing but individual despair, stable suicide rates exist. Year after year they remain at almost the same level and vary systematically with the strength of social cohesion: they are higher where integration is weaker, for example among Protestants compared with Catholics, or unmarried people compared with married people. An individual suicide is the tragedy of a particular person; the suicide rate of an entire group is a social fact. Even the most intimate experiences follow a social pattern.

For design, this means that every project is conceived within a dense network of social facts, whether the designer knows it or not. Even an entrance hall is not drawn into a void. It takes shape in a space where unwritten rules already govern where one may stand and where one may not, how far apart strangers stand in a queue, and who steps aside for whom. An apartment design encounters the social fact called “family,” whose form has changed over the past fifty years (single parents, children living in two households, multigenerational households, adults sharing accommodation). A floor plan either accommodates these forms or people find ways around it. Social facts are as real a material as concrete, except that concrete is visible and social facts usually are not. Making them visible is among the principal tasks of urban sociology.

1.5 Structure and Agency: The Central Tension

Two concepts have appeared so far: the sociological imagination as the capacity to see, and the social fact as what needs to be seen. They are connected by a question that runs through all of sociology and returns in every subsequent chapter: the relationship between structure and agency.

Structure is the sum of the more enduring arrangements that extend beyond us and shape us: institutions, laws, class differences, power relations, social facts. Structure both constrains (people cannot simply do whatever they please) and enables (without language no one could speak, without money no one could exchange goods, without building law no one could build). Agency, by contrast, is the capacity of individuals to choose, to act, to resist and do things differently. People are not puppets of structures. They circumvent them, adapt them to their purposes, and sometimes change them.

Sociologists have always debated which of the two carries greater weight. Emphasize structure too strongly and people appear as helpless chess pieces. Emphasize agency too strongly and everything that presses upon, constrains, and predetermines people disappears from view, leaving the naive idea that everyone makes their own fate and is therefore personally to blame for it. Most good sociology avoids both extremes and takes both sides seriously. The best-known attempt to resolve this dispute theoretically is Anthony Giddens's theory of structuration. For him, structure and agency are not two opposing forces but two aspects of the same process. Structure is both the medium of action and its continually reproduced outcome (the duality of structure). Language is again the best illustration. By speaking we submit to its rules, yet by speaking we also keep it alive and gradually transform it. (The book reserves another influential attempt, Bourdieu's concept of habitus, for its concluding chapter.)

For architecture, what matters is that a building stands precisely at the hinge between structure and agency. It is produced by structure because money, regulations, property relations, and power interests have determined what will be built, where, how high, and for whom (Yamasaki, as we know, had the height and density imposed from above). At the same time, a building helps shape the actions of those who live in it. It opens some possibilities and closes others, invites some people in and stops others at the door.

Here lies a trap into which architecture falls especially easily, and it even has a name: architectural determinism. This is the belief that form directly and reliably determines behavior. Build “streets in the sky” and a community will emerge; build towers and alienation will follow. The first story about Pruitt-Igoe is pure architectural determinism. Determinism also has an academic history. In Utopia on Trial (1985), the British geographer Alice Coleman attributed vandalism and crime in London housing estates directly to measurable features of their form and recommended redesigning the estates. Later criticism, however, showed that her correlations weakened once residents’ poverty and housing-allocation practices were taken into account. Chapter 4 will return to this trap in detail. Determinism is doubly dangerous: it is false (behavior is also shaped by structures beyond the architect’s reach) and seductive (it flatters professional power). Form neither determines behavior nor leaves it untouched. It makes some actions easier and others harder, invites certain uses and discourages others, always in interplay with human agency and surrounding structures. A staircase can facilitate encounters; it cannot command them. A wall can facilitate exclusion, but no wall can cause or eliminate the poverty behind it.

Taking creative power seriously without falling for the illusion that form can solve problems of money, power, and institutions means walking a narrow line. Staying on that line is among the most difficult—and most valuable—skills in architectural thinking.

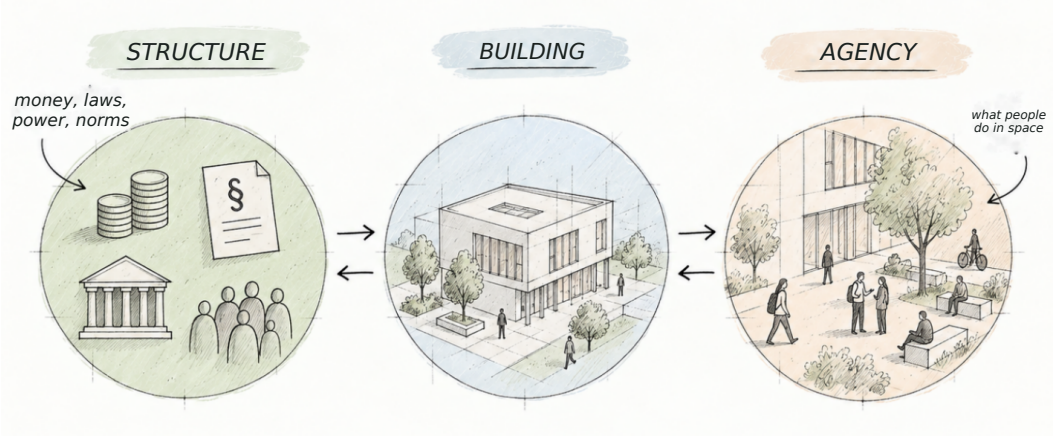

Fig. 1.3. The building as a hinge between structure and agency. The arrows run in both directions. Structures produce the building; the building helps shape action; and changed action can, over time, feed back into structures (Giddens’s duality of structure).

1.6 The Thesis of This Book: Space Is Social, Society Is Spatial

The whole book rests on one sentence. It has two halves, and both are true at once.

Space is social. No space is a neutral container into which life is merely “poured.” Every spatial arrangement embodies decisions about who belongs where, what matters, what is permitted, and what is not. A square, a fence, a reception desk, a staircase, and a property boundary are social relations translated into matter.

Society is spatial. No social relationship exists outside space. Power, inequality, family, community, memory, and surveillance do not take place in some kind of ether. All require a location, whether offices, bedrooms, cemeteries, cameras, or fences. Understanding society means looking at where it happens.

For sociology, the discovery is the second half of the sentence: society always has a spatial form, something the discipline long overlooked. For architecture, the revolutionary part is the first. It says that every drawing is a silent hypothesis about social life. Choosing to open the kitchen into the living room is an assumption about what family life should look like and who should be visible while cooking. A single shared entrance instead of two separate ones embodies a judgment about whether different people should meet. And a bench shaped so that nobody can lie on it presupposes who belongs in public space and who does not.

Such hypotheses are made regardless. The only question is whether consciously or inadvertently. Without sociological imagination, an architect makes them inadvertently and is then surprised that “people use the building incorrectly.” With sociological imagination, the architect knows that there is no such thing as “incorrect use.” There is only a difference between what was assumed and how people actually live, and this difference is the most valuable feedback an architect can receive.

1.7 How to Read a Building Sociologically

Sociological imagination can be learned because it is a habit of asking questions. The following set is deliberately simple and can be applied to any space, from a bus stop to an opera house. The book will return to it and refine it, but even in this rough form it reveals more than an ordinary glance can capture.

Who paid for the space, and who benefits from it? Money usually reveals whom a place serves, even when it speaks the language of the common good.

Whom does the space invite in, and whom does it stop? Every place has thresholds, some made of stone, others unspoken. The difference lies in who passes through them without a second thought and who hesitates or turns back.

Which behaviors does the space facilitate, and which does it make harder? The verb “facilitate” is deliberately chosen instead of “determine.” Where can one sit, linger, hide, meet others, or be alone?

What is visible, and what is concealed? A grand staircase versus a staff entrance; rubbish bins, technical facilities, and the people who clean.

What happens when someone uses the space “differently”? Skateboarders on marble, laundry on a balcony, a flower planted without permission in a municipal flower bed. A departure from the intended use often reveals the intention better than anything else.

These five questions contain the entire method of the book in miniature.

1.8 What Sociology Cannot Offer (and What It Can)

It is worth saying what sociology is not good for. It has three limitations.

It does not provide form. No sociological theory produces a floor plan, the height of a building, or the appearance of a facade. That remains the architect’s work.

It does not provide certainty. Sociology does not predict behavior as reliably as physics predicts a falling stone. People are creative and defiant

and cannot be predicted, because alongside structure there is also their agency. Sociology increases the likelihood of a sound judgment, but it does not guarantee one.

It does not absolve us of responsibility. Quite the opposite. Once it becomes clear that a drawing is a hypothesis about social life, the excuse “I only drew it” no longer holds.

So what does sociology offer? Better questions. It reveals what would otherwise remain hidden: social facts, structures, and power relations embodied in material form. It guards against the most embarrassing professional mistake: believing that problems of money and power can be solved through form. And it provides both humility and confidence. Humility, because we can see how much of the outcome lies beyond the architect’s control; confidence, because we can also see that narrow but real range in which decisions about form genuinely change people’s lives.

Pruitt-Igoe does not prove that architecture is powerless, but that architecture alone is not enough. And an architect can hardly do anything worse than believe the opposite. If space is not a neutral container, how does it actually come into being? Who “produces” it, and how? That is the subject of the next chapter.

Key Concepts in This Chapter

Sociological imagination (C. W. Mills) — the ability to see connections between personal biography and historical or structural forces, and to shift perspective between the individual and society as a whole.

Personal trouble vs. public issue (Mills) — the distinction between what can be explained and addressed individually and what is a manifestation of how society is organized.

Social fact (É. Durkheim) — a way of acting, thinking, and feeling that is external to the individual, coercive, and collective (language, money, laws, norms). It is real even though human beings created it.

Structure vs. agency — the relationship between arrangements that extend beyond us (and both constrain and enable us) and individuals’ capacity to choose and act.

Duality of structure (A. Giddens) — structure as both the medium and the continually reproduced outcome of action. The most influential theoretical attempt to dissolve the dualism between structure and agency.

Architectural determinism — the mistaken belief that form directly and reliably determines behavior. Architecture falls into this trap especially easily (compare Coleman, 1985, and criticism of her work).

The book's thesis — space is social (every arrangement embodies social decisions), and society is spatial (every social relationship takes place somewhere). It follows that every drawing is a hypothesis about social life.

Questions for Reflection

Choose a building or public space generally considered "successful" or "unsuccessful." Can both stories from section 1.2 be told about it, one attributing the cause to form and the other to structure? Which story is heard more often in public debate, and why?

Apply Mills's distinction between personal trouble and public issue to housing. What phenomenon in Czechia is commonly interpreted as a personal failure, although it could also be understood as a public issue? What changes when you switch perspectives?

Find three social facts (in Durkheim's sense) that a person encounters when entering any building. How would the building have to change to circumvent them? Is that even possible?

Robin Hood Gardens was demolished as a social failure and simultaneously preserved in a museum as an architectural monument. What does this ambiguity tell us about the relationship between aesthetic and social judgments of architecture?

Is it true that "there is no such thing as using space incorrectly, only a difference between assumption and life" (section 1.6)? Where are the limits of this claim?

Field Exercise 1: Reading a Place

Choose a public or semi-public place you pass through every day (a bus stop, a station concourse, the forecourt of a faculty building, a shopping arcade), and spend twenty minutes simply observing it, without designing anything. Work through the five questions in section 1.7 and record a specific observation for each. Pay particular attention to the fifth question and capture at least one instance in which someone used the space "differently" from how it was evidently intended. Submit one page of text or one page of sketches with notes. The exercise in the next chapter will build on these observations.

Sources and Recommended Reading

Classic texts (the core of the chapter):

Mills, C. W. (1959). The Sociological Imagination. New York: Oxford University Press. (Czech edition: Sociologická imaginace. Prague: SLON.) For this chapter, the first chapter, "The Promise," is sufficient.

Durkheim, É. (1895). Les règles de la méthode sociologique. (Czech edition: Pravidla sociologické metody.) The key passage is the definition of the social fact.

Durkheim, É. (1897). Le suicide. For an idea of how a social fact is studied "as a thing."

Giddens, A. (1984). The Constitution of Society. Cambridge: Polity Press. On the duality of structure and the theory of structuration.

On the Pruitt-Igoe case:

Bristol, K. G. (1991). "The Pruitt-Igoe Myth." Journal of Architectural Education, 44(3), 163–171. A foundational revisionist study; freely accessible versions are available in university repositories (green open access).

Freidrichs, C. (2011). The Pruitt-Igoe Myth (documentary film, USA). Based on accounts by former residents; suitable introductory material for a seminar.

Heathcott, J. (2012). “Pruitt-Igoe and the Critique of Public Housing.” Journal of the American Planning Association, 78(4). A historical reconstruction of the operational and fiscal causes of decline.

Comparative cases (Europe):

Wassenberg, F. (2013). Large Housing Estates: Ideas, Rise, Fall and Recovery. The Bijlmermeer Case. Amsterdam: IOS Press / TU Delft. A detailed monograph on the Amsterdam case.

Victoria & Albert Museum: documentation of the fragment of Robin Hood Gardens (saved in 2017, exhibited at the Venice Architecture Biennale in 2018) — vam.ac.uk.

Coleman, A. (1985). Utopia on Trial. London: Hilary Shipman. An influential—and methodologically contested—defence of architectural determinism; read alongside critiques of her work.

Supplementary:

Jencks, C. (1977). The Language of Post-Modern Architecture. London: Academy Editions. For the original (and now disputed) declaration of the “death of modern architecture.”

CHAPTER 2

How Space Is Produced

A Concrete Wall and Three Forms of the Same Place

“(Social) space is a (social) product.”

— Henri Lefebvre, The Production of Space (1974)

“Space is the simultaneity of stories that have not yet been fully told.”

— Doreen Massey, For Space (2005)

2.1 The Illusion of the Empty Container

The most common conception of space is that of an empty container. Space is imagined as a neutral vessel that existed before anything within it; as a stage on which a play unfolds but which remains indifferent to the play; or as a grid of coordinates into which houses, people, and things are subsequently placed. This intuition runs deep—it reaches back to Cartesian and Newtonian physics—and is harmless enough for everyday orientation. For understanding the city, however, it is misleading.

The container view of space was reinforced by modern science, with its empty, homogeneous, measurable coordinate space in which bodies move. In architecture it is also an occupational bias. A drawing, floor plan, or axonometric projection depicts space as a pre-defined area to be filled. Learning to draw means learning to see space as something given, into which content is inserted. This perspective is essential for design, yet it can easily be mistaken for reality. Lefebvre would say that architects run a particular risk of confusing the map with the territory, because they take for space what is only one of its dimensions. We shall return to this dimension as “conceived” space.

The first chapter argued that space is social. This chapter asks about the mechanism. If space is not a neutral container, where does it come from? In The Production of Space (1974), the French philosopher and sociologist

Henri Lefebvre answered tersely and somewhat provocatively: space is produced. It is not simply given, and no one finds it ready-made. And because societies produce it, it bears their relationships, conflicts, and hierarchies. “(Social) space is a (social) product.” With this single sentence, Lefebvre dismantles two illusions at once: the illusion of transparency (space as an innocent, legible, neutral medium of thought) and the illusion of naturalness (space as a merely pre-given thing).

Producing space, however, does not merely mean pouring concrete. The same physical material can become an entirely different place depending on the social relationships, forms of use, and meanings people invest in it. A single Prague example illustrates this best: a stretch of concrete wall above the Vltava that has not changed its shape in a hundred and fifty years, yet has been fundamentally transformed several times.

2.2 Náplavka: The Same Wall, a Different Place

Rašín Embankment on the right bank of the Vltava was built in 1870–1878 and in the early twentieth century, so the embankment wall with its vaulted chambers is more than a century old. To make way for it, old Podskalí, a distinctive settlement of raftsmen and river workers, was demolished. Here lies the first lesson: the production of this space itself began with the destruction of another. For decades, the chambers served strictly technical purposes, as stores for ice and timber. Sand was unloaded here from boats, and in winter the ice merchants’ carts came here and carried ice from here to restaurants and households. Náplavka was the working edge of the river.

Podskalí deserves a closer look. It was an old Vltava neighbourhood of raftsmen, boatmen, and timber merchants, whose life followed its own rhythm tied to the river. The regulation of the embankment in the late nineteenth century swept much of it away in the name of flood protection, transport, and the representative image of a modern city. A lived landscape was replaced by a new, planned one: a straight stone wall, a clean line, order. This is not a marginal note in the history of Náplavka; it is the first act of its production. Every “empty” site on which something is built is, in reality, usually a place that someone occupied before.

As river freight transport declined after the 1960s, this function disappeared, and the busy waterfront became a little-used, half-forgotten

strip beside the water: somewhere people walked through, but which few particularly missed. It could have remained that way. It did not.

At first there was no plan. From around 2009, the place began to come alive from below. Ivo Slavík organized the first exhibitions and concerts in the chambers and brought in a rusty boat that became a floating gallery and bar; the Bajkazyl bicycle workshop appeared; and the Archetyp association launched Saturday farmers' markets (ERA21 2020). The "discovery of a place by the water" coincided with a broader trend toward inhabiting the city as a natural habitat. Architect Petr Janda, who has worked on the embankments since 2009, designed the now widely recognizable chamber portals with their large elliptical glass panes.

Only then did the institutions arrive. In 2017, the then mayor adopted the project and began championing it personally. Funding was found, and almost CZK 174 million was allocated to the vaults, toilets, and technical modifications on the Rašín and Hořejší embankments. The reconstruction, which came ten years after the first initiatives, transformed twenty vaults into cafés, galleries, studios, workshops, public toilets, and even a branch of the municipal library. The vaults received motor-operated glazed portals and built-in flood protection. Operations are now managed by a city-owned company. Success brought such intense commercial pressure that the architect himself spoke of a "losing battle," and the city responded with rules: quiet Sundays, Mondays, and Tuesdays, noise limits, and large events no more than once a month.

Throughout this time, the stone itself barely changed. The wall from the 1870s still stands, and the vaults remain the same vaults. Yet the place has travelled from working infrastructure through a forgotten strip of land to one of Prague's liveliest public spaces, and from there to a dispute between a "living room by the river" and an open-air shopping-and-bar centre. If space were a neutral container, this could not be explained. The container is the same, while its contents (social life) are entirely different each time. What changed, then, if not the material fabric? Lefebvre would answer that three different "spaces" are simultaneously present in every place, and Náplavka shifted in all three.

Question about the case. If the city had "completed" Náplavka at the outset with a single finished project, instead of allowing it to grow from below through concerts, markets, and a rusty boat, would it be just as lively

today? Your answer suggests what you believe gives space its life: form, or its lived appropriation.

2.3 Threefold Space: Lefebvre’s Triad

Lefebvre’s most useful tool is a set of three dimensions that are present simultaneously in every space and interpenetrate one another. Lefebvre calls this the spatial triad.

Perceived space (spatial practice). Material, bodily, everyday space. It includes the routes people take, physical flows, and repeated actions that produce and reproduce a place through use. At Náplavka, this means the Saturday line of market stalls, runners and cyclists on the path, people sitting on the edge with their feet above the water, and the rhythm of the seasons. Perceived space is the city as enacted by feet and hands.

Conceived space (representations of space). Space thought out, planned, and represented by architects, engineers, planners, and officials. It consists of drawings, maps, models, regulations, and the “project.” It is the space of knowledge and power and tends to prevail because it is the space of those who make decisions. At Náplavka, it includes Janda’s plans for the vaults, cadastral boundaries, the events calendar, the ordinance on “quiet days,” and the very category of “revitalisation.” Architects spend most of their professional lives in this space.

Lived space (representational spaces). Space as people experience it directly through images, symbols, memory, and feeling. It is the space of inhabitants and users: appropriated, charged with meaning, and sometimes resistant. At Náplavka, it includes the rusty gallery boat as a symbol, concerts, and the feeling of “our place by the river”; the attachment that led people to defend the place against excessive commercialisation. In lived space, a strip of concrete becomes a meaningful place, and people can reclaim it even against plans someone else has drawn for them.

The triad is not limited to Náplavka; it can be applied to anything. A university lecture hall is perceived as rows of seats, acoustics, and a route to the door; conceived as seating-capacity standards, escape routes, and a timetable; and lived as a place of boredom, stage fright, or a first encounter, or as the back row where people go to disappear. Anyone who learns to distinguish these three dimensions in any place has mastered half of the sociological reading of space.

The three dimensions are always intertwined and never neatly separated (Lefebvre 1991). They also connect to the first chapter. Architects inhabit conceived space, the drawing, while people inhabit lived space, and the gap between them is precisely the “difference between assumption and life.” According to Lefebvre, living space emerges when all three dimensions resonate with one another, and dead space where conceived space completely dominates and crushes lived space. Pruitt-Igoe was conceived space imposed from above, leaving little room for lived appropriation. Náplavka, by contrast, emerged in perceived and lived space and was only “conceived” afterwards, which may be why it feels so alive.





Fig. 2.1. The same wall, two centuries, two quite different spaces.

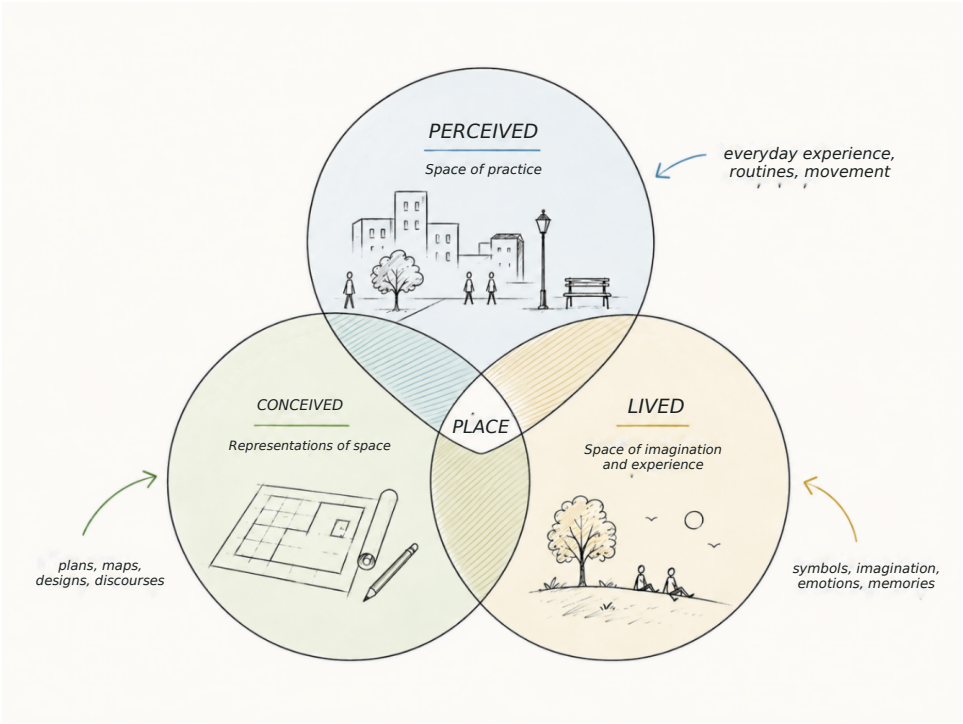

Fig. 2.2. Three spaces in one: practice, planning, and lived meaning never entirely overlap—and it is precisely in that tension that space is produced.

2.4 Whose Space Prevails

If space is produced, its production is never innocent. It is a struggle over which of the three dimensions will prevail and whose meaning will win. Lefebvre's broader thesis is that modern, market-oriented space tends toward abstract space: homogenized, measured, monetized, and made legible for exchange and control. It colonizes and flattens differential space, the space of difference and lived uniqueness. Two forces work against one another here: appropriation (people making space their own through use and meaning) and domination (power organizing space for control and profit).

Abstract space sounds theoretical, but it is tangible. It is the kind of space that can easily be measured, rented, compared, and replicated. An airport concourse, a shopping mall, and a "revitalized" waterfront in ten different cities resemble one another precisely because abstract space tends toward interchangeability. It measures area in square meters of yield and erases particularities that are difficult to monetize. Differential space, by contrast, is what makes a place this place and no other. The struggle between appropriation and domination is also about whether a place retains its distinct character or dissolves into a generic, interchangeable backdrop.

On Náplavka, this struggle unfolded almost exactly as Lefebvre described. Its life began through appropriation: from below, improvised, and lived. Success turned it into an asset managed by a municipal company; commercial tenants fill the vaulted spaces, and pressure to exploit its "commercial potential" is growing. "Quiet Sundays" and noise limits are attempts by conceived and administrative space to discipline lived space once again, after it became too profitable and too noisy. Who Náplavka belongs to—residents who want a living room beside the river, or visitors and operators seeking revenue—is not determined by stone. It is decided again and again. The claim that space is social must therefore be taken literally, as a description of an ongoing and very material dispute over its production.

A similar situation can be found in Vienna's Grätzloasen ("neighborhood oases") project, in which parking spaces are converted into publicly accessible courtyards. A study interpreting the project through Lefebvre's triad described "double appropriation" (both organizers and local residents make the place their own) and recurring disputes about the "misuse" of the

oases: who may use them, and how. The plot is the same as on Náplavka. As soon as an underused, dominated space is appropriated and brought to life, a dispute erupts over whose lived meaning will count from then on.

The best-known global example of the production and rewriting of space is Seoul's Cheonggyecheon. The stream, which had flowed through the center of the Korean metropolis for centuries, was covered by a roadway in the postwar decades; in 1976 an elevated urban expressway was completed above it, conceived space of the developmental state and a symbol of modernization. Between 2003 and 2005, Mayor Lee Myung-bak had the expressway demolished and 5.8 kilometers of the watercourse "restored," with a riverside promenade. The symbol was reversed. An icon of automotive modernity became an icon of a city oriented toward people and "nature." The project demonstrably lowered temperatures along the corridor, attracted millions of visitors, and raised nearby land prices (Kang & Cervero 2009). Yet not everything made it into the celebratory brochures. The "river" is largely an engineered work, since water is pumped into the channel; it is more a manufactured scene of nature than nature's return (discussed in greater detail in Chapter 7). Construction also displaced thousands of street vendors and small workshops to the periphery, businesses that had scraped by for decades alongside the covered stream. The same project can therefore be read both as a victory of lived space over the domination of traffic and as a new, more elegant form of domination that subjugated the lived space of poorer users and erased their "Podskalí." Both readings are true at once.

Moreover, producing space usually comes at a cost somewhere else. Náplavka itself rests on the erasure of Podskalí, an entire community of river people demolished so that the wall could be built. Cheonggyecheon rests on the erasure of the street traders' world. Every produced space generally "unproduces" another, and today's lively place often sits on yesterday's forgotten one. Sociology trains the eye to ask not only "what is here now?" but also "what was here before, and who paid for the change?"

2.5 Space as Process

Lefebvre’s triad can seem static, like three compartments into which things merely need to be sorted. The British geographer Doreen Massey substantially revised this view. For her, space is neither a surface nor a container but a product of relations, and therefore always unfinished (Massey 2005). It is the sphere of multiplicity, of different trajectories coexisting, and the “simultaneity of stories that have not yet been fully told.” There is no final state of Náplavka, only the next episode in the dispute among markets, residents, the city, the river, and the weather. Anyone who declares a place “finished” mistakes an intermission for an ending.

The relational perspective also has a political consequence. If a place is always the intersection of many trajectories—people, money, materials, histories—then no place is innocent and none is merely “local.” Náplavka is connected to the quarries from which the wall’s stone came, to the global market that determines which businesses are profitable in its vaulted spaces, and to tourism, which fills the place while transforming it. Massey calls this throwntogetherness. A place is always a contingent encounter of whatever happens to come together, and what ultimately emerges from that encounter remains open and depends on how people act.

For design, the relational perspective matters because it rejects two comforting fictions: that a place has one true meaning (it has many, often contradictory meanings), and that completing a building also completes a space (it merely adds another voice to a conversation that continues). For Doreen Massey, space is a verb, not a noun.

2.6 What This Means for Architecture

The practical consequence calls for humility, but it is also liberating. Architects work almost exclusively in conceived space—in drawings, models, and briefs. Yet their product enters lived and perceived space, where its meaning will be determined by people the architect will never meet. A drawing is therefore not the production of a place; it is one move in a long process of production that the architect neither controls nor can bring to an end.

Two things follow from this. First, humility about meaning: a design cannot determine how a space will be lived; it can only offer possibilities. Náplavka flourished in part because its vaults and edges were sufficiently “loose” for people to appropriate them through concerts, markets, and a rusty boat long before any grand plan arrived. Spaces that leave room for appropriation come alive. Spaces whose lived meaning is prescribed at the drawing board tend to be used “incorrectly”—which, as Chapter 1 explained, merely means differently from what was expected. Second, responsibility for the production of space: because producing one space generally means unmaking another, the honest question at the drawing board is not only “What will this place become?” but also “What and whom does it replace, and whom does it actually serve?” The Seoul case makes the question especially sharp: can we have Cheonggyecheon without the displaced market traders?

There is also a third, more uncomfortable consequence. Because abstract space is easy to measure and sell, the entire system—the investor, the bank, regulations, and calculations—pressures the architect to produce space that is interchangeable and legitimate at first glance. Resisting this does not mean making extravagant gestures; it means protecting differential space: everything that makes a place distinctive, permits lived appropriation, and resists being reduced to a spreadsheet. Sociology does not give the architect a recipe. But it gives a name to the pressure they face, and thereby a first opportunity to confront it consciously.

If space is produced by social relations, the next question is what those relations are. The most persistent of them, and the one most visibly inscribed in walls, doors, and thresholds, is power. That is the subject of the next chapter: how buildings embed, exercise, and conceal power, from prisons to open-plan offices.

2.7 How to Read the Production of Space

The following questions build on the five questions in Chapter 1 and now ask how space is produced, and by whom.

What was here before, and who disappeared so that the present place could emerge? Almost every produced space has replaced another.

Which three spaces meet here? Perceived space (how the place is used bodily), conceived space (how it is planned and regulated), and lived space (what it means, and to whom).

Which one dominates? Do planning and regulation prevail, or appropriation and meaning? And whom does that serve?

Whose meaning is “official,” and who subverts it? Where actual use diverges from intention, there is lived space.

Is it finished, or is it still being negotiated? Usually the latter; the only question is who is negotiating at present and who is not.

Key Concepts of This Chapter

Production of space (H. Lefebvre) — the proposition that space is a social product bearing the relationships, conflicts, and hierarchies of its time, as opposed to a natural given or neutral container.

Spatial triad (Lefebvre) — three simultaneously present dimensions of every space: perceived (spatial practice, bodily use), conceived (representations of space: plans, maps, regulations), and lived (spaces of representation: meaning, symbol, appropriation).

Appropriation versus domination — the conflict between people’s taking possession of space for use and meaning, and the exercise of power over space for control and profit.

Abstract versus differential space (Lefebvre) — the tendency of modern market space toward homogenization, quantification, and commodification, suppressing difference and lived uniqueness.

Relational and processual space (D. Massey) — space as a product of relations and a multiplicity of simultaneous trajectories, a never-completed “simultaneity of stories that have not yet been fully told.” This also includes throwntogetherness.

The empty-container fallacy — the intuition that space is a pre-existing neutral box: harmless in everyday life, misleading when trying to understand the city.

Questions for Reflection

Choose a place that has changed markedly in character over a few years even though its physical fabric has remained almost the same. Which of the three dimensions of space shifted most, and why?

Lefebvre argues that conceived space (the plan) often prevails over lived space. Where is this true? And where, conversely, has lived space overcome the plan?

What was destroyed or displaced to create some of today's popular public spaces? Whom do they serve now, and whom did they serve before?

Cheonggyecheon is celebrated for returning a river to the city and criticized as a manufactured backdrop that forced street vendors to leave. Can both judgments be held at once? What would the project have had to do differently for the second judgment not to apply?

Massey says that no place is ever finished. How does this fit with the conventional architectural notion of a "completed building"? Where does the contradiction arise?

Field Exercise 2: Three Layers of One Place

Choose one place and describe it three times. First, as perceived space: where and how people move through it, what they do with their bodies, and what flows and rhythms occur there. Second, as conceived space: how it is planned, owned, and regulated, and what maps, land registers, and regulations say about it. Third, as lived space: what it means, what symbols and memories it carries, and where it is used "differently." Finally, note which of the three descriptions was most difficult and why, and which an architect usually sees first. One page is enough, two at most.

Sources and Recommended Reading

Classic texts (core of the chapter)

Lefebvre, H. (1974). La production de l'espace. Paris: Anthropos. (English: The Production of Space, translated by D. Nicholson-Smith, Oxford: Blackwell, 1991.) A demanding but foundational text; for an introduction, the passages on the spatial triad suffice.

Massey, D. (2005). For Space. London: Sage. On relational and processual understandings of space; her essay “A Global Sense of Place” (1991), freely available in several repositories (green open access), is more approachable.

Soja, E. W. (1996). Thirdspace. Oxford: Blackwell. Develops Lefebvre’s triad into the concept of “third space.”

Open access — applications of the triad to specific places

Ardıç Yetiş, Ş., et al. (2021). A study applying Lefebvre’s “trialectics” to an urban square (Afyonkarahisar); freely available through PubMed Central — Humanities & Social Sciences Communications. An example of how perceived, conceived, and lived space can be read in a real public space.

A study of the Vienna Grätzloasen project (the conversion of parking spaces into public courtyards), interpreted through Lefebvre’s triad, describes “double appropriation” and disputes over the “misuse” of space; available in academic repositories.

On the Cheonggyecheon case:

Kang, C. D. & Cervero, R. (2009). “From Elevated Freeway to Urban Greenway: Land Price Impacts of the CGC Project in Seoul, Korea.” Urban Studies, 46(13). On the project’s effects on land prices.

There is extensive critical literature on “restored nature” and the displacement of street vendors from Cheonggyecheon (key search terms: Cheonggyecheon restoration, street vendors, simulated nature); we recommend looking up current review studies in academic databases.

On the Prague Náplavka case:

“Ať žije náplavka. Revitalizace pražské náplavky” (petrjanda/brainwork), ERA21, 2020 — era21.cz. A freely accessible architectural analysis of the project and its history.

prazskenaplavky.cz — official website of the site’s administrator; overview of the riverside vaults and their new uses.

“Revitalizace náplavky,” Encyklopedie Prahy 2 — encyklopedie.praha2.cz. Context, operating rules, and “quiet” days.

CHAPTER 3

Institutions, Power, and Space

From the Panopticon to the Principle of Normality

“Power visible, yet unverifiable.”

— On panoptic power; Michel Foucault, Discipline and Punish (1975)

“Total institutions break down the barriers ordinarily separating sleep, work, and play.”

— Erving Goffman, Asylums (1961)

3.1 A Machine for Surveillance

On an island off the southwestern coast of Cuba, now called Isla de la Juventud, stand five enormous concrete drums. Each contains a single tower surrounded by a ring of cells on six floors. The cells run through the full thickness of the wall, so daylight illuminates them from outside and the prisoner is always visible from the tower as a silhouette, while knowing nothing about the observer. This is Presidio Modelo, the “model prison,” built between 1926 and 1931 under the dictatorship of Gerardo Machado. It was designed for approximately 2,500 prisoners; in its worst years it held more than six thousand. It is the most complete panopticon ever built.

Here the building itself is the guard. Remove the flesh-and-blood guard and the geometry still works, because a prisoner who cannot know when he is being watched behaves as though he were watched all the time. Form has taken over control. The second chapter’s thesis—that space carries social relations—applies literally here, and none of those relations is more legible in walls, doors, and sightlines than power. Náplavka showed that space carries relations; Presidio Modelo shows that one of them, domination, can to a considerable extent be built.

Yet the caution from Chapter 1 applies here too. Concrete gives orders to no one. The drum organizes visibility so that obedience becomes the reasonable choice, managed by the prisoner himself, who disciplines himself. This is a mechanism much subtler and more powerful than determinism, and it was named by the philosopher who made the logic of Presidio Modelo famous long after it had been built.

(Incidentally, Presidio's most famous prisoner was the young Fidel Castro, held here from 1953 to 1955, who reportedly called the prison an excellent school. After the revolution, opponents of his own regime ended up in the same cells. The prison closed in 1967; today it is a museum and national monument, and the chapter will return to it.)



Fig. 3.1. A surveillance machine: from a single tower it is possible, in principle, to oversee thousands of cells. Architecture itself becomes the guard.

3.2 From the Execution Ground to the Timetable

Michel Foucault opens Discipline and Punish (1975) with two scenes separated by eighty years. The first is the public torture and execution of the regicide Damiens in 1757. The condemned man's body is destroyed before spectators, and sovereign power displays itself by marking that body. The second scene is an ordinary prison timetable from the 1830s, in which every hour and every movement is prescribed. Between the two scenes, Foucault argues, a revolution occurred in the way power operates.

Sovereign power was spectacular and occasional, directed at the body, and visible in the person of the ruler. Disciplinary power, by contrast, is continuous and ordinary, aimed at behavior, and invisible in the sense that it operates through arrangement rather than spectacle. It does not destroy—it produces: useful, obedient, 'docile bodies'—the trained soldier, the diligent pupil, the punctual worker. Its ideal architectural diagram is Bentham's panopticon.

The English philosopher Jeremy Bentham conceived the panopticon at the end of the eighteenth century as an 'inspection house': a ring of cells, a central tower, and lighting arranged so that those under observation could be seen while the observer remained concealed. What interested Foucault was less the act of observation itself than the uncertainty it generates. Power here is 'visible and unverifiable.' The tower is constantly in sight, yet one can never confirm whether anyone is inside it at a given moment. The person under observation therefore internalizes the gaze and polices himself. Power becomes automatic, continuous, inexpensive, and impersonal, and it operates even when the tower is empty.

The panopticon was not the only architectural program of discipline. It had a rival: solitude. Philadelphia's Eastern State Penitentiary (1829, architect John Haviland), a radial star of corridors lined with cells, adopted the so-called separate system. Each prisoner lived entirely alone, with a cell and yard of his own, and wore a hood on the rare occasions when he passed through a corridor, so that he could see no one and no one could see him. Instead of visibility, isolation and penitence were supposed to bring about reform—hence the word 'penitentiary.' The building became an international sensation. Alexis de Tocqueville and Gustave de Beaumont came to study it on behalf of the French government, and Charles Dickens, shaken by his visit in 1842, wrote that the torture of solitude was crueler

than the lash. An architect can learn here that discipline is a program that can be built in different forms: through surveillance or isolation, a ring or a star. What they share is the conviction that the floor plan itself should carry out reform.

Bentham himself, moreover, recognized that his diagram could be used beyond prisons and proposed it for hospitals, schools, workhouses, and asylums. From this Foucault drew a thesis about modern society as a whole. The same disciplinary procedures—enclosure, partitioning space, ordering, timetables, examination, and continuous visibility—organize barracks, schools, clinics, factories, and offices. The prison is merely their purest form; in everyday institutions they operate in diluted form.

The instruments through which discipline works in space are, for the most part, an architect’s instruments. Foucault describes enclosure (a wall separating inside from outside), partitioning (a place for each person, one body per cell, whether a prison cell, desk, bed, or cubicle), functional placement (space divided by tasks and observability), and ranking (corridors, queues, numbered rows that turn people into comparable units), and above all the timetable, which slices time as precisely as partitions slice floor area. These are perfectly ordinary items in a floor plan and an operational diagram. Discipline does not enter space afterward; it is already embedded in the way space is drawn.

Put in the terms of Chapter Two, the panopticon is conceived space in its most extreme form: a plan that organizes perception and behavior from above and leaves minimal room for lived appropriation. The question arises whether such a diagram belongs only to grim institutions or whether it also arranges the spaces of entirely ordinary working life.

3.3 The Panopticon Today

It does. The best-known panopticon of our time is the open-plan office. Low partitions or none at all, glass-walled meeting rooms, the manager's view across the entire floor, a screen turned outward. A worker who does not know when he is being watched performs visible busyness. Hot-desking deprives him even of the small stronghold of a personal workstation, while activity dashboards, login times, and the green 'available' dot extend the tower into data, where it never sleeps. (The dissolution of the panopticon into ubiquitous data—'liquid surveillance'—is the subject of Chapter Eleven.)

For architecture, this is an uncomfortable finding. A glass wall reads as openness, transparency, and democracy, yet it determines the direction of the gaze and the regime of visibility: it is a soft tower. The same element can liberate or discipline, depending on who can see whom. Anyone specifying a glass partition distributes, whether intentionally or not, the right to look—and the gaze is power. Glass is not thereby forbidden; its selection simply ceases to be innocent.

The office is not the only example. An airport is an even clearer disciplinary space: one-way routes with no possibility of return, successive filters and checkpoints, zones reserved for holders of the appropriate documents, cameras everywhere, and pressure toward voluntary obedience, because those who behave inconspicuously pass through faster. Passengers discipline themselves: they take out their laptops, remove their belts, and join the queue long before anyone speaks to them. The same applies in an examination hall, at a border crossing, or in a government office waiting room. Space sets out in advance what is permitted and leaves most enforcement to its users.

This does not mean that every open-plan office is a prison—that would again be the determinism discussed in Chapter One. Rather, the diagram of asymmetrical visibility and self-regulated behavior reappears in spaces that, outwardly, look nothing alike.

Good design therefore begins when the architect notices where lines of sight run and who controls them.

3.4 Total Institutions

Foucault describes the diagram from above. The sociologist Erving Goffman describes these same enclosed places from within, from the perspective of those who live in them. His central concept is the total institution: a place of residence and work where a large number of similarly situated people, cut off from wider society for an extended period, lead an enclosed, formally administered life. His examples are broad: prisons, psychiatric hospitals (he himself conducted fieldwork at St. Elizabeths Hospital in Washington), monasteries, boarding schools, barracks, and ships.

Architecturally and socially, a total institution is defined by the collapse of three spheres that ordinary life keeps separate. Most people sleep in one place, work in another, and enjoy leisure in a third, among different people and under different authorities. A total institution merges all three into one place, one authority, and one timetable, always in the company of the same large group (Goffman speaks of ‘batch living’). The floor plan erases the thresholds between bedroom, workplace, and recreation that quietly structure a free life.

Goffman writes most penetratingly about the self. Entry into a total institution begins a series of humiliations that he calls the mortification of the self. A uniform replaces personal clothing, a number replaces a name, possessions are confiscated, the cell is standardized, and a person loses control over when to eat, wash, or sleep. Identity is not expressed by such spaces; it is systematically taken away by them. The self that entered is dismantled, and an administered inmate is assembled in its place.

Yet inmates resist. As we know from Chapter One, people are never merely pawns of structure. Goffman speaks of an ‘underlife,’ of ‘secondary adjustments’ through which people win back fragments of autonomy that the institution has not granted them: a hidden object, a routine turned to one’s own advantage, an unguarded corner, slang, small bends in the rules. Underlife is appropriation (Chapter Two) under maximum domination. Even where conceived space is total, lived space seeps back in, and no institution entirely possesses the people inside it.

Nor is this merely a matter of the past, as every contemporary residential institution reminds us. Homes for older people, children’s homes, residential facilities, and refugee reception centers face the same risk: the

merging of life's spheres, batch routines, and the quiet loss of one's name and control.

Architecture helps determine whether an institution slides into the mortification of the self or resists it. Does the resident have a threshold of their own that they can close? May they bring their own furniture and photographs? Is there a private corner? Is the daily routine dictated by the building or by the person? Such architectural questions directly determine how much of the self remains intact inside.

Together, Foucault and Goffman offer a stereoscopic picture. The panopticon shows what architecture does; the mortification of the self shows what it does to a person; and the underlife shows how a person responds. Anyone designing a residential institution of any kind (a prison, hospital, care home, student residence, or refugee camp) must ask not only how it operates, but also how much mortification its floor plan produces and how much room it leaves for an underlife.

Question for the case study. Walk through an ordinary day in any school. Where do the boundaries between rest, work, and play collapse? Where does the "mortification of the self" begin (bells, compulsory desks, a number in the register, a uniform set of rules), and where do pupils carve out an "underlife" for themselves? And how much of this is necessary, and how much is simply the inertia of institutional form?

3.5 Heterotopias: Other Spaces

Before that question becomes a design proposal, it is worth broadening the view, because not every "other" space serves discipline. In his 1967 lecture "Of Other Spaces" ("Des espaces autres"), published in 1984, Foucault identified another category: heterotopia. It is a real place that is different in some way, a counter-space that reverses, condenses, or suspends the order of ordinary space. A utopia is an ideal without a place; a heterotopia is an actual location where the usual rules bend.

Foucault illustrated the passage between utopia and heterotopia through the mirror. The mirror is a utopia because it shows a placeless place: in it, a person is where they are not, in an unreal space behind the glass. At the same time, it is a heterotopia because it really hangs on a wall. From that unreal point behind the glass, the person looks back at themselves and thereby establishes themselves where they stand. The concept of

heterotopia therefore goes beyond a list of unusual buildings and describes places that change a person's relationship to where they actually are.

Foucault sketched several characteristics that can serve as a checklist. Every society creates heterotopias, and their functions change over time (the cemetery moves from beside the church to the edge of town as attitudes toward death change). They bring several incompatible spaces together in one real location (a theatre stages entire worlds on a rectangular platform; a garden gathers flora from around the world in a single flowerbed). They often operate according to another time and, as heterochronies, either accumulate it (museum, library, cemetery) or dissolve it (fairground, festival). They tend to have rituals of entry and exit: one cannot simply walk in. And each functions in relation to all remaining space, either as an illusion that exposes ordinary space as still more illusory, or as compensation: a carefully ordered counter-world.

Foucault's examples form a small bestiary for designers: the cemetery, the ship ("the heterotopia par excellence"), the garden, the museum, the theatre, the boarding school, the brothel, and the holiday colony. Some are also disciplinary spaces of the kind we already know, so prisons, asylums, and psychiatric hospitals appear in both categories. Presidio Modelo, once a perfect machine of discipline, is now a museum and national monument, a heterotopia of accumulated time where visitors who have come to remember climb the guard tower. Chapter Eight examines the cemetery, perhaps the most universal heterotopia.

For architecture, the concept has a twofold value. As a diagnostic tool, it identifies a whole family of spaces missed by conventional functional categories: places that exist precisely in order to be different. As a design brief, it legitimizes the deliberate creation of such counter-spaces: a garden, a cloister, a reading room, a memorial, a bathhouse—places where ordinary order and the demand for productivity are temporarily suspended.

3.6 What This Means for Architecture

The discussion so far leads to one significant conclusion. Every floor plan distributes visibility, access, and movement (who sees whom, who may enter where, who must pass through what), and that distribution is an exercise of power, whether or not the architect names it as such. This does not make the architect a tyrant. Power is simply an unavoidable medium of architectural work, like gravity or daylight. Architects do not choose whether to work with power, only whether to do so consciously.

Most buildings are, of course, not prisons, but they lie along the same continuum. Schools, hospitals, care homes, student residences, open-plan offices, and shopping centres share some features with the panopticon and the total institution (controlled visibility, enforced routes, timetables, diminished privacy), though to varying degrees and for different purposes. This is why small decisions matter more than they appear to: the height of a partition, the location of a nurses' station, a handle on the inside of a room door, the possibility of turning off the light, a place beyond the gaze of others. Each such decision shifts a building a little closer to discipline or to dignity. Sociology replaces neither sensitivity nor standards here. It provides a language for naming that shift before the building is constructed.

The Norwegian Halden Prison (opened in 2010; Erik Møller Architects with HLM Arkitektur) shows that an institutional floor plan is a variable, not a destiny. It is a maximum-security prison for roughly 250 of the country's most serious offenders, yet it rests on what its operators call the principle of normality: life inside should resemble life outside as closely as security permits. The windows have no bars, cells have their own sanitary facilities, and prisoners and officers cook together in open kitchens. Large windows and the surrounding forest deliberately let in daylight and the changing seasons, making the passage of time perceptible. Read through Goffman, almost every one of these choices counters mortification, because it restores a name, a routine, possessions, and ordinary thresholds that the classic total institution takes away. Read through Foucault, it also changes the directions of the gaze. In place of the clear panoptic axes of a Victorian radial prison, Halden accepts "blind corners" and the additional staff required to make them possible.

The Dutch Hogeweyk in Weesp near Amsterdam (opened in 2009; Molenaar & Bol & Van Dillen architecten), a “village” for people with advanced dementia, shows that the principle of normality is not peculiar to prisons. It has more than twenty households of six or seven residents each, with streets, a small square, a supermarket, a café, and even a theatre between them. Staff wear ordinary clothes and residents move freely around the grounds; only the outer perimeter is secured. Read through Goffman, this is a systematically designed anti-total institution that restores a name, a private threshold, shopping, a walk, and the everyday rhythm of life—precisely what a conventional ward with a long corridor and nurses’ station takes away. Hogeweyk also raises the so-called “Truman Show objection.” Is a benevolently staged normality, which shields residents from confronting their confinement, a dignified solution or a well-intentioned deception? The answer is not self-evident, which is why everyone designing residential care facilities should reflect on Hogeweyk.

Halden and Hogeweyk also make a claim that should give the attentive reader pause: that humane architecture works. Norway reports reoffending rates of around 20 percent, compared with a common 50 to 70 percent elsewhere; Hogeweyk reports less medication and calmer residents. These are encouraging figures, but none of them proves by itself that the building caused the outcome. Norway also has short sentences, a generous welfare state, the careful selection of who is admitted where, and the entire social system surrounding the prison; Hogeweyk, in turn, has unusually high staffing levels and a specific clientele. How much of the outcome is attributable to architecture, and how much to everything else? Has anyone actually measured whether light, shared kitchens, and a staged town square change behavior, or do we simply enjoy telling ourselves that story?

Distinguishing evidence from appealing design folklore cannot be done through intuition and attractive photographs. We need to know how claims about space are tested. That is the subject of the next chapter.

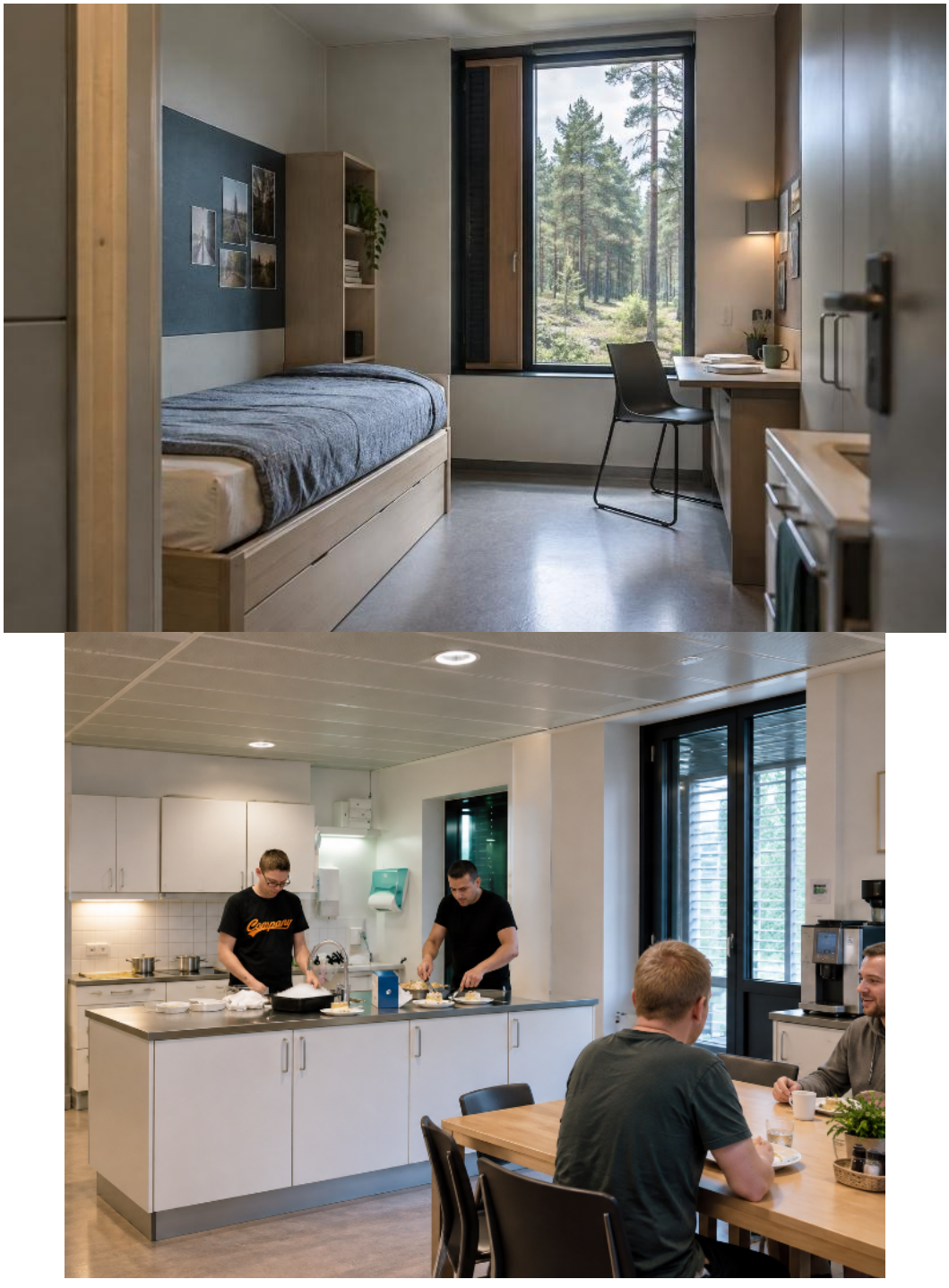

Fig. 3.2. The principle of normality. The same functions, but with the opposite intention: to restore what the total institution takes away.



Fig. 3.3. An anti-total institution. An ordinary street as a therapeutic tool, which also raises the question of where care ends and a stage set begins.

3.7 How to Read Power in Space

To the sets of five questions from Chapters 1 and 2, we add another. This time we ask how space distributes visibility, access, and the self.

Who can see whom here, and who cannot verify that they are being watched? An asymmetrical gaze means asymmetrical power.

Who is allowed to enter where, and along which routes are people forced to move? Thresholds, checks, and compulsory routes divide people into those with access and those without.

Do the boundaries between sleeping, working, and playing collapse here? The more of life a single place and authority bring together, the closer the space is to a total institution.

What does this space do to the self? Does it restore a person’s name and control, or take them away? Look for both the mortification of the self and openings for an underlife.

Is this an “other” space, a heterotopia? A place that deliberately reverses or suspends the ordinary order (a cemetery, garden, museum, or ship) needs different rules from spaces of everyday activity.

Key Concepts of This Chapter

Disciplinary power (M. Foucault) — power that, rather than publicly punishing the body (as sovereign power does), operates through continuous, everyday arrangements and produces “docile bodies.” The less visible it is, the more effective it becomes.

Panopticon (J. Bentham, M. Foucault) — an architectural diagram of power: a ring of cells around a central tower, in which the observed person is permanently visible while the observer is concealed. Power that is “visible and unverifiable” is internalized and continues to operate even when the tower is empty.

Separate system (Eastern State Penitentiary) — a competing program of discipline: reform through isolation and solitude rather than visibility. It demonstrates that discipline can be built in different forms.

Docile bodies (Foucault) — bodies trained by disciplinary techniques (schedules, spatial partitioning, assessment), simultaneously the object and instrument of power.

Total institution (E. Goffman) — a place of residence and work where a large group of similarly situated people, cut off from wider society, lead an enclosed, formally administered life. It dissolves the boundaries between sleeping, working, and playing.

Mortification of the self (Goffman) — the systematic stripping away of identity upon entering a total institution (uniform, number, loss of possessions and control over the daily routine).

Underlife (Goffman) — “secondary adjustments” through which people reclaim remnants of autonomy even within a total institution. It is appropriation under conditions of maximum domination.

Heterotopia (Foucault) — a real “other” place, a counter-space that reverses, condenses, or suspends the ordinary order (cemetery, ship, museum, garden, prison). It has its own temporality and rituals of entry.

Principle of normality (Halden, Hogeweyk) — a design strategy that reverses the logic of the total institution. Life inside should resemble life outside as closely as possible; thresholds, names, and everyday rhythms are therefore restored.

Questions for Reflection

An open-plan office as a “soft panopticon.” Where exactly is the tower, and who is (or is not) sitting in it? Does it differ from Presidio Modelo merely in degree, or also in kind?

The panopticon and the separate system are two opposing floor plans serving the same purpose. Can you find traces of both — surveillance and isolation — in contemporary non-prison building types (schools, hospitals, offices)?

Goffman shows that underlife (sublife, gray zone) emerges even in a total institution. Where do we encounter secondary adjustments in institutions we pass through every day (school, hospital, dormitory)?

Hogeweyk is sometimes criticized as a “Truman Show,” a kindly stage set rather than the real world. Is staged normality more dignified than a traditional ward with a long corridor? And by what criterion should we decide?

Halden deliberately sacrifices panoptic visibility (blind corners) in favor of normality. Is this also a good direction for non-prison buildings? Where do visibility and dignity come into conflict?

Which places in your city are heterotopias? Choose one and examine Foucault’s characteristics (juxtaposition of incompatible spaces, a different temporality, ritual of entry).

Field Exercise 3: Map of Sightlines

Choose a building or space used by several different groups (government office, hospital, faculty building, railway station). Draw a diagram showing who can see whom and from where. Where are the “towers” (reception desks, control rooms, glass-walled offices, cameras), where does the gaze fail to reach, and which routes must the different groups take? Finally, note where a small change in sightlines would shift power, and in whose favor. The deliverable is a diagram with commentary, together on one page.

Sources and Recommended Reading

Classic texts (core of the chapter):

Foucault, M. (1975). Surveiller et punir. Paris: Gallimard. (Czech: Dohlížet a trestat; English: Discipline and Punish.) The sections on discipline and panopticism are particularly important.

Foucault, M. (1967/1984). “Des espaces autres” (“Of Other Spaces” / Czech: “Jiné prostory”). A short, influential lecture on heterotopias; the English translation (J. Miskowiec) is freely available online — green open access.

Goffman, E. (1961). Asylums. New York: Anchor Books. A foundational text on total institutions, mortification of the self, and underlife, based on field research in a psychiatric hospital.

Bentham, J. (1787/1791). Panopticon; or, The Inspection-House. The primary source for the diagram; freely available (public domain).

History of prison architecture:

Beaumont, G. de & Tocqueville, A. de (1833). On the Penitentiary System in the United States and Its Application in France. A contemporary European reflection on the separate system; freely available (public domain).

Johnston, N. (2000). Forms of Constraint: A History of Prison Architecture. Urbana: University of Illinois Press. An overview of the history of prison floor plans.

Eastern State Penitentiary Historic Site — easternstate.org. Documentation, plans, and interpretive materials concerning the separate system.

Open access — cases and applications:

Berger, R. (2016). “Kriminalomsorgen: A Look at the World’s Most Humane Prison System in Norway.” Working paper on SSRN (OA; DOI 10.2139/ssrn.2883512). On Halden Prison and the “principle of normality.”

MoMA, “Halden Prison” (Design and Violence) — moma.org. Freely accessible architectural commentary (Erik Møller Architects + HLM).

On Hogeweyk: documentation by Molenaar & Bol & Van Dillen architects and the operator (Vivium Zorggroep); critical commentary in specialist publications and the daily press (search term: “dementia village”).

On the Presidio Modelo case:

Documentation and photographic archives (Wikimedia Commons; Atlas Obscura) — built 1926–1931, five circular blocks, closed in 1967, now a museum and national monument.

CHAPTER 4

The Research Cycle

How to Tell Whether a Building Works

“A view from a window may influence recovery after surgery.”

— Roger S. Ulrich, Science (1984) — note the cautious “may”

“Not everything that can be counted counts, and not everything that counts can be counted.”

— William Bruce Cameron, Informal Sociology (1963)

4.1 A Number That Proves Nothing

The previous chapter ended with an impressive number. Norway’s Halden Prison, designed as the antithesis of a total institution, boasts a recidivism rate of around twenty percent, while elsewhere rates commonly range between fifty and seventy percent. The tempting conclusion is that humane architecture works. It is an appealing story—and precisely the kind that should make a methodologically literate reader stop and think.

The problem is that Halden did not change just one thing. Norway also differs in sentence lengths, the generosity of its welfare state, staffing levels, the selection of prisoners assigned to particular prisons, and its entire culture of punishment. Which of these reduces reoffending? Perhaps the architecture. Perhaps everything else. And perhaps those who enter Halden already differ from prisoners elsewhere before they even step inside. A single number cannot distinguish these possibilities. It tells us that low recidivism and a humane building occur together, not that one causes the other.

This is where the chapter begins. Whether architects like it or not, they are constantly inundated with claims about what space does to people: that greenery calms them, that an open floor plan encourages collaboration, that daylight improves performance, that an “active ground floor” brings a

street to life. Some claims are supported by evidence, others are marketing, and most are a mixture of the two. Anyone unable to tell them apart either uncritically accepts developers' brochures or mistakes a personal impression for evidence. The aim of this chapter is to teach architects to read research (not to turn them into researchers) so that they can recognize when a claim about space is supported and when it is merely a beautifully told hope.

4.2 Why Understand Research Even If an Architect Does Not Conduct It?

One might object that research belongs to scientists and that an architect's job is to build. Yet architects occupy two positions in relation to research, and both oblige them to engage with it. They are consumers of research because they read (or should read) studies, standards, and "rules of thumb" on which they base their decisions. And they also produce claims about space: as the first chapter showed, every drawing is an unspoken hypothesis about social life: an assumption that people will behave in a particular way if space is arranged in a particular manner. Understanding research therefore means being able to evaluate both other people's hypotheses and one's own.

Research literacy does not require the ability to calculate a regression. It is enough to ask a few questions of every claim (who was studied, what was actually measured, what it was compared with, who paid for it) and to recognize when answers are missing. This is a reader's skill, all the more necessary because architecture has its own folklore: beliefs passed from studio to studio and lecture to lecture without anyone ever testing them. Some are true; others are half-truths that survive only because they sound good and nobody asks questions. Distinguishing one from the other is the task of the research cycle.

A few examples. The claim that open-plan offices encourage collaboration sounded self-evident for decades, until large observational studies of offices suggested rather the opposite. When partitions disappear, people often speak less face-to-face and retreat into email and headphones. By contrast, the proposition that a legible semi-public space ("eyes on the street") increases the feeling of safety has repeatedly found support. Many maxims fall somewhere in between ("an atrium brings people together," "wall color

controls mood," "a view of water is calming"): sometimes they hold, sometimes only under certain conditions, and sometimes not at all. Folklore is not the same as a lie; it is a mixture that needs to be sorted through.

The most instructive example of folklore with a global reach is broken windows theory. In 1982, James Q. Wilson and George Kelling needed only a single essay in The Atlantic to set it out. An unrepaired broken window supposedly signals that nobody cares and invites further damage, so minor disorder grows into serious crime. The idea is intuitive, spatial, and immediately applicable; it influenced policing (New York's "zero tolerance" in the 1990s) as well as the design and management of public spaces around the world. Yet the evidence never grew to match its influence. Crime declined in the 1990s even in cities that had not adopted zero tolerance, and systematic observation of thousands of Chicago streets (Sampson & Raudenbush 1999) showed that "disorder" and crime share structural causes—poverty and weakened neighborhood collective efficacy—and that one does not cause the other. Broken windows theory thus offers this chapter two lessons: how easily an attractive spatial hypothesis becomes global policy before anyone has properly tested it, and how an apparent cause (a broken window) may conceal a third factor, which we will discuss shortly.

Question about the case. A misleading correlation: cities with more churches also tend to have more pubs. Does religious devotion cause drinking? Identify a confounding variable that could explain both at once. Then apply the same caution to the claim that "neighborhoods with more greenery have lower crime" — and to broken windows theory.

4.3 The Research Cycle

Textbooks depict research as a straight line: question, data, conclusion. In reality, it looks more like a circle that keeps turning, becoming more precise with each revolution. It has roughly six stages.

Question. Everything begins with a good question, narrow enough to answer. Instead of asking "is greenery good?", we ask "do patients with a view of greenery recover faster than patients whose windows face a wall?"

Theory and existing knowledge. Before measuring anything, we need to find out what is already known and what might explain the result. Otherwise, we measure blindly.

Research design. We decide whom or what to observe, what to compare it with, and how to limit “everything else” that could distort the result. More than anywhere else, this is where the quality of the research is determined.

Data collection. Observation, questionnaires, interviews, measurements, records. Data are only as good as the design that called for them.

Analysis. Looking for patterns in the data and carefully checking whether a pattern is merely chance or an artifact of measurement.

Interpretation. What the pattern means, what it does not mean, and where the limits of the conclusion lie. From here, an arrow leads back to a new, better question.

The cycle never ends with a simple “proven.” It ends with a conclusion that indicates its degree of uncertainty, and with a new question. The science of space does not offer certainties like the structural analysis of a beam; it offers increasingly good estimates. (In the spirit of the first chapter: it does not give certainty, but better questions.)

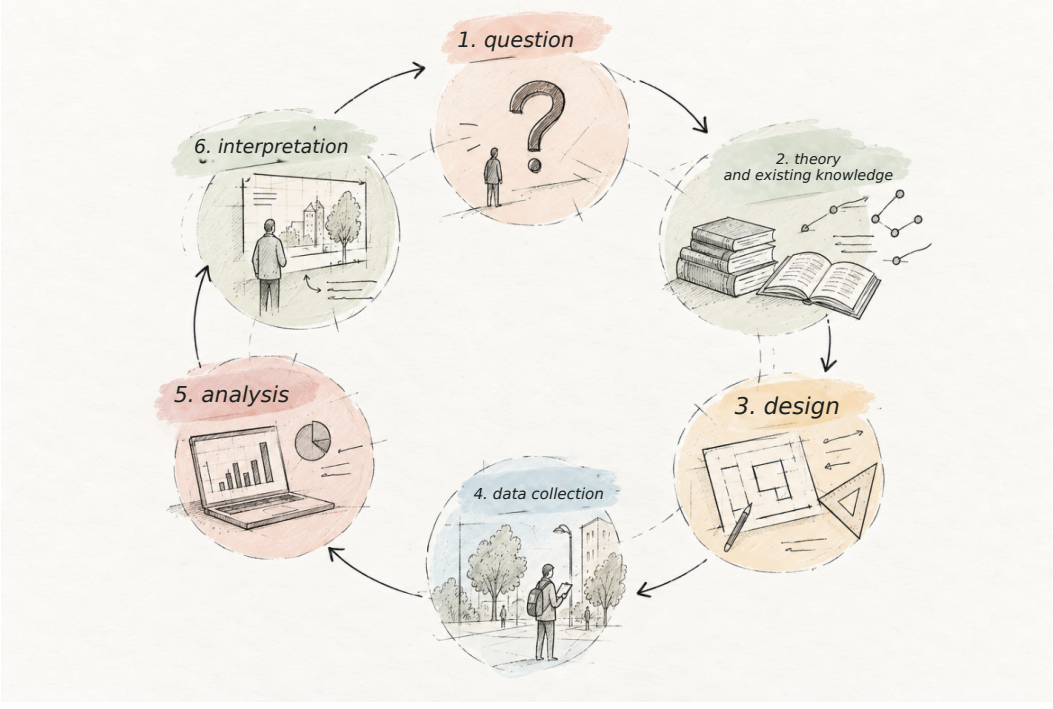

Fig. 4.1. Not a straight line but a circle: each turn sharpens the question instead of closing the subject.

4.4 From the Vague to the Measurable: Operationalization

Between a question and the data lies a step that laypeople skip, although research stands or falls by it: operationalization, the translation of a vague concept into something observable. Architecture works with notoriously vague concepts such as a “lively” square, “well-being,” “community,” “dignity,” or “high-quality public space.” As long as they remain vague, they can neither be verified nor refuted, and everyone imagines something different by them.

To operationalize a “lively square” means deciding how liveliness will be recognized: how many people pass through the square in an hour, how long they stay, how many sit down, how diverse they are (age, gender, alone or in groups), and how many different activities take place there. Only once liveliness has been defined in this way can it be measured and two squares compared, or the same square compared before and after an intervention. A classic example is William H. Whyte, who filmed public spaces in New York in the 1970s to discover why some were full and others empty. In this way, he turned an impression of “liveliness” into an observable phenomenon.

Let us return to Halden from the previous chapter. “Humaneness” can also be operationalized, for example through the rate of violence among prisoners, the number of incidents of self-harm, the frequency and tone of interactions between staff and prisoners, and, of course, recidivism. It immediately becomes clear that each indicator captures only a fragment of the concept, and that the choice of indicator foreshadows the result. Good measurement must therefore have two properties. Validity means that I am really measuring what I claim to measure (is recidivism a measure of a building’s “humaneness,” or rather of what happens to a person after release?). Reliability means that the same procedure would yield the same result in someone else’s hands. A claim based on an invalid or unreliable indicator is shaky, however many numbers stand behind it.

There is also an opposite trap. Once we replace a concept with an indicator, it is easy to forget the concept and start chasing the indicator. A square optimized for the number of people passing through may be “lively” in a spreadsheet and yet unpleasant to spend time in; a school optimized for test scores may produce skilled test-takers. A good researcher never loses

sight of the difference between what interests them (liveliness, learning) and what they can measure (passers-by, points), and knows that the latter only stands in for the former.

4.5 The Correlation Trap: Ulrich’s Window

One famous study best illustrates the entire cycle and its pitfalls: the study that practically established evidence-based design. In 1984, Roger Ulrich published an article in Science with the cautious title “View Through a Window May Influence Recovery from Surgery.” There is already a lesson in that “may,” because good research claims less than a reader might wish to hear.

Ulrich examined the records of patients who underwent gallbladder surgery at a Pennsylvania hospital between 1972 and 1981. He selected forty-six patients and divided them into twenty-three pairs. He matched them carefully, so that the members of each pair were alike in sex, age, smoking status, weight, year of surgery, and hospital floor, and occupied virtually identical rooms. The only difference was the view. Some looked out onto a grove of trees; others faced a bare brick wall. Patients with a view of greenery spent less time in hospital, received fewer strong painkillers, and attracted fewer negative notes from nurses (3.96 per patient for the wall view versus 1.13 for the greenery view).

Why is this study more convincing than the Halden figure? Ulrich moved beyond mere co-occurrence and closer to an experiment. By matching similar patients in similar rooms, he excluded (“controlled for”) most of what might have affected recovery other than the view. If a difference remains after such balancing, it is reasonable to attribute it to the one thing that differed. This is the entire distinction between correlation (two things occur together) and causation (one causes the other). Causation can be defended only when we can rule out that “everything else”: the distorting factors known as confounding variables. Halden is full of confounding variables; Ulrich’s window has almost none. And the broken windows from section 4.2? There the confounding variable was poverty, which affects both disorder and crime, thereby creating an apparent causal relationship between them.

We can therefore construct a kind of hierarchy of evidence. At the bottom is an isolated anecdote (“it worked for us”); above it, simple correlation

(Halden); higher still, a matched comparison that balances obvious differences (Ulrich); and higher again, a genuine experiment in which the researcher randomly assigns conditions, balancing even differences nobody thought of. Architecture, however, is at a disadvantage because buildings generally cannot be randomly assigned. We cannot draw lots to decide who will live in which building, and nobody is going to build two hundred identical hospitals just for an experiment. The “gold standard” of architectural research is therefore precisely what Ulrich did: cleverly use a situation in which operations or chance have created otherwise comparable groups differing in only one respect—a so-called natural experiment.

Ulrich was cautious about his conclusion, too. He himself pointed out that the “wall” in his study was an especially monotonous brick surface, so the result cannot be generalized to all views of built-up surroundings; perhaps the effect was not only the beneficial quality of greenery but partly also the dreariness of a blank wall. This is what an honest study looks like: it defines the limits of its own conclusion. (We should add that the research was funded by the forestry branch of the Department of Agriculture, a sponsor with an interest in demonstrating the benefits of nature. That does not invalidate the careful research design, but it does call for closer reading.)

4.6 The Architect’s Tools: POE and Evidence-Based Design

Ulrich’s study did not remain a curiosity; it helped give rise to an entire approach. Evidence-based design emerged precisely in healthcare architecture and calls for important decisions—such as the orientation of rooms, access to light and greenery, or the arrangement of wards—to be based on research rather than mere habit and taste. Ulrich’s work helped inspire the Center for Health Design and a whole wave of studies on how hospital environments affect healing, pain, and staff error rates.

Yet an architect need not wait for scientists. Architects have a tool of their own, one particularly close to their practice: post-occupancy evaluation (POE). It is a simple and underestimated method: return to a completed, occupied building and find out whether it does what was expected of it. Energy consumption and temperatures are measured; the routes people take and the places they avoid are mapped; satisfaction questionnaires are collected; and users, cleaners, and maintenance staff are interviewed. In

the language of Chapter 2, POE directly measures the gap between conceived and lived space, between what the architect drew and how people actually live in it. Only in this way can architects learn from their work instead of repeating the same mistakes from one project to the next.

Evaluating an occupied building also involves another classic trap, discovered almost a century ago. At the Hawthorne electrical works near Chicago, researchers in the 1920s and 1930s studied how lighting affected the productivity of female workers; productivity increased whether the researchers raised or lowered the lighting levels. The explanation entered textbooks as the Hawthorne effect: merely knowing that one is being observed, and that someone is taking an interest, changes one's behavior. For POE and for "living laboratories" (Chapter 14), this calls for humility, because observation itself intervenes in the life of a building. A good researcher therefore combines announced methods (questionnaires, interviews) with unobtrusive traces that do not lie because they do not know anyone is reading them—the so-called nonreactive measures.

Some evidence is provided by the building itself. Paths worn across a lawn (desire lines) are ready-made data about where people actually want to walk, regardless of where the paving directs them. Scuffed surfaces, signs added later saying "do not push," sensors covered with tape, chairs pulled into places the architect never intended—all of these are user feedback. More systematic tools include pedestrian counts and behavioral mapping (who does what, where, and for how long), user questionnaires and interviews, environmental measurements (light, noise, temperature), and, discussed later in this book, analysis of spatial configuration (space syntax). An attentive architect reads not only studies of other people's buildings but also their own building once people have moved in.

There is a whole spectrum of methods, divided roughly into two families. Quantitative methods answer "how many" and "how often" (measurements, counts, questionnaires producing numerical data) and excel at comparison and generalization. Qualitative methods answer "how" and "why" (interviews, observation, ethnography) and help us understand what numbers cannot capture. The best research on space usually combines both. Numbers tell us that a bench remains empty; interviews and observation tell us why.

4.7 What Research Cannot Provide

As with sociology in Chapter 1, we must also acknowledge the limits. Research does not replace judgment. Data narrow the range of reasonable options, but deciding which design is good remains a creative and value-laden act. Research offers no certainty, only estimates with degrees of uncertainty, not geometric proofs. And research does not measure everything. Here the methodologically literate architect faces the most insidious trap: scientism, the tendency to regard only what can be measured as real and silently dismiss the rest. Space also carries beauty, sacredness, sorrow, and a sense of home, none of which fits entirely into a table. The chapter's epigraph, a sentence attributed to sociologist Cameron, works in both directions: not everything that can be counted counts, and not everything that counts can be counted.

Caution also means distrusting a single beautiful study. For all its care, Ulrich's window study was one investigation involving a small sample at one hospital, and it became a reliable point of reference only through dozens of later studies. The human sciences learned this humility the hard way. In the 2010s, the so-called replication crisis erupted when it became clear that a substantial proportion of famous psychological findings could not be confirmed when carefully repeated (Open Science Collaboration 2015). The causes are systemic. Striking findings are easier to publish than dull or null results (publication bias, also known as the "file-drawer effect," because unsuccessful experiments end up in a drawer), while flexibility in analysis makes it possible to squeeze apparently significant findings out of data (p-hacking). Architectural research, with its small samples and strong aesthetic preferences, is particularly susceptible to these problems. A single study offers a hypothesis worth taking seriously; confidence comes only from findings confirmed repeatedly, ideally by different teams using different methods.

So what does research give the architect? The same thing as sociology, but more sharply: protection against self-deception. It prevents an appealing assumption from becoming truth merely through repetition, forces us to ask "how do we actually know?", and provides a way to learn from our own buildings. And Halden? A scientifically literate architect will neither reject its figure nor swallow it whole. They will say it is a promising correlation that calls for a better study, perhaps comparing similar prisons that differ chiefly in their architecture. Until then, they will defend humane design for

a reason that stands on its own even if its effect on recidivism can never be isolated: dignity.

With the distinction between evidence and story in place, urban sociology can return to the big questions. The most urgent need for careful research concerns inequality: who lives where in the city, who is displaced, and whom the average conceals. That is the subject of Chapter 5.

4.8 How to Read Research About Space

The fourth set of questions, this time directed at claims made by others (and by ourselves) about what space does to people.

Who or what was studied? The size and nature of the sample (how many, who, where). A small or unrepresentative sample can support only a limited conclusion.

What was actually measured? This is the question of operationalization. Does the chosen indicator reasonably represent the concept we actually care about?

Correlation or causation? What was compared, and what was “controlled for”? Without a comparison and without accounting for confounding variables, one can speak at most of an association, hardly of a cause.

Who paid for it, and whom does the result serve? The interests of the study’s sponsor do not invalidate it, but they call for a more attentive reading.

Does the conclusion match the data, and how far does it extend? Does the study claim more than it demonstrated? Does it hold beyond the case examined, and has anyone independent confirmed it?

Key Concepts of This Chapter

Research cycle — an iterative sequence of question → theory → design → data → analysis → interpretation → new question. It ends with greater precision and another question, never with certainty.

Hypothesis — A testable statement about a relationship (“a view of greenery shortens recovery time”). Every design implicitly contains some hypothesis.

Operationalization — Translating a vague concept (liveliness, well-being) into an observable indicator (number of passers-by, length of stay). The danger is pursuing the indicator at the expense of the concept.

Correlation versus causation — Two phenomena occurring together versus one actually causing the other. Causation can be defended only after ruling out “everything else.”

Confounding variable (confounder) — A third factor that influences both the outcome and the supposed cause, creating an apparent connection. It lies at the heart of the “correlation trap.”

Broken windows theory (Wilson & Kelling, 1982) — An influential spatial hypothesis whose evidence never matched its influence. An example of folklore turned into global policy, with a confounding variable (poverty) in the background.

Validity and reliability — Whether what is claimed to be measured is actually measured (and whether the conclusion holds elsewhere), and whether the same measurement would produce the same result.

Post-occupancy evaluation (POE) — Returning to an occupied building and checking whether it works as intended. It directly measures the gap between conceived and lived space.

Hawthorne effect and unobtrusive measures — Observation changes the behavior of those observed. A counterweight is provided by traces that do not know they are being read (desire lines, wear, consumption).

Evidence-based design — Design practice that bases important decisions on research evidence rather than habit and taste alone.

Replication crisis and publication bias — One study is a hypothesis; confidence comes only with independent replication. Striking findings are easier to publish than null results.

Scientism — The tendency to regard only what can be measured as real. The counterpart of superstition, and just as misleading.

Questions for Reflection

Choose one “rule of thumb” about space that you have heard presented as self-evident (for example, “an atrium encourages encounters”). What would a study testing it look like, and what would it need to control for?

Operationalize the concept of “good housing.” Which indicators would you choose, and what would inevitably escape those indicators?

Halden versus Ulrich’s window. Explain in your own words why the second case comes closer to demonstrating causation. Could Halden be “turned into Ulrich,” and how?

Broken windows theory influenced the management of public spaces worldwide before it had been verified. Find traces of it in current Czech practice (maintenance, graffiti, “visual smog”) and propose how it could be tested reliably.

Where is the boundary between healthy methodological skepticism and scientism, which rejects everything immeasurable? Find an example in architecture where measurement does more harm than good.

Field Exercise 4: A Small Test of a Claim

Choose one specific claim about a familiar space (for example, “this bench is not used because it faces the road”). Turn it into a question and a hypothesis; decide what would need to be observed or measured and what it should be compared with; and, if possible, carry out a small observation (for instance, spend twenty minutes counting who stops where). Finally, write a sober account of what the mini-study showed, what it did not show, and what better study should follow. Length: one to two pages.

Sources and Recommended Reading

Core readings for the chapter

Ulrich, R. S. (1984). “View through a Window May Influence Recovery from Surgery.” Science, 224(4647), 420–421. A foundational study in evidence-based design; the full PDF is freely available in several repositories (green open access).

The Center for Health Design — healthdesign.org. An open knowledge database of studies on the effects of environments on health (including a summary of Ulrich’s study and its methodology).

Whyte, W. H. (1980). The Social Life of Small Urban Spaces. A classic example of how observation can operationalize a “lively” public space; the accompanying film is freely available online.

Broken windows and its critique

Wilson, J. Q. & Kelling, G. L. (1982). “Broken Windows.” The Atlantic Monthly, March 1982. The original essay; freely available online.

Sampson, R. J. & Raudenbush, S. W. (1999). “Systematic Social Observation of Public Spaces.” American Journal of Sociology, 105(3). A crucial empirical correction: disorder and crime share underlying structural causes.

Harcourt, B. E. (2001). Illusion of Order. Cambridge, MA: Harvard University Press. A systematic critique of the theory and of zero-tolerance policy.

Method, POE, and the limits of research

Preiser, W. F. E., Rabinowitz, H. & White, E. (1988). Post-Occupancy Evaluation. A classic introduction to the evaluation of occupied buildings; freely available POE manuals are also offered by the Usable Buildings Trust and RIBA.

Roethlisberger, F. J. & Dickson, W. J. (1939). Management and the Worker. Cambridge, MA: Harvard University Press. The original Hawthorne studies.

Open Science Collaboration (2015). “Estimating the Reproducibility of Psychological Science.” Science, 349(6251). On the replication crisis; a freely accessible summary is available.

CHAPTER 5

Center and Periphery

Inequality and Exclusion Inscribed on the Map

“Gray spaces lie between the whiteness of legality and the blackness of eviction.”

— Oren Yiftachel, Planning Theory (2009)

“Once gentrification begins, it continues until most of the original working-class residents have been displaced.”

— Ruth Glass, London: Aspects of Change (1964), paraphrase

5.1 What the Average Conceals

The previous chapter ended by distinguishing evidence from narrative and reminding us that an average can conceal a great deal. Here we take that reminder literally. When someone says that “the city is becoming wealthier” or that “housing quality is improving,” they are speaking of an average; behind that average often lie two opposing realities separated by a deep divide. A map of any city is also a map of its inequalities. Prices, education, health, life expectancy, and prospects of employment change from street to street, sometimes abruptly across a single intersection.

But this chapter takes the argument one step further. Space does not merely reflect social inequality; it also organizes it. An address is a consequence of social position and, at the same time, helps determine a person’s life chances. Where someone lives affects which school their child attends, how far they travel to work, what air they breathe, whom they encounter, and whom they can reach. Sociology speaks of neighborhood effects because place itself helps produce inequality. The axis along which this happens is the relationship between center and periphery. The “periphery,” however, need not be the geometric edge of a city; it is rather a position on its social map.

How deep that divide can be is illustrated by the most frequently cited example from Glasgow. A report by the WHO Commission on Social Determinants of Health (2008) compared the deprived inner-city district of Calton with the affluent suburb of Lenzie, a few kilometers away, and found a twenty-eight-year difference in male life expectancy (54 versus 82). Similar maps can be drawn along London Underground lines and Prague tram routes, where years of life are lost from one stop to the next. The citywide average of “eighty years of life expectancy” may actually consist of neighborhoods where people routinely live to eighty-five and others where they die at seventy-five, only a few minutes’ walk apart. Inequality is not merely a matter of comfort or prestige; it is inscribed in the length of life.

5.2 The Chicago School and Urban Ecology

The first group to study these patterns systematically was a circle of sociologists at the University of Chicago in the 1920s and 1930s, now known as the Chicago School (Robert Park, Ernest Burgess, Louis Wirth, and others). Chicago, expanding at breakneck speed through immigration, served as their laboratory. Their approach was ecological. They regarded the city as a kind of ecosystem in which groups compete for space much as species compete for habitats. This competition produces “natural areas”: neighborhoods with distinct characteristics and populations.

Its best-known result is Burgess’s concentric-zone model (1925). The city consists of a series of rings. At the center is the commercial and administrative core, surrounded by a “zone of transition” (a deteriorating mixed district of inexpensive housing, workshops, and immigrants), followed by a belt of working-class housing, better residential neighborhoods, and finally the suburbs of commuters. Groups move through this scheme by a process Park called invasion and succession. A new wave of residents enters a neighborhood and displaces the previous one, much as one kind of vegetation takes over from another in an ecosystem.

The Chicago School was also interested in what the city does to people. In his essay “Urbanism as a Way of Life” (1938), Louis Wirth argued that the size, density, and diversity of the population generate a distinctive urban character. Contacts become impersonal, instrumental, and superficial, but individuals gain unprecedented freedom and anonymity. According to Wirth, the metropolis loosens the grip of traditional community, at the price

of loneliness amid the crowd. Neither this liberation nor this distress is evenly distributed: the anonymity of the center may be a deliverance for one person and abandonment for another.

The Chicago School made the city an object of scientific inquiry, sent researchers into the streets, and showed that the distribution of residents follows identifiable patterns. Its contribution is enduring. Burgess's model, however, was never a map of any particular city; it was an idealized diagram of Chicago's circumstances at one point in time. Later scholars supplemented it (Hoyt's sector model, the multiple-nuclei model, and later the "Los Angeles School," with its fragmented, decentralized city). Yet a more fundamental objection matters more than these corrections.

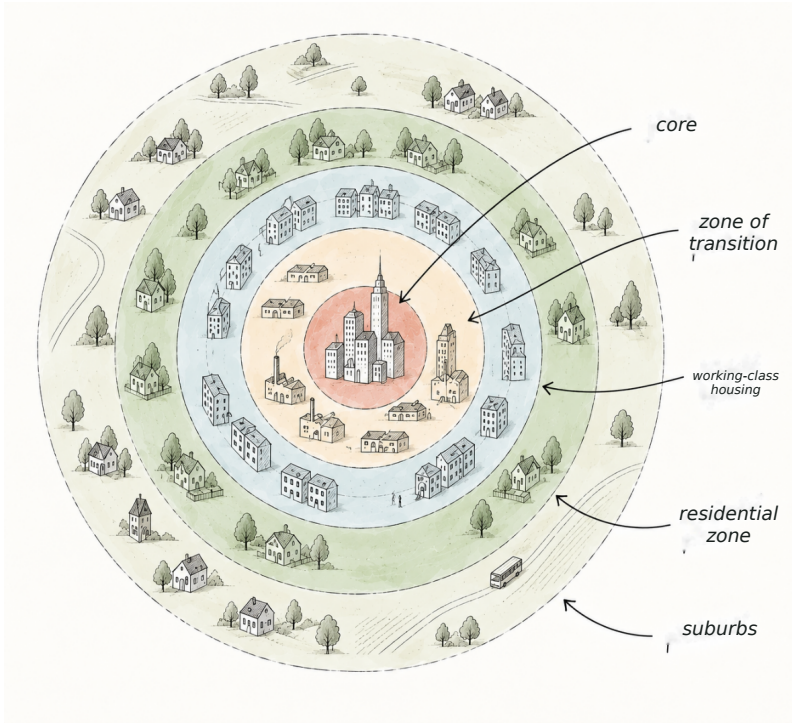

Fig. 5.1. An influential model, yet an idealization of one period and one city—not a law of nature. The French banlieue reverses its geography: poverty there lies on the outskirts.

5.3 The Trap of Naturalization

The ecological metaphor has a serious flaw: it naturalizes inequality. When neighborhoods are described as habitats and displacement as succession, it is easy to suggest that the distribution of poverty and wealth results from some natural competition, something that simply exists, like the climate. This obscures the fact that someone set the rules of that competition. Who may obtain a mortgage and where, where social housing or a highway is built, whom zoning permits and whom it excludes—all of these are determined by decisions, laws, and interests.

It is the same mistake against which the first chapter warned, now dressed in spatial terms. A public problem is mistaken for a natural fact, or for the "character" or "culture" of those who live in a particular neighborhood. Explaining deprivation in an excluded neighborhood through the characteristics of its residents is sociologically the same error as explaining fifteen million unemployed people by invoking fifteen million weak characters. Inequality on a city map is produced, and anyone seeking to understand it must ask how it was produced. Two of the most important processes through which this happens are segregation and gentrification.

5.4 Segregation: Inequality Built into the Map

Segregation is the spatial separation of groups according to class, ethnicity, or race. American redlining offers perhaps the clearest demonstration that it is not "natural." In the 1930s, a federal agency (HOLC) assessed neighborhoods according to mortgage-lending risk and outlined the "worst" ones—usually those inhabited by Black residents—in red on maps. Banks did not lend in the red zones. Decades of decline followed, from which many neighborhoods have still not recovered. Segregation here was not created by competition for locations: a stroke of a red pencil across a map was enough. Exclusionary zoning, restrictive covenants in property deeds, and municipal decisions about where affordable housing may or may not be built have similar effects.

The most extreme example of manufactured segregation remains South African apartheid, not least because it was explicitly the work of spatial planning. The Group Areas Act (1950) divided cities along racial lines. "Non-white" residents were forcibly removed from inner-city neighborhoods (Johannesburg's Sophiatown was demolished after 1955,

and Cape Town's District Six was razed) to townships beyond the urban edge. Buffer zones of vacant land, industry, and transport infrastructure separated them from the "white" city. Soweto (South Western Townships) remains an inhabited monument to this system. Planners drew zones, buffers, and access routes with a military emphasis on control (Christopher 1994). Apartheid ended, but much of its geography survived. Poverty remains where it was once planned to be, and Johannesburg and Cape Town rank among the world's most spatially unequal cities. Segregation, in short, does not require prejudice on the part of individuals; an official stamp will suffice. Once built, it can outlive the regime that drew it by generations.

Thomas Schelling's model (1971) showed that even mild individual preferences can result in pronounced segregation. Residents need only prefer not to be in a substantial minority, and neighborhoods will separate over time even without strong prejudices. Calling this "spontaneous," however, does not excuse segregation. Rather, the model demonstrates how little it takes, and how powerfully such preferences are amplified by structural pressures: money, politics, and discrimination. The consequences are severe: concentrated poverty (and concentrated privilege at the opposite pole), unequal access to schools, jobs, and services, and the neighborhood effects already mentioned, through which disadvantage passes from place to person.

Concentrated poverty also has effects greater than the simple sum of poor households would suggest. Sociologist William Julius Wilson described "concentration effects." Where unemployment and poverty accumulate, not only money disappears but also employment contacts, role models, and functioning institutions. Disadvantage thus reproduces and deepens itself. This is not a characteristic of the people, but of the situation in which they have been spatially concentrated. There is therefore a major difference between "a neighborhood where poor people live" and "a neighborhood that produces and perpetuates poverty," and that difference is created by the organization of the city.

The French suburbs (banlieues) illustrate a third variation of the same mechanism while also correcting American terminology. Large housing estates (grands ensembles), built from the 1950s on the outskirts of Paris and other cities, were intended to address the postwar housing shortage. As the middle class moved into owner-occupied housing, immigrant and

low-income households became concentrated in these estates, and the periphery became the French counterpart of the American “inner city.” Sociologist Loïc Wacquant (2008) compared the Chicago ghetto with the Parisian banlieue and showed that, despite superficial similarities, they are distinct formations. The poor French periphery is more ethnically mixed, and the state rather than the market is its principal actor. Both, however, share territorial stigma: an address alone can disqualify a person in the eyes of employers, public authorities, and the media. The unrest of 2005, which spread to hundreds of suburbs after the deaths of two boys in Clichy-sous-Bois, was interpreted in this light less as an “immigrant crisis” than as a revolt of a marginalized periphery. Burgess’s model consequently requires substantial revision. Poverty may lie at the center (the American model) or at the edge (the French model), because “center” and “periphery” are positions on a social map, not matters determined by geometry.

The Czech Republic likes to tell itself that this is somebody else’s problem, but it is not. According to a specialist analysis by the Ministry of Labour in 2015, the country had 606 socially excluded localities with approximately 115,000 inhabitants, compared with roughly 300 localities and 80,000 inhabitants less than a decade earlier. Their number had therefore almost doubled in ten years. Most were in the Ústí nad Labem and Moravian-Silesian regions. A typical case is the Chanov housing estate in Most. It was established to concentrate Roma residents displaced from demolished parts of Most; in the 1990s, its residents were further harmed by the privatization of housing stock in the center and high unemployment. The estate’s present condition cannot be explained by the “culture” of its inhabitants. It results from housing policy, the market, and municipal practices of pushing “problematic” tenants to the margins. Yet every other newspaper headline falls into the trap of naturalization.

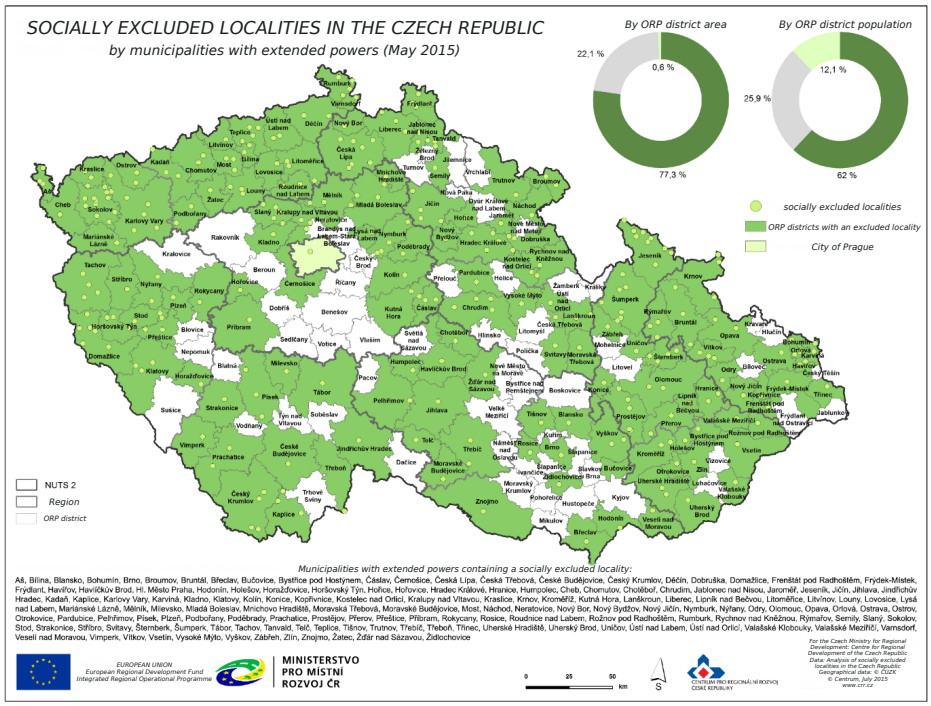

Fig. 5.2. Inequality inscribed on the map of the country—and doubled within a single decade.

5.5 Gentrification: When the Periphery Becomes the Center

The opposite, yet related, process is gentrification: the influx of wealthier residents and capital into a previously poorer, often central neighborhood, raising prices and rents and displacing the original population. Sociologist Ruth Glass coined the term in 1964 while observing London's Islington. There, the middle class gradually bought and renovated working-class houses until working-class residents were displaced. The word has a deliberately ironic undertone (from "gentry," the landed upper class).

Two groups of theories explain why this happens. The supply-side approach, associated with Neil Smith, speaks of the rent gap. When the return on a deteriorating property falls far below what it could yield after reinvestment, a profitable gap opens up and capital returns to the neighborhood. For Smith, the driving force of gentrification is primarily capital, not changing tastes. Demand-side theory, associated with David Ley, emphasizes the new urban middle class and its preferences(cafés, historic façades, "authenticity"). In reality, both usually operate at the same

time. Cultural pioneers “discover” a neighborhood and make it attractive; only afterward does major capital arrive to capture the rent gap. Meanwhile, the process has become globalized. Loretta Lees and her colleagues speak of “planetary gentrification,” which is now reshaping neighborhoods from Shanghai to Santiago (Lees, Shin & López-Morales 2016).

In the Czech Republic, gentrification is most often illustrated by Prague’s Karlín district. Originally an industrial and working-class neighborhood, it was devastated by the “flood of the millennium” in 2002, which destroyed dozens of buildings and displaced thousands of residents. The disaster became a catalyst for transformation. After the flood, the city sold numerous plots to private owners, thereby relinquishing its ability to steer the district’s development. Renovated and newly constructed buildings filled with offices and expensive apartments, and Karlín became one of Prague’s most sought-after addresses, nicknamed “Little Berlin.” Among those who paid for this transformation by having to leave were Karlín’s Roma residents. Many moved to relatives in northern Bohemia after the flood, as owners of renovated buildings sought ways to get rid of them. Czech urban research (for example, the work of Martin Ouředníček) points out that the structure of housing ownership in this country makes gentrification “milder” than in the Anglo-Saxon world. Displacement is less conspicuous and harder to detect, but that does not mean it does not exist.

Displacement takes more forms than might appear. Peter Marcuse distinguished direct displacement (when a tenant is forced out by rising costs or eviction), exclusionary displacement (when people who could once have moved into a neighborhood no longer have a chance), and displacement pressure, which transforms a neighborhood long before anyone actually moves away. Cheap pubs, tailors’ shops, and small grocery stores disappear, along with the very conditions that had allowed poorer residents to live there. And the process continues. Karlín’s story is followed by major development areas such as Rohanský ostrov, Smíchov, and the former Žižkov freight station, where apartments are being built at prices beyond the reach of middle- and low-income households. Gentrification advances across the city like a front, from one neighborhood to the next.

Question about the case. After the flood, many of Karlín’s Roma residents moved to northern Bohemia — the region with the highest concentration of socially excluded localities. Can Karlín’s celebrated transformation and the

decline of places such as Chanov therefore be read as two ends of the same process — the center “improving” by sending its problem to the periphery? And what would have had to happen differently at the outset so that improving the center did not mean worsening conditions at the periphery?

5.6 Gray Spaces: Between Legality and Eviction

Segregation and gentrification both take place within the bounds of law and operate through ownership, tenancy, and zoning. The Israeli urbanist Oren Yiftachel, however, identified a vast domain between legality and illegality, which he calls gray spaces. These are places and populations kept between the “whiteness” of legality, approval, and safety and the “blackness” of eviction, demolition, and disappearance. Gray space has neither been fully incorporated nor eliminated. It is tolerated but unrecognized, held in a condition Yiftachel calls permanent temporariness.

According to Yiftachel, this condition is no accident: it is a mode of governance. Through “gray spacing,” urban regimes manage populations they do not want but cannot or will not remove. They leave them in limbo, where nothing can be legalized and no progress can be made. Planning, in his account, is a principal instrument of this process because it classifies, delimits, and administers a profoundly unequal society, thereby facilitating “creeping apartheid.” In a related vein, Ananya Roy and other scholars show that informality is not limited to the poor. It is also a mode of urbanization and an instrument of power. The state decides what counts as “informal” or “illegal,” and on that basis either turns a blind eye or orders demolition.

Here planning governs through its official stamps. Those who have the power to declare something “temporary,” “unauthorized,” or “contrary to the plan” can keep people in uncertainty without openly driving them out. A clear example is the accommodation and reception facilities for migrants on Europe’s peripheries. They are established as temporary yet persist for years, outside ordinary urban law and ordinary urban visibility. Gray space is thus a permanent solution masquerading as a provisional arrangement.

The concept originated in the Middle East, but it is equally useful in Europe. It applies to hostels in which people live “temporarily” for years; to demolitions carried out one block at a time (in Chanov, the remains of buildings are removed gradually, block by block, with no clear future for

what remains); to informal settlements; and to migrant reception facilities. In all these places, inequality is expressed both by location on the map and by legal standing—that is, by how securely or precariously a person is allowed to exist somewhere at all.

5.7 Who Is the City For?

The conclusion is serious. Every plan and every regulation distributes centrality and marginality, deciding who will be closer to resources, opportunities, and recognition and who will be farther away. Architects and urban planners participate in this distribution whether they acknowledge it or not. They shape it through the location of social housing, zoning, the form taken by “revitalization,” and decisions about whether a municipality relinquishes control of development to private developers, as happened in Karlín after the flood.

Two lessons follow. “Improvement” almost always has both a beneficiary and a victim. In the spirit of Chapter 2, producing a more valuable space usually means unmaking another space—and, with it, the lives of its inhabitants. The word “revitalization” should therefore prompt the question: for whom is it happening, and at whose expense? Inequality is just as reliably concealed in averages. We can see the barrier that the average obscures only when we disaggregate data by groups and places. The geographer Edward Soja coined the term spatial justice to describe a fairer way of dealing with this barrier; Chapter 13 addresses the political claim that follows from it, the “right to the city.”

Criticism, however, does not imply powerlessness. There are tools for distributing centrality less unjustly, and architects and planners need not remain mere spectators. These include protecting affordable housing and regulating rents; requiring a share of affordable housing in new developments (inclusionary zoning); retaining municipal housing stock rather than selling it at the first crisis; building socially mixed neighborhoods instead of uniform enclaves; and creating community land trusts that keep land outside speculation. Vienna’s century-old Gemeindebau system demonstrates that municipal housing can work; together with subsidized housing, it accommodates a majority of the city’s residents. None of these instruments is a cure-all, and each has limitations. But all aim to separate improvement of a place from the expulsion of its people—and that is precisely what Karlín failed to safeguard.

The center–periphery axis thus ends with a simple but uncomfortable question that every designer should ask when considering a brief: Who is this city for, and whom is it sending away, even indirectly? The next chapter shifts the same question from class and ethnicity to the body: not “who can afford it?” but “for whose body is space designed in the first place?”—and whom does the silent assumption of a “standard user” already exclude?

5.8 How to Read Inequality in Space

The fifth set of reading questions focuses on how space distributes opportunities and social standing.

For whom does this place open up life chances, and for whom does it close them off? An address helps determine a person’s fate; through neighborhood effects, location itself influences life chances.

Is this concentration natural or manufactured? Who created it, and by what means (loans, boundaries, zoning, prices, housing allocation)?

Who benefits from the “improvement,” who is displaced by it, and where do they go? Victims of gentrification are easily overlooked because they are no longer here.

Under what legal conditions do people live here? Fully legally, illegally, or in the gray zone of “permanent temporariness,” from which they can neither gain legal status nor escape?

What does the citywide average conceal in this picture? Only when data are broken down by group and place does the barrier hidden by the aggregate figure become visible.

Key Concepts of This Chapter

Social stratification in space — space not only reflects social inequality (class, ethnicity, status) but also organizes it. An address helps determine life chances.

Neighborhood effects and concentration effects (W. J. Wilson) — place affects life chances beyond what individual characteristics would predict. Concentrated poverty reproduces itself as networks, role models, and institutions disappear.

Chicago School / urban ecology — the first systematic urban sociology (Park, Burgess, Wirth, 1920s–1930s). It understands the city as an ecosystem in which people compete for space. This includes Burgess's concentric-zone model, with its "zone of transition."

Naturalization trap — the tendency to explain manufactured inequality as a natural result of competition or as an expression of residents' "culture." It is the spatial equivalent of mistaking a public issue for a personal failure (Chapter 1).

Segregation — the spatial separation of groups by class, ethnicity, or race. It is produced by specific mechanisms, such as redlining, apartheid zoning, or housing-allocation practices.

Redlining — a historical practice (United States, 1930s) in which entire neighborhoods were denied loans based on who lived there. One of the clearest demonstrations that segregation is manufactured.

Territorial stigma (L. Wacquant) — disqualification based on an address alone. A place's reputation affects its residents in the eyes of employers, public authorities, and the media.

Gentrification — the influx of wealthier residents and capital into a formerly poorer (often central) neighborhood, raising prices and displacing existing residents. Ruth Glass introduced the term in 1964; today scholars also speak of "planetary" gentrification (Lees et al.).

Rent gap (N. Smith) — the difference between the actual and potential return on land, which makes reinvestment (and thus gentrification) profitable. It explains the process from the supply side.

Gray spaces (O. Yiftachel) — populations and places kept between legality and eviction in a state of "permanent temporariness." Here, planning becomes an instrument of "creeping apartheid."

Informality — a mode of urbanization and an instrument of power that concerns more than the poor. The state decides what counts as "informal" and what it will demolish.

Questions for Reflection

Examine Czech public discourse about socially excluded localities in light of the naturalization trap. Which explanations attribute their condition to the "nature" or "culture" of residents, and what do these explanations conceal?

Name the actors who benefited from Karlín's transformation and those who paid for it by leaving. Could the transformation have occurred without displacement, and what would that have required?

In the American model, poverty lies in the center; in the French model, on the outskirts; in the South African model, wherever the law drew it. What does this comparison imply for a Czech city? Where is its social periphery, and which decisions put it there?

Compare the rent-gap explanation with the cultural explanation of gentrification. Which better captures the transformation of a neighborhood you know? Can they be separated at all?

Yiftachel's "gray spaces" concept emerged in the Middle East. How well does it fit European conditions (hostels, block-by-block demolition, informal settlements), and where are its limits?

Field Exercise 5: A Map of Inequality

For one city, obtain two maps of the same area: one showing property prices or rents and the other showing an indicator of disadvantage (unemployment, debt enforcement proceedings, educational attainment, access to services). Overlay the maps and describe where the social "center" and "periphery" diverge (these need not correspond to the city's geometric center and edge). For one selected boundary, investigate when it arose, through which decision, and through whose actions or responsibility. Submit both maps with a commentary of one to two pages.

Sources and Recommended Reading

Classic texts (core of the chapter):

Park, R. E., Burgess, E. W. & McKenzie, R. D. (1925). The City. Chicago: University of Chicago Press. Foundational text of the Chicago School and urban ecology (Burgess's concentric-zone model).

Wirth, L. (1938). “Urbanism as a Way of Life.” American Journal of Sociology, 44(1). Classic essay on urbanism; freely available in numerous repositories.

Glass, R. (1964). London: Aspects of Change. London: MacGibbon & Kee. The work in which the term “gentrification” first appeared.

Smith, N. (1979). “Toward a Theory of Gentrification.” Journal of the American Planning Association, 45(4); and Smith (1996), The New Urban Frontier — the rent gap and the “revanchist city.”

Wilson, W. J. (1987). The Truly Disadvantaged. Chicago: University of Chicago Press. Effects of concentrated poverty.

Yiftachel, O. (2009). “Theoretical Notes on Gray Cities: The Coming of Urban Apartheid?” Planning Theory, 8(1), 88–100 (DOI 10.1177/1473095208099300); freely accessible repository versions — green open access.

Comparative and international cases:

WHO Commission on Social Determinants of Health (2008). Closing the Gap in a Generation. Geneva: WHO. Freely available; includes the Glasgow comparison of Calton and Lenzie.

Wacquant, L. (2008). Urban Outcasts: A Comparative Sociology of Advanced Marginality. Cambridge: Polity. A comparative perspective on the ghetto and the banlieue; territorial stigma.

Christopher, A. J. (1994). The Atlas of Apartheid. London: Routledge. A cartographic reconstruction of apartheid planning in South African cities.

Lees, L., Shin, H. B. & López-Morales, E. (2016). Planetary Gentrification. Cambridge: Polity. On the globalization of the process.

Schelling, T. (1971). “Dynamic Models of Segregation.” Journal of Mathematical Sociology, 1(2) — the “tipping” model; Roy, A. & AlSayyad, N. (eds., 2004). Urban Informality — on informality as a mode of urbanization.

Czech sources:

GAC / MPSV (2015). Analysis of Socially Excluded Localities in the Czech Republic. Freely available (esfcr.cz) — 606 localities, approximately 115,000 inhabitants; map portal.

Ouředníček, M. et al. — studies of gentrification and residential differentiation in Prague (Faculty of Science, Charles University); maps and publications freely available online.

CHAPTER 6

Norm and Body

The Standard User and Everyone Else

“The tendency to think in terms of the average person is a trap.”

— Gilbert S. Daniels, USAF technical report (1952)

“Disability is caused not by the body, but by the environment.”

— summary of the social model of disability (M. Oliver)

6.1 The Body That Was Forgotten

The previous chapter examined how space excludes people on the basis of class and ethnicity. Exclusion on the basis of the body is less conspicuous and all the more pervasive, because it is built directly into dimensions. Every building is designed for some user. This user appears to be anyone at all, yet in reality has a quite specific body: adult, healthy, of average height, without crutches, a stroller, or a white cane. Anyone who differs from this model encounters a world tailored slightly out of alignment: a handle that is too high, a door that is too narrow, or a step where a level surface would have sufficed. Here exclusion follows from an assumption nobody has stated aloud; it requires no malicious intent.

Sociologically, this points to a shift that architecture, because it works through the eyes, can easily overlook. Space is known through the body, through movement, reach, and fatigue, whereas a plan offers only an abstract view from above. The philosopher Maurice Merleau-Ponty spoke of the lived body. In his account, we do not survey the world from outside as pure minds; we inhabit it as bodies and measure it against ourselves. Yet an architect spends an entire professional life in what Chapter 2 called conceived space: the drawing they see but do not inhabit. Between the drawing perceived by the eye and the space experienced by the body lies

the same gap as between conceived and lived space. Into that gap fall all those whose bodies differ from the assumed model.

6.2 Modulor: The Body Elevated to a Standard

Deriving dimensions from the human body is an old idea in architecture and, in itself, a good one. Vitruvius sought in the proportions of a man with outstretched arms (whom Leonardo turned into the famous “Vitruvian Man”) the key to harmony between a building and the cosmos. In Bauentwurfslehre (1936), Ernst Neufert collected the “normal” dimensions of everything from door handles to staircases, placing a catalogue of standards in the hands of architects worldwide. Le Corbusier most explicitly elevated the body into a measuring system. His Modulor (published in 1948 and 1955) is a proportional system based on a figure 183 centimetres tall with one arm raised, linked to the golden ratio and the Fibonacci sequence. Through it, Le Corbusier hoped to reconcile human scale with metric abstraction and restore the body to buildings.

This noble intention, however, contains a flaw at its very foundation. The body that Modulor made the measure of all things is one particular body: an adult man of European stature. (Indeed, Le Corbusier raised the original height from 175 to 183 centimetres, reportedly after a “handsome man in an English detective novel.”) The supposedly universal human measure is selected from a very narrow range. The same applies to Henry Dreyfuss’s later ergonomic pair, “Joe and Josephine,” in which particular bodies likewise became models to which the rest of humanity was expected to conform. A norm passes itself off as nature. The same problem was revealed by an apparently unrelated episode in the US Air Force.

What gives this narrowness political weight is the reach of the standard. Neufert’s Bauentwurfslehre is among the most widely translated and distributed architectural manuals ever published. Its dimensions of the “normal” person and “normal” activity travelled around the world and became embedded in standards, regulations, and the hand that draws. Once one body becomes the measure, it travels onward as an unquestioned assumption that nobody notices. A kitchen based on the reach of a particular figure, a step height suited to a particular stride, or a counter at a given height is built again and again across the globe. Asking whose body became the standard is also asking whose experience is presented as universally human.

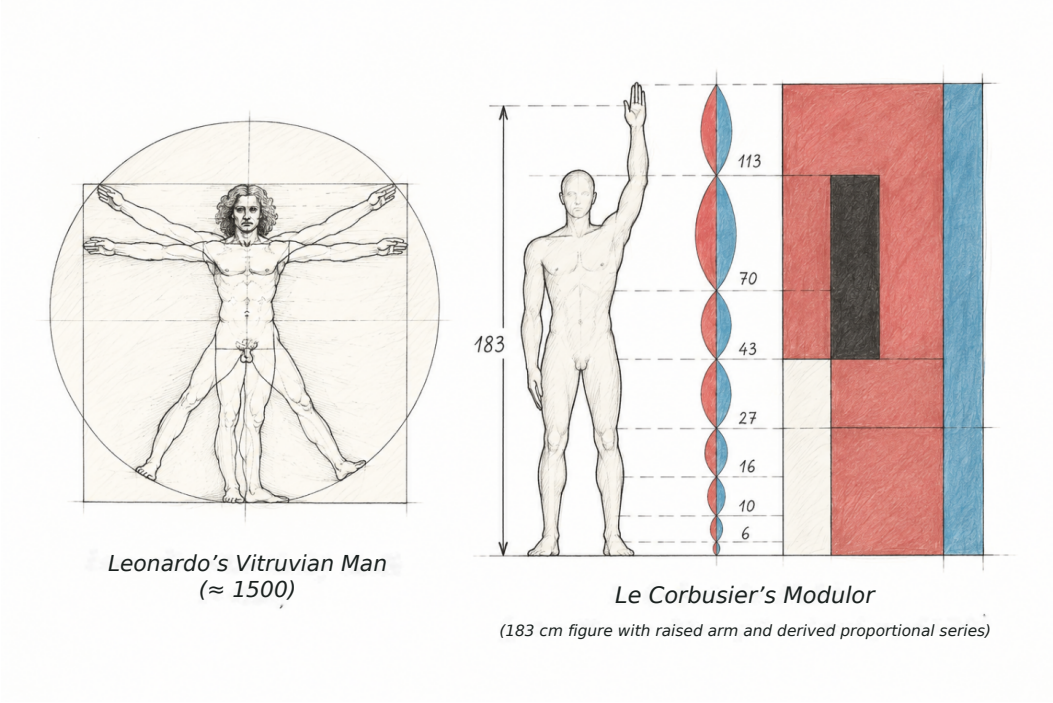

Fig. 6.1. One particular body elevated to a universal measure. Behind the "human being" stands an adult man of a particular stature.

6.3 The Myth of the Average Person

The notion of an "average person," whose dimensions can serve as the basis for design, comes from the Belgian statistician Adolphe Quetelet. In the nineteenth century he introduced the concept of l'homme moyen, the average man, who was for him both an ideal and a norm. At first glance this sounds reasonable. Simply measure the population, calculate the average, and design for it. In 1952, however, a young US Air Force analyst, Gilbert Daniels, demonstrated that this was a mistake.

The Air Force was then grappling with mysterious crashes. Pilots were losing control of otherwise sound aircraft, and nobody knew why. Cockpits had been designed around pilots' average bodily dimensions. Daniels measured 4,063 pilots in ten of the most important dimensions, defined an "average" range for each dimension (the middle third of the values), and asked how many pilots fell within the average range in all ten dimensions simultaneously. Not a single one did. No pilot was average in all ten measurements at once. A cockpit designed for the average pilot therefore fit nobody.

The consequences were revolutionary, and architecture has much to learn from them. The Air Force abandoned the average as its reference point and introduced adjustability. Seats, pedals, and controls began to be adapted to the individual (the adjustable car seat, incidentally, also traces its origins to this development). The lesson was that the system should adapt to the person. The same holds for spatial design. The “average user” is a statistical fiction, and a design that relies on this figure ultimately fits nobody. Instead of searching for a more perfect average, we need to design for a range: for mobility, adaptability, and the diversity of bodies that actually exist.

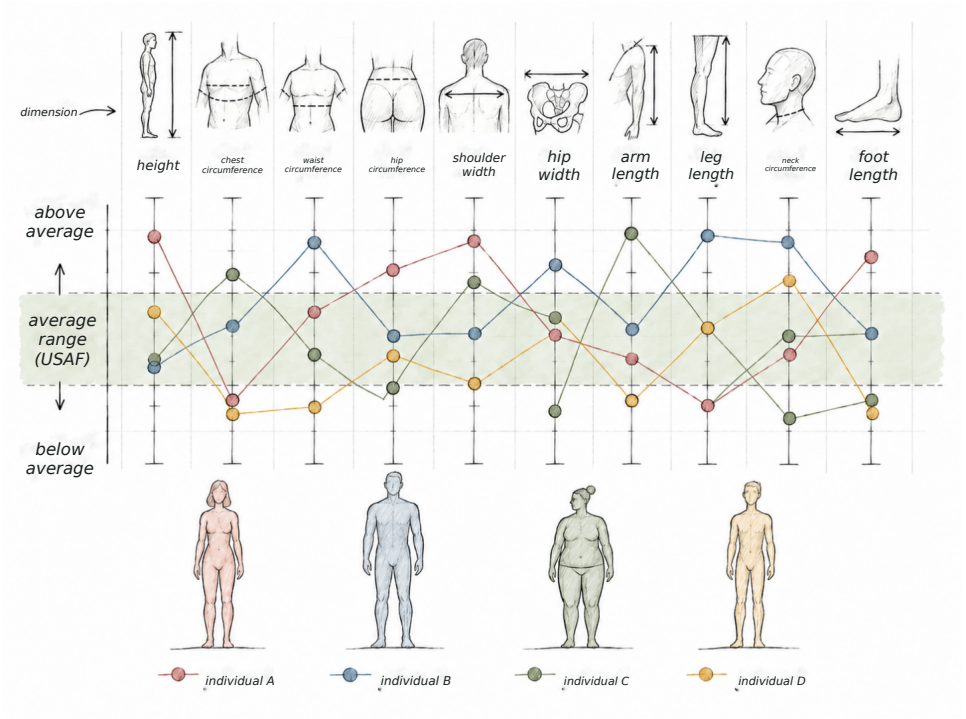

Fig. 6.2. Designing for the average person means designing for nobody. The solution is adjustability; a better average does not help.

6.4 Space as the Body’s Silent Language: Proxemics

The body does not merely occupy space with its dimensions; it also carries zones around itself into which it admits only certain people. The American anthropologist Edward T. Hall named this phenomenon proxemics and, in The Hidden Dimension (1966), described four zones of distance that people observe without consciously thinking about them: intimate (for those closest to us), personal (for friends), social (for ordinary interaction), and public (for formal situations and strangers). These zones determine how far apart we stand in a queue, how dense a crowd we can tolerate, and when we begin to feel cramped.

Above all, Hall showed that these zones vary across cultures. A distance taken for granted in one society may seem cold in another, or conversely intrusive. For architecture, this means that dimensions that appear “natural” (the size of a waiting room, the spacing of benches, the tolerable density of a square) are norms, often borrowed from a single cultural experience. Space is a silent language; whoever designs it decides on behalf of others how close they will have to be to one another and whose idea of the appropriate distance will apply to everyone.

The consequences are tangible. The feeling of “overcrowding” depends both on the number of people per square metre and on how much closeness a given culture tolerates. The same density can feel pleasantly lively in one setting and unbearable in another. Decisions about corridor width, the spacing of seats in a waiting room, or the size of an apartment are therefore not purely technical. They embody a particular idea of how close strangers ought to be to one another. An architect who adopts these measurements from tables without recognising their cultural and bodily contingency may design a space that is comfortable for some and oppressive for others, without knowing why.

6.5 Gender and Space

The most deeply entrenched assumption about the user concerns gender. The traditional city and the traditional home were organised around a division between the male breadwinner, who goes out to work in the public sphere, and the female caregiver, who remains in the private sphere. In her essay “What Would a Non-Sexist City Be Like?” (1980), the American architectural historian Dolores Hayden showed how deeply this division is embedded in the suburban house and in the separation of housing from work and services, and how it isolates women who also bear the burden of unpaid care. Public space is then often designed without regard for the body pushing a stroller, holding a child’s hand, or fearing for its safety at night. The result is a “geography of fear” that effectively restricts the city available to women.

A small illustration is the perennial queue outside women’s toilets. Allocating equal floor area to both sexes means fewer cubicles where activities take longer and are often accompanied by childcare. Inequality is built into the standard and presented as equality. In Invisible Women (2019), the journalist Caroline Criado Perez brings together dozens of similar cases under the concept of the gender data gap. The world is measured and designed according to male bodies and male daily routines because data about women are simply missing. One frequently cited example concerns a Swedish city that discovered that its winter snow-clearing schedule unwittingly prioritised roads over pavements: drivers (more often men) over pedestrians and caregivers (more often women). When it reversed the order, the number of winter injuries among pedestrians fell; the healthcare costs of those injuries had exceeded the entire winter maintenance budget.

The data gap costs the most lives in transport, and transport is part of urban design. For decades, the standard crash-test dummy used in automobile testing was modelled on a male body at the centre of the statistical distribution. At most, the female body was tested as a scaled-down version of the male one, and even then in the passenger seat. American analyses of crashes have shown that, in a comparable collision, a woman faces a substantially higher risk of serious injury (Bose, Segui-Gomez & Crandall 2011). The designers did not act out of ill will; they simply translated the Modulor into steel, elevating one body into the measure of all. The lesson an architect should draw is that even “standard”

is not an innocent word. Every standard they adopt has its own historical figure, and that figure has a sex, an age, and a stature.

Vienna shows that things can be done differently. Since 1991, it has systematically applied gender mainstreaming in planning. It began with an exhibition, “Who Owns Public Space?”, which documented a day in the lives of eight different women, and with an analysis of movement showing that women made two-thirds of pedestrian journeys, although these journeys had scarcely been discussed. Urban planner Eva Kail promoted dozens of projects. The Frauen-Werk-Stadt housing complex (1997) has stroller storage near entrances, wide staircases, building heights that allow residents to keep an eye on the street, a kindergarten in the complex itself, and shops and medical practices within reach. Parks once dominated by football cages (and therefore by boys) gained paths and facilities for other sports and began to be used by girls as well. Sidewalks were widened and crossings made safer. In a city where most people live in subsidized housing, competition entries are now also assessed from a gender perspective, and planners from Prague make study visits to Vienna for precisely this reason. In essence, the Viennese approach applies the principle of Chapter 4: first find out who actually uses a space, and only then design it.

6.6 Disability: Space That Disables

The myth of the standard body is most directly challenged by thinking about disability. Traditionally, disability is understood as a property of the body. A person “is” confined to a wheelchair and therefore cannot get upstairs. The so-called social model of disability (formulated by British activists and sociologist Mike Oliver) reverses the cause. The person cannot get upstairs because there is a staircase instead of a ramp, not because they use a wheelchair. It is the environment that disables. A step, a curb, a heavy door, or a sign legible only to sighted people are small decisions through which the built environment produces disability, because it assumes just one kind of body.

This also clarifies the purpose of accessibility. It is often treated as a kindness to a minority or as bureaucratic harassment, when in fact it demonstrates that “normal” design was, from the beginning, design for one body. That is why attaching an additional measure to every building is not enough. The answer is universal design (a concept associated with Ronald

Mace): designing from the outset so that a space serves the widest possible range of people without special adaptations—wider doors, smooth transitions between levels, intelligible wayfinding, and multiple sensory channels. In crip theory, Robert McRuer speaks of “compulsory able-bodiedness,” the unspoken assumption that a normal body is an able body, and universal design attempts to leave this assumption behind. What benefits a wheelchair user also benefits a parent with a stroller, a delivery worker with a trolley, and an older person with a cane. Accessibility serves everyone.

This phenomenon is called the curb-cut effect, and its history is instructive for the relationship between structure and agency (Chapter 1). Wheelchair users themselves fought for lowered curbs. In Berkeley, California, around the turn of the 1960s and 1970s, a group called the Rolling Quads formed around Ed Roberts, the first student with near-total paralysis who used a wheelchair to be admitted to the university. At first, members poured concrete onto curbs at night to make their own ramps; later they secured the city’s first official curb-ramp programme on Telegraph Avenue. Berkeley gave rise to the independent living movement and, later, US accessibility legislation (Williamson 2019). It soon became clear that parents with strollers, travellers with suitcases, delivery workers, cyclists, and indeed anyone carrying groceries benefited from the ramps as well. A measure designed for people at the margins improved the environment for everyone. Perhaps this is the most important lesson of the entire chapter. Designing from the margins, starting with the body that is least well served, looks like a concession to a minority, yet it is the most reliable route to a space that serves the majority better than a design based on an imaginary average.

Question about the case. An accessible entrance is often provided by a ramp at the back, beside the rubbish bins, while the grand staircase remains at the main entrance. What does this space communicate about who is an “ordinary” visitor and who is an “exception”? Could the main entrance be designed so that everyone passes through it in the same way — and why does this happen so rarely?

6.7 Age: Childhood and Old Age

The standard user is not only male, healthy, and of average height, but also of working age. Both ends of life thus fall out of the city. Children have lost the independent mobility that was once taken for granted. A city adapted to the automobile is too dangerous for them, so they become passengers who are driven around, escorted by someone from door to door. The child-friendly city movement therefore proposes a simple test. If an eight-year-old can safely walk alone to buy an ice cream, the neighbourhood is doing well. If not, it was designed for cars. At the other end of life, the number of older and frailer people is growing; for them, a fast-moving, slippery city reluctant to provide places to sit is full of obstacles. Their needs—a bench at the right distance, a public toilet, legible wayfinding, an environment that supports the memory of people with dementia—are the same things that benefit everyone else.

Urbanist Gil Peñalosa combined both tests in the slogan that gave rise to the international organisation 8 80 Cities. A city should work for an eight-year-old and an eighty-year-old; then it will work for everyone. This is not sentimentality but a design criterion: the eight-year-old and the eighty-year-old are the city's most sensitive measuring instruments. Where a child can cross safely, anyone can cross; where an older person can rest, anyone can rest. These "indicator bodies" at the edges of the age spectrum play the same role as the wheelchair user at the curb. They reveal whom a space was really designed for.

Both needs can be addressed deliberately through design. A child-friendly city requires continuous safe routes to school, permeable blocks, traffic calmed enough that children are not constantly in danger, and public places where they may spend time without supervision and without having to buy anything. An environment friendly to older people and people with dementia, meanwhile, depends on clear wayfinding, recognisable landmarks, calm surroundings without confusing reflections or mirrors, and benches spaced closely enough that a journey can be completed in stages. None of this is exotic, and every one of these requirements also improves the city for someone hurrying through it in full strength.

Moreover, children and older people are not "special groups" alongside the ordinary user: everyone passes through childhood and old age. A design that takes account only of a fully able adult thus excludes each of us at the

beginning and end of life, and excludes anyone temporarily when they break a leg or carry a heavy load. Bodily diversity is the rule. The “standard” body is a condition that a person occupies for only part of life, and never entirely.

6.8 For Whose Body?

Taken together, every dimension, every threshold, and every standard carries within it an assumption about the body that will pass through it. None of these is neutral: neither the height of a door handle, the spacing of stairs, the width of a doorway and the slope of a ramp, nor the volume and size of a sign. Everything suits someone and cuts someone else off. Every drawing is therefore a hypothesis about social life, as the first chapter argued, and at the same time a hypothesis about the body. Without saying so, it declares who is imagined here as the ordinary user and who is an exception that needs to be “solved.”

The shift this chapter calls for concerns concepts as much as techniques. Deviation from the norm shows that the norm was too narrow from the outset. There is no point in treating it as a defect in the user that a design generously tolerates. The myth of the average person already collapsed in the cockpit, and the diversity of bodies must be accepted as a fact. Instead of the fiction of a standard user, good design addresses the range of real bodies and works with flexibility, adaptability, and generous dimensions. The body is plural.

For practice, this does not mean abandoning dimensions and standards, since building is impossible without them. Their status changes, however. A standard must be treated as a working simplification, consciously provisional, which does not faithfully represent the actual user. Wherever possible, it should be replaced with adjustability and generosity, and everywhere it is appropriate to ask whom it is currently cutting off. This chapter therefore does not call for a new, better standard of the body; it asks architects to stop believing that any single standard exists at all, and to design for the plurality of human bodies.

So far, the book has asked which human bodies count in space. The next chapter takes the question one step further and asks whether only human bodies should count: parks, landscapes, and the “more-than-human” world

will force us to ask whom space actually belongs to once we stop assuming that human beings are its only measure.

6.9 How to Read the Body in Space

The sixth set of questions for reading space addresses assumptions about the body embedded in dimensions and thresholds.

For what body was this designed? What height, age, mobility, and senses are silently assumed, and whom does that assumption exclude?

Where is the fiction of the average hidden? Does the design rely on a nonexistent average user where adjustability and a range of dimensions would suffice?

Whose personal distance became the norm? Are densities, distances, and sizes “natural,” or borrowed from a single cultural and bodily experience (proxemics)?

Does the environment disable here, or the body? Where does disability arise from a missing ramp, a threshold, or a channel of perception, and where is “accessibility” relegated to the staff entrance?

Can a child, a pregnant woman, an elderly man, or someone with a stroller pass through here as easily as a “standard” adult? A design is tested by the stages of life through which everyone passes (the 8/80 test).

Key Concepts of This Chapter

Standard (normative) user — the body a design silently assumes, historically an adult, healthy man of average height. Anyone who differs from it is slightly excluded from the outset.

Lived body (M. Merleau-Ponty) — we know space through the body, movement, and reach; an abstract plan is not enough. A gap opens between the drawing we see and the space we experience.

Modulor (Le Corbusier) — a proportional system derived from a figure 183 cm tall. It shows how one particular body is presented as a universal human measure (compare the Vitruvian Man and Neufert).

Myth of the average person (Quetelet; disproved by Daniels in 1952) — a user who is average in every dimension at once does not exist, so a

design made for the average fits nobody. The solution is adjustability and accommodating a range.

Proxemics (E. T. Hall) — culturally variable zones of distance (intimate, personal, social, public). The “natural” dimensions of space are in fact norms.

Gender data gap (C. Criado Perez) — a world measured and designed according to male bodies and daily routines (snow clearing, crash-test dummies). The remedy is gender mainstreaming (Vienna), based on studying actual use.

Social model of disability (M. Oliver) — disability is produced by the environment. It is the step that disables, not the wheelchair.

Universal design (R. Mace) — designing from the outset for the broadest possible range of people without special adaptations. It is the opposite of accessibility “stuck on” afterward and segregated access.

Curb-cut effect — a measure won for the least-served body improves the environment for everyone. Historically, people fought for it from below (Berkeley, Rolling Quads); nobody handed it down from above.

Questions for Reflection

Choose one building you know well and describe the “standard user” for whom it was evidently designed. Whom do its dimensions and thresholds exclude, and how?

Modulor sought to “return the body to the building.” What was good about that intention, and where did it turn into a norm presented as universal? Can anthropometry be rescued without excluding people?

Find an example in your surroundings where the environment “produces disability” (the social model). How would universal design resolve the same situation without adding a ramp afterward?

Lowered curbs in Berkeley were won by wheelchair users themselves, initially even by illegally pouring concrete ramps. What does this story tell us about the relationship between structure and agency (Chapter 1)? And who in your city today is doing what the Rolling Quads did then?

Vienna’s gender mainstreaming is based on data about actual use. Which groups of users in your city are not measured by anyone, and what therefore remains undesigned?

Field Exercise 6: Audit of a Single Threshold

Choose one entrance to a public building and pass through it in turn from the perspective of several different bodies: a wheelchair user, a parent with a stroller, an elderly person with a cane, a child, a deaf or blind person, and a foreigner unfamiliar with the language. For each, record where and how the space stops, slows down, or confuses them. Finally, propose a single change that would make the entrance accessible to as many of them as possible at once (in the spirit of universal design), and note why it was not chosen during the original design. Submit one page with a sketch.

Sources and Recommended Reading

Core of the chapter:

Le Corbusier (1948, 1955). Le Modulor / Modulor 2. On the body elevated to a measure; compare Neufert, E. (1936). Bauentwurfslehre.

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Hall, E. T. (1966). The Hidden Dimension. Proxemics and the cultural variability of interpersonal distance.

Hayden, D. (1980). “What Would a Non-Sexist City Be Like?” Signs, 5(3). And Criado Perez, C. (2019). Invisible Women. London: Chatto & Windus — the gender data gap.

Oliver, M. (1990). The Politics of Disablement — the social model of disability; McRuer, R. (2006). Crip Theory.

Transport, accessibility, age:

Bose, D., Segui-Gomez, M. & Crandall, J. R. (2011). “Vulnerability of Female Drivers Involved in Motor Vehicle Crashes.” American Journal of Public Health, 101(12). On crash-test dummies and the data gap in transport.

Williamson, B. (2019). Accessible America: A History of Disability and Design. New York: NYU Press. The history of accessibility, including Berkeley and the independent living movement.

8 80 Cities (Gil Peñalosa) — 880cities.org. Methods and case studies of cities for eight-year-olds and eighty-year-olds.

Open access and applications:

City of Vienna: Manual for Gender Mainstreaming in Urban Planning and Urban Development — freely available to download; overview of Vienna projects (Eva Kailová, Frauen-Werk-Stadt).

Centre for Universal Design (NC State): The Principles of Universal Design (R. Mace et al.) — seven principles, freely available online.

CHAPTER 7

Human and Nonhuman

Nature, the Park, and the More-than-Human City

“Wilderness is in large part a creation of the very civilization from which it seems to offer an escape.”

— William Cronon (1995)

“We have never been modern.”

— Bruno Latour (1991)

7.1 The Nature We Invented

Chapter Six asked which human bodies count in space. An even more radical question remains: do only human bodies count? Cities are also inhabited by birds, insects, trees, fungi, water, and weather. Moreover, in recent years architecture has discovered “nature” as a subject, even a fashion, whether in green walls, infiltration planting beds, “biophilic” interiors, or linear parks. The reflexive response is that greenery is good and that there can never be enough nature. By questioning this reflex, the chapter does not seek to defend nature in the city any less. It seeks to ensure that architects can read it as critically as power or inequality.

The starting point is the uncomfortable realization that “nature” is a category produced by society itself, not a neutral given lying outside it. What we consider “natural,” “wild,” or “green” is the result of history, taste, and power; even the very division of the world into “city” and “nature” is ideological. Two thinkers demonstrate this especially sharply. According to historian William Cronon, even wilderness is a cultural creation; according to philosopher Bruno Latour, the dividing line between nature and society has never truly held.

7.2 Cronon: The Trouble with Wilderness

In his essay “The Trouble with Wilderness” (1995), William Cronon developed an idea that at first sounds almost heretical: wilderness is an invention, and a relatively recent one. As late as the early modern period, people perceived mountains and primeval forests as repellent, inhospitable places. Only Romanticism, and in America the myth of the frontier, turned them into sacred refuges of untouched nature, where city dwellers go to renew their souls. What appears to be the purest opposite of civilization is thus in fact its product, a projection of its desires and anxieties.

Cronon does not stop at this curiosity; he points to the danger that follows from it. If “real nature” is equated with untouched wilderness somewhere far away, we can easily overlook nature where we actually live (in the city, in the garden, in the park, in the soil beneath the pavement) and readily sacrifice it while feeling that genuine natural wealth is, after all, protected elsewhere, in a national park. The dualism of “city versus nature” is therefore not an innocent description. It turns the city into non-nature, thereby justifying reckless treatment of its ecology. Architects can take the first lesson of this chapter from this: whenever they “add nature,” they are applying a particular, culturally laden idea of what nature is and where it belongs.

Cronon’s critique also has a harder political dimension. The myth of untouched wilderness usually required the disappearance from the landscape of people who had long lived there. American national parks were established, among other things, by expelling Indigenous inhabitants so that the scenery could appear pristine and empty; here “wilderness” was literally manufactured through displacement. This brings us full circle to Chapter Five: even the seemingly innocent category of nature can bear traces of exclusion and the erasure of those who were there before.

7.3 Olmsted: Designed Nature as a Tool

That “nature” in the city is manufactured is best demonstrated by the park. New York’s Central Park, created by Frederick Law Olmsted and Calvert Vaux according to their winning “Greensward” design (1858), is not a piece of wilderness left intact among the buildings; it is a pastoral scene engineered from the ground up (reshaped terrain, imported soil, planted groves, concealed roads), whose task is to look natural. Conceived space from Chapter 2 is at work here in full force, because the result presents itself as the work of nature while being planned down to the last shrub. (Here, too, erasure came first. Seneca Village, a settlement of predominantly Black landowners, was cleared and demolished along the park’s route, making this another “Podskalí.”)

More important, however, is why the park was created. Olmsted understood it as a social project. It was supposed to give the urban masses health, fresh air, and “moral elevation,” to mix social classes and (not coincidentally) instill in them the manners of a respectable middle-class visitor. The park thus resembles the institutions of Chapter 3. It is a scene with rules, a subtle instrument of discipline that prescribes how to stroll, where to sit, and what is improper. But it also pursued a less idyllic aim. In 1867, with Prospect Park, Olmsted expected the surrounding area to become a “first-class residential neighborhood,” so the park was intended to raise the value of neighboring land. Designed nature was also a financial instrument from the outset, and we will return to this at the end of the chapter.

Olmsted did not invent this approach out of nothing. He followed the eighteenth-century English landscape garden, whose form was shaped by Lancelot “Capability” Brown. It deliberately abandoned the strict geometry of the French garden, replacing it with rolling lawns, scattered groves, and ponds meant to appear as though nature itself had created them. It was an exceptionally costly, aristocratic taste. Only those able to reshape an entire estate to look untouched could afford a “natural” appearance. Here too, what appears to be nature is a polished social style, and the choice between “wild” and “managed” is always also a choice of values.

In the twentieth century, Singapore elevated the same approach to the level of the state. The “Garden City” campaign announced by Lee Kuan Yew in 1967 turned tree planting into a government program and manicured

greenery into a calling card for investors, with the simple message that a city-state capable of managing tropical vegetation could also manage their money. Today's slogan "City in a Garden" takes the program to its extreme in Gardens by the Bay (2012). Its "supertrees," steel-and-concrete towers covered in plants, with photovoltaics and air-conditioning exhaust outlets built into them, turn nature into a technological spectacle.

Singapore really is green, and that can be measured. At the same time, its greenery is devoid of randomness: cultivated, controlled, and politically legible, a kind of national enactment of Olmsted's triad of health, discipline, and land values. As an extreme case, it shows that designed nature can be a genuine ecological achievement and at the same time an instrument of governance and branding; neither excludes the other.



Fig. 7.1. A park is not nature simply allowed in, but an engineered landscape with social and financial purposes—from Manhattan to Singapore.

7.4 The More-than-Human City

The second major correction comes from the opposite direction. Cronon shows that “nature” is an all-too-human category, while more recent thinking asks whether our entire understanding of the city is too human. Bruno Latour argued that the modern world imagined a clean division between Nature and Society that never actually existed. Everything around us consists of hybrids, mixtures of human and nonhuman elements, and nonhumans (microbes, rivers, materials, animals) act within them as agents that help determine what happens.

From this emerged the so-called more-than-human perspective on the city. Geographer Sarah Whatmore, anthropologist Anna Tsing (who showed, in a study of a mushroom growing among industrial ruins, how life arises from cooperation among many species), and Donna Haraway, with her call to “make kin” across species, all decenter the human. For them, the city is a shared community of humans, animals, plants, fungi, water, and weather, which co-create it whether we acknowledge them or not. Pigeons, foxes, and a quince tree in the courtyard are, in this view, fellow inhabitants of the city just as we are.

For design, this leads to an unusual question: can we also design for nonhumans, for example pollinators, birds, and soil life, or for water that wants to flow somewhere? This includes rewilding (the deliberate restoration of ecological processes) and the concept of the third landscape (le tiers paysage) developed by landscape architect Gilles Clément. Unmaintained residual spaces such as embankments, abandoned lots, and all kinds of edges are paradoxically often the richest in biodiversity, precisely because people do not intervene in them. The aesthetics of neatness gives way here to the value of wildness, and restraint itself can become a form of care.

In practice, this means quite tangible decisions: species-diverse planting instead of a grass monoculture that is “green” but almost ecologically dead; glass and lighting that are considerate of birds and the night sky; uncovering streams that have been enclosed in pipes (so-called daylighting, whose most famous, though technically disputed, example is Seoul’s Cheonggyecheon from Chapter 2); or leaving dead wood, field margins, and corners beyond human oversight. A warning is also appropriate, however. Much of what is sold as “biophilic” design is more like green cosmetics: for

example, a high-maintenance green wall poor in life, or a few ornamental flowerbeds around a luxury development.

A test case has been Milan's Bosco Verticale (Stefano Boeri, 2014), a pair of residential towers bearing hundreds of mature trees and thousands of plants on their facades. It is a captivating icon—and at the same time a textbook question from Chapter 4. Trees on balconies dozens of metres above the ground require special substrates, anchoring, irrigation, and "flying gardeners" who rappel down the façade. The cost and maintenance of a single tree are many times greater than planting it in the ground, while the measurable ecological benefit (shade, biodiversity, water retention) remains disputed. The towers also offer luxury housing, so biophilia serves here as a means of distinction and greenery as a sign of class (Bourdieu's lesson from Chapter 13 in plant form). None of this means that the vertical forest is a fraud. But the difference between ecologically functional greenery and greenery as advertising can only be established by measurement, and for the price of one vertical forest, whole streets could be planted with trees where shade is needed most.

Connected to this is the underestimated question of acceptance. Some of the public read wild-looking greenery as neglect, because tall grass gives the impression that no one is caring for the place. Landscape architect Joan Nassauer proposed a simple solution, summed up in the phrase "messy ecosystems in orderly frames." People more readily accept rich, wild vegetation if it is framed by clear signs of care, such as a mown edge, a bench, a sign, or a path, which tell those around it that this is intentional. Czech cities, too, have in recent years reduced mowing and established flowering meadows, encountering precisely this conflict between "order" and life. Designing for nonhumans therefore also means designing the legibility of that intention for people.

7.5 Who Does Greenery Belong To?

Once we stop treating greenery as an unquestioned good, the question of justice arises. Access to parks, trees, and clean air is distributed as unequally as wealth. Poorer and minority neighbourhoods tend to have less greenery and more environmental burdens, whether busy roads, landfills, or heat without shade. This is called environmental justice, and from this perspective the lack of greenery in poor neighbourhoods is an injustice, not an accident. The logical response is to add greenery where it is missing. But precisely here lies a trap identified only by more recent research literature.

As the climate changes, unequal access to greenery is becoming increasingly urgent. Shade, channels of cool air, and permeable surfaces are becoming matters of health and survival. During heatwaves, people die precisely in densely built-up, concrete neighbourhoods without trees, where the poorest often live, and these same neighbourhoods generally cope worst with torrential rain. Besides aesthetics and well-being, greenery is also infrastructure that protects against heat and water; where it is distributed unequally, risk is distributed unequally too. An architect who decides where shade will fall and where water will soak into the ground is deciding more than what a place looks like.

7.6 The High Line and Green Gentrification

The best-known example is New York’s High Line. An abandoned freight railway viaduct on Manhattan’s West Side was slated for demolition, but two local residents, Joshua David and Robert Hammond, together with Friends of the High Line, successfully campaigned to turn it into a linear park. It was designed by James Corner Field Operations and Diller Scofidio + Renfro, with planting by Piet Oudolf, and opened in three stages in 2009, 2011, and 2014. As landscape architecture, it is a first-rate work that achieved immediate success and now attracts millions of visitors each year.

Its social record, however, is ambiguous. It was not greenery alone that mattered, but also the accompanying rezoning of West Chelsea, which relaxed height restrictions and opened the neighbourhood to luxury development. Here, too, the park did not simply “let nature into” the city. It set a process in motion whose course was determined by rules. Property prices along the route rose sharply, and expensive apartments and offices

multiplied. Visitors are predominantly tourists and white people, whereas roughly a third of Chelsea's residents are people of colour, many living in public housing, who rarely visit the park and do not regard it as theirs. Years later, co-founder Hammond summed it up with unusual candour: they had wanted to do it for the neighbourhood, and they had failed.

That the High Line is not an unfortunate exception is shown by the repetition of the same pattern elsewhere. Atlanta's BeltLine and numerous "green" projects in London and Barcelona encounter the same difficulty, because a better environment drives prices upward. Seoul's Cheonggyecheon belongs here too: the "restored river" raised land prices along its corridor (Kang & Cervero 2009) and displaced street vendors before the phenomenon even acquired its now-familiar name. The creators of the High Line learned from this and founded the High Line Network, which now collects approaches for designing similar projects without displacement. Their admission that "we failed" offers a broader lesson: unless measures against displacement are considered from the very beginning, even the most beautiful park can become an instrument of inequality.

This phenomenon is called green (or environmental) gentrification. Ecological improvement raises property values and displaces precisely those it was supposed to benefit. Geographers Jennifer Wolch, Jason Byrne, and Joshua Newell called it the urban green-space paradox, because efforts to make a city greener and healthier can make it less just. This is not an argument against greenery; it is an argument against greenery designed without regard for who lives in the area. This directly continues the argument of Chapter 5. The park became a tool of displacement, just as privatization once did in Karlín (Chapter 5), and Olmsted's old calculation that a park raises surrounding property values came true in a form he probably would not have wished for.



Fig. 7.2. Outstanding landscape architecture—and at the same time an engine of rising prices and displacement; its creators themselves acknowledged that they had failed the surrounding neighbourhood.

Question about the case. The High Line grew out of grassroots civic enthusiasm — much like Prague's river embankment (Chapter 2) — yet became an engine of displacement, as did Karlín (Chapter 5) or Cheonggyecheon. Is "greening" or "revitalising" the centre necessarily tied to worsening conditions on the periphery, or can a design separate the two? And what, specifically, would that require in the original brief, rather than relying on goodwill after completion?

7.7 What This Means for Architecture

When we bring the individual strands together, nature in the city emerges as four things at once: a culturally produced category (Cronon), a designed and maintained scene that carries values (Olmsted, Singapore), a more-than-human community of co-inhabitants (Latour, Tsing), and a matter of justice (Wolch). None of these dimensions is neutral, and therefore "adding greenery" is never merely a technical decision.

None of this is an argument against greenery, parks, or ecology. The city needs more nature, and poor neighbourhoods need it most of all. The

difficulty is that good intentions are easily mistaken for good results, as we already saw with the humane prison in Chapter 3. Greenery is a powerful tool and, like any powerful tool, has effects beyond its intended target. A critical perspective does not diminish the desire to plant trees; it adds awareness of whom a tree will actually serve.

Four questions follow from this, which the designer should ask before drawing a tree. What idea of nature is being applied, and whom does it leave out? Is this wilderness for tourists, a pastoral park for the middle class, a technological garden for investors, or productive, ordinary greenery for local residents? Does the design also account for nonhumans, water, soil, and pollinators, or does it create nature only for the human eye? The most pressing question is whom this greenery will lift up and whom it will displace. Giving up on greenery in poor neighbourhoods would be the wrong answer, since it would merely preserve environmental inequality. We need to design in a way that does not tie ecological improvement to luxury development. Winifred Curran and Trina Hamilton called this strategy “just green enough”: green enough, but not so much as to drive out existing residents. It is linked to the affordable-housing protections discussed in Chapter 5. Finally, is the designer unnecessarily holding on to the city–nature dualism where dissolving it (water-infiltrating streets, wild edges, a building as habitat) could produce a solution that is both ecologically richer and more just?

These questions do not lower ambitions; they redirect them. Architecture that takes nature seriously remains creative. It simply broadens the circle of those it cares about, from the human user to the whole community of life, and from today’s land price to the long timescale of ecological processes. The meaning of a tree planted today will become apparent in fifty years; who receives its shade in the meantime is as much a social question as a biological one.

One point insisted on in Chapter 4 remains to be recalled. That greenery benefits people is not folklore. Ulrich’s study of views from a window documented a measurable effect of looking at greenery, and dozens of subsequent studies have confirmed it. Evidence that nature heals, however, does not justify greening that heals some by driving others away. Whether greenery is beneficial and whether it is fairly distributed are two different questions, and good design must answer both. The next chapter leaves life behind and turns to its counterpart—death, memory, and absence in the

city—beginning with the cemetery, that “other space” we already encountered in Foucault’s heterotopias.

7.8 How to Read Nature in Space

The seventh set of questions for reading space concerns the seemingly innocent act of “adding greenery.”

Whose nature? What cultural idea of nature is being staged here (wilderness, pastoral park, technological garden, productive garden bed)? Whom does that idea exclude?

Manufactured or allowed in? How much labour, maintenance, and power lie behind the seemingly “natural” scene, and what behaviour does it prescribe?

For whom is this greenery, and whom will it displace? Whose life will it improve and whose rent will it raise? Is there a risk of the urban green-space paradox?

Does it include nonhumans? Is the space designed for birds, pollinators, soil, and water too, or only for the human eye? Is it merely green cosmetics whose benefits no one has measured?

Does the city-versus-nature dualism persist here? Where could dissolving it (the more-than-human, third landscape) lead to a better and more just solution?

Key Concepts of This Chapter

Nature as a construct (W. Cronon) — “Nature” and “wilderness” are culturally and historically produced categories. Idealising untouched wilderness conceals the nature of places where we live.

City × nature dualism — An ideological division that sets the city against nature. According to Latour (“we have never been modern”), it never truly held, because everything is hybrid.

Designed nature as a tool (F. L. Olmsted, Singapore) — The park as an engineered scene with social and economic aims: health, moral improvement, discipline, rising land values, or a national brand.

More-than-human — An approach that decentres humans and includes the city's nonhuman co-inhabitants (animals, plants, fungi, water). This includes rewilding and the "third landscape" (G. Clément).

Green cosmetics — Greenery as advertising and distinction without measurable ecological benefit. Only measurement distinguishes it from functional greenery (test case: Bosco Verticale).

Environmental justice — The unequal distribution of greenery and environmental risks by class and ethnicity. The shortage of greenery in poor neighbourhoods is an injustice, not an accident.

Green (environmental) gentrification — Ecological improvements raise property values and displace original residents: the "urban green-space paradox" (Wolch, Byrne, Newell).

"Just green enough" (Curran & Hamilton) — A greening strategy that avoids displacement by separating ecological improvement from luxury development.

Questions for Reflection

Apply Cronon's critique to the term "greenery" in architecture. What conception of nature usually lies behind it, and what does it omit?

Olmsted also designed parks as instruments of health, discipline, and increasing land values, and Singapore turned the same idea into a state programme. Which of these motives survive in today's local green-space "revitalisations"?

Bosco Verticale is celebrated as an icon of green architecture and criticised as an expensive backdrop for luxury housing. Propose how you would reliably measure its ecological contribution (Chapter 4), and what you would compare it with.

Compare the High Line, Cheonggyecheon, the river embankment, and Karlín. When did revitalisation end in displacement, and when did it not? What determined the outcome?

What, concretely, would it mean to "design for nonhumans" in a city you know? Give three measures and their limitations.

Field Exercise 7: Audit of a Piece of Greenery

Choose one urban “natural” place (a park, an avenue of trees, a green wall, a wild plot) and describe it through four different lenses: as a cultural idea (what kind of “nature” is staged here); as a manufactured and maintained setting (who maintains it, at what cost, and with what rules of behaviour); as a habitat for nonhumans (who lives here besides people); and as a driver of value (does it raise surrounding rents and prices?). Finally, propose one change that would enrich the place ecologically while causing less displacement. The output should be one to two pages.

Sources and Recommended Reading

Core of the chapter:

Cronon, W. (1995). “The Trouble with Wilderness; or, Getting Back to the Wrong Nature.” In Uncommon Ground. New York: W. W. Norton. The essay is freely available on the author’s website (williamcronon.net) — open access.

Latour, B. (1991/1993). We Have Never Been Modern (Nikdy jsme nebyli moderní). On dissolving the nature–society dualism and treating nonhumans as actors.

Olmsted, F. L. & Vaux, C. (1858). The “Greensward” proposal (Central Park). On the park as a social and economic project; for Seneca Village, see the Central Park Conservancy documentation.

More-than-human and the third landscape:

Whatmore, S. (2002). Hybrid Geographies; Tsing, A. (2015). The Mushroom at the End of the World; Haraway, D. (2016). Staying with the Trouble; Clément, G. — Manifeste du Tiers paysage (“third landscape”).

Nassauer, J. I. (1995). “Messy Ecosystems, Orderly Frames.” Landscape Journal, 14(2). On public acceptance of wild greenery.

Singapore and vertical greenery:

Barnard, T. P. (ed., 2014). Nature Contained: Environmental Histories of Singapore. Singapore: NUS Press. On the history of the “Garden City” campaign.

Documentation of Bosco Verticale (Stefano Boeri Architetti — stefanoboeriarchitetti.net) and critical commentary in the professional press on the costs, maintenance, and measurable benefits of vertical greenery.

Green gentrification (open access and case studies):

Wolch, J. R., Byrne, J. & Newell, J. P. (2014). “Urban Green Space, Public Health, and Environmental Justice: The Challenge of Making Cities ‘Just Green Enough’.” Landscape and Urban Planning, 125, 234–244.

Curran, W. & Hamilton, T. (2012). “Just Green Enough: Contesting Environmental Gentrification in Greenpoint, Brooklyn.” Local Environment, 17(9); the same authors (2018), Just Green Enough. London: Routledge.

On the High Line: Friends of the High Line; interviews with R. Hammond (CityLab / The Atlantic, 2017); property-price data analyses (StreetEasy, “Changing Grid”). For Cheonggyecheon, see the sources for Chapter 2.

CHAPTER 8

Presence and Absence

Death, Memory, and the City

“To be human means above all to bury.”

— Robert Pogue Harrison, The Dominion of the Dead (2003)

“We speak so much of memory because there is so little of it left.”

— Pierre Nora (1989)

8.1 The City and Its Dead

After nonhuman life, this chapter turns to death, which stands opposite life itself, and more broadly to absence. A city is shaped not only by things that are present but also by those that are missing: the dead, demolished houses, expelled inhabitants, events that are commemorated, and those that are forgotten. Absence is not mere emptiness; it is an active force that holds the shape of space as firmly as walls do.

We see how absence shapes the city at every turn: an empty lot left by a demolished house, a street name recalling a vanished village, a monument in the middle of a square, a minute of silence during which traffic stops. The dead and the disappeared belong among the city’s inhabitants and help determine where we walk, what we honour, and what we avoid. To read a city also means to read those who are absent from it.

In The Dominion of the Dead (2003), philosopher Robert Pogue Harrison argues that human beings are creatures who bury. It is only through a relationship with the dead — by laying them to rest and remembering them — that a human group becomes a community. According to Harrison, cities rest on an unspoken pact between the living and the dead, because we live among the names, graves, and monuments of our ancestors and build upon them both literally and figuratively. That pact is most clearly visible in the cemetery. In Chapter 3, the cemetery served as an example of Foucault’s

heterotopia, an “other space” with its own time, whose function has repeatedly changed over the course of history. This chapter examines it in greatest detail, because in a cemetery we can read almost everything a city does with death, values, and memory.

8.2 The Cemetery as a Clash of Cosmologies

A cemetery seems to be a place of silence and agreement. In reality, it is among the most contested places in a city, because every community invests it with its cosmology, its ideas about death, the body, the afterlife, and the relationship of the living to the dead. These ideas are often incompatible, and so cosmologies struggle over the ground in the cemetery. Its very location tells the story of historical change. In the Middle Ages, people were buried around the church, in the sacred centre of the settlement. Enlightenment-era hygienic reforms banished cemeteries to the outskirts of cities (the Parisian Père-Lachaise, dating from 1804, became a model of the garden cemetery), and in 1787 Joseph II prohibited burials inside cities. Death thus moved from the sacred centre to the clean periphery, itself a sign of where society wants it to be.

The deepest dispute, however, concerns time. Should a grave last forever, or may it be used again? Each answer arises from a different cosmology and creates an entirely different place. The first is embodied by the Old Jewish Cemetery in Prague. Halakha prohibits disturbing graves and requires the preservation of gravestones, but the ghetto was not allowed to expand. This conflict produced an unusual spatial solution. Earth was piled over old graves and new burials were made in layers above them, in places as many as twelve, while old gravestones were raised to the new surface. Burials took place here from 1439 to 1787. Some twelve thousand gravestones survive, yet approximately forty thousand people, perhaps more, are buried here. The dense accumulation of leaning stones, now iconic, is literally a compromise made material between belief in eternal rest and a shortage of land.

The second answer is embodied by the ordinary Czech cemetery. Under the Funeral Services Act, a grave plot is not purchased but rented, and the lease must cover the so-called decomposition period (the time required for decomposition, determined according to the soil). When the lease ends and the family does not renew it or the family line dies out, the grave is cleared after the decomposition period and the plot is used again. Eternal rest is

not assumed here; reuse is expected. Thus the same act — laying the dead to rest — creates two opposing spaces in two cosmologies: one that can never be abolished and therefore grows in layers, and another that is deliberately rewritten after a generation or two. Further disputes concern burial in the ground versus cremation (long rejected by the Church, but now predominant in Czechia), the orientation of the grave (toward Mecca for Muslims, toward the east for Christians), and, in Islam, the prohibition of coffins and the inadmissibility of exhumation. The cemetery is not an agreement about death; it is a negotiation between incompatible worlds.

Islamic burial sharpens these conflicts. The body is placed without a coffin, in a shroud, on its right side facing Mecca, and the grave must never be removed. This clashes both with European regulations (requirements concerning coffins, depth, and reuse) and with the rental system. European cities therefore either establish separate Muslim sections with their own orientation and no reuse, or families transport the deceased to their country of origin.

Choosing between burial in a new homeland and return to the old one is also a choice of identity, because where a person belongs sometimes becomes clear only from where they are laid to rest.

Where land has run out completely, the cemetery grows upward. In Hong Kong, people wait years for a grave plot, and remains are therefore moved into multistorey columbaria. In Tokyo, the Buddhist temple Ruriden offers a columbarium with thousands of glass Buddha statuettes illuminated by LEDs; when a visitor presents a chip card, the statuette belonging to their deceased relative lights up. The vertical cemetery is the logical yet unsettling culmination of the rental cosmology: death as a storage unit with an access system. This, too, is architecture — and it, too, reveals what place society accords to death.

Question about the case. The Old Jewish Cemetery preserves names for centuries; an ordinary cemetery replaces them within a generation once the lease expires. Which of these two cosmologies is more “sustainable,” and which is more “humane”—and can the two even be separated? What would it mean to design a cemetery that could do both: remember for a long time and yet not exhaust the land?



Fig. 8.1. The cosmology of eternal rest collides with a shortage of land: as many as twelve layers of graves. Both a monument and a limit at once.

8.3 Value, Aesthetics, and Sustainability

The cemetery is also about value and aesthetics, and every style of gravestone contains an argument. A monumental nineteenth-century family tomb proclaims status and the continuity of the family line. An egalitarian lawn cemetery with low, uniform plaques (and, in its extreme form, a military cemetery with endless rows of identical crosses) expresses the equality of all in death. A natural woodland burial ground with an inconspicuous stone, or none at all, speaks of a return to the cycle of life and rejects the monument altogether. The dispute over what a “proper” grave should look like, how much stone, how many candles, and how much inscription it should have, is a dispute over what we value as a community: individuality, equality, memory, or humility.

Sustainability is entering this discussion ever more forcefully. A cemetery is above all a dispute over land. Cities are growing, but land is not, and the shortage of space is precisely what underlies both the European system of reuse and the vertical columbaria of overcrowded metropolises. Alongside land, there are materials and energy. Conventional burial in the ground involves embalming chemicals, hardwood and metal in coffins, and often a concrete burial vault; cremation, in turn, consumes energy and produces emissions. Hence the growing movement for “green” burial without embalming, in a biodegradable shroud and without concrete, as well as newer procedures such as human composting (already legal in some countries) or alkaline hydrolysis. Paradoxically, the cemetery is also valuable urban greenery. Old, overgrown cemeteries become refuges for biodiversity and quiet parks for the living, so even a place of the dead is a

more-than-human community in the spirit of Chapter 7. The choice of burial method, until recently a purely religious matter, is now also an ecological and aesthetic choice.

Czechia is among the countries with the highest cremation rates in the world. This is connected to the strong interwar cremation movement, which saw cremation as a progressive, secular, and hygienic alternative to church burial. Its manifesto became the Pardubice crematorium by Pavel Janák (first cremation in 1923), known as the “House of Light” and built in a distinctive Rondocubist “national style.” It emerged from the winning proposal in the republic’s first public architectural competition for a crematorium and is now a national cultural monument. The building united a technical facility with an architectural and ideological programme and demonstrates that the way we treat the dead says something about the kind of society we want to be.

8.4 Identity and Forgetting

The cemetery is also a map of group identity projected into death. Separate sections according to religion, national and military burial grounds, the Tomb of the Unknown Soldier, and family tombs carry the structure of a community, along with its inequalities, into the ground. Poor people have had (and still have) nameless graves, common burial pits, and plots whose rent no one pays, so the inequality discussed in Chapter 5 does not leave a person even after death. For minorities and diasporas, a cemetery can be an anchor of identity abroad, as Muslim sections in European burial grounds and the repatriation of bodies to countries of origin show. And sometimes a cemetery outlives the community itself. Prague’s Jewish cemeteries are now also memorials to a community almost erased by the Shoah, and stone preserves a name even where there is no one left to remember.

Yet the cemetery is also a machine for forgetting. Being buried does not necessarily mean being remembered. There comes the so-called second death, the moment when nobody remembers the deceased any longer. The European system of grave leases takes this forgetting as a matter of course. Once descendants stop paying or the family line dies out, the grave is cleared and the name disappears, usually within one or two generations. Alongside this administrative forgetting there is also violent forgetting: Jewish cemeteries destroyed and plundered, burial grounds abolished and

built over, or gravestones reused as paving. The cemetery thus lives in permanent contradiction: it promises memory while, for the most part, administering oblivion. As we shall see, the same is true of monuments.

The digital environment is now entering this old conflict between memory and forgetting. QR codes linking to online profiles of the deceased appear on gravestones; virtual cemeteries and “digital legacies” that survive on servers are emerging. Presence and absence thereby take on a new, paradoxical form. A person may be physically removed from an expired grave and yet continue to “exist” on a screen, or conversely lie beneath a carefully maintained stone about which nobody knows anything anymore. The architecture of memory is thus expanding into something that cannot be built from stone, and the question of what it means to be remembered remains open.

8.5 Monuments and the Politics of Memory

What a cemetery does for individuals, a monument does for society. It is official memory placed in public space. The historian Pierre Nora explained this through the concept of lieux de mémoire, “sites of memory.” In modern times, when living, self-evidently shared memory (milieux de mémoire) has faded, society, according to Nora, deposits memory in designated places: monuments, museums, anniversaries, and archives. A monument is therefore an admission that without it we would forget.

Because memory is selective, it is also an instrument of power. Who is commemorated and who is not tells us whose story counts. For a long time there were no monuments to the victims of slavery, to colonized peoples, or to women, while victors and military commanders stood in every square. Monuments therefore become battlegrounds. The toppling of statues of colonizers or slaveholders is not vandalism but a dispute over whom public space should honour.

A turning point in the very language of monuments came in Washington in 1982. The Vietnam Veterans Memorial was designed by twenty-one-year-old architecture student Maya Lin. Instead of a hero on a pedestal, there is a wedge of black granite cut into the ground, bearing the names of more than 58,000 fallen service members engraved in chronological order; the polished stone reflects the visitor’s face among the names of the dead. Some veterans initially rejected the design as a “black

scar of shame" and succeeded in having a traditional figurative sculpture group added nearby. Nevertheless, Maya Lin's wall became the country's most visited and emotionally powerful memorial. People touch it, make rubbings of names on paper, and leave objects beside it. The memorial does not celebrate but counts losses; it does not dictate what to feel but compels visitors to read. In doing so, it established a vocabulary from which memorial architecture still draws today: absence, names, reflection, and a cut in the ground instead of a pedestal.

The idea of the counter-monument followed this line, a term identified by James E. Young in the German context. It is a monument that rejects grandiose monumentality and compels active remembrance. The best-known examples are Gunter Demnig's "stumbling stones" (Stolpersteine), small brass paving blocks bearing the names of victims of Nazism, installed since 1992 in pavements outside their last homes. Instead of being concentrated in one large monument, memory is dispersed into ordinary steps through the city, and you stumble upon it on your way to buy bread rolls. More radical was Hamburg's Monument against Fascism (Jochen Gerz and Esther Shalev-Gerz, 1986). A twelve-metre-tall lead-covered column, into which passers-by were invited to scratch their names and messages, was lowered deeper into the ground each time a section had been filled with writing, until it disappeared entirely in 1993. What remained was a plaque stating that in the end we ourselves must stand up against injustice, because a monument will not do it for us.

Behind the counter-monument lies the unsettling thought that a finished, massive monument may do memory more harm than good. Once remembrance has been "taken care of" in bronze and stone, it becomes tempting to stop remembering. The monument begins to remember on our behalf, and we can comfortably forget. The German debate therefore distinguishes Denkmal (a commemorative monument) from Mahnmal (a monument of warning). Its culmination is Berlin's Memorial to the Murdered Jews of Europe (Peter Eisenman, 2005), a field of 2,711 concrete stelae without a single name or inscription on undulating ground, where visitors lose their bearings and their view. Supporters see in it the disorientation made tangible and the incommensurability of the crime. Critics argue that abstraction without information also permits carefree selfies and picnics among the stelae. Perhaps this unresolved dispute is precisely the most honest condition in which memory can exist. To design a

memorial is also to design a way not to forget, and that is a much harder task than building something large.



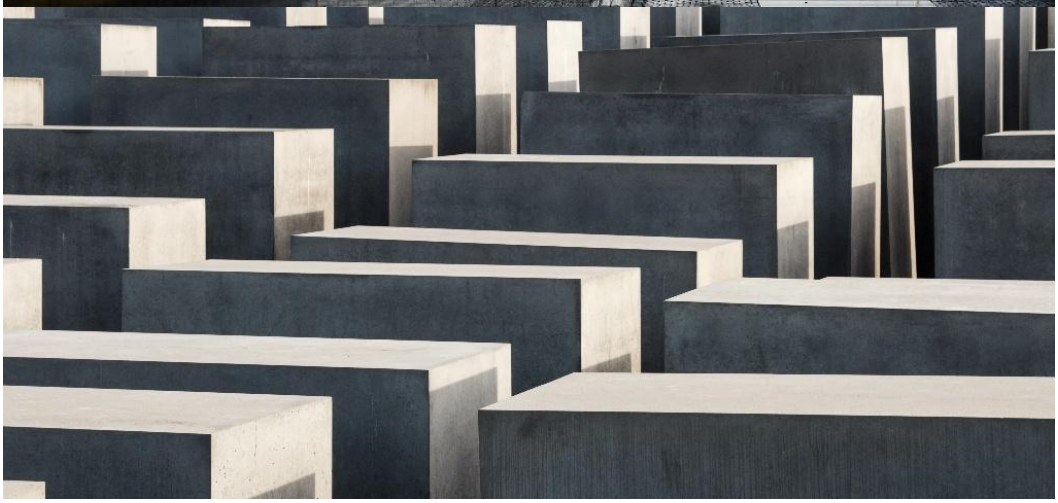



Fig. 8.2. From pedestal to incision, from statue to name, from monument to a small block in the pavement: after 1982, memorial architecture has worked with absence rather than heroic presence.





Fig. 8.3. Every gravestone aesthetic is a quiet argument about status, equality, and memory.

8.6 Ruins and Difficult Heritage

Between memory and forgetting lies the ruin. In Industrial Ruins (2005), geographer Tim Edensor showed that decaying factories and abandoned buildings are more than rubbish. They are places outside the established order, where involuntary memory is released, where a different, raw aesthetic of decay prevails, and where nature returns (also a theme of Chapter 7). A ruin is absence made material, reminding us of what once existed precisely because it is no longer there. It is both memory and forgetting at once, and often also a promise of new, unofficial uses.

The hardest case arises when a building remembers something we would rather forget. Sharon Macdonald named the concept of difficult heritage through the example of Nuremberg, which still lives with the monumental grounds of Nazi Party rallies. The material remains of a shameful past confront society with a dilemma for which there is no neutral answer. Demolition risks forgetting; preservation risks celebration or morbid tourism. Reinterpretation is the most demanding and the most honest response. Demolition, too, says something about memory. Whoever tears down the monuments of one era also decides what the next generation should not remember.

Czech history offers a textbook example. On Prague's Letná hill, Europe's largest group monument stood from 1955 to 1962: the Stalin monument, which was blown up after a change in the political line. A giant metronome now ticks on the empty pedestal. That sequence alone, from colossus to empty platform to timekeeping pendulum, speaks clearly about transformations of memory. After 1989, similar disputes recurred over dozens of communist monuments and, most recently, statues associated with the Soviet army. Demolish them, move them to a museum, or add an explanatory plaque? No solution is innocent, which is precisely why neither architects nor city administrations can avoid making these decisions.

Methodological inset — representing trauma. Places associated with suffering (Terezín, Lidice, Auschwitz, Ground Zero) attract "dark tourism" (Lennon & Foley) and confront both the designer and the visitor with the same ethical question: how can a place bear witness to horror without aesthetically beautifying it into a postcard, sanitizing it until it becomes harmless, or turning it into an attraction? Representing trauma in space is a methodological challenge in its own right, one that recurs throughout this

book: it demands restraint, precision, and respect for victims ahead of the visual impact of a design.

8.7 What This Means for Architecture

The architect cannot avoid death and memory. Architects design cemeteries, crematoria, monuments, museums, and memorials and, above all, often unknowingly decide what will be remembered every time they preserve or demolish something. Demolition erases, reconstruction selects, and a new plaque rewrites. In the spirit of Chapter 2, producing new space usually means unproducing the old space together with its memory. Whether they want to or not, architects are thus custodians of both presence and absence.

Three obligations follow from this. First, honesty about whose memory is commemorated and whose absence is passed over — because memory is selective and bound up with power. Second, humility toward cosmologies other than our own: a cemetery, prayer room, or memorial serves people with different ideas about death and the sacred, and good design does not impose its own aesthetic or its own relationship to permanence on them. Third, restraint where a place carries trauma: the impact of the design must give way to respect for the victims. Over all this hangs the tension that this chapter has revealed in the cemetery and that permeates the entire city — the tension between permanence and temporariness: between the desire to build for eternity and the reality that almost everything is eventually rewritten. The next chapter is devoted to this tension.

8.8 How to Read Presence and Absence in Space

The eighth set of questions for reading space concerns how space deals with death, memory, and what is missing.

Who is commemorated here, and who is conspicuously absent? Whose memory is carried by names and monuments, and whose absence itself says something?

What cosmology prevails here? Does the place assume eternity (an undisturbed grave) or recycling (a lease, a decomposition period)? Burial or cremation? Whose rules have been applied?

What do the gravestones and their arrangement say about values? About status, equality, individuality, relationships with nature, and permanence?

What is remembered here, what is forgotten, and by what mechanism? Whether through an expired lease, demolition, or a rewritten plaque, forgetting is often produced just as memory is.

How does the place deal with trauma? Does it aestheticize it, cleanse it, turn it into an attraction, or allow it to speak with restraint and respect?

Key Concepts of This Chapter

Presence × absence — the city is also shaped by those who are not present: the dead, demolished buildings, and events both commemorated and forgotten. Absence is an active force, not merely an emptiness.

The dominion of the dead (R. P. Harrison) — humans are "burying" creatures. The dead establish the community, and the city rests on a pact between the living and the dead.

The cemetery as heterotopia (Foucault) — an "other space" with its own time (heterochrony), whose function shifted over time (church to city edge; in-ground burial to columbarium).

Cosmological conflict — incompatible ideas about death, the body, and the afterlife projected onto the cemetery: burial versus cremation, eternal rest versus reuse (lease, decomposition period), and the orientation of graves.

Second death / forgetting — the moment when nobody remembers the deceased anymore. The European system of grave leases and decomposition periods makes forgetting a rule rather than a failure.

Lieux de mémoire (P. Nora) — "sites of memory." In modernity, as living memory fades, memory is externalized into designated places (monuments, museums, anniversaries, archives).

Counter-monument (J. E. Young) — a monument that rejects monumentality and transfers the work of remembering to the viewer. Examples range from Maya Lin's wall through the disappearing Hamburg column to the Stolpersteine.

Difficult heritage (S. Macdonald) — material remnants of a shameful past and the dilemma of whether to demolish, preserve, or reinterpret

them. This includes “dark tourism” (Lennon & Foley) and the ethics of representing trauma.

Questions for Reflection

Compare the Old Jewish Cemetery with the system of leasing grave plots. Explain how two cosmologies of death lead to two entirely different spatial and landscape solutions.

Find a “missing monument” in your city: an event or group that is not commemorated. Why is it absent, and what would change if such a monument were created?

Many initially rejected Maya Lin’s wall as a “black scar of shame”; today it is a model of memorial architecture. Did the memorial change, or did society? What follows from this for current disputes over monuments?

Berlin’s field of stelae bears not a single name, while the Stolpersteine bear only names. Compare the two strategies. What can each achieve, and what does each risk?

Compare the ecological footprint of burial in the ground, cremation, and natural burial. What cosmological and aesthetic obstacles prevent the spread of the “greener” options?

Give an example in which demolishing (or, conversely, preserving) a building became a dispute over what we as a society wish to remember.

Field Exercise 8: Reading a Cemetery

Visit a cemetery and read it as a document. Record which cosmologies meet there (burial or cremation, separate sections by religion, grave orientation); how the aesthetics of gravestones speak of status, equality, and period; where forgetting is visible (cancelled or abandoned graves, empty spaces left after clearance) and where, by contrast, persistent remembrance is evident; and who is missing. Finally, note which of these observations could be carried over into the design of any “site of memory.” The output should be one to two pages.

Sources and Recommended Reading

Core of the chapter:

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Act No. 256/2001 Coll., on funeral services — rental of a burial plot and the period required for decomposition. The Terezín Memorial as an example of “difficult heritage”; Pavel Janák’s crematorium in Pardubice (a national cultural monument).

CHAPTER 9

Permanence and Temporariness

Strategies, Tactics, and the Unfinished City

“Tactics are the art of the weak.”

— Michel de Certeau, The Practice of Everyday Life (1980)

“Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.”

— Jane Jacobs (1961)

9.1 The Ideology of Permanence

Architecture is a discipline of permanence. Vitruvius’s triad already places firmness (firmitas) alongside utility and beauty. The professional ethos values buildings that endure for generations, and the discipline’s ultimate gesture remains the monument or the completed regulatory plan. There are good reasons for this orientation, because buildings are expensive and stand for a long time. But it also leads to a tendency to regard a finished, stable state as the ideal and every kind of changeability as a shortcoming that needs to be “resolved.”

The preceding chapters have repeatedly undermined this assumption. Chapter 2, drawing on Doreen Massey, showed space as a process that is never finished; Chapter 8 showed that even the cemetery, a seemingly eternal place, largely only pretends to be permanent and is in fact continually rewritten. This chapter examines the relationship between the permanence of the form created by the architect and the temporariness of the life that inhabits it. To fix a form is also to exercise power. Whoever decides what is “finished” and permanent thereby closes off the future possibilities of others. Two classic works provide concepts with which to

think about this relationship: Michel de Certeau's writing on everyday life and Jane Jacobs's book on the life of great cities.

The contrast between permanence and temporariness is, moreover, more of a continuous spectrum than a sharp boundary. In How Buildings Learn (1994), Stewart Brand showed that no building is wholly and uniformly permanent. It consists of layers that change at different rates. The location of the site and the load-bearing structure hardly change at all; the envelope and technical services age slowly, whereas the internal layout and furnishings change quickly. A building is thus a process unfolding on several timescales at once. Good design takes this layering into account and does not bind the slow layers to the fast ones. Bad design ignores it, and therefore becomes obsolete all at once.

9.2 De Certeau: Strategies and Tactics

In The Practice of Everyday Life (1980), Michel de Certeau introduced the distinction on which this discussion rests: the difference between strategy and tactic. Strategy is the calculation of a power that has its own "proper place" (lieu propre) — an institution, property, or plan. From this place it organizes the surrounding space, surveys it, and controls it; its instruments are the map, the regulatory plan, and the project. A tactic, by contrast, is the art of someone who has no place of their own. It acts in a space arranged by others, and because it cannot remake that space, it seizes opportunities, "makes do," and turns arrangements imposed by others to its own ends. Strategy controls space; tactics have only time at their disposal — the moment, the gap, the opportune occasion.

De Certeau made this distinction famous through the example of walking in the city. The view from above (he wrote about the roof of the World Trade Center) turns the city into a legible map; it is the strategic gaze of the planner. But the pedestrian below does not read the map. With their steps they write a trajectory that the plan cannot capture: taking shortcuts, stopping, making detours. Walking relates to the map as speech relates to language: it is an enactment that bends and circumvents the rules. In the terms of this book, permanent form belongs to strategy, while temporary, improvised use belongs to tactics. Tactics are what life does with the form it has been given, and in this they continue Lefebvre's appropriation and Goffman's "underlife" (Chapters 2 and 3).

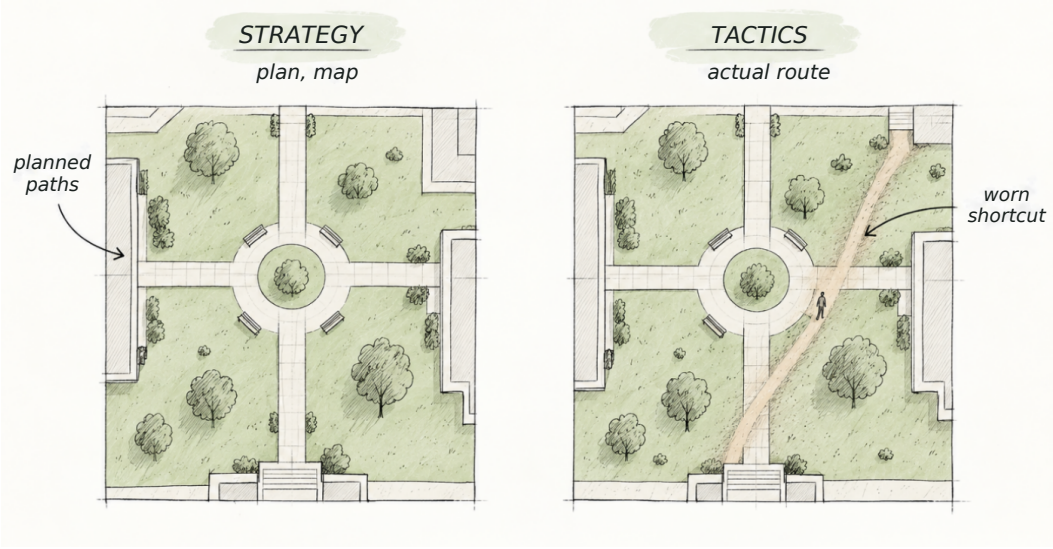

Fig. 9.1. Strategy controls space and draws a map; tactics have only time and write with their own feet.

9.3 Jacobs: An Order That Cannot Be Drawn

Jane Jacobs arrived at the same problem from the opposite direction. In The Death and Life of Great American Cities (1961), she sharply criticized modernist planning, whether Le Corbusier's Radiant City, urban clearance, or Robert Moses's grand redevelopment schemes. In her view, such planning imposed a fixed, single-purpose, definitive order on the city, thereby killing street life. Against the idea of the city as a work that could be designed once and for all, she set the city as organized complexity, a self-organizing system that lives through time and cannot be drawn from above.

Two of her concepts became widely known. The "sidewalk ballet" is the choreography of street life unfolding throughout the day, held together by countless small, unplanned interactions. "Eyes on the street" are the informal surveillance provided by residents and shopkeepers, ensuring safety without cameras or police officers. For our purposes, however, one of the generators of diversity she identified is more important: the need for old, inexpensive buildings. New buildings are costly and can support only established tenants who can pay high rents. Only a mixture of buildings of different ages, with cheap old houses alongside new ones, creates niches for marginal, experimental, and beginning tenants. Diversity is thus made possible by time accumulated in buildings, whereas a neighbourhood built

all at once produces uniformity, however high its quality. Jacobs thereby gives permanence a precise economic dimension. A definitive, completed plan kills the emergent order that can arise only through gradual accumulation and ageing.

Jacobs grounded her critique in a precise epistemological argument. At the end of her book she adopts mathematician Warren Weaver's threefold typology of scientific problems: problems of simplicity (few variables), problems of disorganized complexity (huge numbers of mutually independent elements, manageable through statistics), and problems of organized complexity (many variables interconnected into an organic whole). In her view, modernist planning treated the city either as a problem of simplicity, where a few measures such as density and green-space area suffice, or as disorganized complexity describable by statistical averages of residents. Yet the city is a problem of organized complexity, a system of many interdependent factors that cannot be broken down into independent variables or fixed in a definitive plan. Jacobs thus anticipated later theories of self-organization and emergence.

9.4 Terrain Vague and Loose Space

Catalan architect Ignasi de Solà-Morales explained the value of indeterminacy and incompleteness in his essay "Terrain Vague" (1995). He used the term for abandoned, residual, and indeterminate urban sites: vacant lots, cleared industrial premises, edges, and in-between spaces. The French expression combines the sense of "empty, free, available" with that of "vague, indistinct." Solà-Morales saw in such places a reservoir of freedom and otherness amid an overdetermined city obsessed with performance. The demand for usefulness has not yet mastered them, so they remain open to possibilities. Hence their paradox: as soon as an architect "resolves" and designs a terrain vague, they generally destroy the very indeterminacy that made it valuable.

Karen Franck and Quentin Stevens introduce a related concept in the collection Loose Space (2007). "Loose" space allows unplanned, diverse uses that users appropriate for themselves. Its opposite is "tight" space, anxiously programmed for a single purpose. Looseness—the capacity of space to serve purposes other than those intended—appears on steps where people sit and skateboard, in a square that accommodates both a market and a demonstration, or in a car park transformed into a

marketplace. It is also temporal: space loosens and tightens again according to the time of day, season, and circumstances. Both concepts connect with the “wrong” use discussed in Chapter 1—use other than that anticipated—and with appropriation.

Both concepts confront the designer with the paradox of intervention. The value of terrain vague and loose space lies in their lack of complete definition. They are not fully programmed and leave initiative to users. Yet any proposal to “enhance” them reduces that indeterminacy, since designated functions, street furniture, and operating rules tighten them into rigidity. Such places are related to Foucault’s heterotopias and Clément’s “third landscape” (Chapters 3 and 7), since their contribution likewise consists in standing outside the prevailing order. The task of design here is to preserve indeterminacy. For a discipline accustomed to solving and completing things, this is a very difficult brief.

9.5 Tactical Urbanism and Temporary Use

From these reflections, an explicit movement has emerged over the last two decades: tactical urbanism (Mike Lydon and Anthony Garcia). It uses small, inexpensive, often temporary interventions intended to initiate more lasting change. Examples include pop-up pedestrian zones, parklets (a parking space converted into seating and greenery), temporary crossings, and cycle lanes marked simply with paint. An often-cited example is the transformation of New York’s Times Square. In 2009, the city’s transport department, led by Janette Sadik-Khan, closed part of Broadway to cars and provisionally marked out the area with paint and garden chairs. The cheap, reversible experiment proved successful and later became a permanent pedestrian zone. Here a temporary tactic became a permanent strategy. It also served as a pilot—an experiment in the sense of Chapter 4. The claim that “it will be better without cars” was first tested on a small scale and only then made the subject of permanent investment.

In a broader sense, this also includes temporary use (German Zwischennutzung): the transitional occupation of vacant buildings and plots by cultural activities, gardening, or small businesses. Post-reunification Berlin, full of vacant sites, became its laboratory. The strongest symbol is Tempelhofer Feld, the former airport grounds that Berliners voted in a 2014 referendum to keep open rather than build over. It is a rare case in which the temporary and indeterminate prevailed over permanent

development. A famous Parisian counterpart was Les Grands Voisins at the former Saint-Vincent-de-Paul hospital, where, between 2015 and 2020 and before redevelopment, accommodation for people in need, workshops, studios, and public life found a home. Here temporariness was explicitly agreed upon as an interim period destined to end. Temporary use animates neglected places, tests possibilities, and persuades. But it risks commodification: the provisional becomes an aesthetic ("pop-up" as a brand), and temporary cultural use often merely "warms up" a location for a later development project.

Tactical urbanism must nevertheless be examined both critically and conceptually. Its methods have roots in the informal and "insurgent" city (Jeffrey Hou): improvised marketplaces, self-help construction, and appropriations that in many cities of the Global South are a necessity, not a lifestyle (compare Yiftachel's "gray spaces," Chapter 5). When municipal authorities adopt these practices and professionalize them into methodologies and manuals, the tactic of the weak becomes the strategy of the powerful. A pop-up zone approved by city hall is no longer de Certeau's tactic without a place of its own. It is an instrument of power that has learned to look playful and temporary. That is not in itself reprehensible, and the results are often good. It is necessary, however, to say honestly who is actually acting here and for whose benefit.

The longest experiment in temporariness, meanwhile, has been running in Copenhagen. Christiania, a complex of abandoned barracks occupied in 1971 and proclaimed a "free town," survived half a century in legal limbo. The state tolerated it, repeatedly threatened eviction, and its residents governed it through their own assemblies. It was a gray space (Chapter 5) in the middle of a wealthy European metropolis. Only after 2011 did the state allow residents to purchase the land through a common foundation. The tactic thus became institutionalized without being swallowed by a developer, though at the cost of mortgages, rules, and some of its former freedom. Alongside disappearance and commercialization, the story therefore has a third possible ending. Temporariness can be put into a contractual form and handed over to those who lived it. Whether what made Christiania a different kind of place has also survived remains an open question. The following Czech case poses precisely this question.

9.6 Karlín Barracks: Temporariness and Its Limits

The Prague case brings together both sides of temporariness. The Karlín Barracks, a nineteenth-century neoclassical complex, served the army until 2008. They then stood empty for almost ten years because the state was unable to sell them, becoming a typical terrain vague. In 2017, the Ministry of Justice lent them free of charge to an association around the “cultural developer” Matěj Velk. He gradually transformed the courtyard and smaller buildings into a popular cultural center with an open-air cinema, concerts, and cafés. This was appropriation from below in de Certeau’s sense: a tactic that occupied an empty place.

Then strategy made itself heard. In 2024, the building authority ordered part of the complex to close. The interior spaces had not been approved for cultural and food-service operations, and the zoning plan classified the complex as an area for “defense and security purposes,” not cafés and concerts. A change to the zoning plan finally permitted a limited reopening, and even then only in the courtyard and on a provisional basis. In the meantime, the city took over the property and is preparing an extensive reconstruction (housing, a cultural center, a technology park, or a school are under consideration). The free loan became a paid lease for a limited period. The tactic of bringing the place back to life ran up against the slow but relentless order of zoning and occupancy approval. Temporariness itself ultimately became only a phase in the long-term increase in the land’s value, much as on the river embankment (Chapter 2) and the High Line (Chapter 7).

Research on temporary uses in Berlin coined the term pioneer for this shift. A temporary user gives a place cultural appeal and thereby market value, from which someone else later profits. Cultural and community activities, themselves usually precarious and poorly funded, thus involuntarily become the advance guard of property valorization. This mechanism was described at length by critics of Richard Florida’s “creative city.” The Karlín Barracks fit this pattern. Temporariness rarely remains merely temporary and is usually drawn into a longer story about who ultimately gets the place.

Question about the case. Karlín Barracks, the river embankment, and the High Line began as temporary appropriations from below and were gradually absorbed by established order—regulation, rent, developers; Copenhagen’s Christiania, by contrast, bought itself into its residents’ own

hands. Is every successful tactic therefore destined to become a strategy, thereby losing precisely what brought it to life? Could temporariness be designed to remain temporary—without ending either in disappearance or commercialization?



Fig. 9.2. Appropriation from below collides with the zoning plan and occupancy approval. The limits of temporariness—and, at the same time, its value for the site's subsequent redevelopment.

9.7 What This Means for Architecture

The architect is trained to create permanence, whereas the life that enters these forms flows through time, improvises, and changes. Four consequences follow for practice. The first is to design the incomplete: to leave room within the form for tactics and freedom of appropriation. Spaces should be able to accommodate more uses than the designer prescribed (the principle of “long life, loose fit,” and open building). The second consequence is to treat temporary use as legitimate. It is neither a failure nor a gap before the “proper” state; transitional, adaptive, and pilot solutions are fully valid tools.

Architectural theory also offers constructive programs for reconciling permanence with temporariness. The “open building” movement, following N. J. Habraken, distinguishes the load-bearing base (supports), which

should endure and belongs to the collective, from the infill, which residents change for themselves in shorter cycles. The building is deliberately divided into a permanent and a changeable layer, so that the form can last without immobilizing its use. This is a practical response to Brand's layering and Jacobs's need for time, because the fixed base leaves ample freedom.

The third consequence is to acknowledge that fixing a form is an exercise of power. Declaring something finished and permanent means deciding on behalf of future users who were not present. Finally, temporariness must not be idealized either. Provisional arrangements bring precarity, are easily commodified, and can become instruments of displacement (Chapters 5 and 7). An honest position therefore sides with neither permanence nor temporariness. We must build so that the form endures while allowing life to write its own temporary trajectories into it.

This also opens the way to the next chapter. So far, we have discussed what is conspicuous in the city: gestures, interventions, pop-up projects, visible tactics, and visible forms. Yet the city's permanence is sustained to a large extent not by grand gestures but by quiet, unobtrusive, never-ending work: maintenance, repair, cleaning, and care. Chapter 10 turns to this invisible underside of urban life, without which every form, permanent or temporary, would fall apart within months.

9.8 How to Read Permanence and Temporariness in Space

The ninth set of questions for reading space concerns the relationship between fixed form and changing use.

What is fixed here, and by whom? Which form has been declared "finished" and permanent, and whose future possibilities have thereby been closed off?

Where does strategy end and tactic begin? How do people use a place differently from what was planned, and what do they negotiate through doing so?

Is this space "tight" or "loose"? Does it allow only a single prescribed use, or does it leave room for unplanned appropriation?

What happens to indeterminacy here? Is terrain vague regarded as a defect to be “resolved,” or as a value that an intervention might destroy?

Whom does temporariness serve? Is it an instrument of bottom-up appropriation, a test (pilot), or a way of “warming up” an area for future commerce and displacement? And could it be secured contractually for the benefit of those who live it, as in Christiania?

Key Concepts of This Chapter

Ideology of permanence — architecture’s tendency to regard a permanent, “finished” form as an ideal and changeability as a deficiency. Yet fixing form is an exercise of power that closes off future possibilities.

Strategy × tactics (M. de Certeau) — strategy is the calculation of power that has its own “proper place” and organizes space from above (map, plan). Tactics are the art of the weak, who have no place of their own, act in someone else’s space, and make use of time and opportunity.

Organized complexity (J. Jacobs) — the city as an emergent, self-organizing order that lives in time (“sidewalk ballet,” “eyes on the street”) and cannot be drawn from above. Diversity is also sustained by old, inexpensive buildings: time accumulated in the built environment.

Building layers (S. Brand) — a building as a set of layers renewed at different speeds (site, structure, skin, services, space plan, stuff). A design that does not bind these layers together ages gradually, part by part.

Terrain vague (I. de Solà-Morales) — indeterminate, abandoned residual places as reservoirs of freedom and possibility. Their paradox is that designing them usually means destroying their indeterminacy.

Loose space (Franck & Stevens) — a space’s capacity to be appropriated for uses other than those intended. Its opposite is “tight,” single-purpose programmed space.

Tactical urbanism (Lydon & Garcia) — small, inexpensive, often temporary interventions intended to initiate lasting change (pop-up zones, parklets, pilot modifications). Temporariness is a test and a demonstration.

Temporary use (Zwischennutzung) — transitional occupation of vacant places that animates, tests, and persuades. But it risks commodification and the role of a “pioneer” who warms up an area for a developer.

Questions for Reflection

Using a specific place, explain where the boundary lies between de Certeau's strategy (planning, regulation) and tactic (actual use). Who has a "proper place" here, and who improvises?

Jacobs argues that diversity is sustained, among other things, by old, inexpensive buildings. Why is this an argument about time, and what happens to diversity when an entire neighbourhood is "completed" all at once with new construction?

Find an indeterminate residual place, a terrain vague, in your city, and consider whether and how it could be "designed" without losing what makes it valuable.

Christiania moved from occupation to ownership; the association at Karlín Barracks moved from borrowing the premises to becoming a fixed-term tenant. Compare the two trajectories. What determined the difference, and what did each community gain and lose?

Karlín Barracks, the river embankment, Times Square, Tempelhof: which of these temporary uses became permanent, which disappeared, and which continue? And what determined those outcomes?

Field Exercise 9: A Map of Tactics

Choose one regulated public place and, over a period of time (for example, an hour), record how it is used differently from what was planned: where people sit away from benches, where informal shortcuts have been worn into the ground, what railings, steps, or window ledges are used for, and where informal trade or play appears. Label each observation either "strategy" (what the plan prescribed) or "tactic" (what people do with it). Finally, propose a single modification that would make the place "looser" without once again constraining it to one purpose. The output is an annotated plan.

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Core of the chapter:

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CHAPTER 10

The Visible and the Invisible

Infrastructure, Maintenance, and Care

"The invisibility of functioning infrastructure becomes visible only upon breakdown."

— Susan Leigh Star (1999)

"Care is everything we do to maintain, continue, and repair our world so that we may live in it as well as possible."

— Berenice Fisher and Joan Tronto (1990)

10.1 The Hidden Side of the City

The previous chapter ended with the observation that the city endures not through grand gestures but through quiet, never-ending work. This chapter makes that hidden side its subject. The city runs on extensive systems such as water supply and sewerage, electricity and heat, data networks, transport, and waste collection, and these are designed so that no one notices them. We turn on the tap, press a switch, flush the toilet. What happens behind the wall and beneath the pavement remains outside our field of vision. Added to this hidden technology is hidden labour: cleaning, repairs, maintenance, and care, without which every form would fall apart within months.

Sociology has a sensitive set of tools for this side of the city because it has always been interested in what is taken for granted. The boundary between the visible and the invisible expresses a judgment, not merely a description. What is visible tends to be valued, funded, and attributed to authors. What remains hidden tends to be undervalued and overlooked until it stops working. Two strands of thought shed the most light on this hidden side:

the study of infrastructure, pioneered by Susan Leigh Star, and the more recent turn toward maintenance, repair, and care.

10.2 Star: The Ethnography of Infrastructure

In her foundational article “The Ethnography of Infrastructure” (1999), Susan Leigh Star proposed taking infrastructure seriously as a sociological subject and listed its characteristic features. Infrastructure is relational. It has no meaning as a thing in itself; it is always infrastructure for someone and for some activity. It is embedded in other structures and learned as part of membership in a community, because users become familiar with it as they become inhabitants. Above all, it is transparent. It recedes into the background and becomes a backdrop that is present without our noticing it. From this follows its best-known characteristic: it becomes visible only upon breakdown. As long as water flows and the metro runs, infrastructure seems not to exist. When a failure occurs, it suddenly becomes the most conspicuous thing in the city.

Star derived a methodological programme from this. If we want to understand the city, we must study precisely what is boring and backstage (standards, classifications, connections, maintenance schedules) and pay attention to the invisible work overlooked by the “grand narrative” of the city. Infrastructure is, after all, a collection of frozen decisions. The route of a network, who is connected and whom the network bypasses, and which standard became binding are social and political choices made in the past that have hardened into apparently technical necessities. Reading infrastructure means thawing out those choices retrospectively.

Together with Geoffrey Bowker, Star extended this perspective to infrastructures of classification (the book Sorting Things Out, 1999). Classification, too, is a hidden infrastructure with consequences. Address systems, postal codes, zoning-plan categories, classifications of buildings and uses are grids that decide what belongs where and what can even be imagined. When a person or place does not fit into such a grid, what the authors called torsion (twisting) occurs. Reality has to bend to fit the prescribed box. Thus even seemingly innocent categories shape the city. Many a dispute that appears technical (which zone a building falls into, whether it is a “temporary structure”) is actually a dispute over classification.

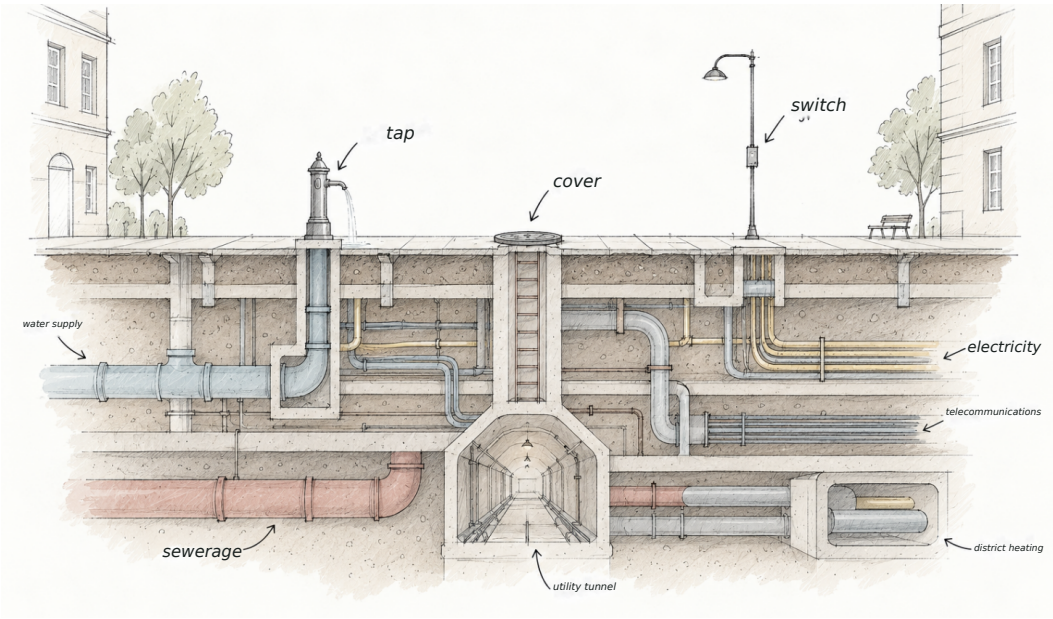

Fig. 10.1. Infrastructure recedes into the background and emerges only when it breaks down. What we see is a tiny fraction of what supports us.

Question about the case. During the 2002 flood, the Prague metro—a network usually so taken for granted that no one paid attention to it—became overnight the most visible and most discussed object in the city. It was flooded and taken out of service for months (according to Starová, infrastructure becomes visible upon breakdown). What things you depend on every day do you become aware of only when they stop working? And who actually does the work that keeps them running, and how is that work valued?

10.3 The Politics of Infrastructure

The fact that infrastructure freezes decisions has direct consequences for justice. In Splintering Urbanism (2001), Stephen Graham and Simon Marvin described the disintegration of the “modern infrastructural ideal”: the idea of a unified public network equally accessible to everyone. Fragmentation is taking its place. Infrastructure is stratified into premium, seamless, reliable services for the affluent (fast lanes, private networks, premium data connectivity, gated developments with their own services) and services that are bypassed, underfunded, or absent for the poor. Connection to water, sewerage, high-quality internet, or reliable transport is therefore no longer taken for granted. It becomes a dividing line along which the inequality described in Chapter 5 is reproduced, this time concealed in network routes and in the places where networks do not go.

Anthropologist Nikhil Anand showed what life along this line looks like in Mumbai (Hydraulic City, 2017). There, water flows only during certain time windows and at fluctuating pressure. Who receives it and when depends on valves, pumps, officials, and political interventions. Anand coined the term hydraulic citizenship for this. Residents of informal neighbourhoods must constantly demand, maintain, and defend their connections—and with them the recognition that they belong to the city. Pressure in the pipes is literally a measure of citizenship. Where the network is insufficient or deliberately absent, tanker trucks and middlemen take over, and the poor pay many times more per litre of water than the connected middle class. Infrastructure ceases to be a backdrop and becomes an everyday political arena. This is an extreme but instructive version of what applies everywhere in milder forms.

The universal network was itself a historical achievement. The modern city of the nineteenth and twentieth centuries took shape precisely through the construction of public water supplies, sewerage systems, and lighting, which were meant—at least ideally—to be available to all. The sanitary reform we encountered in the relocation of cemeteries away from city centres (Chapter 8) had the same character. Being connected meant becoming a full-fledged urban resident. Disconnection, whether due to poverty, informal status, or neglect, is conversely a form of exclusion from urban citizenship. The splintering of networks, privatization, and prepaid metering erode this old ideal and once again make access to basic services dependent on the ability to pay.

10.4 The Turn to Maintenance and Repair

A second line of thinking shifts attention from the creation of things to keeping them going. Architecture and technology have long celebrated new things—inventions, innovations, completed buildings—while taking for granted the labour that keeps finished things alive. In their essay “Out of Order” (2007), Stephen Graham and Nigel Thrift argued that smooth functioning is the exception, while constant failure and wear are the normal condition of things. The continuity we take for granted is produced only through repair and maintenance. Steven J. Jackson developed this idea further with the concept of broken world thinking. In his view, the world is always already broken and falling apart. The fundamental work that keeps it habitable is repair, and the repairer, rather than the inventor, should therefore move to the centre of attention.

Out of this perspective grew a movement around the slogan maintainers (Andrew Russell and Lee Vinsel, “Hail the Maintainers,” 2016). It points out that the overwhelming majority of human work and care consists of maintenance, yet this work is more poorly paid, less visible, and often falls to women and members of disadvantaged groups. In “Maintenance and Care” (2018), media theorist Shannon Mattern showed that the same is true of the city. Its daily operation is sustained by an army of cleaners, repair workers, maintenance staff, and caregivers whose work is more successful the less it is seen. The turn to maintenance therefore does more than describe things. It also proposes what—and whom—we should value in the city.

Neglected maintenance has very tangible consequences. Vinsel and Russell speak of a maintenance deficit. Obsession with the new leads to investment in spectacular new buildings while ageing pipes, bridges, and networks are left unrepaired until they collapse, and deferred maintenance becomes an expensive and dangerous disaster. Europe’s darkest reminder is Genoa’s Morandi Bridge. On 14 August 2018, during a storm, a two-hundred-metre section of the motorway viaduct collapsed with vehicles on it, killing 43 people. The investigation uncovered years of postponed repairs to corroded stays, warnings that had been underestimated, and disputes over who should pay to maintain the privately operated motorway. Within two years, Italy built a new, elegant bridge designed by Renzo Piano. Money, political will, and acclaim can always be found for a new structure, but not for maintaining the old one. The paradox of invisibility is cruel: maintenance

succeeds precisely when nothing happens, which makes it easy to economize on. Its absence announces itself only through catastrophe. Architecture that thinks only about the final inspection and an impressive photograph helps create this deficit.

10.5 Maintenance as Care

The final step is to recognize maintenance as a form of care. Feminist care ethics draws on the well-known definition by Berenice Fisher and Joan Tronto: care is everything we do to maintain, continue, and repair our world so that we can live in it as well as possible. Under this definition, maintaining infrastructure, caring for people, and looking after the environment belong to a single category. It also becomes clear why care is undervalued. It has long been associated with women's unpaid or poorly paid labour of social reproduction (Chapter 6), and the more successful it is, the less visible it becomes. María Puig de la Bellacasa has also shown that care is not confined to people. We can—and must—care for soil, water, and the city's nonhuman fellow inhabitants as well, thereby returning to Chapter 7.

The pandemic showed that this is more than an academic concept. The "essential workers" on whom society depends were, to a large extent, precisely people doing maintenance and care—drivers, cleaners, caregivers, refuse collectors—who had previously been almost invisible and poorly paid. Star's rule applies to work just as it does to pipes, because work too becomes visible only when it stops. To understand maintenance as care is therefore to see, behind a technical expense, an ethical and political relationship with the people, things, and environments whose continued existence depends on it.

Care also has a politics of distribution. Joan Tronto identified a phenomenon she called privileged irresponsibility. Those who benefit from care often do not have to perform it themselves and can therefore conveniently forget about it. In the city, this means that those who enjoy a clean, functioning, well-maintained environment rarely know whose labour produces it. This ignorance is a privilege, not an accident. Making care visible is therefore also a question of justice, because it disrupts privileged irresponsibility.

10.6 Who Cares for the City

Who, then, performs this hidden work? At the professional level, it is the personnel whom architecture likes to overlook: the cleaner, maintenance worker, gardener, refuse collector, and dispatcher. Much of their knowledge is tacit and experiential. We will not find it in a manual; it is passed on through participation in what Jean Lave and Étienne Wenger called communities of practice. These people are co-authors of the life of a building just as much as its designer, because they determine whether the work will still serve its purpose after many years or fall into disrepair. Architecture that fails to take them into account and designs an inaccessible gutter, a façade that cannot be cleaned, or a storeroom too small for a trolley makes their work harder and thereby shortens the life of its own creation.

Alongside paid maintenance there is also civic care, performed voluntarily by people from below. It has a long tradition in the Czech lands. Beautification societies brought together citizens who looked after the appearance and condition of public space, planted trees, maintained cleanliness, and restored small monuments. The first was founded in Kutná Hora in 1861, and by the beginning of the twentieth century there were hundreds of them in the Czech lands (237 around 1904). The communist regime dissolved their federation in 1951, but today this tradition is being revived in dozens of municipalities. Some revived societies are very concrete in their activities. In Vrchlabí, every planted rosebush has its own “patron” who cares for it. Alongside them are community gardens and guerrilla gardening, related to the tactics discussed in Chapter 9. Civic care differs from professional maintenance in that it arises not from duty or profit but from a relationship to a place. Care is not merely a service, but also a way of feeling at home in the city.

Civic care, however, also has its limits and ambiguities. The communist regime did not dissolve the federation of beautification societies in 1951 by accident. Autonomous, grassroots care for shared space is an expression of functioning civil liberties, and authoritarian power therefore sees it as competition. But voluntary care can also be abused. The state or municipality may shed responsibility and shift cleaning, maintenance, and social services onto the shoulders of unpaid citizens (such criticism was directed, for example, at the British “Big Society”). Voluntary care thus

complements public infrastructure of care; it must not replace it or serve as an alibi for austerity cuts.



Fig. 10.2. The city endures not through grand gestures, but through continuous, undervalued, and often invisible work.

10.7 What This Means for Architecture

Bringing these two lines of thought together produces an image of the city very different from the pictures in architecture magazines. It is held together far more by hidden networks and continuous maintenance and care—much of it performed by undervalued and overlooked people—than by spectacular new buildings and grand gestures. Four consequences follow for the designer. The first is to design with maintenance and care in mind. The life of a building is ensured by those who will clean, repair, and water it, and the design should make them co-authors rather than victims. “Designed for care” does not mean the same as “maintenance-free.” More demanding care is sometimes acceptable if it is visible and valued.

In practical terms, this means treating maintenance as part of the brief rather than leaving it as a later concern for the operator. One must account for whole-life-cycle costs, not merely the purchase price; choose materials and details that can be cleaned, repaired, and replaced in layers (in the

sense of Brand's layering discussed in Chapter 9); and prefer the renewal and adaptation of what already exists over demolition and new construction. Caring for what already exists is cheaper and gentler on both the environment and the memory of the place (Chapters 7 and 8). Maintenance thus moves from the margins of the project to its centre.

The second consequence is to consider making things visible. There is a prejudice that good infrastructure is invisible. Yet where revealing a hidden network or labour educates, empowers, or establishes justice, visibility can be a virtue—whether in legible water management, exposed service installations, or recognition of those who provide care. The third consequence is to attend to the politics of access and ask whom the network bypasses and where it splinters, because infrastructure is a vector of inequality. The fourth is to reconsider the ethos of the profession and move from the heroic creator of the new to the humble steward of what endures. An architect does not begin on a greenfield site and does not finish with final building approval. They enter an unfinished, worn, inhabited reality that must continue to be cared for.

This chapter has shown that invisible systems sustain the city. The next chapter adds a troubling postscript: the same systems that maintain the city increasingly also monitor and manage it. The sensors, cameras, and data networks of the "smart city" merge with the infrastructure of maintenance and transform it into an infrastructure of control. We thus move from invisible care to invisible surveillance—to the tension between control and freedom.

10.8 How to Read the Visible and Invisible in Space

The tenth set of questions for reading space focuses on what sustains the everyday functioning of the city without being seen.

What remains invisible here until it stops working? Which systems and what labour sustain everyday operations without anyone noticing?

Who maintains it, and how are they valued? Who cleans, repairs, waters, and watches over it? Is their work visible, paid, and respected?

Is infrastructure equally accessible to everyone? Where has the network "splintered" into premium and bypassed parts (splintering), and whom does this exclude from citizenship of the city?

Does the design account for its own maintenance? Is the building designed so that it can be cared for and repaired, or merely so that it looks good for a while?

Where would making things visible help? Where would revealing a hidden network or labour educate, empower, or establish justice? And where, by contrast, is it enough for it simply to work unobtrusively?

Key Concepts of This Chapter

Infrastructure (S. L. Star) — relational, embedded, and "transparent" systems that fade into the background, that we learn as part of membership, and that become visible only upon breakdown. Social and political decisions are frozen into them.

Splintering urbanism (Graham & Marvin) — the fragmentation of once-universal public networks into premium ones (for the affluent) and bypassed ones (for the poor). Here infrastructure is a vector of inequality.

Hydraulic citizenship (N. Anand) — belonging to the city negotiated through connection to the network. Pressure in the pipes becomes a measure of recognition (Mumbai).

The turn to maintenance (S. J. Jackson, "broken world thinking"; Russell & Vinsel, "maintainers") — a critique of the cult of innovation. The world is constantly falling apart, and repair and maintenance hold it together: work that is undervalued, often gendered, and poorly paid. A maintenance deficit ends in disaster (the Morandi Bridge).

Ethics of care (Fisher & Tronto; Puig de la Bellacasa) — care as "everything we do to maintain and repair our world." Maintenance is care; it is gendered and devalued, and extends to the nonhuman world as well. This also includes the "privileged irresponsibility" of those who benefit from care without performing it.

Communities of practice (Lave & Wenger) — tacit, experiential knowledge of maintenance, passed on through participation in practice and absent from manuals. Maintenance workers are co-authors of a building's life.

Beautification societies — a Czech tradition of voluntary civic care for public space (the first in Kutná Hora in 1861; the association was suppressed in 1951 and is now being revived). Here care is a civic practice that goes beyond a paid service.

Questions for Reflection

Following Star, name three infrastructures on which you depend every day but do not notice. What decisions about who is connected and whom the network bypasses has each of them "frozen" into itself?

Why is it easier to find money and glory for a new building than for maintenance, as the Morandi Bridge case demonstrated? Propose a way to make the "maintenance deficit" visible before it announces itself through catastrophe.

"Hail the Maintainers": why is maintenance valued less than innovation, even though there is far more of it? How would budgets and architecture change if the opposite were true?

Care is gendered and invisible (Chapter 6). Who maintains the building in which you study or work, and what do you know about them?

Beautification societies care for spaces from below and without payment. How do they differ from professional maintenance and from tactical urbanism (Chapter 9), and where do they complement each other?

Field Exercise 10: Maintenance Audit

Choose one building or public space and investigate what happens behind the scenes. Who cleans, repairs, waters, removes snow, and collects waste there, and how often? Approximately how much does this cost? Where are the spaces designated (or forgotten) for these activities, such as cleaning closets, technical rooms, container storage areas, or access to the façade? Record what was designed with maintenance in mind and what was designed despite it. Finally, propose one modification that would make caring for the place easier while also making it more visible and more valued. Summarize your findings in one to two pages.

Sources and Recommended Reading

Core of the chapter:

Star, S. L. (1999). “The Ethnography of Infrastructure.” American Behavioral Scientist, 43(3). On the characteristics of infrastructure and invisible work; cf. Bowker, G. & Star, S. L. (1999). Sorting Things Out. Cambridge, MA: MIT Press.

Graham, S. & Marvin, S. (2001). Splintering Urbanism. London: Routledge. On the fragmentation of networks and unequal access.

Anand, N. (2017). Hydraulic City: Water and the Infrastructures of Citizenship in Mumbai. Durham: Duke University Press. On hydraulic citizenship.

Jackson, S. J. (2014). “Rethinking Repair.” In Media Technologies (MIT Press). And Graham, S. & Thrift, N. (2007). “Out of Order.” Theory, Culture & Society, 24(3). On the turn toward maintenance and repair.

Maintenance and Care (Open Access)

Russell, A. & Vinsel, L. (2016). “Hail the Maintainers.” Aeon — freely available. Mattern, S. (2018). “Maintenance and Care.” Places Journal — freely available (open access).

Fisher, B. & Tronto, J. (1990). “Toward a Feminist Theory of Caring”; Tronto, J. (2013). Caring Democracy; Puig de la Bellacasa, M. (2017). Matters of Care — on the ethics of care. Lave, J. & Wenger, E. (1991). Situated Learning — communities of practice.

Czech Sources and Cases

The tradition of beautification societies (from 1861, Kutná Hora; now being revived) — voluntary civic care for public space. The 2002 flood and the Prague metro as an example of a failure that makes infrastructure visible.

On the Morandi Bridge collapse (Genoa, 14 August 2018): the final reports of the Italian investigation and overviews in the professional press; Renzo Piano’s new viaduct (2020) as a counterpoint between visible new construction and invisible maintenance.

CHAPTER 11

Control and Freedom

Surveillance, Data, and the Smart City

"In disciplinary societies one was always starting again; in societies of control one is never finished with anything."

— Gilles Deleuze (1990)

"Surveillance capitalism claims human experience as free raw material."

— Shoshana Zuboff (2019)

11.1 From Care to Surveillance

Chapter Ten ended with the hidden systems and continuous maintenance that hold the city together. But the same systems that maintain the city increasingly also monitor and manage it. Cameras, sensors, readers, chip cards, and the data networks of the "smart city" merge with maintenance infrastructure and turn it into an infrastructure of control, as invisible and taken for granted as the water supply. This chapter poses a classic political question, but relocates it into space. Where does legitimate management end and surveillance begin, and what happens to freedom in the process?

Over recent decades, these issues have been addressed by an extensive interdisciplinary field, surveillance studies, which connects sociology, geography, law, and computer science, and whose concepts I will draw upon. Two figures frame the discussion. The philosopher Gilles Deleuze announced a transition from disciplinary society to the society of control; the sociologist Shoshana Zuboff named surveillance capitalism. The theoretical terrain between them needs to be mapped, at least in broad outline.

11.2 From Discipline to Control

The starting point is Michel Foucault, whom we encountered in Chapter Three. The disciplinary society, as he described it, operates through enclosure. Individuals move from one bounded institution to another (school, barracks, factory, hospital, prison), and in each they are shaped and watched. Its culmination is the panopticon, in which the mere possibility of being observed is enough for a person to internalize discipline. Gilles Deleuze argued in his influential “Postscript on the Societies of Control” (1990) that this regime was giving way to something new. In a society of control, the walls disappear. Control becomes detached from enclosed institutions and is continuous, fluid, and ubiquitous, like a modulation that adjusts as it operates.

Deleuze’s concepts have proved prophetic for the digital city. Where discipline needed a gate and a wall, control needs only a code, a chip, and a password, and access is regulated continuously, remotely, and individually. The individual, meanwhile, becomes what Deleuze called a dividual. In place of the indivisible person behind a wall comes a bundle of data, profiles, and scores that can be divided, combined, and sorted at will. The city as a system of enclosures becomes a field of continuous recording in which we move freely and yet remain under constant, if unobtrusive, surveillance.

Control, however, has long since ceased to be limited to watching; it is also embodied in the material substance of design. Oscar Newman, with the concept of defensible space (1972), and subsequently the CPTED doctrine, made architecture an instrument of crime prevention. Space is to be arranged so that residents can exercise natural surveillance and so that it is clear who belongs where. In City of Quartz (1990), Mike Davis showed the darker side of the same approach in Los Angeles. He described a “fortress” city that systematically destroys public space through gated communities, barbed-wire fences, and benches designed to exclude homeless people. Between Foucault’s discipline and Deleuze’s control, then, stands a very concrete craft: design that physically determines who may remain where, and that is itself an exercise of power.

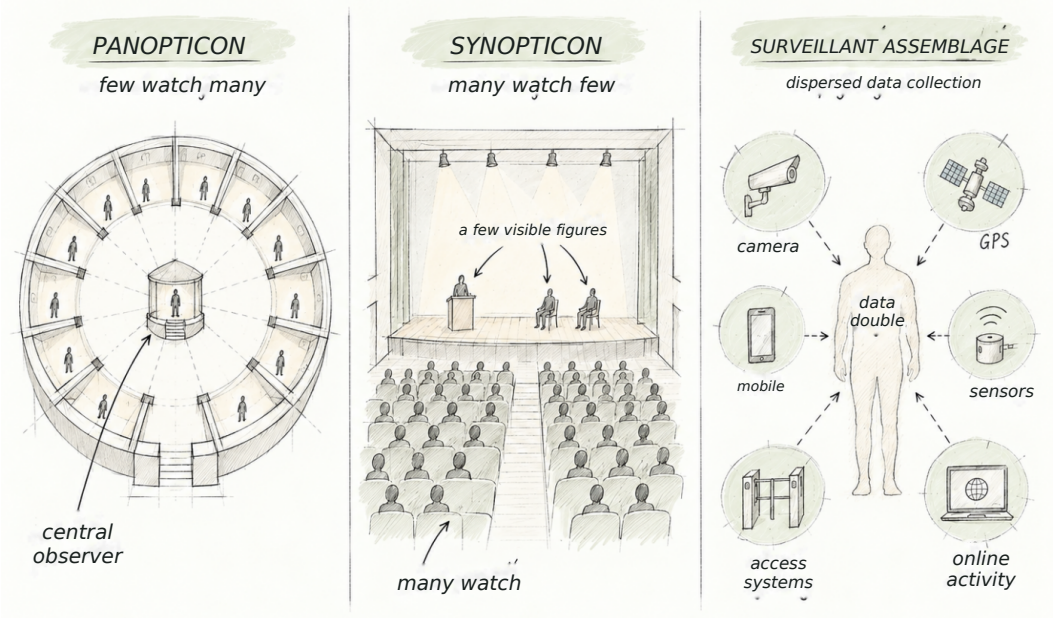

Fig. 11.1. From enclosed discipline to control without walls, in which surveillance is dispersed and continuous.

11.3 Surveillance Studies: Sorting, Synopticon, Assemblage

Between Foucault and Zuboff, surveillance studies developed a range of concepts, each illuminating a different aspect of urban control. The Canadian sociologist David Lyon showed that the essence of surveillance is not so much snooping as social sorting. Collected data divide the population into categories that are then treated differently. This determines who receives a loan, who is stopped by a patrol, who passes through smoothly, and who is delayed. Surveillance thus connects directly to the classification infrastructure (Chapter 10) and unobtrusively drives the inequality discussed in Chapter Five.

The Norwegian criminologist Thomas Mathiesen placed beside Foucault's panopticon (the few watch the many) its mirror image, the synopticon. In the era of mass media, conversely, the many watch the few, and the crowd looks at celebrities, screens, and those at the top. In today's city the two principles intertwine. Canadian sociologists Kevin Haggerty and Richard Ericson described contemporary surveillance as a surveillant assemblage, a dispersed, rhizomatic network of heterogeneous systems. From individual data traces, this network constructs a data double, an abstract profile that

is then acted upon without anyone asking the living person. Oscar Gandy had earlier named panoptic sorting: discriminatory decision-making based on data. Zygmunt Bauman and David Lyon described liquid surveillance. It is dispersed, voluntary, and consumer-oriented, and people disclose more about themselves within it than any regime could ever have compelled them to reveal.

The year 2013 showed that the surveillance assemblage was no theoretical speculation, when Edward Snowden leaked documents from the American NSA concerning the mass collection of communications metadata, direct connections to the servers of global platforms, and data sharing between intelligence agencies. The debate on surveillance thereby shifted from suspicion to documented facts. It also became clear that the city's data traces (phone locations, payments, vehicle movements) flow into an assemblage whose nodes lie far beyond the reach of municipal government. Roger Clarke had already introduced the term dataveillance, surveillance through data, in 1988; the Snowden affair merely gave it empirical substance.

The city also includes border control and security surveillance. French sociologist Didier Bigo described the banopticon, a regime which, rather than disciplining everyone, profiles and excludes the undesirable (migrants, suspects, those deemed ‘risky’), thereby managing global unease. British geographer Louise Amoore showed how decisions at borders and within cities are made according to algorithmic risk. Here people are judged not by what they have done but by what their data profile predicts about them. This anticipation, in which people are acted against on the basis of probability, spills over from borders into the ordinary city in the form of predictive policing and risk scoring.

11.4 Racialized Surveillance

Surveillance studies were long written predominantly by white men from the wealthy Global North, making a voice that broadens this perspective all the more valuable. In Dark Matters: On the Surveillance of Blackness (2015), American theorist Simone Browne showed that surveillance has never been innocent or colour-blind in history. It has always been racialized. The monitoring of Black bodies has a long genealogy, from the registration and branding of enslaved people, through the ‘lantern laws’ of colonial New York that forced Black people to carry a light at night so they could be seen, to today's biometrics and facial recognition.

Browne coined the term racializing surveillance. In her view, surveillance practices do not merely record racial differences; they help produce them through the very choice of whom to subject to control and whom not to. In cities this has immediate effects. Facial-recognition algorithms demonstrably make more mistakes with darker faces and with women. Predictive policing systems repeatedly send patrols to places where arrests have already occurred, thus reinforcing inequality.

The Detroit case of Robert Williams (2020) showed just how concrete this can be. Police arrested a Black father outside his own home because a facial-recognition system had incorrectly matched him to footage from a shop camera. It was the first publicly documented case of its kind, and others followed, almost exclusively involving Black defendants. Surveillance is not a neutral eye. It reproduces, and sometimes deepens, the exclusion discussed in Chapters 5 and 6. Taking ‘world sociology’ seriously here means not overlooking that people experience urban surveillance differently according to skin colour, class, and gender.

Browne is not alone in this critique. She belongs to an influential current of critical data studies that is essential to know today. Ruha Benjamin speaks of the ‘New Jim Code’ (in Race After Technology, 2019): ostensibly neutral technologies that reproduce racial domination beneath a smooth surface. Safiya Noble documented racial and gender biases built into search engines in Algorithms of Oppression (2018), while Cathy O’Neil described how opaque algorithms spread injustice on a large scale in Weapons of Math Destruction (2016). In Automating Inequality (2018), Virginia Eubanks showed that automated systems in welfare benefits, housing, and policing fall hardest on poor people, turning them into inhabitants of a ‘digital

poorhouse.’ All these authors shift attention away from privacy in general toward the question of whom surveillance and algorithms harm most. It is those who were already disadvantaged.

11.5 Surveillance Capitalism and the Smart City

A second foundation for this discussion comes from Shoshana Zuboff. In The Age of Surveillance Capitalism (2019), she argues that a new economic order has emerged which claims human experience as free raw material. Behavioural surplus is extracted from our behaviour and processed into prediction products (predictions of what we will do), which are traded on markets in future behaviour. The goal is not only to predict behaviour but also to stimulate and modify it; Zuboff calls this capacity instrumentarian power. Orwellian totalitarianism ruled through fear and punishment; instrumentarian power works comfortably and unobtrusively, by modifying the environment that surrounds us.

For surveillance capitalism, the city is an ideal hunting ground, and its urban form is the smart-city project. In the solutionist version of the smart city, critically analysed by Rob Kitchin and Adam Greenfield, and whose premise Evgeny Morozov called technological solutionism, every urban problem is translated into data and sensors. Their actual product, however, is often precisely data about inhabitants. The smart city then becomes less a city that serves people better than an interface that extracts value from the city. The relationship between control and freedom thus moves from abstraction into very concrete designs for streets, lamps, and benches, and becomes a matter for the architect.

A complete picture requires placing surveillance and the smart city within the broader theory of the information society. In his trilogy on the network society (beginning in 1996), Manuel Castells argued that power had shifted into networks and that a new space of flows had emerged. It consists of capital, information, and images flowing in real time between nodes of a global network, and this space asserts itself over the older space of places, in which our bodies and neighbourhoods live. The smart city effectively attempts to connect place directly to the space of flows and turn the street into a network node. Decision-making about the city thereby moves away from its inhabitants and into data centres and the headquarters of multinational platforms. The next chapter, on the global and the local, will return to this.

11.6 Toronto, Barcelona, Prague: Three Responses

Three cases illustrate the range of possible responses. At one pole stands Sidewalk Toronto. Google's subsidiary Sidewalk Labs (under Alphabet) proposed Quayside, a district on Toronto's waterfront packed with sensors, heated sidewalks, autonomous transport, and continuous data collection from every corner and even from benches. The project met resistance precisely over data governance. Privacy adviser Ann Cavoukian resigned, the civic movement BlockSidewalk arose, and in 2020 the proposal was abandoned. Critics celebrated it as a ‘victory of democracy over surveillance capitalism.’ The smart city as a private hunting ground for data had been rejected from below.

At the opposite pole stands Barcelona. Under mayor Ada Colau and her chief technology officer Francesca Bria, the city resolved to ‘reverse the smart-city paradigm’: to put citizens and their needs first and technology second. Under a policy of technological sovereignty, it introduced data-ownership clauses into public procurement, promoted open-source software, and launched the DECODE project, intended to return control over data to citizens and make it a data commons, a public good rather than prey. At the same time, the participatory platform Decidim opened the creation of the city's agenda to citizens. Prague lies between these two poles. Its municipal camera system has more than a thousand locations, and in 2019 the police considered supplementing it with facial-recognition software. The mayor publicly rejected the proposal, saying he did not want “Big Brother in the Chinese style,” and the matter was referred to the Office for Personal Data Protection.

Let us look more closely at the authoritarian pole to which the Prague statement refers. China’s social credit system, widespread facial recognition, and “city brain” projects show how far a surveillance assemblage can be taken when it is joined to state power. Space becomes a continuous assessment of behaviour, with direct consequences for access to services, transport, or employment; in Xinjiang, the state has taken biometric control as far as the mass surveillance of an entire ethnic minority. Europe is trying to move in the opposite direction. The EU Artificial Intelligence Act (2024) substantially restricts widespread biometric recognition in public spaces and classifies “social scoring” among prohibited practices. Toronto’s data market, Barcelona’s commons,

Prague's caution, and Chinese scoring thus define the full political spectrum of what a smart city can be.

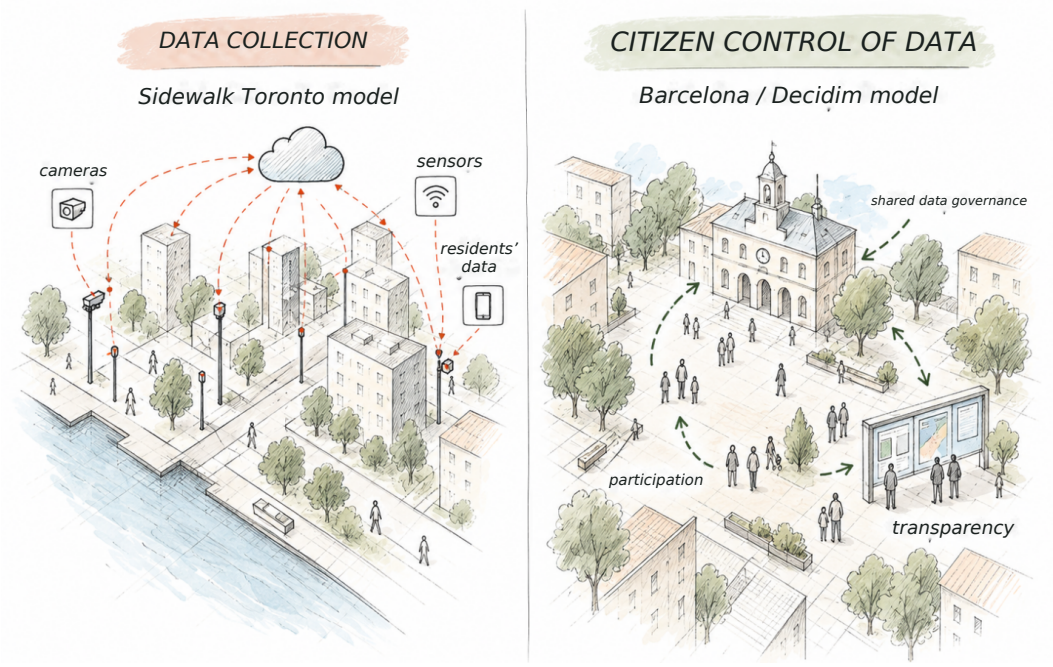

Fig. 11.2. The same technology in the service of opposing politics: the city as a hunting ground for data, or data as a public good.

Question about the case. In 2019, Prague police considered adding facial-recognition software to the city's camera system (more than a thousand locations); the mayor rejected it, saying he did not want "Big Brother in the Chinese style." Where is the boundary between safety and surveillance, and who decides where it lies? Is there evidence that cameras actually reduce crime (Chapter 4), or are they deployed on the promise of safety without measuring the results? And what does the Detroit case of Robert Williams tell us about the cost of an error?

11.7 What This Means for Architecture

Today, surveillance is not added to a finished building afterward; it is built into it—in cameras, readers, access systems, sensors, and “smart” elements decided on by the designer and investor. Whether they want to or not, architects thus become co-creators of a regime of control. Four responsibilities follow. First, design for privacy and opacity where these are needed: not every space must be measured and every movement recorded; the right not to be watched is part of the right to the city. Second, resist the solutionist reflex according to which every problem can be solved by another sensor—and ask for evidence of effectiveness (Chapter 4), rather than settling for a mere promise.

The most literal form of an architecture of control is hostile design (hostile architecture). It includes benches divided by armrests so that people cannot lie on them, spikes and stones on ledges, sloping surfaces, harsh lighting, and music intended to drive away the “undesirable.” These elements do not watch anyone through a camera, yet they still exclude. They govern bodily behaviour by making certain postures impossible (directly recalling Davis’s “fortress” city and Chapter 6 on the body). Whether a homeless person can sleep on a bench is decided not by a law but by a designer. It is a small decision, yet control and freedom confront one another directly in the detail of street furniture.

Third, bear social sorting in mind: a seemingly neutral camera or algorithm affects people differently according to class, skin colour, and gender (Lyon, Browne), and can therefore quietly reproduce inequality. Fourth, regard data as a common good rather than prey: the Barcelona model shows that a smart city can be designed to serve its residents rather than extract value from them. The choice between Toronto and Barcelona is not technical but political—and is imprinted on streets, lamps, and benches just as tangibly as on laws.

This chapter has traced surveillance as power dispersed throughout urban infrastructure. One final step remains, widening the perspective: the data, platforms, and capital behind this control are not local—they flow across the planet and are governed from elsewhere. This opens the subject of the final pair of chapters: the tension between the global and the local, which Chapter 12 addresses.

11.8 How to Read Control and Freedom in Space

The eleventh set of questions for reading space concerns how space watches, sorts, and governs those who move through it.

Who is watching whom here, and who can see it? Is surveillance overt or concealed? Does it target everyone, or only selected people (social sorting)?

What information about people is collected here, and where does it flow? What data does the space capture, who owns it, and who extracts value from it (surveillance capitalism)? Does it end up beyond the city's reach (Snowden)?

Whom does the "smart" solution serve? Does it solve a real problem for residents, or create a new market for data and control (solutionism)?

Is any space left free from surveillance? Are there places where a person remains anonymous and nobody measures them? And do they have a right to such places?

Who decides, and on what basis? Is the deployment of surveillance supported by evidence of effectiveness (Chapter 4), or merely by promises of safety and innovation? And who bears the cost of an error (Williams)?

Key Concepts of This Chapter

Society of control (G. Deleuze) — the transition from enclosed disciplinary institutions to continuous, modulating control through codes and networks, in which the individual becomes a "dividual," broken down into data.

Dataveillance (R. Clarke) — surveillance carried out through data rather than direct observation. The Snowden documents (2013) gave it empirical substance.

Social sorting (D. Lyon) — surveillance sorts the population into categories treated differently, thereby reproducing inequality (compare classification in Chapters 10 and 5).

Synopticon (T. Mathiesen) — the reverse panopticon, in which the many watch the few (through the media). It complements Foucault's panopticon, where the few watch the many.

Surveillant assemblage and data double (Haggerty & Ericson) — dispersed, rhizomatic surveillance assembles a “data double” from data flows, which is then acted upon instead of the living person.

Racialized surveillance (S. Browne) — surveillance has always been racialized (from slavery to biometrics and facial recognition); it not only monitors differences but also helps produce them. The case of R. Williams (Detroit, 2020) is an example.

Surveillance capitalism (S. Zuboff) — human experience is appropriated as free raw material and turned into prediction products. The goal is to predict and also modify behaviour (“instrumentarian power”).

Technological sovereignty / data commons (Barcelona model) — a counter-model in which citizens decide about their own data and data are public infrastructure rather than spoils.

Questions for Reflection

Give three examples of how “enclosed” discipline in the city (walls, gates, reception desks) has changed into “open” control in Deleuze’s sense (chips, apps, codes). What has changed for freedom of movement?

How can an apparently neutral camera or algorithm reproduce the inequality discussed in Chapters 5 and 6? Explain using the case of Robert Williams and the concepts of social sorting (Lyon) and racialized surveillance (Browne).

Compare the visions of the smart city developed in Sidewalk Toronto and Barcelona. Whose interests come “first” in each vision, and how is that reflected in the design?

Find three elements of hostile design in your city that regulate bodily behaviour (armrests on benches, spikes, sloping surfaces). Whom do they exclude, what problem has the city thereby “solved,” and where has the problem moved?

Should there be a right to anonymity and to remaining unmeasured in the city? Where in your city would such a space be, and is it under threat?

Field Exercise 11: Surveillance Map

Walk a selected route through the city and record every element of surveillance: cameras (municipal, private, traffic), card and license-plate readers, sensors, access systems, and places where payment or proof of identity is required. Estimate how many times a person is recorded along the route and by whom (the city, police, a private party, a platform). Mark where surveillance is visible and where it is hidden, and whether there is an alternative route with less surveillance. Finally, for each element, consider whose safety and whose interests it actually serves. Submit an annotated map of the route.

Sources and Recommended Reading

Core of the chapter:

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Zuboff, S. (2019). The Age of Surveillance Capitalism. New York: PublicAffairs. On behavioural surplus and instrumentarian power.

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Haggerty, K. & Ericson, R. (2000). “The Surveillant Assemblage.” British Journal of Sociology, 51(4) — data double. Gandy, O. (1993). The Panoptic Sort. Bauman, Z. & Lyon, D. (2013). Liquid Surveillance.

Browne, S. (2015). Dark Matters: On the Surveillance of Blackness. Durham: Duke University Press — racialized surveillance.

Benjamin, R. (2019). Race After Technology; Noble, S. U. (2018). Algorithms of Oppression; O’Neil, C. (2016). Weapons of Math Destruction; Eubanks, V. (2018). Automating Inequality — critical studies of data and algorithms.

Smart city and case studies:

Kitchin, R. (2014). “The Real-Time City?” GeoJournal, 79; Greenfield, A. (2013). Against the Smart City; Morozov, E. (2013). To Save Everything, Click Here — “technological solutionism.”

Case studies: Sidewalk Labs / Waterfront Toronto (cancelled in 2020); Barcelona — “Towards Technological Sovereignty,” the DECODE project and the Decidim platform (freely available); the City of Prague’s municipal camera system and the debate on facial recognition (2019); the EU Artificial Intelligence Act (AI Act, 2024).

CHAPTER 12

Global and Local

The Global City, Flows, and Planetary Urbanization

“The global always takes place in something local.”

— Saskia Sassen (paraphrase)

“Society has been completely urbanized.”

— Henri Lefebvre (1970)

12.1 The City in a Global Network

The previous chapter ended with the observation that the data, platforms, and capital governing urban control are not local: they flow around the planet, and decisions about them are made elsewhere. The penultimate chapter therefore addresses the relationship between the global and the local. No city today is an island. Even the most local street is interwoven with relationships reaching across the entire world, whether through ownership, capital, materials, labour, tourism, or data. The question is therefore not whether the city is global, but how, and whose, globality takes shape in it, and whom it serves.

This chapter deliberately draws on a broad range of international sociology, because globalization cannot be understood from a single angle. Its foundations are two works: Saskia Sassen’s analysis of the global city and Neil Brenner and Christian Schmid’s thesis of planetary urbanization. Around these we will add theories of flows, cultural globalization, and a perspective from the Global South, without which the picture would remain incomplete and provincial.

12.2 Sassen: The Global City

In The Global City (1991), in which she examined New York, London, and Tokyo, Saskia Sassen overturned a common intuition. In her view, the globalization of the economy does not mean that place ceases to matter. On the contrary, it creates a handful of command nodes in which the management of the world economy is concentrated, especially advanced producer services (finance, law, auditing, consulting) that coordinate dispersed global production. The global city is therefore a very concrete place where the global economy physically takes place: in office towers, stock exchanges, and corporate headquarters.

Sassen's most influential finding, however, concerns society. The global city is deeply polarized. Alongside highly paid professionals, a substantial stratum of low-paid service labour emerges (cleaners, couriers, nannies, hospitality workers), serving this elite and often consisting of migrants. This creates a "new geography of centrality and marginality," in which precisely the most global metropolises depend on the worst-paid and least visible local labour (see Chapter 10). The glamour of the command centre and the precarity of those who serve it are inseparable.

In doing so, Sassen built on John Friedmann's earlier thesis about "world cities" (world city hypothesis, 1986). According to this thesis, cities are ranked in a global hierarchy by the extent to which they command the world economy, and research networks (such as GaWC) continue to compile rankings of this command power. In her later book Expulsions (2014), Sassen also revealed a darker side of the global economy: expulsion. Land grabbing, evictions, and financial mechanisms push entire groups out of housing, and even almost out of society.



Fig. 12.1. The same generic towers in every global city—and beneath them the low-paid, often migrant labour that serves them (Sassen).

12.3 Brenner and Schmid: Planetary Urbanization

The second approach shifts the scale from the city to the entire planet. Neil Brenner and Christian Schmid follow Henri Lefebvre and his thesis of the "complete urbanization of society," arguing that the traditional opposition between city and countryside has lost its validity. Urbanization no longer means merely the growth of cities; it is a process transforming the entire surface of the Earth. Brenner and Schmid distinguish concentrated urbanization (the dense built-up fabric of cities as we normally see it) from extended urbanization. By the latter they mean the networks that supply and connect cities, such as highways, ports, logistics warehouses, mines, plantations, data centres, and energy networks.

From this perspective, the "urban" is not confined to the city: even an apparently rural warehouse beside a highway, a quarry supplying stone, a plantation growing food for a metropolis, or a data centre somewhere in the fields is "urban." There is no "outside" of the city; the entire planet is threaded through by urban metabolism. For the architect, this is a sobering lesson. Their building is not an island but a node in a planetary network of

flows of matter, energy, and labour, and most of that network remains hidden in the hinterland that the project never discusses.

Brenner and Schmid thereby also challenged the popular claim that humanity has just crossed the threshold of “fifty percent of the population living in cities” and entered an “urban age.” In their view, such a figure is misleading because it assumes that we know where the city ends, and that is precisely what is no longer true. For them, the “urban” is not a condition that can be counted but a process that permeates everything. This returns us to Lefebvre’s original question, which will also be central to the concluding chapter. If urbanization is planetary and is produced by the powerful, to whom does the right to the city belong—that is, the right to participate in deciding about the space in which we all live?

12.4 Flows and Scales

Between the scale of the city and that of the planet lies thinking in terms of flows. Manuel Castells (Chapter 11) contrasted the “space of places” with the space of flows, a network through which capital, information, and images circulate in real time and in which power is concentrated. Anthropologist Arjun Appadurai added a cultural dimension. For him, globalization is not uniform homogenization but a set of disparate, often contradictory flows, which he described as five “scapes”: flows of people, media, technologies, finance, and ideas. These flows diverge and collide, so the globalized world is more fragmented and deterritorialized than uniformly homogenized.

Doreen Massey (Chapter 2) offers a corrective. Against nostalgia for an enclosed, “authentic” place, she proposed a global sense of place. Each place, she argued, is a unique node where relationships drawn from around the world meet; the local is thus a particular intersection of the global. With the concept of power-geometry, Massey also pointed out that flows are unequally distributed. Some people lead and control movement, others are swept along by it, and still others remain trapped in immobility. Zygmunt Bauman captured the same inequality in the opposition between the tourist and the vagabond. The global elite moves freely and is welcomed everywhere, whereas the same movement threatens and criminalizes the poor migrant. Mobility has become one of the principal dividing lines of contemporary inequality.

Geographer David Harvey identified the deeper cause of these flows. With the concept of time-space compression, he described how capitalism constantly accelerates turnover and shrinks distances. The world “gets smaller” because capital needs to move ever faster. He then used the concept of the spatial fix to explain why capital periodically flees into the built environment. Surpluses are invested in real estate and infrastructure until these, too, become obsolete and capital moves elsewhere. The waves of construction, booms, and crises that rewrite cities are therefore not accidental. They are the rhythm in which global capital searches for somewhere to settle, and much of what an architect experiences as “demand” is in fact this capital in motion.

Flows, however, carry not only capital and culture but also risks. German sociologist Ulrich Beck spoke of a world risk society and cosmopolitanization. Today’s greatest threats, such as climate change, pandemics, or financial contagion, disregard borders and affect the planet as a whole, although once again unequally. The pandemic and heatwaves demonstrated this (Chapters 7 and 10). Even in a city, safety can no longer be secured locally, behind a wall. It is necessarily shared, and responsibility for it therefore extends beyond the boundaries of a plot, municipality, or state.

12.5 Decentering the Global City: A View from the South

Global city theory has one serious weakness. It was developed from the perspective of New York and London and measures all other cities against them, as though they were merely imperfect echoes. British geographer Jennifer Robinson countered this with the concept of ordinary cities. The overwhelming majority of the world’s cities do not fit the hierarchy of “global cities,” yet they deserve to be understood on their own terms, regardless of what they supposedly lack. Indian-American urban scholar Ananya Roy goes further. She reminds us that humanity’s urban future is unfolding primarily in the Global South—in Lagos, Dhaka, Mumbai, and Kinshasa—and that urban theory must therefore cease to be provincially Euro-American and learn from cities previously considered “backward.”

This shift has far-reaching consequences. Using Johannesburg as an example, AbdouMaliq Simone introduced the concept of people as

infrastructure. Where reliable networks are absent, residents themselves take on their functions through improvised relationships and arrangements, connecting the themes of Chapter 10 to the reality of most cities in the world. In Planet of Slums (2006), Mike Davis described the planetary explosion of informal settlements as a fundamental fact of contemporary urbanization. Immanuel Wallerstein offers an older and more general framework. His world-systems theory (core, semi-periphery, periphery) reminds us that inequality between cities is structural because it arises from a historical division of labor in which some places command and others supply.

The debate about Lagos shows both how to read such cities and how not to read them. At the turn of the millennium, Rem Koolhaas and Harvard's Project on the City interpreted Africa's largest metropolis as a fascinating self-organizing system. He saw a marketplace in traffic congestion and a productive principle in breakdown; a city functioning "despite" planning and infrastructure seemed to him a possible model of the future of all cities. Geographer Matthew Gandy, in a sharp critique ("Learning from Lagos," 2005), accused him of aestheticizing deprivation. What looks from above (and from an air-conditioned car) like captivating emergence is, from below, the daily hard work of people whose own bodies replace an absent state and missing networks. These are Simone's "people as infrastructure" in their harshest form. Moreover, Lagos is the product of very specific histories: the oil economy, the structural adjustments of the 1980s, and investments lost to embezzlement. It can hardly stand as an image of a city "after planning." The dispute teaches a lesson in both directions. The South deserves study without condescension, but also without romanticism that turns deprivation into virtue and improvisation into an aesthetic program.

This turn also has a theoretical name. Aihwa Ong and Ananya Roy speak of worlding: the ways cities actively "become worldly" along their own, often unexpected paths rather than copying the North. Behind it lies a broader effort that historian Dipesh Chakrabarty called provincializing Europe. The point is to stop treating European and North American experience as a universal yardstick and recognize it as one among many. Urban sociology draws from this a program of comparative urbanism, which learns across cities around the world and treats them as equally valid cases. For the architect, this encourages humility. Rules derived from Manhattan need not apply in Brno any more reliably than rules derived from Lagos.

12.6 Prague: Global Flows in a Local Core

The Czech context illustrates both sides of globalization on a smaller scale. On the one hand, Czechia is firmly woven into the extended urbanization of the European economy. As an assembly and logistics hinterland linked above all to German industry, it has covered its landscape with motorways, industrial zones, and logistics warehouses. It is thus a typical example of Brenner and Schmid's "urban" hinterland, which is not a city and yet sustains the city. In the terms of world-systems theory, it is a classic semi-periphery: a place that manufactures and assembles but rarely commands.

This semi-peripheral role also has a human form that Sassen would immediately recognize. Czech assembly plants, warehouses, and construction sites are kept running to a large extent by migrant workers from Ukraine, Slovakia, and countries farther east—a low-paid, largely invisible stratum on which the more glamorous economy above depends. The capital buying up Czech real estate is also global. Prague's role as a film production hub is another example: Barrandov studios attract foreign productions, earning it the nickname "Eastern Hollywood." Globalization has specific addresses, halls, and people here.

On the other hand, Prague shows how global interest can rewrite a local centre. The historic centre has become a global commodity. According to analyses by Prague's Institute of Planning and Development, around eight thousand short-term accommodation units (Airbnb and similar services) were being offered in the city in spring 2023. They were extremely concentrated in the historic core, and the overwhelming majority were operated by hosts with multiple apartments, making this more a business than "sharing." The centre is consequently losing residents. Apartments disappear from the long-term housing market, prices rise, shops turn into souvenir stores and currency exchanges, and a living neighbourhood becomes a stage for visitors. The Prague 1 district council even established a "Committee Against the Depopulation of the Centre" and warned of the core turning into a "ghost town." Global enthusiasm for a beautiful place can thus deprive that very place of its inhabitants. It is the same mechanism as in gentrification (Chapter 5) or the commercialization of the river embankment (Chapter 9), except that here it is driven by planetary flows of tourism and capital. Barcelona, Venice, and Amsterdam face

similar disputes, and “overtourism” can be understood as planetary gentrification in tourist disguise.



Fig. 12.2. When the whole world wants a place, its centre becomes a stage and its inhabitants disappear.

Question about the case. Prague’s historic centre has become a global commodity: short-term rentals displace residents, shops turn into souvenir stores and currency exchanges, and the centre empties of everyday life while filling with tourists. To whom, then, does the city belong—to residents, or to visitors and investors from elsewhere? And can the global flow of interest in a beautiful place be put to use without depriving that place of itself (see Chapters 5, 7, and 9)?

12.7 What This Means for Architecture

An architect always works in a particular place, yet that place is shaped on all sides by the global world. The capital financing a building is global; the companies and star architects designing it are often global; and the materials and supply chains from which it is made, as well as the workforce that builds and later services it, are global too (Chapter 10 and this chapter). The aesthetic is often global as well. Rem Koolhaas speaks of the "generic city" and of "junkspace": interchangeable, placebo-like spaces of airports, shopping centres, and hotel lobbies that look the same in Dubai as in Prague.

Global competition between cities, however, also produces the opposite of genericity: the icon. Since the opening of the Guggenheim Museum in Bilbao (Frank Gehry, 1997), the "Bilbao effect" has circulated around the world: the belief that a single spectacular building by a star architect ("starchitecture") can put a city on the map of global flows of tourism and investment. It has partly worked in some places; elsewhere, the result has been merely expensive sculptures without the promised miracle. Dubai shows an extreme version of the same approach. Its skyline of icons competing for capital's attention was built by migrant workers with minimal rights, just as Sassen described, while their accommodation lies outside the frame of promotional photographs. The generic and the iconic therefore belong to the same abstract space (Chapter 2), because both are produced more for the global gaze than for local life.

Three tasks follow for the architect. First, they must resist both genericity and iconicity without falling into the opposite trap of manufactured, kitschy "localness" served up to tourists. Place, as Massey describes it, is a living intersection of relationships and cannot be preserved as a museum of the past. Second, the architect should take seriously the planetary hinterland of the design and ask where materials come from, who extracted and manufactured them, and what hidden network of labour and impacts the building sets in motion (extended urbanization). Third, they should design for the migrant and ordinary city. That means treating newcomers and diversity as the norm (Chapter 6), seeing immigrant neighbourhoods as engines of renewal rather than problems, and learning from cities of the South, not only from the command centres of the North.

Let us dwell on the last task a little longer. Migration, accelerated by globalization, transforms cities into environments of super-diversity (Steven Vertovec), where people of many origins, languages, and statuses live side by side. In the concept of the “arrival city,” urban sociologist Doug Saunders showed that immigrant neighbourhoods need not be pathological. If they are well connected and permeable, they drive the city forward and serve as springboards from which newcomers establish themselves and move on. Designing for such a neighbourhood means investing less in representation and more in inexpensive, adaptable spaces, good connections, and opportunities for small businesses: precisely the qualities Jacobs (Chapter 9) saw as conditions for a living city.

This is connected to a responsibility that globalization makes urgent. Every building is a node in a worldwide chain of materials and labour. Concrete and steel have enormous carbon footprints; stone and wood travel halfway around the planet; and many materials and components are produced under conditions that would be unacceptable at the building site itself. Designing in a global world therefore means sharing responsibility for what becomes visible only at the other end of the supply chain (Chapters 7 and 10): emissions, the landscape that has been mined, and the hands that prepared the materials. Every local gesture has a planetary underside.

All these considerations lead to the same question, which this chapter has merely sharpened. When global capital and global tourism both desire the city, to whom does it actually belong, and who decides its future? The book thus reaches its conclusion. After twelve chapters showing how space produces power, inequality, the body, memory, control, and global flows, one final question remains: what follows from all this for the architect as a social actor? Chapter thirteen addresses that question.

12.8 How to Read the Global and Local in Space

The twelfth set of questions for reading space examines how global flows materialize in a particular place and whom they serve.

Whose capital and whose decisions have reached this place? Who owns, finances, and designs it, and where do they come from?

Who services the global layer, and for how much? Where, behind the glitter of the command centre, is low-paid, often migrant labour hidden (Sassen)?

Where does the “city” end and its planetary hinterland begin? Which warehouses, motorways, mines, and data centres sustain this place (extended urbanization)?

Is it “generic,” “iconic,” or “local”? And is even the local produced for a global gaze? Does the reference to place serve residents, or tourists and investors?

To whom does the city belong when the whole world is interested in it? How can the right of local people to remain (Chapter 5) be protected when the global flow of interest raises prices and drives them out?

Key Concepts of This Chapter

Global city (S. Sassen) — command nodes of the world economy where advanced services are concentrated. The city becomes polarized between an elite and a low-paid (often migrant) service workforce, creating a “new geography of centrality and marginality.”

Planetary urbanization (Brenner & Schmid, following Lefebvre) — the disappearance of the city/countryside opposition; “concentrated” and “extended” urbanization. A warehouse, motorway, mine, and data centre are urban too.

Space of flows (M. Castells) — power and the economy operate through networks of capital and information flows, above the “space of places.”

Global cultural flows / scapes (A. Appadurai) — globalization as heterogeneous, often contradictory flows (of people, media, technologies, finance, and ideas), rather than uniform homogenization.

Global sense of place and power-geometry (D. Massey) — place as a node of global relations. Mobility is distributed unequally: some direct the flows, while others are swept along by them (compare Bauman’s opposition between tourist and vagabond).

Spatial fix and time-space compression (D. Harvey) — capital is periodically invested in the built environment and accelerates turnover; waves of construction and crises are its rhythm.

Ordinary cities / perspective from the South (J. Robinson, A. Roy, A. Simone) — criticism of the hierarchy of “global cities” and emphasis on the Global South, where the urban future is unfolding. This includes “people as

infrastructure” and the dispute over Lagos (Koolhaas versus Gandy) as a warning against romanticizing deprivation.

World-systems theory (I. Wallerstein) — core, semi-periphery, and periphery as a structural framework for inequality between places and cities.

Bilbao effect / starchitecture — the belief that an iconic building can switch a city into global flows. It is the other face of the generic city, likewise produced for a global gaze.

Questions for Reflection

Find in your city the global “command” layer in Sassen’s sense and the low-paid layer that serves it. How are they arranged spatially, and how do they depend on each other?

Describe “extended urbanization” (Brenner and Schmid) around your city (warehouses, motorways, industrial zones, data centres). Why is this also the city?

Koolhaas read Lagos as fascinating self-organization; Gandy saw aestheticized deprivation. How do the two views differ methodologically (Chapter 4), and what would decide which is closer to the truth?

Find a Czech example of belief in the Bilbao effect — the idea that an iconic building will “kick-start” a city. What would such a building need to accomplish so as not to be merely an expensive sculpture, and whom should it serve?

To whom does the centre of Prague belong, where Airbnb-type short-term rentals have proliferated? To residents, or to visitors and investors? What tools (Chapter 5) could protect the right of locals to remain?

Field Exercise 12: Traces of the Global in the Local

Choose one place (a street or a block) and trace its global connections. Find out who owns the buildings (public registers), where the capital, materials, and tenants come from, how many short-term rentals, multinational chains, currency-exchange offices, and offices of global companies are present, and who provides services there and from where they commute or have migrated. Also record what remains distinctly local. Finally, assess whether global flows enliven the place or empty it out, and what would return it to its residents. A text of one to two pages is sufficient.

Sources and Recommended Reading

Core of the chapter:

Sassen, S. (1991). The Global City. Princeton: Princeton University Press; idem (2014), Expulsions. On command nodes and the polarization of the global city.

Brenner, N. & Schmid, C. (2014). “The ‘Urban Age’ in Question.” IJURR, 38(3); Brenner, N. (ed., 2014). Implosions/Explosions. Berlin: Jovis. Following Lefebvre, H. (1970). La révolution urbaine.

Flows and cultural globalization:

Castells, M. (1996). The Rise of the Network Society — the space of flows. Massey, D. (1991, 2005) — global sense of place and power-geometry (see Chapter 2). Bauman, Z. (1998). Globalization — tourist and vagabond. Harvey, D. (1989). The Condition of Postmodernity — time-space compression.

Appadurai, A. (1996). Modernity at Large — global cultural flows and “scapes”; Beck, U. (1999). World Risk Society.

Perspective from the South (world sociology):

Robinson, J. (2006). Ordinary Cities. London: Routledge; Roy, A. & Ong, A. (eds., 2011). Worlding Cities; Simone, A. (2004). “People as Infrastructure.” Public Culture, 16(3); Davis, M. (2006). Planet of Slums; Wallerstein, I. — world-systems theory; Chakrabarty, D. (2000). Provincializing Europe.

Gandy, M. (2005). “Learning from Lagos.” New Left Review, 33. A polemic with Koolhaas’s reading of Lagos (Harvard Project on the City / Mutations, 2000).

Vertovec, S. (2007). “Super-diversity and Its Implications.” Ethnic and Racial Studies, 30(6); Saunders, D. (2010). Arrival City.

Czech sources:

Touristification and short-term rentals (Airbnb) in central Prague — analyses by the Prague Institute of Planning and Development (IPR). The Czech Republic’s position in the European production network and the “extended urbanization” of logistics warehouses and industrial zones.

CHAPTER 13

The Architect as a Social Actor

Field, the Right to the City, and Reflexivity

“The right to the city is the right to change ourselves by changing the city.”

— David Harvey (2008)

“Architecture depends.”

— Jeremy Till (2009)

13.1 The Architect as a Social Actor

The twelve chapters of this book have shown that space is not an innocent container into which life is merely poured. Space produces power and inequality, presupposes a particular body, deals with memory and death, exercises control, is maintained through care, and is traversed by global flows. And each time, somewhere in the background, there was someone who designed it. The concluding chapter therefore turns to the architect—not as a neutral technician who organizes society from the outside, but as a social actor who is part of the very same field of forces examined throughout the book.

This is a consistent next step. The tools that this book has offered, chapter by chapter, for reading the city must ultimately also be turned upon the person doing the reading: upon their position, interests, and inclinations. Sociology has a precise term for this: reflexivity. We will draw on two lines of thought. Pierre Bourdieu showed how even the expert’s gaze is socially formed, while the tradition of the right to the city (Henri Lefebvre, David Harvey) asks to whom space actually belongs and who should decide about it.

13.2 Bourdieu: Field, Habitus, and One’s Own Position

Bourdieu offers three concepts with which to locate the architect in society. A field (champ) is a relatively autonomous arena with its own rules, stakes, and hierarchies. Architecture is such a field, in which people compete for recognition, commissions, and prestige. Habitus is a system of internalized dispositions that individuals carry from their upbringing and education, determining what they perceive as self-evident, tasteful, and possible. From this perspective, the architect’s “trained eye” is also a socially produced disposition. Position in the field is then determined by capital: alongside economic capital, especially cultural and symbolic capital. In La Distinction (1979), Bourdieu showed that taste is a marker of class and an instrument of distinction, that is, of setting oneself apart from others.

For the profession, this is an uncomfortable and at the same time liberating finding. An architect with a particular habitus and cultural capital can easily mistake their class-conditioned taste for objective quality and impose it on people with a different habitus as a “better solution.” Bourdieu coined the term symbolic violence for this imposition of dominant categories that present themselves as natural. The defense against it is reflexivity: turning the sociological gaze upon oneself, objectifying one’s own position, and asking what one fails to see because of one’s habitus. A reflexive architect is not someone who has rid themselves of assumptions (that is impossible), but someone who knows about them and takes them into account.

Garry Stevens developed a Bourdieusian perspective on architecture in The Favored Circle (1998). He showed that the profession reproduces itself as a closed circle. Much of what is called “talent” is unrecognized cultural capital that successful architects brought with them from home, while the star system celebrating the solitary genius conceals this class origin beneath the veil of giftedness. The myth of the autonomous creator is therefore not innocent. It legitimizes the existing hierarchies of the field and diverts attention from the fact that architecture is always produced collectively and is socially conditioned. That is also why reflexivity is not a luxury, but a professional necessity.

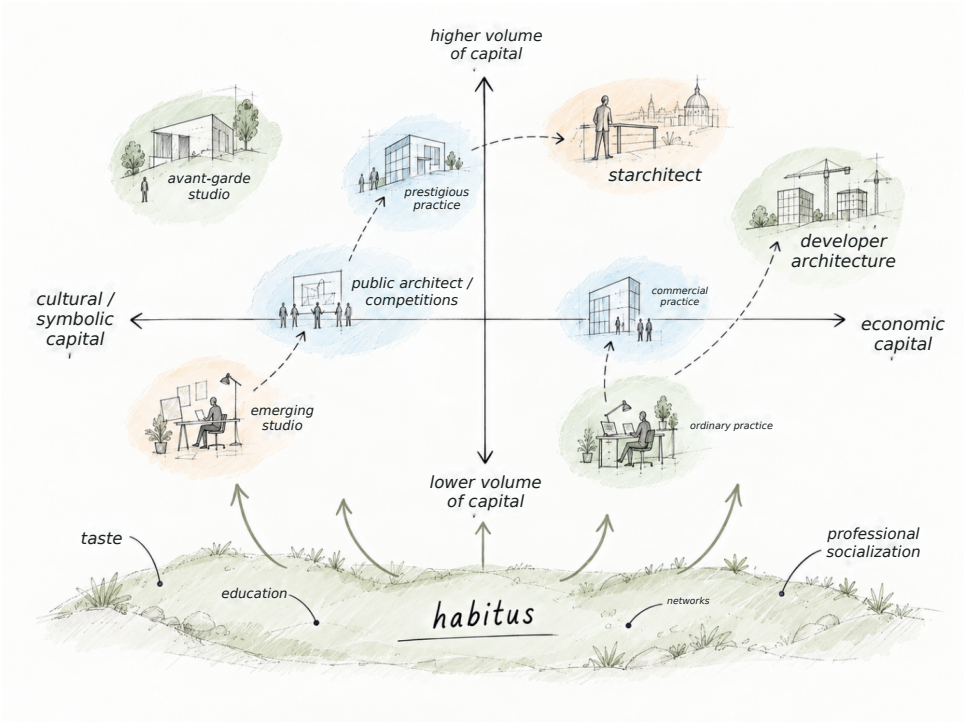

Fig. 13.1. The architect's taste and eye are not neutral, but socially formed. Reflexivity means knowing where I stand in the field.

13.3 The Right to the City

If the architect's perspective is situated, the question arises: whose interests should the architect actually advance? One answer is offered by the tradition of the right to the city. Henri Lefebvre, whose production of space we encountered in Chapter 2, coined the term "right to the city" as early as 1968. He meant much more by it than access to what the city offers: namely, the right to inhabit space, appropriate it, and co-create it, thereby also changing oneself. He understood the city as a work (oeuvre) in which its inhabitants participate, and contrasted it with the city as a commodity produced for profit.

David Harvey reformulated this idea in his essay "The Right to the City" (2008) as a collective right to reshape the process of urbanization, and thus also to decide where the surpluses that finance the building of the city will flow. For him, the right to the city is more a collective claim to power than an individual entitlement (Don Mitchell and Peter Marcuse, among others, also build on this tradition). For the architect, this means a change of role.

The task is to mediate the collective right of residents to shape space, rather than impose space on them from the position of an expert.

The question “Who owns the city?”, sharpened by Chapter 12, here becomes a professional brief.

To the right to the city Lefebvre added the concept of autogestion, or self-management, by which he meant the ability of inhabitants to manage the conditions of their lives and their space themselves, from below and without paternalistic direction from above. Thus, alongside the claim to a share, the right to the city also includes a claim to make decisions, to be a subject of the production of space rather than merely its recipient. For the architect, this is the most demanding part of the brief, because it asks them to relinquish some of their own authority in favour of those for whom they design.

Closely related to the right to the city is the question of the commons, shared resources managed by a community. Nobel Prize winner Elinor Ostrom refuted the dogma that shared resources inevitably end up being plundered, demonstrating that communities can manage them themselves and sustainably. Her work underpins the idea of urban commons and “commoning,” the collective care of space (compare Chapter 10 and Barcelona’s data commons in Chapter 11). Anthropologist James Holston, in turn, described insurgent citizenship using the example of Brazilian peripheries. There, poor people claim the right to the city through self-help construction and habitation, from below and in everyday practice, rather than from above through the law. The right to the city is therefore won not merely through declarations, but through everyday appropriation.

13.4 Participation and Its Traps

We usually try to mediate the right to the city through participation, by involving inhabitants in design. But sobriety is called for here. As early as 1969, Sherry Arnstein devised her famous ladder of participation. At its lowest rungs are manipulation and “therapy” (false participation); in the middle is tokenism (informing, consultation, and placation, which create the impression of involvement without sharing power); and only at the top is genuine citizen power (partnership, delegated power, citizen control). Most of what passes for participation gets stuck at tokenism. People are heard, but decisions are still made elsewhere.

Critical literature goes further, warning that participation can become an instrument. Bill Cooke and Uma Kothari gave their edited volume the telling title Participation: The New Tyranny? (2001). According to them, participation often merely legitimizes what has already been decided, thereby co-opting resistance. Markus Miessen speaks of the “nightmare of participation,” in which shared responsibility dilutes decisions into noncommitment. None of this implies resignation. Genuine participation is demanding and rare, but the alternative of a heroic expert imposing ready-made solutions is worse. Jeremy Till summed this up in the proposition that architecture depends on something. It is not an autonomous art; it necessarily depends on others, on time, and on politics, and the architect therefore shares authorship whether they like it or not.

Planning theory has developed sophisticated models for such a shared process. Paul Davidoff proposed advocacy planning as early as 1965. In his view, planners should not pretend to be neutral technicians; they should openly represent the interests of those who would otherwise go unrepresented. John Forester showed that planning takes place face to face with power, and that the most important skill is listening and mediating between unequal parties. Patsy Healey developed this into collaborative planning, based on deliberation and the search for agreement. Together, these approaches shift the profession’s centre of gravity from drawing to facilitation, from the work to the process, in which the designer is more a mediator than the sole author.

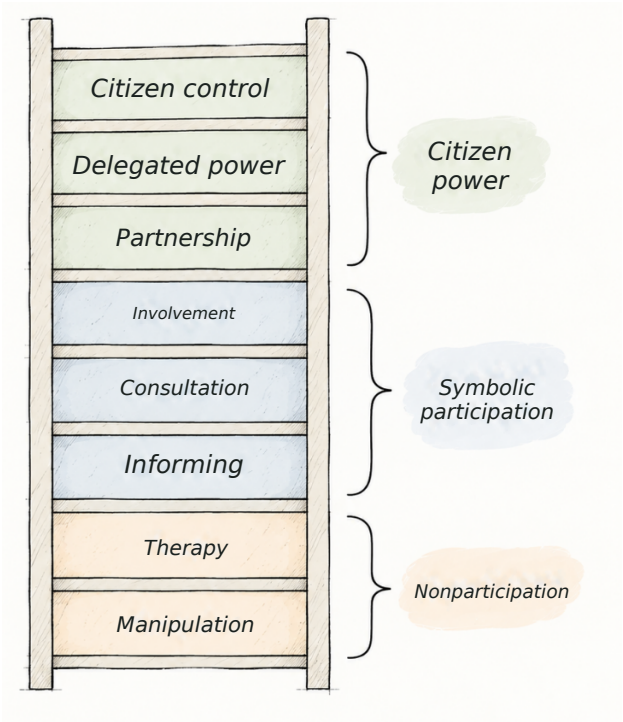

Fig. 13.2. Most “participation” remains on the lower rungs. Genuine sharing of power is rare.

Question about the case. Prague’s river embankment (Chapters 2 and 9) went from a spontaneous civic initiative through takeover by the city to an architectural intervention (the glass portals of the vaults). Who, then, is its “author”? What would change if the architect entered earlier, or conversely later? And what does the role of a designer look like when they know that they are only entering a process already underway rather than initiating it themselves (Till: architecture depends)?

13.5 The Just and Open City

If the architect is to serve the right to the city, they need a standard by which to recognize a good city. Sociology and urban theory offer three related ideals. In The Just City (2010), Susan Fainstein proposed evaluating urban decisions according to three criteria: equity, diversity, and democracy. Beyond efficiency and beauty, a just city should also be fair, both in the distribution of benefits and in decision-making. Philosopher Iris Marion Young countered the ideal of community as a fellowship of like-minded people with the ideal of urban life as openness to difference that no one absorbs. A good city allows strangers to be together without having to become the same.

Richard Sennett develops this openness through the distinction between ville (the built, material city) and cité (the lived, relational city), and through his call for an open city that is underdetermined, permeable, and capable of development rather than perfectly planned and closed. This brings us back to Chapter 9. Designing a loose, incomplete space that can also accommodate life the designer did not anticipate is itself an ethical gesture. The just and open city is therefore neither an architectural idiom nor a style; it is a set of criteria—equity, diversity, democracy, and openness—by which any design can be assessed.

These criteria can be deepened further. Philosopher Nancy Fraser pointed out that justice has two incommensurable axes: redistribution (material equality) and recognition (respect for different identities). A good city must attend to both, because redistribution alone does not ensure dignity, and recognition alone does not feed anyone. Geographer Edward Soja added the concept of spatial justice. Injustice is always distributed in space in some way, so the struggle for justice must also be geographical: over where the tram runs, where the park stands, and who owns the centre. A just city, then, is not only a matter of fair distribution, but also of fair geography.

13.6 Limits and Possibilities: The Architect’s Agency

It would be naive to portray the architect as a savior. As early as 1973, Manfredo Tafuri argued soberly in Architecture and Utopia that architecture cannot redeem society under capitalism, and that hopes invested in form will end in disappointment because the decisive forces lie elsewhere. This skepticism must be taken seriously, if only as an antidote to professional grandiosity. Jeremy Till, together with Nina Awan and Tatjana Schneider, gave this skepticism a constructive turn through the concept of spatial agency (2011). There are many ways to act in space: besides designing buildings, one can organize, mediate, or amplify the voices of others. In a broader sense, then, an “architect” is anyone who helps shape space for the benefit of its users.

The Chilean practice Elemental, led by Alejandro Aravena, showed that shared authorship can also be a method of building. In Quinta Monroy (Iquique, 2004), it was tasked with housing a hundred families who had long been squatting in the city center, using public funds (a fraction of the usual costs) without displacing them to the periphery. The answer was “half a good house.” The construction provided the load-bearing structure, sanitary core, roof, and services—in other words, what families could not provide themselves. It left the other half of the volume empty so that residents could gradually complete it according to their means, needs, and tastes. Here the house is an open construction in the sense of Chapter 9, and at the same time an acknowledgment that the residents are its co-authors. Aravena received the Pritzker Prize in 2016 for this approach and released the house plans for free use. Later evaluations were more sober. The quality of the additions varies, and without accompanying support, “half a house” can become a half-measure. Even so, Quinta Monroy remains the most frequently cited demonstration that when an architect relinquishes some authorial control, the result need not be less architecture, merely a different architecture.

Between Tafuri’s skepticism and activism lies the realistic position of the reflective practitioner described by Donald Schön. Such a professional does not proceed according to ready-made rules but acts in dialogue with an ambiguous situation, thinking through and reassessing it along the way. The practitioner acknowledges limits (an architect cannot establish a just society), yet insists on responsibility. This book has shown how design

contributes to gentrification (Chapters 5 and 7), surveillance (Chapter 11), or the exclusion of bodies (Chapter 6). Where architects participate in these processes, they can also refuse, redirect, and act differently; even limited agency is more than none.

Contemporary practice shows that this responsibility is not merely theoretical. Architects form associations so that they do not have to participate in harmful projects. The Architects Declare movement has committed thousands of practices to radically reducing the carbon footprint of construction (Chapters 7 and 12); organizations such as The Architecture Lobby raise questions about working conditions in the profession; and the American organization ADPSR campaigned for architects to refuse to design prisons intended for torture. An architect's ethics extend beyond the professional code. They also include the right, and sometimes the duty, to refuse a commission whose spatial hypothesis is indefensible. Reflexivity without a willingness to act would remain merely a comfortable pose.

Alongside grand gestures of refusal there is unobtrusive everyday agency, which is closest to the architect. It consists of the small decisions examined by this book chapter after chapter: whether a threshold allows a wheelchair through (Chapter 6), whether a bench permits someone to sleep (Chapter 11), whether a piece of space remains free and undetermined (Chapter 9), whether those who will maintain the work have been taken into account (Chapter 10). None of these decisions will change society on its own, but together they determine how people live in space. A reflexive architect knows that it is precisely in these unobtrusive choices—not in manifestos—that their values become material.

13.7 The Reflexive Architect: Summary of the Book

When we bring together the threads of all the chapters, an image emerges of the architect as a reflexive social actor. This architect knows where they stand in the field and what their habitus prevents them from seeing (Bourdieu). They serve not only the person who pays but also residents' right to the city (Lefebvre, Harvey). They share authorship through genuine rather than feigned participation (Arnstein, Till, Aravena). They measure their work against equality, diversity, democracy, and openness (Fainstein, Young, Sennett). And they accept the limits of their power without relinquishing responsibility (Tafuri, Schön).

Such an architect carries with them an awareness of the whole book. They know that space is produced by society and power (Chapters 1–3), and that claims about space can and must be tested (Chapter 4). They also know that space determines inclusion and exclusion (Chapter 5), always presupposes a particular body (Chapter 6), takes account of the nonhuman world (Chapter 7), and carries memory and death (Chapter 8). It is both permanent and temporary (Chapter 9), and survives only thanks to invisible maintenance and care (Chapter 10). It is increasingly monitored and controlled (Chapter 11) and permeated by global flows (Chapter 12). The reflexivity addressed in this chapter turns these same questions back on the designer.

Thus the book returns to its first sentence. In the introduction, we said that every building is a hypothesis about social life, an unspoken claim about how people will live together. To be an architect as a social actor means to formulate these hypotheses consciously and with understanding. It also requires humility and an awareness that hypotheses can be wrong, that real people inhabit them, and that others always help create them. According to Doreen Massey, the city is never finished, and the same is true of an architect's learning. The book thus ends in openness rather than a definitive answer: not with instructions on how to build, but with an invitation to keep reading space and ourselves for as long as we inhabit the world together.

13.8 How to Read Yourself

The final questions are not directed at the city this time. They are directed at the person who designs and reads the city.

Where do I stand in the field? What habitus, taste, and capital do I carry from my upbringing and education? What do I consequently take for granted, and what do I fail to see (Bourdieu)?

Whose city is it? Am I serving residents' right to the city, or primarily the interests of whoever pays (Lefebvre, Harvey)?

Is my "participation" genuine? Do I share power and authorship, or merely collect agreement with a decision already made (Arnstein)?

Is the outcome just and open? Does it expand access, diversity, and possibilities, or restrict them (Fainstein, Young, Sennett)?

How far does my responsibility extend, and where can I refuse? What inequality, surveillance, or exclusion am I helping to produce (the whole book), and where can I act differently?

Key Concepts of This Chapter

Field, habitus, capital (P. Bourdieu) — the architect acts within a field with its own rules and hierarchies. Their "taste" and "eye" are socially formed (cultural capital, distinction), and their expertise can operate as symbolic violence.

Reflexivity (Bourdieu; D. Schön) — turning the analytical gaze on one's own position and assumptions. The reflective practitioner acts in dialogue with an ambiguous situation.

Right to the city (H. Lefebvre; D. Harvey) — the collective right to inhabit, appropriate, and transform the city; autogestion as self-management; the architect as a mediator rather than someone who imposes solutions.

Ladder of Participation (S. Arnstein) — a scale from manipulation through tokenism to citizen power. Most "participation" gets stuck at tokenism, and participation can also become a tool of co-optation (Miessen; Cooke & Kothari).

Architecture Depends / Spatial Agency (J. Till; Awan, Schneider, Till) — architecture is not autonomous; it depends on others, on time, and on politics. There are many ways of acting in space, not only through building. The “half of a good house” (Elemental) is an example of shared authorship built into the form.

The Just and Open City (S. Fainstein; I. M. Young; R. Sennett; N. Fraser; E. Soja) — equality, diversity, and democracy as criteria; openness to difference; redistribution as well as recognition; the distinction between “ville” and “cité”; and spatial justice.

Questions for Reflection

Following Bourdieu, describe your own habitus and capital. Where does your “taste” come from, and what do you therefore take for granted? What would you overlook if you did not know this?

Choose a project you know and ask whose right to the city it strengthened and whose it weakened.

On which rung of Arnstein’s ladder was the “participation” in a project you experienced? What would move it higher?

Quinta Monroy leaves half of the house unfinished. Where is the boundary between empowering residents and transferring costs and risks to them? What would “accompanying support” have to include for the former to be true?

Sennett distinguishes between “ville” and “cité.” Give an example of a building in which the two diverged: for instance, a well-designed form in which people live badly, or vice versa.

Field Exercise 13: A Reflexive Portrait

In the final exercise, turn the tools of the entire book upon yourself. Choose one of your own (student) projects and examine it through the twelve lenses of the preceding chapters: what power and inequality does it produce, for whose body is it intended, and how does it deal with memory, control, maintenance, and global flows? Then add a thirteenth, reflexive layer: From what position (habitus, capital) did you design the project, whose right to the city did you defend, and where did you share authorship—or fail to share it? The result will be a short essay in which the architect analyzes themselves as a social actor; it may also serve as a personal summary of the entire course.

Sources and Recommended Reading

Core of the chapter:

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Till, J. (2009). Architecture Depends. Cambridge, MA: MIT Press; Awan, N., Schneider, T. & Till, J. (2011). Spatial Agency; Schön, D. (1983). The Reflective Practitioner; Tafuri, M. (1973). Architecture and Utopia.

Aravena, A. & Iacobelli, A. (2012). Elemental: Incremental Housing and Participatory Design Manual. Ostfildern: Hatje Cantz. On Quinta Monroy and the “half of a good house”; plans released for free use.

The just and open city:

Fainstein, S. (2010). The Just City; Young, I. M. (1990). Justice and the Politics of Difference; Sennett, R. (2018). Building and Dwelling; Fraser, N. (1995). “From Redistribution to Recognition?” New Left Review; Soja, E. (2010). Seeking Spatial Justice.

Czech sources:

IPR Prague — Public Space Design Manual and Participation Manual (“How to Plan Participatorily?”); architectural competitions in cooperation with the Czech Chamber of Architects (ČKA); Prague’s river embankment as an example of shared authorship (Chapters 2 and 9).

CHAPTER 14

Participation and Co-creation

Art-based Research and Living Labs in the Preparation of Architectural Concepts

“People educate one another, mediated by the world.”

— Paulo Freire (1968)

“Art is not an illustration of knowledge; it is a way of knowing in its own right.”

— paraphrase, after arts-based research (P. Leavy)

14.1 From Consent to Co-creation

The thirteenth, concluding chapter called on architects to serve the right to the city and to share authorship through genuine participation. This supplementary chapter follows it up in practical terms. It asks how new architectural concepts can be developed together with the public so that engagement does not remain stuck on the lowest rungs of Arnstein’s ladder, at mere information-sharing and consultation, which create the impression of participation without sharing power. The entire shift can be summed up as a journey from consent, in which we ask people to approve a finished proposal, to co-creation, in which the proposal is developed together from the outset.

Co-creation, however, faces two obstacles that conventional participation tools such as surveys or public hearings cannot overcome. The first is how to capture knowledge that residents possess but cannot express in a questionnaire: embodied experience, the memory of a place, its atmosphere, fears, and wishes. The second is how to test a proposed solution before it is irreversibly built. This chapter answers the first

question with methods of art-based research and the second with the concept of the living lab, meaning testing in a real environment and in real time. We will then place both within the international tradition of participatory research and co-design.

14.2 Participation as Co-research

Co-creation stems from an emancipatory tradition. In Pedagogy of the Oppressed (1968), the Brazilian educator Paulo Freire rejected the "banking" model of education, in which an expert merely deposits knowledge into passive recipients. In its place he proposed dialogue. People learn from one another, mediated by the world, and in doing so gain the ability to change that world. He called this process conscientização, or critical consciousness. The Colombian sociologist Orlando Fals-Borda built on Freire's work with participatory action research (PAR): research conducted with people and for change, rather than about people. This approach emerged in the Global South and fundamentally transformed the relationship between the expert and the "researched." Earlier still, the social psychologist Kurt Lewin contributed the action-research cycle, in which people plan, act, observe, and reflect, then repeat the entire process.

Within design itself, this tradition has a counterpart in Scandinavian participatory design. In the 1970s and 1980s, particularly through the UTOPIA project, researchers such as Pelle Ehn advanced the idea that users (at the time, workers and typesetters) should be co-designers of the technologies and environments they would use. They possess experiential knowledge to which the expert has no access. Here we hear again the "communities of practice" discussed in Chapter 10. The sociologist Elinor Ostrom introduced the concept of co-production for this kind of relationship. In her account, value arises through collaboration between expert and user; the expert does not deliver it ready-made. Participation in this sense means co-research and co-design, in which knowledge and decision-making are shared, and it has little in common with simply collecting opinions.

Architecture has its own tradition of participation as well. As early as the late 1960s, the Italian architect Giancarlo De Carlo declared that architecture was "too important to be left to architects," and in the Villaggio Matteotti housing development in Terni he invited future residents to help decide on their apartments. The American architect and

theorist Henri Sanoff subsequently assembled and classified a broad range of engagement tools in Community Participation Methods in Design and Planning (2000), from simulation games and workshops to preference surveys and joint evaluation. In doing so, he made participation a craft with its own methodology rather than merely a good intention. Co-creation therefore also belongs to architecture's own heritage and does not need to be imported from sociology.

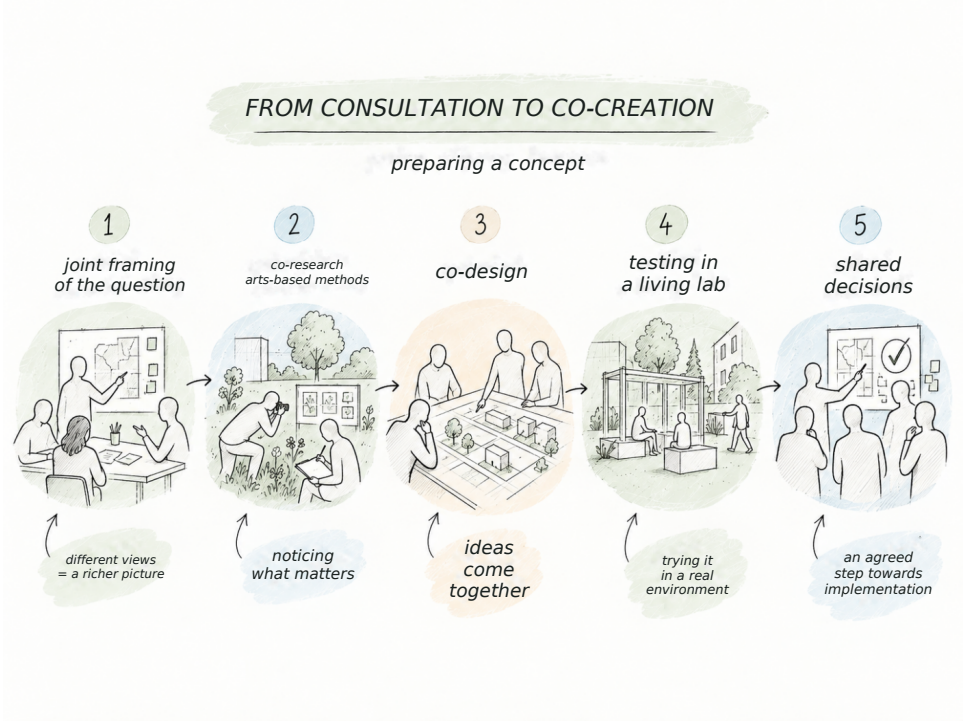


Fig. 14.1. Participation is not a one-off survey but a cycle of joint investigation, design, and testing.

14.3 Art as Method: Art-based Research

The main difficulty of co-research is that the most valuable knowledge about space is often tacit. We experience it through our bodies; it is bound up with memory and emotion and resists words. This is precisely what art-based research (ABR) addresses, developed systematically by the sociologist Patricia Leavy and, before her, Shaun McNiff and Elliot Eisner. In ABR, artistic practices (visual, narrative, and performative) serve as an independent way of knowing, rather than merely illustrating findings that have already been established. They can be used to create, investigate, and communicate knowledge, including knowledge overlooked by other methods.

For the participatory preparation of a concept, ABR has three advantages. It brings tacit, embodied, and emotional knowledge to the surface (Chapters 2 and 6): how we feel in a place, what we fear, and where we feel at home. It also opens participation to people without specialist training. Someone who cannot read a technical drawing or write a comment on a zoning plan can still make a collage, photograph, model, or story; voices regularly overlooked in formal consultations can therefore be heard (Chapters 5 and 6). Finally, ABR gives form to wishes that have so far remained vague, making it possible to work with them further. Here art drives the research rather than merely decorating the process.

Why art can capture this kind of knowledge is explained by the turn toward sensory and embodied ways of knowing. Anthropologist Sarah Pink developed sensory ethnography, which takes seriously the fact that we perceive a place not only through sight, but also through walking, sound, smell, and mood. Theorists of the “non-representational” approach, following Nigel Thrift, add that much of what shapes space takes place below the threshold of words and concepts. Artistic methods are more receptive to such knowledge than a questionnaire, because they work not only with statements but also with images, movement, and lived experience. Elliot Eisner called the ability to perceive with such subtlety connoisseurship. This, rather than data collection alone, is at the heart of good co-research.

14.4 ABR Tools in Concept Development

The range of art-based and related participatory methods is broad. Let us recall those that have proved most useful in architecture. Photovoice (Caroline Wang and Mary Ann Burris, 1997) puts a camera in residents' hands. They themselves photograph what danger, beauty, or home means to them in their surroundings, and then interpret the pictures together; in this way, the subjects of research become its co-authors. Mental maps are based on Kevin Lynch's book The Image of the City (1960). Residents draw from memory how they imagine a place, with its paths, edges, nodes, and landmarks, revealing how they actually experience space regardless of how it looks on a plan.

Cultural probes, devised by Bill Gaver, Anthony Dunne, and Elena Pacenti (1999), are sets of tools given to participants: a disposable camera, a diary, small maps, and postcards with questions. For a period of time, participants use them to record their own lives in a place, producing illuminating and often unexpected insights. Walking methods (walking interviews, or "go-alongs") and Guy Debord's Situationist dérive take the conversation directly into space and capture how a person experiences it sensorially and bodily while walking (Chapter 9). The Theatre of the Oppressed of Brazilian director Augusto Boal, especially his forum theatre, enables residents not merely to describe a dispute over space but to enact it and "rehearse" possible solutions. Boal directly follows Freire and turns participants from spectators into actors. Together, these methods broaden both who can participate and what kinds of knowledge count.

Mapping and digital methods further expand the repertoire. In participatory mapping (and public participation GIS, or PPGIS), residents mark on a map their places—favourite, dangerous, and missing—and thus create a "counter-map" to the official plan. An example is the Green Map of Plzeň and similar tools. Tactile techniques, such as building with models, sand, or construction kits (for example, Lego Serious Play), turn ideas into three-dimensional forms that participants can manipulate together. Digital participation platforms, such as Barcelona's Decidim from Chapter 11, make it possible to submit proposals, discuss them, and vote on a large scale. Yet the ease of online participation cannot replace the depth of meeting in person. The appropriate method always depends on the question, the people, and the stage of preparation, because describing a problem calls for a different tool than testing a solution.

Question about the case. Imagine preparing a new public square. A survey captures opinions that people can put into words. Photovoice, mental maps, and walks undertaken together, however, also reveal what people fear in the place, where they feel at home, and what the place means to them—knowledge that a survey misses. Which of these findings would actually change the design? And who ultimately decides whether they are reflected in it—the architect, the authority, or the residents themselves (Arnstein)?

14.5 Living Lab: Participation in Real Time

The second difficulty of co-creation—how to test a solution before it is irreversibly built—leads to the concept of the living lab. It is an environment in which new ideas, services, or spatial solutions are developed and tested directly in everyday life, continuously and over several rounds. Users participate as co-creators rather than as experimental subjects. The concept originated in the MIT circle around William Mitchell and became established through the European Network of Living Labs (ENoLL, 2006). It rests on four principles: a real-life setting, the involvement of multiple stakeholders, active user co-creation, and repeated iterations.

An urban living lab applies this approach to city-making. A proposed solution is first tested as a temporary, reversible intervention in an actual neighbourhood. How people really use it is observed, and it is adjusted in response to feedback before potentially being made permanent. The living lab thus connects three threads already running through this book: pilot operation and its evaluation from Chapter 4 (claims are tested against data on use); temporariness and tactical urbanism from Chapter 9 (the transformation of Times Square from a temporary experiment into a permanent pedestrian zone is, in effect, a living lab); and participation from this and the previous chapter (the user shares in decision-making at every round). Participation is extended over time and anchored in a specific place.

The living lab also has its own theory and typology. It is described as a “quadruple helix”: cooperation among citizens, public administration, the private sector, and academia, in which no one commands alone and knowledge is shared. Closely related is the German concept of Reallabor, or real-world laboratory. This is an interdisciplinary experiment in which

pathways toward sustainability and justice are tested directly in the city and researchers participate in change rather than observing it from outside (researchers such as Niki Frantzeskaki speak of urban transition labs). All these approaches share the replacement of a one-off decision with a learning process. The city becomes an environment in which solutions are continually tested, evaluated, and corrected. Yet this is also where their risk lies.

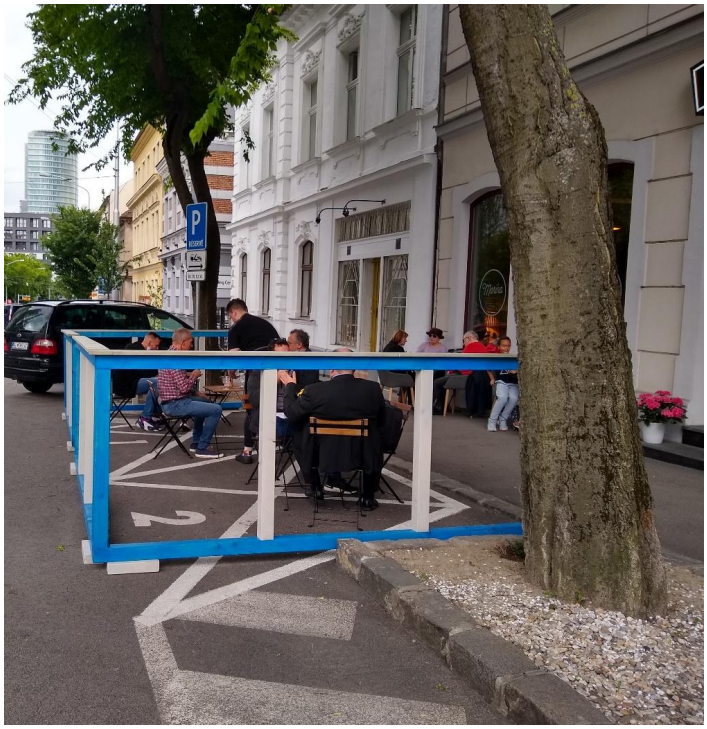


Fig. 14.2. A living lab means participation in real time and in a real place. A solution is repeatedly evaluated before being made permanent.

14.6 Limits and Ethics of Participatory Methods

None of these methods is miraculous, and none guarantees anything on its own. They face the same danger that Chapter 13 warned against: tokenism. Even a well-executed photovoice project or an impressive pop-up in a living lab can serve merely as participation-washing, a backdrop of participation behind which decisions are still made elsewhere. Bill Cooke and Uma Kothari pointed out that participation can easily become a tool of co-optation. This also applies to art-based methods, whose outputs are collected as "data" and end up in a drawer. A living lab, meanwhile, can slide into experimentation on residents, especially when driven by the technological solutionism of the smart city (Chapter 11). Who, then, is actually the "user," and who benefits from the testing?

That co-creation can fail even with good intentions and a large budget is demonstrated by Copenhagen's Superkilen (BIG, Topotek 1, and the artist group Superflex, 2012). The half-kilometre-long park in the ethnically most diverse neighbourhood of Nørrebro was meant to "celebrate diversity." It assembled about a hundred items of street furniture from sixty countries (benches, fountains, traffic signs, swings), intended to represent the origins of local residents, and public participation formed part of the concept. The result is photogenic and internationally acclaimed. Critics (Steiner and others), however, argued that participation largely remained at the level of aestheticization. Residents were consulted about the selection of objects, but not about the neighbourhood's power relations and social questions (poverty, safety, displacement), and their cultures were reduced to collectible souvenirs, to "identity as park equipment." Superkilen thus offers an ambivalent lesson: even sophisticated co-creation backed by participation can miss the right to the city if residents' voices are reduced to choices from a catalogue while the questions that truly matter are bypassed.

Geographer Erik Swyngedouw raised a deeper objection. According to him, participation can become post-political. It turns into a ritual of consensus in which assurances that "we can surely agree on everything" conceal a real political dispute over power, money, and whose interests ultimately prevail. If only the "usual crowd" of vocal people with time to spare attends each time, participation may even sanctify inequality in the name of democracy. Genuine co-creation must therefore not sweep conflict under the carpet. It should make conflict visible, open it to negotiation, and actively seek out

those who do not volunteer. Otherwise the emancipatory instrument of Freire and Fals-Borda turns into its opposite: a technique for silencing disagreement.

The ethical rules that follow are fairly clear. Participation must be informed and voluntary, and the authors of photographs and stories must retain control over their work (this is the foundation of photovoice ethics). Above all, however, co-research makes sense only when it is connected to real decision-making power. Otherwise it remains tokenism. Inclusion is just as important. We need to ask who did not come (working people, caregivers, older people, minorities) and how to involve them, because participation favours the vocal and those with time to spare. Finally, reflexivity from Chapter 13 comes into play. From what position and with what habitus am I leading the process, and whose perspective am I unconsciously imposing? A good facilitator does not hide their power; they acknowledge it and share it.

14.7 What This Means for Architecture

Taken together, these ideas yield a process for preparing a concept that takes participation seriously. First, the question is framed jointly with residents. They share in deciding what the problem is and what should be included in the brief. This is followed by co-research using art-based methods (photovoice, mental maps, probes, walks, theatre), which brings tacit, embodied, and diverse knowledge to the surface. From this emerges co-design in the form of scenarios and models developed in workshops. It is then tested in a living lab as a temporary intervention and refined according to feedback (Chapters 4 and 9). But the whole process is meaningful only if it rests on shared decision-making power at the upper rungs of Arnstein’s ladder (Chapter 13). Otherwise it remains decoration for a proposal already decided in advance.

The Czech context shows that this is more than theory. The Prague Institute of Planning and Development issued the Manuál participace and links participation with architectural competitions, because participation has its greatest effect when it informs a high-quality brief. Since 2014, the Pilsen association Pěstuj prostor has involved the public through open calls, workshops, and mapping, and in squares such as Jiráskovo it has translated residents’ wishes and findings directly into the briefs for architectural competitions. Moving participation to the beginning means letting residents co-decide what will be designed in the first place.

Czech practice also builds on examples from around the world. Brazil's Porto Alegre introduced participatory budgeting (orçamento participativo) as early as 1989, allowing residents themselves to decide on part of the city's investments. This model spread to thousands of cities, including Czech ones. Colombia's Medellín became known for social urbanism: the targeted construction of libraries, schools, and cable cars in the poorest neighbourhoods, planned by the city together with their residents. A former symbol of violence became an often-cited example of a city transformed from below and above at the same time. Here, too, however, later criticism pointed to the risk of "aerial gentrification," in which a new cable car raises prices and changes the neighbourhood it was intended to serve (compare Chapters 5 and 7). Both cases show that participation is not a European luxury and that some of the strongest inspirations come from the Global South (Chapter 12).

This brings the arc of the entire book to a close. If an architect reads space through the questions posed in earlier chapters (power, inequality, the body, memory, control, global flows) and at the same time accepts that they are only entering a process and sharing it with others (Chapter 13), art-based research and the living lab offer a way to put that knowledge into practice: the joint, informed, and tested shaping of space. Merely declaring a right to the city is not enough. What matters is the method: how the concept comes into being and who has a say in it.

14.8 How to Prepare a Concept with the Public

The final questions are practical and should accompany the preparation of an architectural concept with the public.

Are we framing the question with people, or for them? Do residents co-decide what the problem is and what should be included in the brief, or are they given a ready-made question?

What knowledge do we want to bring to the surface, and is a survey enough? Where experience, memory, fears, or atmosphere are at stake, we turn to art-based methods (photovoice, mental maps, probes, walks, theatre).

Are we testing the concept in a real environment and over time? Can it be tried out as a temporary, reversible intervention (living lab) and adjusted according to feedback (Chapters 4 and 9)?

Which rung of the ladder are we on? Are we sharing decision-making power, or merely collecting suggestions (Arnstein)? Who makes the final decision?

Who is missing, and who is leading the process? Which voices have not come forward, and how can they be included? From what position and with what habitus are we facilitating the whole process (reflexivity, Chapter 13)?

Key Concepts of This Chapter

Co-creation / co-design (Scandinavian participatory design; P. Ehn) — users as co-designers who enter the process as more than respondents. Here participation means sharing both knowledge and decision-making power, not merely collecting opinions.

Participatory action research (P. Freire, O. Fals-Borda, K. Lewin) — research with people and for change, not research about people. It rests on dialogue, consciousness-raising, and a cycle of action and reflection. A related concept is co-production (E. Ostrom).

Arts-based research (P. Leavy; McNiff, Eisner) — artistic practices as a distinctive way of knowing. They bring tacit, embodied, and emotional knowledge to the surface and open participation to people without specialist training.

ABR tools — photovoice (Wang & Burris), mental maps (Lynch), cultural probes (Gaver et al.), walking methods and dérive (Debord), forum theatre (Boal).

Living lab — a real-world environment co-managed by users in which solutions are developed and tested in place and over time, repeatedly and with multiple actors (MIT; ENoLL). An urban living lab combines pilot operation (Chapter 4), temporariness (Chapter 9), and participation.

Tokenism and participation-washing — the risk that methods create only the appearance of participation without sharing power. A living lab can slide into “experimentation on residents,” and participatory design into aestheticization (Superkilen).

Post-political participation (E. Swyngedouw) — the transformation of participation into a ritual of consensus that conceals real conflicts of power and can legitimize inequality in the name of democracy.

Questions for Reflection

Choose a planned project and propose which arts-based methods would bring out knowledge that a questionnaire would miss. Why those particular methods?

A living lab or a one-off consultation? What does each approach gain and lose? When is it worth testing in a real environment and over time?

Superkilen “celebrates diversity” through a collection of objects from around the world, but sidesteps questions of power and housing. Where is the boundary between celebrating identity and aestheticizing it? How would you approach the same neighbourhood?

Pěstuj prostor in Plzeň translated residents’ wishes directly into the brief for an architectural competition. Why does participation have its greatest impact precisely in a high-quality brief?

Where does co-creation end and “participation-washing” begin? How can you recognize the difference in a specific project?

Field Exercise 14: A Small Participatory Co-research Project

With a small group of residents of one place, try two arts-based methods, for example photovoice (each person takes three photographs of “where I feel good” and “where I feel bad” and comments on them) and a mental map (each person draws the place from memory). Summarize the findings into three “briefing principles” for a future design. Finally, reflect on what the methods contributed beyond an ordinary questionnaire, who did not volunteer, and from what position you led the process. Submit a short report with photographs, maps, and the three principles.

Sources and Recommended Reading

Participatory research and co-design:

Freire, P. (1968). Pedagogika utlačovaných; Fals-Borda, O. — participatory action research (PAR); Lewin, K. — action research. Ostrom, E. — co-production.

Ehn, P. (1988). Work-Oriented Design of Computer Artifacts and Scandinavian participatory design (the UTOPIA project). De Carlo, G. — participatory architecture (Villaggio Matteotti); Sanoff, H. (2000). Community Participation Methods in Design and Planning.

Art-based research and methods:

Leavy, P. (2015). Method Meets Art: Arts-Based Research Practice. New York: Guilford; McNiff, S. (1998). Art-Based Research; Eisner, E. — art as a form of knowing; Pink, S. (2009). Doing Sensory Ethnography.

Wang, C. & Burris, M. (1997). “Photovoice.” Health Education & Behavior, 24(3); Lynch, K. (1960). The Image of the City — mental maps; Gaver, B., Dunne, A. & Pacenti, E. (1999). “Cultural Probes.” interactions, 6(1); Boal, A. — Theatre of the Oppressed; Debord, G. — dérive and psychogeography.

Living labs, criticism, and case studies:

European Network of Living Labs (ENoLL, 2006) and the literature on urban living labs; building on pilot operation and evaluation (Chapter 4) and tactical urbanism (Chapter 9). Compare the German Reallabore and urban transition labs (Frantzeskaki et al.).

Swyngedouw, E. (2011). “Interrogating Post-Democratization.” Political Geography, 30(7). On “post-political” participation. On Superkilen: documentation by BIG / Topotek 1 / Superflex and critical commentary (search term “Superkilen participation critique”).

IPR Prague — Manuál participace and its connection to architectural competitions; the Pěstuj prostor association (Plzeň) — open calls and translation of residents’ wishes into project briefs (e.g., Jiráskovo Square); ČKA — OTTA discussions “Participation in Architecture.” International examples: participatory budgeting in Porto Alegre and social urbanism in Medellín.

APPENDIX

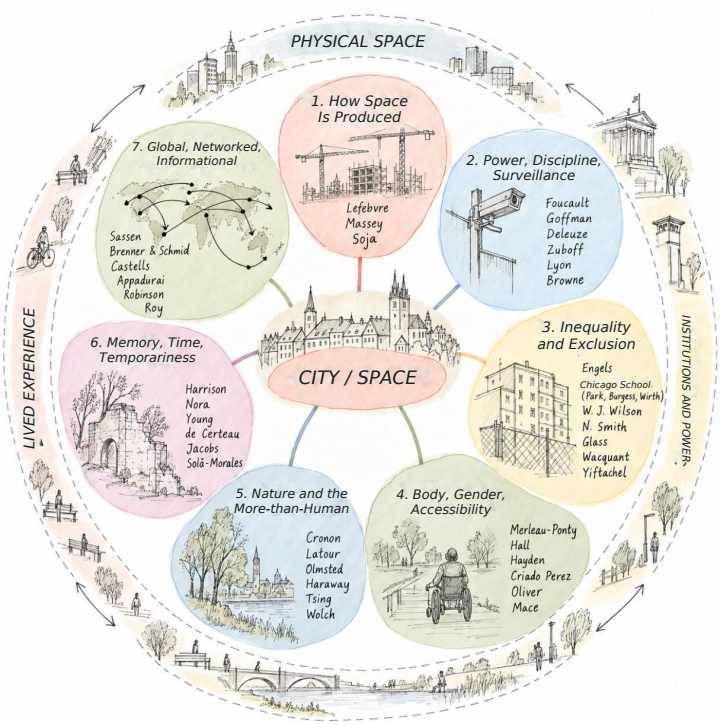
Overview of Authors in Urban Sociology

A Map of Ideas, Key Works, and Their Contributions

This appendix summarizes the field in one place. First, it shows the areas that urban sociology addresses; then it lists the major works; finally, for each author, it briefly explains what they contributed, how they arrived at it, and what follows from it for the work of today's architect with the city. It can be used as a guide to the preceding chapters as well as a starting point for further reading. Unlike conventional overviews, it also includes authors who play a prominent role in the main text but are missing from traditional tables of the field: Goffman, Foucault, Olmsted, Sennett, Zuboff, and the pair Brenner–Schmid.

What Urban Sociology Addresses

For architecture, it is useful to read the city simultaneously on three levels: as physical space, as an institution, and as everyday experience. The following map summarizes the main areas of the field and the authors who have something to say about them (Fig. D.1).



Overview of Authors and Works

The table lists authors chronologically and, for each, gives a key work, its year, and the core idea. Authors added beyond the original overview who play a central role in the book are shown in italics.

Author	Work	Year	Main idea
Friedrich Engels	The Condition of the Working Class in England	1845	The industrial city spatially separates classes; housing is a question of power.
Ferdinand Tönnies	Gemeinschaft und Gesellschaft	1887	Transition from community to a society of instrumental, impersonal relationships.
Georg Simmel	The Metropolis and Mental Life	1903	The metropolis overloads the senses; a blasé detachment is a defence.

Author	Work	Year	Main idea
Max Weber	Die Stadt (The City)	1921	The city as a distinctive type: market, autonomy, and bourgeois self-government.
Park · Burgess · McKenzie	The City (Chicago School)	1925	The city as a “social laboratory”; growth in zones and an ecology of coexistence.
Louis Wirth	Urbanism as a Way of Life	1938	Size, density, and diversity shape the urban way of life.
Frederick Law Olmsted	Central Park (“Greensward” design)	1858	The park as an engineered landscape serving health, discipline, and land values.
Kevin Lynch	The Image of the City	1960	Residents carry an “image of the city” in their minds; legibility can be designed.
Jane Jacobs	The Death and Life of Great American Cities	1961	A lively street, mixed uses, and “eyes on the street” make the city safe.
Lewis Mumford	The City in History	1961	The history of the city as an instrument of human purposes; a warning about scale.
Erving Goffman	Asylums	1961	Total institutions erase the boundaries between sleeping, work, and play; “mortification of the self” and underlife.

Author	Work	Year	Main idea
Herbert J. Gans	The Urban Villagers	1962	Close-knit communities also exist in the city centre; clearance destroys neighbourhoods.
Henri Lefebvre	The Right to the City / The Production of Space	1968 / 1974	Space is socially produced; inhabitants have a right to the city.
Jan Gehl	Life Between Buildings	1971	Human scale; a high-quality ground-floor environment gives rise to social life.
Manuel Castells	The Urban Question / The Network Society	1972 / 1996	The city as collective consumption; today a node in the “space of flows.”
David Harvey	Social Justice and the City	1973	Cities are shaped by flows of capital; space is a question of justice.
Michel Foucault	Discipline and Punish / Heterotopias	1975	Space disciplines; the panopticon and heterotopias as “other spaces.”
Pierre Bourdieu	Distinction	1979	Taste marks class; habitus, capital and field also shape the architect’s perspective.
William H. Whyte	The Social Life of Small Urban Spaces	1980	Through observation, he identified what makes small public spaces lively.
Saskia Sassen	The Global City	1991	Global cities direct the world economy and polarize it at the same time.

Author	Work	Year	Main idea
Doreen Massey	Space, Place and Gender / For Space	1994 / 2005	Space as a bundle of relations; “power-geometry” distributes mobility unequally.
Neil Brenner & Christian Schmid	Planetary Urbanization	2011	The city/countryside divide dissolves; warehouses, highways and data centres are also urban.
Richard Sennett	Building and Dwelling	2018	Distinction between “ville” (built city) and “cité” (lived city); a call for an open city.
Shoshana Zuboff	The Age of Surveillance Capitalism	2019	Human experience as free raw material; the smart city as a hunting ground for data.

Author Annotations

For each author, we briefly describe what they contributed, how they arrived at it, and what follows from it for working with cities today. For clarity, the authors are arranged thematically, roughly following the structure of the book.

Friedrich Engels — The Condition of the Working Class in England (1845)

What he contributed: He was among the first to show that poverty and disease have an address: the industrial city spatially separates classes, and housing is a question of power, not merely of technology.

How he arrived at it: He walked through the working-class districts of Manchester and connected what he saw to a critique of early capitalism.

What this gives us today: He reminds us that the “housing question” is longstanding and political, and that the distribution of housing reveals the divisions within society (Chapter 5).

Ferdinand Tönnies — Gemeinschaft und Gesellschaft (1887)

What he contributed: He distinguished two types of coexistence: Gemeinschaft (community based on closeness and shared bonds) and Gesellschaft (society based on instrumental, impersonal relationships). The city shifts the balance toward the latter.

How he arrived at it: He worked theoretically, seeking concepts to describe how bonds between people change in the transition from village to modern city.

What this gives us today: He gives us language for what is lost and gained through urban anonymity, and a framework for thinking about neighbourhoods and communities.

Georg Simmel — The Metropolis and Mental Life (1903)

What he contributed: He was the first to connect the metropolis with human psychology. He described how a flood of stimuli compels inhabitants to respond intellectually and with reserve, and to adopt a “blasé” detachment that protects them from overload.

How he arrived at it: He observed Berlin at the turn of the century: its pace, money economy and anonymous crowds.

What this gives us today: He reminds us that the environment shapes behaviour and mental well-being; the sensory burden of the street—noise, excessive lighting, crowding—is not a trivial matter but a design concern (Chapter 6).

Max Weber — Die Stadt / The City (1921)

What he contributed: He conceived the city as a particular type: a place of markets, relative autonomy and civic self-government, asking what historically makes a city a city.

How he arrived at it: Using the method of "ideal types," he compared cities across different eras and cultures.

What this gives us today: He reminds us that the city is not merely a built-up area but also an institution and a mode of governance, raising the question of who makes decisions about it and how.

Chicago School — Park, Burgess, McKenzie — The City (1925)

What they contributed: They made the city the subject of systematic empirical research. Burgess's concentric-zone model and "urban ecology" described how populations and functions are distributed in the city and how this distribution changes.

How they arrived at it: Through field research and street mapping, they studied Chicago in the 1920s, a rapidly growing metropolis of immigrants.

What this gives us today: It provides a starting point for reading a neighbourhood—who lives where and why—and a method of attentive field research, albeit without deterministic "zones" (Chapter 5).

Louis Wirth — Urbanism as a Way of Life (1938)

What he contributed: From the size, density and diversity of the city, he derived typical features of what he called "urbanism as a way of life": impersonal relationships, a division of roles, tolerance, but also loneliness.

How he arrived at it: He built on the Chicago School and Simmel, seeking characteristics of urbanism shared by different individual cities.

What it offers us today: It provides a vocabulary for what distinguishes urban life and warns that density produces both freedom and anonymity.

Frederick Law Olmsted — Central Park (1858)

What he contributed: Through his parks and writings, he demonstrated that urban "nature" is manufactured. A park is an engineered pastoral scene intended to look natural while serving social and economic goals.

How he arrived at it: He designed major American parks (Central Park, Prospect Park) and understood them as tools for health, "moral elevation," and the increase in the value of surrounding land.

What it offers us today: It encourages a critical view of greenery. Every form of “nature” in the city prescribes certain behaviour and serves some people more than others (Chapter 7).

Kevin Lynch — The Image of the City (1960)

What he contributed: He found that residents carry a “mental image of the city” composed of paths, edges, nodes, districts, and landmarks, and that the legibility of the environment can be deliberately designed.

How he arrived at it: He asked residents of Boston, Jersey City, and Los Angeles to draw their cities from memory and looked for common elements in their maps.

What this gives us today: It provides a practical tool for orientation and place identity, as well as the mental-map method now used in participatory processes (Chapter 14).

Jane Jacobs — The Death and Life of Great American Cities (1961)

What she contributed: She shifted attention from plans to the living street. In her view, safety and vitality arise from mixed uses, short blocks, buildings of different ages, and “eyes on the street.”

How she arrived at it: She closely observed her own New York neighbourhood and opposed the demolition of functioning communities in the name of modernist renewal.

What this gives us today: It remains the most practical guide to the quality of ground-floor street frontages, permeability, and opportunities to spend time in public space, as well as a defence of the small scale (Chapter 9).

Lewis Mumford — The City in History (1961)

What he contributed: He wrote a comprehensive history of the city as an instrument of human purposes. He warned against inhuman scale and against technology and growth prevailing over meaning.

How he arrived at it: He drew on broad historical and cultural knowledge and engaged critically with modernist urbanism.

What it offers us today: A long historical perspective, a scale of values, and a reminder that the city should serve people, not the other way around.

Erving Goffman — Asylums (1961)

What he contributed: He described the total institution: a place where a large group of people cut off from their surroundings lead an enclosed, formally administered life. He also named the “mortification of the self” and the “underlife” through which people resist it.

How he arrived at it: He conducted field research at St. Elizabeths psychiatric hospital in Washington, drawing on the microsociology of everyday interaction.

What it offers us today: It helps in designing all residential institutions (prisons, care homes, dormitories, camps). It prompts the question of how far a floor plan mortifies a person and how much room it leaves for autonomy (Chapter 3).

Herbert J. Gans — The Urban Villagers (1962)

What he contributed: He demonstrated that even a poorer inner-city neighbourhood can be a functioning community with dense social ties, rather than merely a “slum” destined for demolition.

How he arrived at it: He moved into Boston’s West End for a time and studied it from within before urban renewal razed it.

What it offers us today: He reminds us that physical deterioration does not mean social failure and warns against urban renewal that destroys invisible social networks (Chapters 1 and 5).

Henri Lefebvre — The Right to the City / The Production of Space (1968 / 1974)

What he contributed: He introduced two concepts. According to the first, space is socially “produced” (the perceived–conceived–lived triad); according to the second, inhabitants have a “right to the city”: the right to inhabit, appropriate, and co-create it.

How he arrived at it: He combined Marxist philosophy with a critique of postwar technocratic construction in the French suburbs.

What it offers us today: It provides an ethical and analytical starting point for the entire book, describing both the mechanism of the production of space (Chapter 2) and the political claim to participation (Chapter 13).

Jan Gehl — Life Between Buildings (1971)

What he contributed: He brought human scale and the pedestrian back into design. He demonstrated that high-quality public space supports not only necessary walking but also “optional” and social activities.

How he arrived at it: For many years, he systematically observed life in streets and squares, beginning in Copenhagen.

What it offers us today: Concrete principles for lingering in public space, active ground floors, and walking, as well as a method for measuring life in space. This is close to Whyte’s work and to today’s living labs (Chapters 4 and 14).

Manuel Castells — The Urban Question / The Network Society (1972 / 1996)

What he contributed: He initially understood the city as a place of “collective consumption”: housing, transport, and services provided by the state. Later, he described the “space of flows” of the network society.

How he arrived at it: He began in Marxist sociology and the study of urban movements, later focusing on the information economy and globalization.

What it offers us today: He connects infrastructure, power, and data. He shows that networks extending far beyond city boundaries also determine what happens in cities today (Chapters 11 and 12).

David Harvey — Social Justice and the City (1973)

What he contributed: He connected the form of the city to movements of capital. In his account, the distribution of housing, investment, and crises follows economic calculation and produces inequality. He later formulated the “right to the city” as a collective claim.

How he arrived at it: As a geographer and political economist, he responded to urban crises and inequalities in the United States in the 1970s.

What it offers us today: His work is useful for analysing gentrification, housing prices, and pressure from developers (Chapter 5), as well as global flows of capital (Chapter 12).

Michel Foucault — Discipline and Punish / Heterotopias (1975)

What he contributed: He showed how space disciplines—that is, how spatial arrangements (the panopticon, institutions) shape behavior. With the concept of heterotopia, he named places governed by a different order, such as cemeteries, prisons, or ships.

How he arrived at it: He studied the history of institutions and understood power as something inscribed into space and bodies alike.

What he offers us today: He sharpens our perception of surveillance, control, and the hidden power of design (Chapters 3, 8, and 11), and of what spatial arrangements do to people.

Pierre Bourdieu — La Distinction (1979)

What he contributed: He showed that taste is not innocent: it is a marker of class and an instrument of distinction. The concepts of habitus, capital, and field explain why even an expert's way of seeing is socially formed.

How he arrived at it: He drew on extensive empirical research into French society and on a theory of practice intended to overcome the opposition between structure and agency.

What he offers us today: A means for architects to reflect on themselves, recognize their own habitus, and identify the "symbolic violence" of professional taste (Chapter 13).

William H. Whyte — The Social Life of Small Urban Spaces (1980)

What he contributed: Through empirical and sympathetic observation, he discovered what makes small public spaces lively: places to sit, sunshine, water, food, and proximity to the street.

How he arrived at it: As part of the "Street Life Project," he spent years filming and counting people in New York squares.

What he offers us today: Tested recommendations for designing squares and ground-floor street frontages. His observation of actual use remains a model and anticipates today's living labs (Chapter 4).

Saskia Sassen — The Global City (1991)

What she contributed: She introduced the concept of the "global city" as a node that directs the world economy while itself dividing into a stratum of high-end services and a low-paid, often migrant service workforce.

How she arrived at it: She compared New York, London, and Tokyo and their connections within a single global economy. Later she added the logic of "expulsions."

What she offers us today: A way to read globalized metropolises and the tourism, migration, and social polarization within them (Chapter 12).

Doreen Massey — Space, Place and Gender / For Space (1994 / 2005)

What she contributed: She understood space as a bundle of relationships rather than an empty container. Through the concept of power-geometry, she showed that mobility and power are distributed unequally.

How she arrived at it: She combined critical geography with feminist theory and challenged the idea of an enclosed, "authentic" place.

What she offers us today: The concept of a "global sense of place" as an open intersection of relationships, and with it a way of connecting the global and the local (Chapters 2 and 12).

Neil Brenner & Christian Schmid — Planetary Urbanization (2011)

What they contributed: They argue that the opposition between city and countryside has lost its validity because urbanization is transforming the entire surface of the planet. They distinguish “concentrated” from “extended” urbanization.

How they arrived at it: They built on Lefebvre’s thesis of the “complete urbanization of society” and critically challenged the slogan of an “urban age.”

What they offer us today: They compel architects to see a building as a node in a planetary network of material and labor flows, including warehouses, mines, and data centers in the hinterland (Chapter 12).

Richard Sennett — Building and Dwelling (2018)

What he contributed: He distinguished ville (the built, material city) from cité (the lived, relational city) and called for an “open city” that is permeable, not overdetermined, and capable of further development.

How he arrived at it: He drew on his lifelong body of work on public life, work, and ethics, and on his critique of enclosed, overdetermined forms.

What he offers us today: A yardstick for a good city and a design ethos that leaves room for forms of life the designer did not foresee (Chapters 9 and 13).

Shoshana Zuboff — The Age of Surveillance Capitalism (2019)

What she contributed: She described a new economic order that claims human experience as free raw material and turns it into prediction products. It not only predicts behavior but also modifies it (“instrumentarian power”).

How she arrived at it: She analyzed the data economy of major technology platforms and their business models.

What she offers us today: A framework for criticizing the “smart city” as a hunting ground for data, and for asking who owns the data a city collects about its inhabitants (Chapter 11).

How to Use This Appendix

This overview is not intended for memorization. It can be used in three ways. First, as an index to the book: for each author, the chapter in which their concepts are applied to a concrete case is indicated in parentheses. Second, as a map of the field, showing that urban sociology is not a single, uniform discipline: it is traversed by a debate between an emphasis on structure (Engels, Harvey, Sassen) and an emphasis on agency and everyday life (Goffman, de Certeau, Jacobs), between a view from above (plan, map) and one from below (walking, appropriation). Third, as a springboard: each entry is an invitation to open the original work, since annotations can never replace reading. Anyone who works through the book together with this appendix will have not only tools for reading the city but also an understanding of where these tools come from and where they belong in the thinking of the discipline.

GLOSSARY OF TERMS

Alphabetical Overview of Key Concepts in Urban Sociology

The glossary brings together the key concepts used in the book, from the production of space to surveillance, care, and global flows. Each entry gives the author or origin of the concept, a brief definition, and a reference to the chapter or chapters where it is applied to a concrete case. It is useful both for quick revision before an examination and as a guide back to the text. It does not replace the explanations in the chapters; it merely summarizes them. The concepts are arranged according to the Czech alphabet (č after c, ch after h, ř after r, š after s, ž after z).

A

Abstract × differential space (Lefebvre) — modern, market-oriented space tends toward homogenization, quantification, and commodification, suppressing spaces of difference and lived uniqueness. (Chapter 2)

Appropriation × domination — the conflict between people's appropriation of space for use and meaning, and its domination by those in power for control and profit. (Chapter 2)

Architectural determinism — The mistaken belief that form directly and reliably determines behaviour. Architecture falls into this trap particularly easily (cf. Coleman 1985 and critiques of her work). (Ch. 1)

Architecture Depends / Spatial Agency (J. Till; Awan, Schneider, Till) — Architecture is not autonomous; it depends on others, on time, and on politics. There are many ways to act in space, not only by building. The "half of a good house" (Elemental) is an example of shared authorship built into form. (Ch. 13)

Art-based research (P. Leavy; McNiff, Eisner) — Artistic practices as a distinctive way of producing knowledge. They bring out tacit, embodied, and emotional knowledge and open participation to people without professional training. (Ch. 14)

B

Bilbao effect / starchitecture — The belief that an iconic building will switch a city into global flows. It is the other face of the generic city, likewise produced for a global gaze. (Ch. 12)

D

Dataveillance (R. Clarke) — Surveillance carried out through data rather than direct observation. The Snowden documents (2013) gave it empirical substance. (Ch. 11)

Disciplinary power (M. Foucault) — Power which, instead of publicly punishing the body (as sovereign power does), operates through continuous, everyday arrangements and produces "docile bodies." The less visible it is, the more effective it becomes. (Ch. 3)

Temporary use (Zwischennutzung) — The temporary occupation of vacant places, which brings them to life, tests possibilities, and persuades others. Yet it risks commodification and becoming a "pioneer" that warms up a location for a developer. (Ch. 9)

Surveillant assemblage and data double (Haggerty & Ericson) — Dispersed, rhizomatic surveillance assembles a "data double" from data flows; action is then taken upon this double instead of the living person. (Ch. 11)

Surveillance capitalism (S. Zuboff) — Human experience is appropriated as free raw material and transformed into prediction products. The aim is both to predict and to modify behaviour ("instrumentarian power"). (Ch. 11)

Second death / forgetting — The moment when no one remembers the deceased any longer. The European system of renting burial plots and prescribed decomposition periods makes forgetting the rule rather than a failure. (Ch. 8)

City–nature dualism — An ideological division that sets the city and nature against one another. According to Latour ("we have never been modern"), it has never truly held, because everything consists of hybrids. (Ch. 7)

Duality of structure (A. Giddens) — Structure as both the medium and the constantly reproduced outcome of action. The most influential theoretical attempt to dissolve the dualism of structure and agency. (Ch. 1)

E

Curb-cut effect — A measure won for the least accommodated body improves the environment for everyone. Historically, people won these changes from below (Berkeley, Rolling Quads); no one bestowed them from above. (Ch. 6)

Neighbourhood effects and concentration effects (W. J. Wilson) — Place influences life chances more than individual characteristics alone would suggest. Concentrated poverty reproduces itself as contacts, role models, and institutions disappear. (Ch. 5)

Environmental justice — The unequal distribution of greenery and environmental risks by class and ethnicity. From this perspective, the lack of green space in poorer neighbourhoods is an injustice. (Ch. 7)

Ethics of care (Fisher & Tronto; Puig de la Bellacasa) — Care as "everything we do to maintain and repair our world." Maintenance is care; it is gendered and undervalued, and extends to the nonhuman world. This

also includes the “privileged irresponsibility” of those who benefit from care without performing it. (Ch. 10)

Post-occupancy evaluation (POE) — Returning to an occupied building and checking whether it functions as intended. It directly measures the gap between conceived and lived space. (Ch. 4)

Evidence-based design — A design practice that grounds important decisions in research evidence rather than mere habit and taste. (Ch. 4)

G

Gender data gap (C. Criado Perez) — A world measured and designed around male bodies and daily routines (snow clearing, crash-test dummies). The remedy is gender mainstreaming (Vienna), based on studying actual use. (Ch. 6)

Gentrification — The influx of wealthier residents and capital into a previously poorer (often central) neighbourhood, raising prices and displacing original inhabitants. The term was introduced by Ruth Glass (1964); today scholars also speak of “planetary” gentrification (Lees et al.). (Ch. 5)

Global cultural flows / scapes (A. Appadurai) — Globalization as heterogeneous, often contradictory flows (of people, media, technologies, finance, and ideas), rather than uniform homogenization. (Ch. 12)

Global city (S. Sassen) — Command nodes of the world economy where advanced services concentrate. The city polarizes into elites and low-paid (often migrant) service workers, creating a “new geography of centrality and marginality.” (Ch. 12)

Global sense of place and power-geometry (D. Massey) — Place as a node of global relationships. Mobility is unequally distributed: some direct the flows, while others are swept along by them (cf. Bauman’s opposition between the tourist and the vagabond). (Ch. 12)

Green (environmental) gentrification — Environmental improvements raise property values and displace original residents: the “urban green-space paradox” (Wolch, Byrne, Newell). (Ch. 7)

H

Hawthorne effect and unobtrusive measures — Observation changes the behaviour of those being observed. A counterbalance is provided by traces that are unaware of being read (desire lines, wear, consumption). (Ch. 4)

Heterotopia (Foucault) — A real “other” place, a counter-space that reverses, condenses, or suspends the ordinary order (cemetery, ship, museum, garden, prison). It has its own time and rituals of entry. (Ch. 3)

Cemetery as heterotopia (Foucault) — An “other space” with its own time (heterochrony), whose function has changed through history (from church to city outskirts, from burial in the ground to the columbarium). (Ch. 8)

Hydraulic citizenship (N. Anand) — Belonging to the city negotiated through connection to an infrastructure network; pressure in the pipes as a measure of recognition (Mumbai). (Chapter 10)

Hypothesis — A testable statement about a relationship (“a view of greenery shortens recovery”). Every design silently contains some hypothesis. (Chapter 4)

CH

Chicago School / urban ecology — The first systematic urban sociology (Park, Burgess, Wirth; 1920s–1930s). It understands the city as an ecosystem of competition for space; it includes Burgess’s concentric-zone model and the “zone of transition.” (Chapter 5)

I

Ideology of permanence — Architecture’s tendency to regard a permanent, “finished” form as the ideal and changeability as a deficiency. Fixing a form is also an exercise of power that closes off future possibilities. (Chapter 9)

Infrastructure (S. L. Star) — Relational, embedded, and “transparent” systems that recede into the background, are learned as part of membership, and become visible only when they break down. Social and political decisions are frozen into them. (Chapter 10)

J

“Just green enough” (Curran & Hamilton) — A greening strategy that does not result in displacement, because ecological improvement is separated from luxury development. (Chapter 7)

K

Empty-container fallacy — The intuition that space is a pre-existing neutral box; harmless in everyday life, misleading for understanding the city. (Chapter 2)

Communities of practice (Lave & Wenger) — Tacit, experiential knowledge of maintenance that is transmitted through participation in practice and is not written in manuals. Maintenance workers are co-authors of the life of a building. (Chapter 10)

Correlation vs. causation — The co-occurrence of two phenomena versus one actually causing the other. Causality can be defended only after ruling out “everything else.” (Chapter 4)

Cosmological conflict — Incompatible conceptions of death, the body, and the afterlife projected onto the cemetery: burial vs. cremation, eternal rest vs. reuse (rental, decomposition period), and grave orientation. (Chapter 8)

L

Lieux de mémoire (P. Nora) — “Sites of memory.” In modern times, when living memory has faded, memory is externalized into designated places (monuments, museums, anniversaries, archives). (Chapter 8)

Living lab — A real-world environment co-managed by users, in which solutions are created and tested on site and over time, repeatedly and with many actors (MIT; ENoLL). An urban living lab combines pilot operation (Chapter 4), temporariness (Chapter 9), and participation. (Chapter 14)

M

Confounding variable (confounder) — A third factor that affects both the outcome and the supposed cause, creating an apparent relationship. It is at the heart of the “correlation trap.” (Chapter 4)

Modulor (Le Corbusier) — A proportional system derived from a figure 183 cm tall. It shows how one particular body is presented as a universal human measure (cf. the Vitruvian Man, Neufert). (Chapter 6)

Myth of the average person (Quetelet; refuted by Daniels in 1952) — A user who is average in all dimensions at once does not exist, so a design for the average fits no one. The solution is adjustability and a range of dimensions. (Chapter 6)

N

ABR tools — Photovoice (Wang & Burris), mental maps (Lynch), cultural probes (Gaver et al.), walking methods and dérive (Debord), forum theatre (Boal). (Chapter 14)

Naturalization trap — The tendency to explain manufactured inequality as the natural result of competition or as an expression of residents' "culture." It is the spatial equivalent of mistaking a public issue for a personal failure (Chapter 1). (Chapter 5)

Designed nature as a tool (F. L. Olmsted, Singapore) — The park as an engineered landscape with social and economic goals: health, moral uplift, discipline, increased land values, or national branding. (Chapter 7)

Informality — A mode of urbanization and an instrument of power that concerns more than just the poor. The state decides what is "informal" and what will be demolished. (Chapter 5)

O

Maintenance turn (S. J. Jackson, "broken-world thinking"; Russell & Vinsel, "maintainers") — A critique of the cult of innovation. The world is constantly falling apart and is held together by repair and maintenance, undervalued work that is often gendered and poorly paid. A maintenance deficit ends in disaster (Morandi Bridge). (Chapter 10)

Difficult heritage (S. Macdonald) — Material remnants of a shameful past and the dilemma of whether to demolish, preserve, or reinterpret them. Includes "dark tourism" (Lennon & Foley) and the ethics of representing trauma. (Chapter 8)

Ordinary cities / perspective from the South (J. Robinson, A. Roy, A. Simone) — A critique of the hierarchy of "global cities" and an emphasis on the Global South, where the urban future is unfolding. Includes "people as infrastructure" and the debate over Lagos (Koolhaas vs. Gandy) as a warning against romanticizing deprivation. (Chapter 12)

Beautification societies — A Czech tradition of voluntary civic care for public space (the first in Kutná Hora in 1861; the association suppressed in 1951; now being revived). Care here is a civic practice that goes beyond a paid service. (Chapter 10)

Operationalization — Translating a vague concept (liveliness, well-being) into an observable indicator (number of passers-by, length of stay). The danger is chasing the indicator at the expense of the concept. (Chapter 4)

Organized complexity (J. Jacobs) — The city as an emergent, self-organizing order that lives in time ("sidewalk ballet," "eyes on the street") and cannot be drawn from above. Diversity is also sustained by old, inexpensive buildings—that is, time accumulated in the built environment. (Chapter 9)

Personal trouble vs. public issue (Mills) — The distinction between what can be explained and addressed individually and what is a manifestation of the organization of society. (Chapter 1)

P

Panopticon (J. Bentham, M. Foucault) — An architectural diagram of power: a ring of cells surrounding a central tower, in which the observed person is permanently visible while the observer remains hidden. Power that is "visible yet unverifiable" becomes internalized and operates even when no one is in the tower. (Ch. 3)

Dominion of the Dead (R. P. Harrison) — The human being is a "burying" creature. The dead found the community, and the city rests on a pact between the living and the dead. (Ch. 8)

Participatory Action Research (P. Freire, O. Fals-Borda, K. Lewin) — Research with people and for change, not about people. It is based on dialogue, conscientization, and a cycle of action and reflection. A related concept is co-production (E. Ostrom). (Ch. 14)

Planetary Urbanization (Brenner & Schmid, building on Lefebvre) — The disappearance of the city/countryside opposition; “concentrated” and “extended” urbanization. Warehouses, highways, mines, and data centres are also urban. (Ch. 12)

Docile Bodies (Foucault) — Bodies trained by disciplinary techniques (schedules, the partitioning of space, assessment), simultaneously the object and instrument of power. (Ch. 3)

Underlife (Goffman) — “Secondary adjustments” through which people reclaim remnants of autonomy even within a total institution. Appropriation under maximum domination. (Ch. 3)

Field, Habitus, Capital (P. Bourdieu) — An architect acts within a field with its own rules and hierarchies. Their “taste” and “eye” are socially formed (cultural capital, distinction), and their expertise may function as symbolic violence. (Ch. 13)

Post-political Participation (E. Swyngedouw) — The transformation of participation into a ritual of consensus that conceals real conflicts of power and may sanctify inequality in the name of democracy. (Ch. 14)

Right to the City (H. Lefebvre; D. Harvey) — The collective right to inhabit, appropriate, and transform the city; autogestion as self-management; the architect as a mediator, not someone who imposes solutions. (Ch. 13)

Principle of Normality (Halden, Hogeweyk) — A design strategy that reverses the logic of the total institution. Life inside should resemble life outside as closely as possible, restoring thresholds, names, and everyday rhythms. (Ch. 3)

Production of Space (H. Lefebvre) — The thesis that space is a social product bearing the relationships, conflicts, and hierarchies of its time (as opposed to a natural given or a neutral container). (Ch. 2)

Space of Flows (M. Castells) — Power and the economy operate within networks of flows of capital and information, above the “space of places.” (Ch. 12)

Spatial Triad (Lefebvre) — Three simultaneously present dimensions of every space: perceived (spatial practice, bodily use), conceived

(representations of space: plans, maps, regulations), and lived (representational spaces: meaning, symbol, appropriation). (Ch. 2)

Spatial Fix and Time–Space Compression (D. Harvey) — Capital is periodically invested in the built environment and accelerates turnover; waves of construction and crises constitute its rhythm. (Ch. 12)

Counter-monument (J. E. Young) — A monument that rejects monumentality and transfers the work of remembrance to the viewer. Examples range from Maya Lin's wall and the disappearing Hamburg column to the Stolpersteine. (Ch. 8)

Proxemics (E. T. Hall) — Culturally variable zones of distance (intimate, personal, social, public). The "natural" dimensions of space are in fact norms. (Ch. 6)

Nature as a Construct (W. Cronon) — "Nature" and "wilderness" are culturally and historically produced categories. Idealizing untouched wilderness obscures the nature of the places where we live. (Ch. 7)

Presence × Absence — The city is also shaped by those who are absent: the dead, demolished houses, events remembered and forgotten. Absence is an active force, not merely an emptiness. (Ch. 8)

R

Racialized Surveillance (S. Browne) — Surveillance has always been racialized (from slavery to biometrics and facial recognition); it not only observes differences but also helps produce them. An example is the R. Williams case (Detroit, 2020). (Ch. 11)

Redlining — A historical practice (USA, 1930s) in which loans were denied to entire neighbourhoods according to who lived there. The best-known evidence that segregation is manufactured. (Ch. 5)

Reflexivity (Bourdieu; D. Schön) — Turning the analytical gaze toward one's own position and assumptions. The reflective practitioner acts in dialogue with an ambiguous situation. (Ch. 13)

Relational and Processual Space (D. Massey) — Space as a product of relationships and a multiplicity of concurrent trajectories, a never-finished "simultaneity of stories that have not yet been fully told." This also includes throwntogetherness. (Ch. 2)

Rent Gap (N. Smith) — The difference between the actual and potential return on land that makes reinvestment (and therefore gentrification) profitable. It explains the process from the supply side. (Ch. 5)

Replication Crisis and Publication Bias — A single study is a hypothesis; confidence comes only from independent replication. Striking findings are more readily published than null results. (Ch. 4)

S

Scientism — The tendency to regard only what is measurable as real. The counterpart of superstition, equally misleading. (Ch. 4)

Segregation — Spatial separation of groups by class, ethnicity, or race. It is produced by specific mechanisms, such as redlining, apartheid zoning, or housing allocation practices. (Ch. 5)

Separate System (Eastern State Penitentiary) — A competing programme of discipline: reform through isolation and solitude instead of visibility. It shows that discipline can be built in different forms. (Ch. 3)

Social Fact (É. Durkheim) — A way of acting, thinking, and feeling that is external to the individual, coercive, and collective (language, money, laws, norms). It is real even though people produced it. (Ch. 1)

Social Model of Disability (M. Oliver) — Disability is produced by the environment. It is the step that disables, not the wheelchair. (Ch. 6)

Social Stratification in Space — Space not only reflects social inequality (class, ethnicity, status), but also organizes it. An address partly determines life chances. (Ch. 5)

Social sorting (D. Lyon) — Surveillance sorts the population into categories that are treated differently, thereby reproducing inequality (compare classification in Chapters 10 and 5). (Chapter 11)

Sociological imagination (C. W. Mills) — The ability to see the connection between personal biography and historical or structural forces, and to shift perspective between the individual and society as a whole. (Chapter 1)

Splintering urbanism (Graham & Marvin) — The fragmentation of formerly universal public networks into premium networks (for the affluent)

and bypassed networks (for the poor). Infrastructure here becomes a vector of inequality. (Chapter 10)

Society of control (G. Deleuze) — The transition from enclosed disciplinary institutions to continuous, modulating control through codes and networks, in which the individual becomes a "dividual" broken down into data. (Chapter 11)

Co-creation / co-design (Scandinavian participatory design; P. Ehn) — Users as co-designers, not mere respondents; participation means sharing knowledge and decision-making power, not merely collecting opinions. (Chapter 14)

The just and open city (S. Fainstein; I. M. Young; R. Sennett; N. Fraser; E. Soja) — Equality, diversity, and democracy as criteria; openness to difference; redistribution and recognition; the distinction between "ville" and "cité"; and spatial justice. (Chapter 13)

Standard (normative) user — The body silently assumed by a design, historically an adult, healthy man of average height. Anyone who deviates from it is slightly excluded from the outset. (Chapter 6)

Strategies × tactics (M. de Certeau) — Strategy is the calculation of power from its own "proper place," organizing space from above (map, plan). Tactics are the art of the weak, who have no place of their own, act in someone else's space, and make use of time and opportunity. (Chapter 9)

Structure × agency — The relationship between arrangements larger than ourselves (which both constrain and enable us) and individuals' ability to choose and act. (Chapter 1)

Synopticon (T. Mathiesen) — The reversed panopticon, in which the many watch the few (through the media). It complements Foucault's panopticon, in which the few watch the many. (Chapter 11)

Š

Gray spaces (O. Yiftachel) — Populations and places kept between legality and eviction in a state of "permanent temporariness." Planning here becomes an instrument of "creeping apartheid." (Chapter 5)

T

Tactical urbanism (Lydon & Garcia) — Small, inexpensive, often temporary interventions intended to initiate lasting change (pop-up zones, parklets, pilot modifications). Temporariness here is a test and a form of evidence. (Chapter 9)

Technological sovereignty / data commons (the Barcelona model) — A counter-model in which citizens decide about their data, and data become public infrastructure rather than spoils. (Chapter 11)

Broken windows theory (Wilson & Kelling, 1982) — An influential spatial hypothesis whose evidence never matched its influence. An example of folklore turned into global policy, with a confounding variable (poverty) in the background. (Chapter 4)

World-systems theory (I. Wallerstein) — Core, semi-periphery, and periphery as a structural framework for inequality between places and cities. (Chapter 12)

Terrain vague (I. de Solà-Morales) — Indeterminate, abandoned residual places as a reservoir of freedom and possibility. Their paradox is that designing them generally means destroying their indeterminacy. (Chapter 9)

The book's thesis — Space is social (every arrangement embodies a social decision), and society is spatial (every social relationship has a place). It follows that every drawing is a hypothesis about social life. (Chapter 1)

Tokenism and participation-washing — The risk that methods create only the appearance of participation without sharing power. A living lab can slip into "experimentation on residents," and participatory design into aestheticization (Superkilen). (Chapter 14)

Total institution (E. Goffman) — A place of residence and work where a large group of similarly situated people, cut off from the wider society, lead an enclosed, formally administered life. It dissolves the boundaries between sleeping, working, and playing. (Chapter 3)

U

Mortification of the self (Goffman) — The systematic stripping away of identity upon entering a total institution (uniform, number, loss of possessions and control over the daily routine). (Chapter 3)

Universal design (R. Mace) — Designing from the outset for the broadest possible range of people without special adaptations. The opposite of accessibility "tacked on" afterward and segregated access. (Chapter 6)

Ú

Territorial stigma (L. Wacquant) — Disqualification by address alone. A place's reputation affects its residents in dealings with employers, authorities, and the media. (Chapter 5)

V

Validity and reliability — Whether a measure measures what it claims to (and whether the conclusion also holds elsewhere), and whether the same measurement would yield the same result. (Chapter 4)

More-than-human — An approach that decentres humans and takes account of the city's nonhuman co-inhabitants (animals, plants, fungi, water). This includes rewilding and the "third landscape" (G. Clément). (Chapter 7)

Loose space (Franck & Stevens) — The capacity of a space to be appropriated for uses other than those intended. Its opposite is "tight," single-purpose programmed space. (Chapter 9)

Building layers (S. Brand) — A building as a set of layers that change at different speeds (site, structure, skin, services, space plan, furnishings). A design that does not bind the layers together ages gradually, part by part. (Chapter 9)

Research cycle — An iterative sequence of question → theory → design → data → analysis → interpretation → new question. It ends in refinement and another question, never certainty. (Chapter 4)

Z

Green cosmetics — greenery as advertising and distinction without measurable ecological benefit. Only measurement can distinguish it from functional greenery (test case: Bosco Verticale). (Chapter 7)

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Ladder of participation (S. Arnstein) — a scale from manipulation through tokenism to citizen power. Most "participation" gets stuck at tokenism, and participation can also become an instrument of co-optation (Miessen; Cooke & Kothari). (Chapter 13)

Lived body (M. Merleau-Ponty) — we come to know space through the body, movement, and reach; an abstract plan is not enough. A gap yawns between the drawing we see and the space we experience. (Chapter 6)

Note: The terms have been drawn from the "Key Concepts of This Chapter" sections throughout the book and consolidated; where the same term appears in multiple chapters, all references are provided. Readers will find full explanations, examples, and sources in the respective chapters and in the consolidated bibliography.

INDEX OF CASE STUDIES

Which City, Which Building — and What They Demonstrate

The book is built around cases: each chapter begins with a specific place or building and only then derives theory from it. This index brings them together in one place to serve both as a guide and as a collection of examples for teaching and individual work. The cases have deliberately been selected at two scales — Czech cases alongside international ones — to show that the same mechanisms operate at home and around the world. The overview is arranged by chapter; an alphabetical index is appended at the end. Each case lists its location and briefly explains what it demonstrates in the book.

Chapter 1 — Why Sociology for Architects

Case	Location	What it illustrates
Pruitt-Igoe	St. Louis, USA	Collapse of a modernist housing estate; the “death of modern architecture” as myth versus social and fiscal reality (the framing of the whole book).
Bijlmermeer	Amsterdam, Netherlands	European counterpart of Pruitt-Igoe; a large housing estate between decline and renewal.
Robin Hood Gardens	London, UK	Museumification of Brutalist housing (a fragment in the V&A) as a dispute about value and memory.

Chapter 2 — How Space Is Produced

Case	Location	What it illustrates
Prague river embankment (náplavka)	Prague, Czechia	The same wall, a different place: transformation of perceived, conceived, and lived space; appropriation from below (Lefebvre’s triad).
Cheonggyecheon	Seoul, South Korea	Uncovering a culverted river as the production of space; a critical reading of “restored nature” (developed in Chapter 7).

Chapter 3 — Institutions, Power, and Space

Case	Location	What it illustrates
Presidio Modelo	Cuba	A literal panopticon: architecture of surveillance and the internalization of discipline.
Eastern State Penitentiary	Philadelphia, USA	Separate system of imprisonment; space as an instrument of reform and cruelty.
Halden Prison	Norway	A prison designed against the total institution; a humane regime and debate over the influence of architecture (continued in Chapter 4).
Hogeweyk	Weesp, Netherlands	A “village for people with dementia” as both a total institution and an ethical question (“The Truman Show”).

Chapter 4 — The Research Cycle

Case	Location	What it illustrates
Ulrich’s window	Pennsylvania, USA	A view of greenery and recovery: correlation versus causation, confounding variables, and the birth of evidence-based design.
Broken windows theory	New York, USA	An appealing spatial hypothesis elevated into global policy before being verified; its empirical correction.
Hawthorne studies	Chicago, USA	Observation changes behaviour (the Hawthorne effect); unobtrusive measures and the limits of post-occupancy evaluation (POE).

Chapter 5 — Center and Periphery

Case	Location	What it illustrates
Calton vs. Lenzie	Glasgow, UK	A 28-year difference in life expectancy across just a few kilometres: inequality inscribed on a map (WHO 2008).
The apartheid city	Johannesburg / Cape Town, South Africa	Segregation as the explicit work of spatial planning (Group Areas Act); a geography that outlasts the regime.
Parisian banlieues	Paris, France	Poverty at the periphery (not the core); territorial stigma (Wacquant); correction of Burgess’s model.
Redlining	USA	Denial of loans to whole neighbourhoods on the basis of their residents: evidence that segregation is produced, not natural.
Karlín	Prague, Czechia	The 2002 flood as a trigger for gentrification; quiet displacement (Roma community) and sale of land.
Chanov	Most, Czechia	A socially excluded locality as the result of housing policy and displacement, not the “culture” of its residents.

Chapter 6 — Norm and Body

Case	Location	What it illustrates
Modulor	Le Corbusier	One particular body (a man 183 cm tall) elevated to a universal measure; a norm presented as nature.
USAF cockpits (Daniels)	USA	The myth of the average person: nobody is average in every dimension; the solution is adjustability.
Crash-test dummies	USA	The gender data gap with fatal consequences; “Modulor made of steel.”
Gender mainstreaming	Vienna, Austria	Planning based on finding out who actually uses space (Frauen-Werk-Stadt, snow removal).
Rolling Quads / curb-cut	Berkeley, USA	Lowered curbs won from below; the curb-cut effect benefits everyone (structure × agency).

Chapter 7 — Human and Nonhuman

Case	Location	What it illustrates
Central Park / Seneca Village	New York, USA	“Nature” as an engineered landscape carrying values; the settlement erased when the park was created (Olmsted).
Garden City / Gardens by the Bay	Singapore	Designed greenery on the scale of a state: ecological performance as well as an instrument of governance and branding.
Bosco Verticale	Milan, Italy	A test of “green cosmetics”: the vertical forest as an icon, a mark of distinction, and a question of measurable benefit.
High Line	New York, USA	Excellent landscape architecture as a driver of green gentrification; its creators themselves acknowledged failing the neighborhood.

Chapter 8 — Presence and Absence

Case	Location	What it illustrates
Old Jewish Cemetery	Prague, Czechia	A cosmology of eternal rest versus a shortage of land: graves in as many as twelve layers.
Ruriden and vertical columbaria	Tokyo / Hong Kong	A rental-based cosmology taken to new heights: death as a storage unit with an access system.
Pavel Janák's crematorium	Pardubice, Czechia	Cremation as a secular, progressive manifesto; architecture as a worldview ("House of Light").
Vietnam Veterans Memorial	Washington , USA	A turning point in the language of monuments (Maya Lin): incision, names, and reflection instead of a heroic pedestal.
Disappearing Monument against Fascism	Hamburg, Germany	Counter-monument (Gerz): a column sinking into the ground transfers the work of remembrance to the viewer.
Memorial to the Murdered Jews of Europe	Berlin, Germany	A field of nameless stelae (Eisenman): the tension between abstraction and information as the most honest condition of memory.
Stolpersteine	Europe	Dispersed memory encountered in an everyday step: "stumbling stones" in the pavement in front of victims' last homes.
Stalin Monument / Metronome	Prague (Letná), Czechia	The sequence colossus → empty pedestal → metronome as a legible statement about changing memory; difficult heritage.

Chapter 9 — Permanence and Temporariness

Case	Location	What it illustrates
Times Square	New York, USA	A temporary tactic (paint and chairs) transformed into a permanent pedestrian zone; pilot verification as in Chapter 4.
Tempelhofer Feld	Berlin, Germany	Open, undeveloped land defended in a referendum: a victory of the temporary and indeterminate over construction.
Les Grands Voisins	Paris, France	Temporary use as a negotiated interim period (accommodation, workshops, public life) before redevelopment.
Christiania	Copenhagen, Denmark	Half a century of a “free city” in gray space; a third ending to temporariness — contractual transfer into residents’ hands.
Karlín Barracks	Prague, Czechia	Bottom-up appropriation running up against the zoning plan and occupancy approval; temporariness as a phase in increasing land value.

Chapter 10 — Visible and Invisible

Case	Location	What it illustrates
Hydraulic citizenship	Mumbai, India	Water available in time windows: pipe pressure as a measure of belonging to the city (splintering urbanism).
Morandi Bridge	Genoa, Italy	A maintenance deficit ending in disaster (43 deaths); funding is found for new construction, but not for maintenance.
Prague Metro (2002 flood)	Prague, Czechia	Infrastructure becomes visible only when it fails (Star): an ordinary network becomes the most-discussed object.
Beautification societies	Czech lands (since 1861)	Voluntary civic care for public space; care as a civic practice, not merely a paid service.

Chapter 11 — Control and Freedom

Case	Location	What it illustrates
Sidewalk Toronto	Toronto, Canada	The smart city as a private hunting ground for data; a project rejected from below (BlockSidewalk).
Technological sovereignty / Decidim	Barcelona, Spain	A counter-model: data as a public good and a participatory platform; “citizens first, technology second.”
Municipal camera system	Prague, Czechia	Debate about facial recognition; the boundary between security and surveillance (“Big Brother in the Chinese style”).
The Robert Williams case	Detroit, USA	The first documented wrongful arrest due to facial recognition: racialized surveillance and the cost of error.
Social credit / Xinjiang	China	An extreme form of surveillance assemblage linked to state power; mass biometric surveillance of a minority.

Chapter 12 — Global and Local

Case	Location	What it illustrates
Global cities	New York / London / Tokyo	Command nodes of the world economy and their polarization into an elite and a migrant service workforce (Sassen).
The Lagos debate	Lagos, Nigeria	Koolhaas (fascinating self-organization) versus Gandy (aestheticizing deprivation): how to read, and how not to read, cities of the Global South.
The Bilbao effect	Bilbao, Spain	The belief that an iconic building can switch a city into global flows; sometimes a miracle, sometimes an expensive sculpture.
Dubai	United Arab Emirates	The extreme logic of icons and starchitecture, built by migrant workers who remain outside the advertising frame.
Touristification of the historic core (Airbnb)	Prague, Czechia	The historic center as a global commodity: short-term rentals empty a neighborhood of its residents.

Chapter 13 — The Architect as a Social Actor

Case	Location	What it illustrates
Quinta Monroy / Elemental	Iquique, Chile	“Half of a good house” (Aravena): shared authorship built into form; both its limits and its strength.
Prague river embankment (revisited)	Prague, Czechia	Who is the “author” of a place that has emerged gradually: the role of a designer who enters a process already underway.

Chapter 14 — Participation and Co-Creation

Case	Location	What it illustrates
Superkilen	Copenhagen, Denmark	Participation as aestheticization: “identity as park equipment”; post-political co-creation (Swyngedouw).
Participatory budgeting	Porto Alegre, Brazil	Residents decide on a portion of municipal investment; a model spread to thousands of cities, including Czech ones.
Social urbanism	Medellín, Colombia	Libraries, schools, and cable cars in the poorest neighborhoods; transformation from below and above—and the risk of “aerial gentrification.”
Pěstuj prostor	Plzeň, Czechia	Residents’ wishes translated directly into an architectural competition brief; participation at the beginning, not the end.

Alphabetical Index of Cases

For quick reference, cases are listed alphabetically with the chapter in which they are discussed (ordered according to Czech spelling).

Apartheid city — Chapter 5 (Center and Periphery)

Bijlmermeer — Chapter 1 (Why Sociology for Architects)

Bilbao effect — Chapter 12 (Global and Local)

Bosco Verticale — Chapter 7 (Human and Nonhuman)

Calton vs. Lenzie — Chapter 5 (Center and Periphery)

Central Park / Seneca Village — Chapter 7 (Human and Nonhuman)

Dubai — Chapter 12 (Global and Local)

Eastern State Penitentiary — Chapter 3 (Institutions, Power, and Space)

Garden City / Gardens by the Bay — Chapter 7 (Human and Nonhuman)

Gender mainstreaming — Chapter 6 (Norm and Body)

Global cities — Chapter 12 (Global and Local)

Hawthorne studies — Chapter 4 (Research Cycle)

High Line — Chapter 7 (Human and Nonhuman)

Hogeweyk — Chapter 3 (Institutions, Power, and Space)

Hydraulic citizenship — Chapter 10 (The Visible and the Invisible)

Chanov — Chapter 5 (Center and Periphery)

Cheonggyecheon — Chapter 2 (How Space Is Produced)

Christiania — Chapter 9 (Permanence and Temporariness)

Karlín — Chapter 5 (Center and Periphery)

Karlín Barracks — Chapter 9 (Permanence and Temporariness)

USAF cockpits (Daniels) — Chapter 6 (Norm and Body)

Pavel Janák's crematorium — Chapter 8 (Presence and Absence)

Les Grands Voisins — Chapter 9 (Permanence and Temporariness)

Municipal camera system — Chapter 11 (Control and Freedom)

Monument Against Fascism (disappearing monument) — Chapter 8 (Presence and Absence)

Modulor — Chapter 6 (Norm and Body)

Morandi Bridge — Chapter 10 (The Visible and the Invisible)

Crash-test dummies — Chapter 6 (Norm and Body)

Beautification societies — Chapter 10 (The Visible and the Invisible)

Memorial to the Murdered Jews — Chapter 8 (Presence and Absence)

Participatory budgeting — Chapter 14 (Participation and Co-creation)

Parisian banlieues — Chapter 5 (Center and Periphery)

Pěstuj prostor — Chapter 14 (Participation and Co-creation)

Prague embankment — Chapter 2 (How Space Is Produced)

Prague embankment (revisited) — Chapter 13 (The Architect as a Social Actor)

Prague Metro (2002 flood) — Chapter 10 (The Visible and the Invisible)

Presidio Modelo — Chapter 3 (Institutions, Power, and Space)

Pruitt-Igoe — Chapter 1 (Why Sociology for Architects)

Robert Williams case — Chapter 11 (Control and Freedom)

Quinta Monroy / Elemental — Chapter 13 (The Architect as a Social Actor)

Redlining — Chapter 5 (Center and Periphery)

Robin Hood Gardens — Chapter 1 (Why Sociology for Architects)

Rolling Quads / curb-cut — Chapter 6 (Norm and Body)

Ruriden and vertical columbaria — Chapter 8 (Presence and Absence)

Sidewalk Toronto — Chapter 11 (Control and Freedom)

Social credit / Xinjiang — Chapter 11 (Control and Freedom)

Social urbanism — Chapter 14 (Participation and Co-creation)

Debate over Lagos — Chapter 12 (Global and Local)

Stalin Monument / Metronome — Chapter 8 (Presence and Absence)

Old Jewish Cemetery — Chapter 8 (Presence and Absence)

Stolpersteine — Chapter 8 (Presence and Absence)

Superkilen — Chapter 14 (Participation and Co-creation)

Technological sovereignty / Decidim — Chapter 11 (Control and Freedom)

Tempelhofer Feld — Chapter 9 (Permanence and Temporariness)

Broken windows theory — Chapter 4 (Research Cycle)

Times Square — Chapter 9 (Permanence and Temporariness)

Touristification of the city center (Airbnb) — Chapter 12 (Global and Local)

Ulrich’s window — Chapter 4 (Research Cycle)

Halden Prison — Chapter 3 (Institutions, Power, and Space)

Vietnam Veterans Memorial — Chapter 8 (Presence and Absence)

Note: Some cases recur in several chapters (e.g., the embankment in Chapters 2, 9, and 13; Cheonggyecheon in Chapters 2 and 7; Karlín in Chapters 5, 9, and 12). Here they are listed under the chapter in which they are discussed in greatest detail. Readers will find full accounts and sources in the relevant chapters and in the consolidated bibliography.

CONSOLIDATED BIBLIOGRAPHY

Literature cited and recommended throughout the book

This bibliography brings together in one place all literature cited and recommended in the individual chapters. It serves for quick orientation, locating sources, and library reference. Each entry is followed in square brackets by the chapter (or chapters) in which the source is used. Entries are arranged alphabetically by the surname of the first author (or by title for institutional and anonymous sources), following Czech alphabetical ordering. Where possible, notes from the chapters concerning open-access sources have been retained.

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On the Morandi Bridge collapse (Genoa, 14 August 2018): final reports of the Italian investigation and reviews in the specialist press; Renzo Piano’s new viaduct (2020) as a counterpoint between visible new construction and invisible maintenance. [Ch. 10]

On the High Line: Friends of the High Line; interviews with R. Hammond (CityLab / The Atlantic, 2017); price-data analyses (StreetEasy, “Changing Grid”). For Cheonggyecheon, see the sources for Chapter 2. [Ch. 7]

On Hogeweyk: documentation by Molenaar & Bol & Van Dillen architects and the operator (Vivium Zorggroep); critical commentary in the specialist and daily press (search term “dementia village”). On the Presidio Modelo case: [Ch. 3]

On the following cases: Sidewalk Labs / Waterfront Toronto (cancelled in 2020); Barcelona — “Towards Technological Sovereignty,” the DECODE project and the Decidim platform (freely available); the City of Prague’s municipal camera system and the debate about facial recognition (2019); the EU Artificial Intelligence Act (AI Act, 2024). [Ch. 11]

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The tradition of civic beautification societies (from 1861, Kutná Hora; now being revived) — voluntary civic care for public space. The 2002 flood and the Prague metro as a case of a breakdown that makes infrastructure visible. [Ch. 10]

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Z

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8

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