

Mikkel Thorning

VERTIGO



VERTIGO.

ambition,
horizontal
restraint;
urbanism
of
shape
investigation
Vertical
An
that
Kompas
our
cities.
Fellowship
2025
Mikkel
cultural
forces
Turning
Chicago
and
Copenhagen.
on
the
reflection
a



fig. 1
Dusk on the West Coast. The horizon seen as the bounding circle or dividing line between earth and sky.
Vejers Strand, Denmark. December 2021.

VERTIGO.

Vertigo grew out of a year-long fellowship at Myefski Architects in Chicago, Illinois. During the winter of 2024, I was sitting in a cottage in Vejers on the west coast of Denmark, trying to articulate a proposal for the fellowship application.

The year before, I had spent time in Chicago visiting my close friend Kristian Ancker, who was then working at the Danish Consulate in the John Hancock Center. From that vantage point, the city read very differently than anything I had known. The ground receded. The horizon disappeared. Chicago's towers were not hesitant or symbolic in the way Danish vertical landmarks often are. They were direct, unapologetic, and continuous.

It was not the first time a skyline had stopped me. As a kid I remember visiting Copenhagen and straining my neck at the multi-story buildings along the main streets. At fifteen it was New York City. There is a line of European men who have lost their heads over American skyscraper culture, as a colleague of mine put it, and I suppose I am somewhere in that tradition. Rem Koolhaas wrote *Delirious New York*. Michel de Certeau climbed the World Trade Center and tried to read the city from above. I have no such ambitions. But I recognize the impulse.

That sensation became the starting point for this book. Words first accumulated on a screen, then on paper. What began as a curiosity about two cities gradually unfolded into a broader reflection on how cultures imagine height, power, density, and the human body in space. Vertigo is the record of that process.

Mikkel Thorning,

Kompas Fellow.

2025-2026.

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INTRODUCTION: SAND DUNES AND SKYSCRAPERS

*My homeland is **horizontal**.*

The horizon over the ocean as seen from the dunes of the west coast of Jutland. The fields of potatoes and rapeseed flowers stretching to nowhere. The purple and brown expanse of heathland. The eye looks ahead until the world becomes blurry. There is no reason to look up.

Then I came to Chicago.

*The first time you stand at the base of one of the towers in the Loop and tilt your head back, something happens that is difficult to explain. The building does not simply rise. The ground seems to fall away beneath you. The sky pivots. For a moment you cannot tell if you are looking up at something or falling toward it. It is not quite fear and not quite wonder. It is **vertigo**.*

This book grew out of that sensation. Out of the disorientation of moving between two ways of inhabiting the world, one that looks ahead and one that looks up and down, and discovering that the difference goes much deeper than architecture.



Foto by Jonas Soeby.

fig. 2
Tranum Aktieplantage.
Tranum, Denmark. May 2013.



Foto by w_lemay.

fig. 3
Sears Tower disappearing into the clouds.
Chicago, IL. December 2023.

THE VERTICAL CITY

1. Forged in Fire

It began with catastrophe. In 1871, the Great Chicago Fire consumed the city with a fury that shocked the nation. Hot, dry conditions and wooden construction meant the fire spread without restraint. Over three square miles burned, including the central business district. What might have signaled an end became, instead, an opening. The fire cleared space physically, legislatively, and psychologically. In a young country already comfortable with reinvention, Chicago found itself unburdened by the past. Where European cities are slowed by layers of history and preservation, Chicago had only ash. And from ash one can be reborn.

This was not a city frozen in mourning. It was a city that could rewrite its own logic. Urban land, suddenly emptied, gained value through absence. The rebuilding effort did not simply restore what was lost; it accelerated what was only beginning. Chicago’s location, mid-continent, where railroads met the lake, meant it was already positioned for expansion. Population surged. In 1850, fewer than 30,000 people lived here. By 1890, it was over a million. Immigrants arrived daily: workers, builders, merchants, consumers. The demand for space was not only residential. Businesses crowded the city’s center, pressing against each other on land that grew more expensive with every passing season (Cronon 1991).

The grid imposed early and almost without resistance, became a silent ally. Flat, repetitive, relentless. A coordinate system missing only the z-axis. It made land legible and tradeable. Parcels could be exchanged like currency. But the grid also did something subtler. It isolated each plot from its neighbors, turning every block into what Koolhaas would later call the block alone: a self-contained island, disconnected from the continuous fabric of the European city, ready for vertical expansion (Koolhaas 1978). In the medieval city, buildings lean on one another, sharing walls and histories. The Chicago skyscraper shared nothing. It stood free, a monument to the individual or the corporation standing apart from the collective, a self-contained conquest of its specific

plot of earth. To conquer the sky, the builders of Chicago needed to solve two fundamental problems: gravity and exhaustion. How to keep the building up, and how to get the people up.

The solution to the first came with the steel frame. For millennia, height was synonymous with weight. To build high, you had to build thick. The Monadnock Building (1891) stands today as the final, stubborn monument to this ancient logic. Its masonry walls are close to two meters thick at the base, pressing fifty centimeters into the clay soil. It is a structure of pure compression, dark and heavy as a pyramid.

The steel frame broke this equation. William Le Baron Jenney’s Home Insurance Building (1885) in Chicago is considered the first skyscraper by most. It liberated the wall. By shifting the load to a hidden skeleton of steel beams, the façade was freed from its structural duty; it became a curtain that could be opened to the sun. The building started shedding its weight and became a cage of light.

The solution to the second problem was the elevator. The history of the vertical lift can be traced back to Roman engineers designing hoisting mechanisms for the Colosseum, raising gladiators and animals from underground chambers to the arena floor (Klein 2015). But it was not until 1853, when Elisha Otis staged his legendary demonstration at the Crystal Palace exhibition in New York, that the elevator became something people trusted with their lives. Standing atop a platform hoisted high above the crowd, Otis ordered the rope cut. Instead of plummeting, the platform locked in place. “All safe,” he called out (Goodwin 2001). That phrase carried more consequence than he perhaps knew. Four years later, the first commercial passenger elevator was installed in the E.V. Haughwout Building in Manhattan (Goodwin 2001). Chicago followed, and when its office buildings gained elevators in the early 1880s, the economics of the building section were quietly inverted.

Before the elevator, the top floor was the domain of the poor: the garret, the attic, the maids chamber. After it, the higher you went, the cleaner the air, the brighter the light, and the higher the rent. The vertex became the premium. But the elevator did something more



fig. 4
Tabula Rasa after the Great Chicago Fire.
Chicago, IL. 1871.



fig. 5
Steel worker in Chicago.
Chicago, IL. August 2008.

Foto by Timo Goodrich.

fundamental than redistribute desirability. It resulted in the reproduction of the world: the ground plane could be folded upward into seemingly endless repetition, each floor a copy of the valuable virgin site below, stacked floor upon floor of rentable territory. The building became a machine for multiplying land. Investors did not need to understand architecture. They only needed to understand profit per square meter.

After the fire, the rules were already disrupted. Now they could be revised again. Developers tested height limits, negotiated setbacks, and bent what remained of the codes. Regulation became a material rather than a constraint. The skyscraper did not grow from its context. It interrupted it.

2. The Aesthetics of Ambition

With the mechanics solved, the question remained: what should the skyscraper look like?

Louis Sullivan, a central figure in the first Chicago School, stepped into this void. In his 1896 essay *The Tall Office Building Artistically Considered* (1896), he argued that the new vertical organism required a new morphology. He rejected the idea of stacking disparate layers like a wedding cake and looked instead to nature and to the classical column for a tripartite logic: a base designed for the friction of the street, with grand entrances and large windows opening onto the horizontal city; a shaft of indefinite, identical floors representing the repetitive labor of the office hive; and a distinct capital or cornice to terminate the ascent, creating a definitive silhouette against the clouds.

It is in this text that Sullivan famously declared that “form ever follows function.” But in the frenzy of the Loop, a different truth was also emerging. That form followed finance (Willis 1995). The height was dictated by the ledger; the ornament was the marketing.

This did not make the results less magnificent. The buildings that rose in the Loop in these years, the Rookery, the Auditorium, the Fisher, were not merely engineering triumphs. They were arguments. Their stone and terracotta ornament climbed skyward like vines reaching for light, as though the building itself were alive and straining upward. Sullivan’s conviction



fig. 6
*Pyramid of Menkaure (60m), built 2510 BC.
Giza, Egypt. December 2021.*



fig. 7
*Monadnock Building (66m), built 1891.
Chicago, IL. July 2025.*



fig. 8
*OTIS Elevators in the Wrigley Building.
Chicago, IL. July 2025.*

was that architecture should express what a civilization believed about itself. If the skyscraper was the form of the age, it should say so without apology.

Historically, the tower had been a sacred object: the spire of the church, the minaret of the mosque, the campanile of the palazzo. It was an object to look at, not to inhabit. It symbolized the divine or the sovereign. Chicago performed what might be called the annexation of the tower: it took the phallic confidence of the spire and filled it with clerks, typewriters, and insurance agents. The tower was not democratized so much as commercialized. It became a vessel for the everyday business of capitalism. The skyline was no longer a graph of religious piety but of economic virility, and Sullivan’s ornament was its most eloquent signature.

Yet lurking at the edges of the Chicago experiment was a different possibility, one that Koolhaas would later identify as the latent logic of the skyscraper. Exemplified in the 1909 theorem, imagining each floor as an independent plot of virgin land. What if each floor were not a repetition of the one below but an entirely independent world, incompatible with its neighbors, freed from any relationship to what lies above or beneath it? The block alone, pushed to its vertical extreme. A Rookery that was a stack of unrelated courtyards. A Fisher Building that was a vertical carnival. A Monadnock conceived not as a unified geological mass but as geological strata, each layer belonging to a different era entirely. Sometimes we forget to question our approach because we build on precedence. Without it imagination is unshackled.

Something else was also pulling in the opposite direction. The World’s Columbian Exposition of 1893 with Daniel Burnham’s White City, staged on Chicago’s lakefront arrived like a competing ideology. Where Sullivan had called for a new American architecture freed from European precedent, the Exposition answered with columns, domes, and classical symmetry borrowed from Rome, borrowed from Greece. The contrast was not lost on Sullivan, who later wrote bitterly that the Exposition had set American architecture back fifty years (Sullivan, Louis H 1924). Whether or not he was right, he was describing something real: the tension between the forward pressure of technology and capital and the backward pull of cultural prestige.

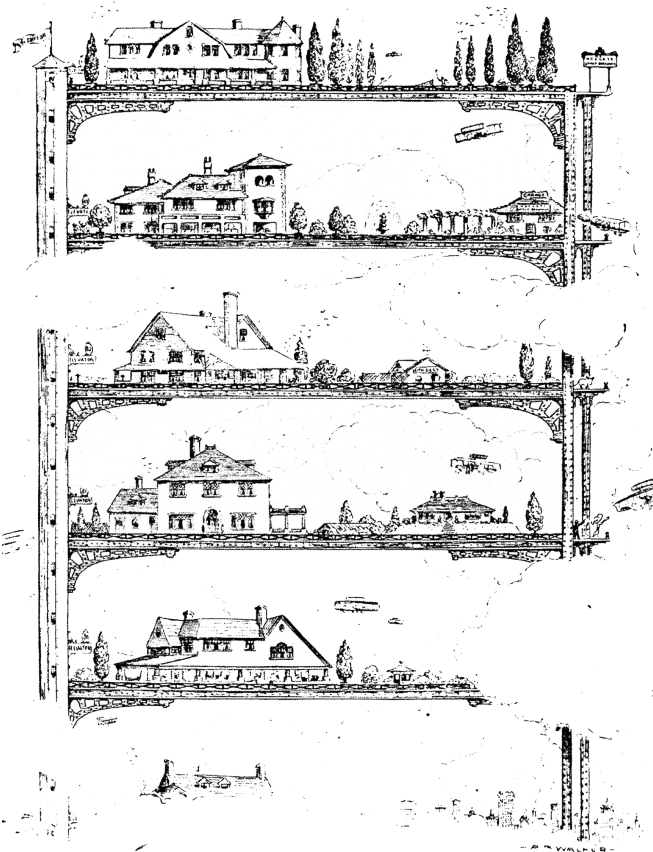


fig. 9
*1909 Theorem.
Life Magazine, 1909.*



fig. 10.
Monadnock & Fisher Building.
Chicago, IL. July 2025.

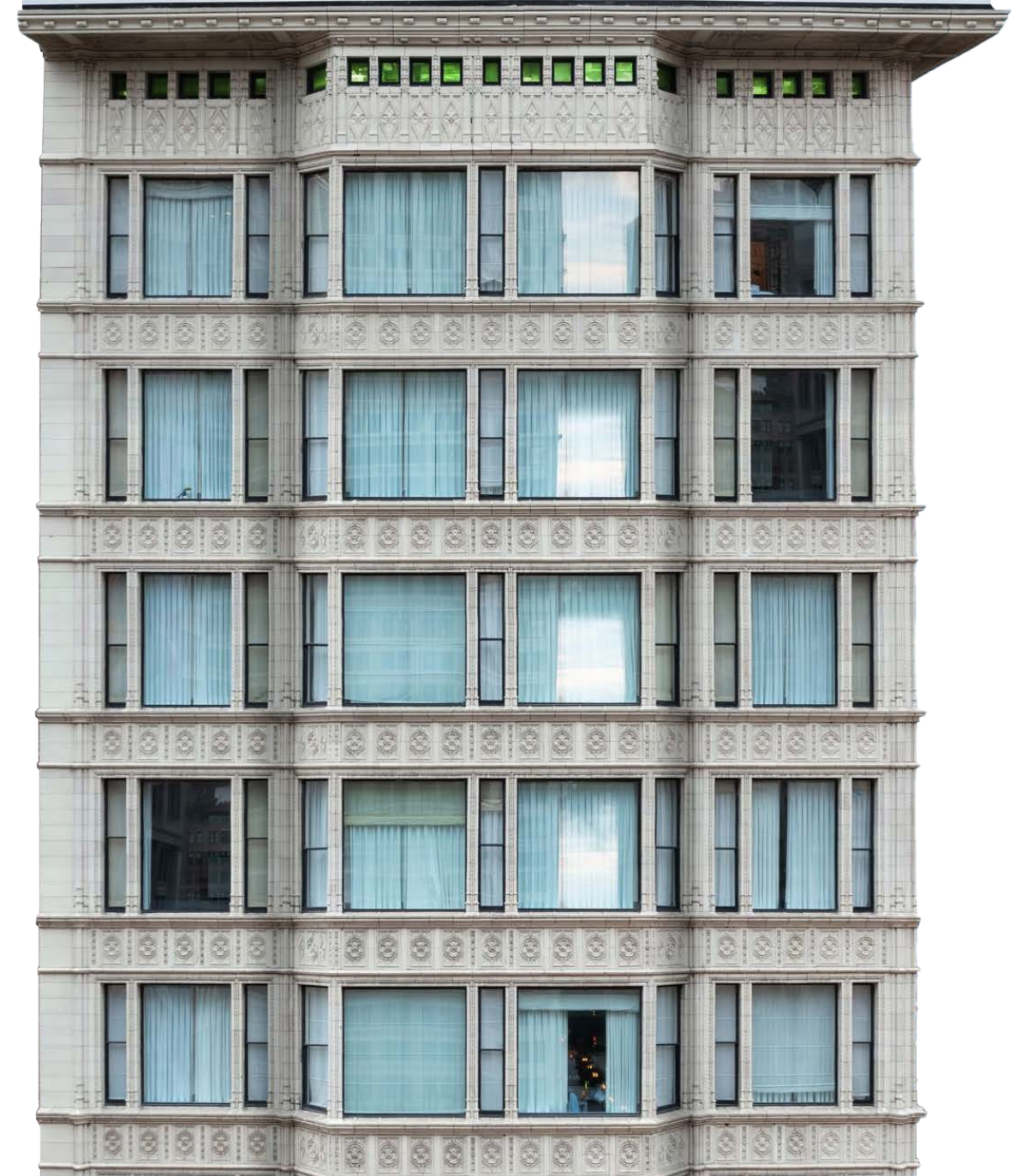


Foto by Chris Hytha.

fig. 11
Reliance Building. Finished in 1895 by architects Burnham & Root, Charles B. Atwood.
First skyscraper to have glass covering the majority of its surface area (61.6m, 15 Floors).
Chicago, IL.

3. The Most Beautiful Building in the World

That tension crystallized in 1922, when the Chicago Tribune announced an international competition for its new headquarters on Michigan Avenue. The brief was disarmingly simple: the editors wanted “the most beautiful office building in the world.” (Larson & Geraniotis 1987). That a newspaper would frame its ambition this way, and that hundreds of architects from across Europe and America would respond, tells you something about what the skyscraper had become by the early 1920s. It was no longer simply a technical problem. It was a cultural statement, and everyone with a drawing board had an opinion about what it should say.

The 263 entries that arrived constitute something close to a time capsule of everything architecture believed about itself at that particular time in history. To page through them is to watch a civilization argue with itself about what the future looks like.

Howells & Hood won. Their tower rose in the neo-Gothic mode: a shaft of pale limestone tapering toward a crown of flying buttresses, its silhouette serrated against the Chicago sky. It was handsome, self-assured, and essentially backward-looking. It resurrected the vertical architecture of a medieval cathedral, but this time scaled up and emptied of God, replaced with editors and printing presses. The Gothic vocabulary had been stripped of its religious conviction and redeployed as prestige.

The more consequential design came second. Eliel Saarinen, submitting from Helsinki, produced a tower that seemed to belong to no historical moment at all and therefore to every future one. His entry rose in clean, tapering tiers, its surface articulated with vertical piers that dissolved into shadow rather than resolving into ornament. There were no buttresses, no tracery, no borrowed costume. The building earned its form from its own internal logic, from the rhythm of structure and window, from the way mass could be made to feel as though it were reaching rather than merely standing. Louis Sullivan, now old and largely forgotten, called it the most beautiful design submitted. When Saarinen’s entry lost, Sullivan wrote that the result was a setback for American architecture. Not because Howells & Hood had done something wrong, but because the profession had chosen the familiar over the genuinely new (Sullivan 1923).

On the opposite end were the proposals of the emerging Modernism. Precursors to the International Style these towers were stripped of ornament, history and context, and started abstracting the form of the skyscraper. The submissions from Max Taut as well as Walter Gropius & Adolf Meyer would prove to signal the emergence of the global phenomenon of Modernism.

Then there was Adolf Loos. The Viennese architect, who had spent his career as ornament’s most implacable enemy, submitted a drawing of a building in the shape of a giant Doric column: base, shaft, and capital, precisely as Vitruvius had described, scaled to thirty stories and planted on the corner of Michigan Avenue.

TRIBUNE COMPETITION



fig. 12
Max Taut's Submission.

\$50,000 PRIZE!

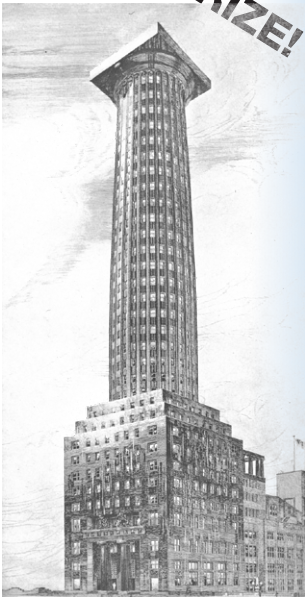


fig. 13
Adolf Loos's Submission.

CHICAGO SUNDAY TRIBUNE, DECEMBER 3, 1922. A * PART 1—PAGE 3.

AWARDS IN ARCHITECTS' COMPETITION FOR NEW TRIBUNE BUILDING

THE WINNING DESIGN--\$50,000 PRIZE

HOWELLS WINS COMPETITION FOR TRIBUNE TOWER

Son of Novelist Gains Architect Prize.

(Continued from first page.)

showing the same from all points as the Tribune landmark. We feel that in this design we have produced a unit. It is not a tower or spire, placed on a building—it is all one building. It climbs into the air naturally, carrying up its main structural lines, and leading them, together with a high open parapet. Our disposition of the main structural piers on the exterior has been adapted to give the full utilization of the corner light in the shaft, and the view up and down the avenue.

Our desire has been not so much an architectural expression of any particular style as to express in the exterior the essential structural problem of skyscraper construction, with its competing vertical and horizontal lines, and its towered horizontals. It is only carrying to a final expression what many of our available houses have tried, almost under more or less hampering conditions in various cities. We have wanted to make this landmark the study of a beautiful and vigorous form, not of an extraordinary form.

The area of the cross section of the central part of the tower gives the area of its several supports in 1,800 square feet, and thus within the 1,500 square feet allowed, the footprint of the top on the street being also within the building low. It is perhaps not necessary to call attention to the fact that the upper part of the building has been designed not only for its own outline and composition, but for the possibilities of illumination and reflected lighting at night.

Square Tower Effect.

It will be observed by reference to the picture of Mr. Howells' design on this page that he has in the architectural scheme, "suggested" such a tower as would be a landmark from only one side. But by the design—we think it a stroke of genius—of carrying the horizontal lines to the north and south sides the effect of a square tower is achieved. The tower is built to a height of 480 feet. Military Gothic, which is how the style of our new home has been defined, never, we believe, had a greater chance to get itself expressed.

As Austin Avenue, which would be the main line from street level to roof, never be cut off on that side. As the Tribune, even the old, on the north, it will look to that no structure which will destroy the solidity of the view from that side is ever created by the terms of the Chicago building ordinance. The Tribune building occupies a height of 280 feet. That is the height of the tower. The rest is for inspiration, a factor, he is sure, to be considered by the architect, the writer and the hand-craftsman. The tower and the gable, a journal like THE TRIBUNE are the pictures of progress that challenge all night long below them.

Harmony of Design.

We emphatically congratulate Mr. Howells and ourselves that the theme of the right flying buttresses and their sustaining piers is carried without exception and without confusion from ground to the summit. There is inspiration in that tremendous sweep upward, and it ends in beneficence. We consider our new building as a repository of services. It is composed, unadorned, commanding and he says something that we must live up to. He is sure this view.

Mr. Howells has not treated the structure as a building and a tower. It is a unit, and so much it will fit its destined site like the rock of Gibraltar, holding its own and all the tremendous things which within it rest. And, we are confident, will rise along the new mile between the city and its beautiful breathing spaces of green and of blue line to the north.

A stroke of the architect's that is some trivial to describe as charming must be looked upon here. Very true that. It has set the blue sky into the outline of the building. From every point of view there will be glimpses of sunlight and of cloud between the right flying buttresses which, in their totality give the impression of battlements by the common eye but which are also also distinct with grace.

Called Real Achievement.

When his commission began to take form in stone we believe our neighbors and fellow townsmen will realize John Mead Howells as a designer and builder who has done a significant thing in the history of American commercial architecture. He has combined simplicity with simplicity. He has been successful but also has been magnificent.

Do THE TRIBUNE what he has done brings home our thoughts of more delicate and more circumspect, and more timber lands to make paper from, and more ideas and values to carry it in, but thought of the obligations of a profession which, in these uncertain times, must mean service.

John Mead Howells is 54 years old. He was born in Cambridge, Mass., where his father, William Howells, was editor of the Atlantic Monthly and was writing the earlier works in the long series of novels which are now being collected and which have taken a permanent place in the literary history of the whole country. His mother was Frances Mead Howells. He was educated at the Massachusetts Institute of Technology and at Harvard, and he is

Architect of the First Prize Winning Design

JOHN MEAD HOWELLS.
(Photograph copyright by Chapman Studio, Inc., New York.)

Second Prize Design--\$20,000 Award

Honorable Mention

Designed by Eliel Saarinen, Helsinki, Finland. Wallace & Gromann, associates.

Third Prize Design--\$10,000 Award

Designed by Helmut & Roche, Chicago.

HONORABLE MENTION

Designed by Richard Yoshino, Mine, Urbana, Ill.

Designed by Schmidt, Gordon & Martin of Chicago.

Designed by Prof. Giuseppe Bossi of Rome, Italy.

Designed by Charles H. Cobb and Carl F. Gould of Seattle, Wash.

fig. 14
Chicago Sunday Tribune.
December 3, 1922.

It is difficult to know, even now, exactly what Loos intended. It may have been a provocation aimed at Sullivan’s tripartite formula, which Loos was literalizing to the point of absurdity. It may have been a joke at the expense of the competition itself, which had asked for beauty and received, in Loos’s reading, only disguised historicism. Or it may have been entirely serious: an argument that if you were going to reach for classical authority, you should at least have the honesty to do it without pretense.

What the competition revealed, taken as a whole, was that the skyscraper had become a site of genuine ideological contest. The building type that Chicago had invented out of commercial necessity was now being claimed by opposing visions of what modern life was and where it was going. Howells and Hood’s Gothic crown looked to a European past for legitimacy. Saarinen’s tapering tower and Taut’s abstract forms pointed toward architectures that had not yet been built. And Loos’s column stood in the middle of the argument, daring everyone to notice that the argument itself might be the point.

Chicago, characteristically, chose the option that looked most like confidence. The Tribune Tower that stands today on Michigan Avenue is beautiful, in the way that conviction always is. But the ghost of Saarinen’s unbuilt tower haunts it.

4. The Golden Age

The decade that followed the Tribune competition belonged to art deco. Where Sullivan had looked to nature and the classical column, and where Saarinen had pointed toward an architecture not yet built, art deco looked to both at once: to the ornament and craft of historical precedent and to the energy and geometry of the machine age, producing buildings of extraordinary surface richness that were also, unmistakably, modern. The Carbide and Carbon Building on Michigan Avenue, clad in dark green terra cotta and gold leaf, reads from the street like a vertical jewel. The Chicago Board of Trade terminated LaSalle Street with a limestone mass topped by a figure of Ceres, goddess of grain, a piece of civic mythology as confident as anything Sullivan

had proposed. These were not buildings embarrassed by their ambition. They wore it on their facades. Then the market crashed. The Empire State Building, completed in 1931 into the depths of the Depression, sat so empty for so long that it was nicknamed the Empty State Building. The great era of vertical construction simply ran out of money before it ran out of ideas, and the skyscraper entered a long pause. When building resumed in earnest after the war, the world it returned to had changed entirely. The clients were different, the materials were different, and the architect who would define the next chapter had arrived in Chicago from a continent in collapse, carrying a vision of architecture that had no patience for ornament or mythology or the spirit of grain goddesses surveying the Loop. Modernism could only be kept at bay for so long before it eventually returned.

Foto by Chris Hytha.



fig. 15
The Carbide and Carbon Building.
Chicago, IL.

5. The Glass Machine

Ludwig Mies van der Rohe arrived in Chicago in 1938, a refugee from a continent in collapse. He brought with him a vision of architecture as pure structural logic: steel and glass, the grid and the void, nothing that was not necessary. He developed his work at the Illinois Institute of Technology, and then in the city itself. The Lake Shore Drive Apartments (1951) were unlike anything Chicago had produced before. Twin glass towers standing at the edge of the lake, their steel frames exposed on the exterior, their proportions arrived at through rigorous logic. There was no ornament, no base or capital in Sullivan’s sense, no concession to the street.

This was the International Style arriving with full conviction, and Chicago absorbed it as naturally as it had absorbed the steel frame seventy years earlier. The city’s tolerance for reinvention, the quality that had made the skyscraper possible in the first place, now made it receptive to a modernism that swept away everything decorative and historical. Where Sullivan had asked what the building should express, Mies asked what it could be stripped of and still stand. The answers produced a different kind of skyline: precise, repetitive,

disciplined. The corporate tower as an efficient machine. The aesthetic shift mirrored a shift in what the tower was for. Sullivan’s ornamented shafts had announced individual ambition of the merchant, the newspaper baron, the insurance company presenting its face to the street. Mies’s glass boxes announced something cooler and more systemic: the corporation as an organizational form rather than a personality, the building as a node in a network rather than a monument in a city. The Tribune Tower’s Gothic crown had been the skyscraper as theater. The Federal Center was the skyscraper as infrastructure.

By the latter half of the twentieth century, the Sears Tower (1973) claimed the title of the world’s tallest building and would hold the record for 25 years, declaring that Chicago’s vertical ambition was not exhausted. But the nature of that ambition had changed. The skyscraper was no longer primarily a local story of a Midwestern city building its way toward the sky with steel from its own mills and ambition forged by its own fire. It had become a global form, repeating itself in Dubai and Shanghai, in Singapore and São Paulo, driven everywhere by the same logic of capital, visibility, and land value. Chicago remained one of its great stages. But it was now one among many.

Foto by Jaysin Trevino.



fig. 16
Looking down at the roofs of the chevron setbacks.
Chicago, IL. March 20, 2014.

Foto by Jaysin Trevino.



fig. 17
Michigan Plaza intersections.
Chicago, IL. March 20, 2014.



fig. 18
Sears Tower in the sunset.
Chicago, IL. Between 1980-2006.

Foto by Carol M. Highsmith.

5. The Transaction

Chicago's relationship to height has always been frank about its own motivations. There is no shame in the transaction. The city built tall because land was expensive, because investors demanded returns, because corporations needed visibility, because height in a flat continent spreading to every horizon was the most legible declaration of arrival.

This is what makes Chicago's verticality so different from the spires it borrowed and repurposed through the annexation of the tower. The church tower, the minaret, the campanile were objects to be seen from outside, symbols pointing toward something beyond themselves. The skyscraper turned this inside out. It became a vessel to inhabit: filled with clerks and typewriters, insurance agents and lawyers, the ordinary machinery of commerce. The skyline was no longer a graph of religious conviction or civic aspiration. It was a graph of economic confidence, of what the market believed, at any given moment, about the future value of this particular piece of earth.

The reproduction of the world, floor by floor, plot by plot, was not a metaphor. It was a business model. And Chicago pursued it with a clarity that other cities, weighed down by older meanings, could not quite match. The fire had burned all of that away, and in its absence a city discovered how quickly and how high it could go when nothing was holding it to the ground. The vertical machine it produced is still visible in the Loop: in the steel bones of curtain walls, in Sullivan's terracotta climbing toward the sky, in Mies's glass reflecting clouds and lake. Each layer is a record of a different argument about what the vertical city is for.

What connects them is not a style but an attitude. Chicago built tall because it believed in the future, and because the future, in a country young enough to still believe this, was understood as something you could construct, floor by floor, lifting humanity out of the mud and into the light.

M m
m m
m m
m m
m m
m m
m m
m m
m m
m m
m m skyscraper
I love you. mmm
skyscraper
I love you.
Mmm skyscraper
I love you. mmm
skyscraper
I love you.
Thirty thousand
feet above
the earth. its a
beautiful thing.
And you're a
beautiful thing.
Thirty thousand feet
above the earth. its
a beautiful thing.
Everybody's a
beautiful thing.
Mmm skyscraper
I love you. Mmm
skyscraper I love you.
And I see Elvis!
I see dogs sniffing the
wind. sniffing the wind
for something new.
dogs sniffing the
wind for something
violent they can do.
dogs sniffing the
wind. sniffing the wind
for something new.
dogs sniffing the
wind for something
violent for me and you.
Will you be my big plaything.
my total big disorientator.
Will you be my big
plaything. my ninja power.
my number cruncher.
Yes. yes. yes. no. yes. yes.
Yes. yes. yes. yes. no. no.
And I see Elvis! And I
hear god on the phone.
Mmm skyscraper I love you.
I see dogs sniffing the
wind. sniffing the wind
for something new.
dogs sniffing the wind
for something violent
that they could do.
dogs sniffing the
wind. sniffing the wind

fig. 19
Lyrics from *Mmm Skyscraper I Love You*.
Underworld (1994).



A H O R I Z O N T A L L I F E

In a country defined by its horizon, height is never neutral. To rise above the landscape is to declare meaning. Long before the steel frame, people raised mounds of earth and stone to mark important sites. In Denmark these mounds appear as small but pronounced hills in an otherwise flat landscape. They are vertical gestures toward the sky. The sheer amount of physical labor required to create them reveals their importance. They insist on being seen and on creating a hierarchy of space where certain things are elevated, consecrated, and remembered. Usually, they served as resting places for the powerful, but not always. Some were empty, formed instead as places of gathering for worship, ritual, or community meetings (Glob 1974). Here again, the human relationship to verticality is expressed as a grammar of significance and orientation.

As the last burial mounds of the late Viking Age settled into the ground, new vertical forms took their place. Churches and civic towers rose from the growing towns, their silhouettes oriented both body and belief. These were structures of power and symbolism. The spire of a church, the tower of a castle, and later the clock tower of City Hall each spoke in the language of height: the divine, the royal, and the civic. For centuries, Copenhagen's skyline was defined by this dialogue between spires. The tower of City Hall was built deliberately higher than that of Christiansborg, which then housed the monarchy, to symbolize the power of the people. Parliament later raised its tower again, forty centimeters higher, as a gesture of authority over the city (Jensen 2012). Here height carried weight, power, and meaning.

fig. 20
Vejrhøj, est. Nordic Bronze Age.
Foto by Jens Cederskjold.



Foto by Graphics.

fig. 21
Dolmen in Denmark.
Zealand, Denmark. October 1, 2007.

UP THE BELL TOWER

I know this because I climbed it.

I was participating in a contest to redesign the tower of the City Hall for a cover that would hide the scaffolding during restoration. I was given access to the interior of the tower on a quiet afternoon in October. What followed was nothing like taking an elevator to an observation deck. You move through the building’s lavishly decorated halls that give way to administrative corridors, and those give way to rooms that have an old sort of backrooms feel. Old municipal exhibits and display cases with the stillness of things no one has looked at in years. Then the staircases begin to narrow. Then they become circle up through stone. They become ladders, then hatches that you push open with your shoulders and climb through on your hands and knees. And then you are on the balcony, and Copenhagen opens in every direction. The rooflines of the medieval inner city, Christiansborg across the canal, the Brutalist Radisson hotel on Amager, the harbor beyond, and on a clear day the ridge of Sweden on the horizon. It felt like a watchtower in the original sense: a place from which you read the territory.

We kept going. Behind the clock face the light is yellow and diffuse, filtered

through textured glass, and from inside you can see the mechanism that moves the hands. The city’s time made visible as gears. Higher still, and the bells are suddenly present not as sound but as objects: enormous, green with age, hanging in the dimness above you. I know their sound from the street, from every morning I have walked through the square below. Up here you feel them before you hear them. The vibration moves through the wooden beams, through your hands where they grip the timber, through your chest.

We sat up over the bells for a while, on the wooden structural skeleton of the spire, while the bells tolled. The sound at that proximity was physical. The city was far below and out of sight but entirely present. There was no hum of HVAC, no carpeted corridor, no view framed by a curtain wall. There was only the building holding you above the city, making you feel the weight and the age of the thing you were inside, and then letting the bells remind you, in the most bodily way possible, that this structure has been marking time for the people below it for over a century.

This is what Danish verticality has historically meant. Not the multiplication of floor area. Not the maximization of return per square meter. A tower you climb through, that changes as you ascend, that rewards the body rather than bypassing it, and that puts something at the top that belongs to everyone who can hear it from the street.



fig. 22
Copenhagen as seen from City Hall. Visible in the photo are notable towers from left to right: The towers of Carlsbergbyen (Multiple, 2016-2025), SAS Royal Hotel (Arne Jacobsen, 1960), Scandic Hotel (Jørgen Buschardt, 1971), and Axel Towers (Lundgaard & Tranberg, 2018)
Copenhagen, Denmark. October 2022.



fig. 23
Behind the clock.
Copenhagen, Denmark. October 2022.



fig. 24
The bell and view from the tower.
Copenhagen, Denmark. October 2022.



fig. 25
The Balcony under the clock.
Copenhagen, Denmark. October 2022.

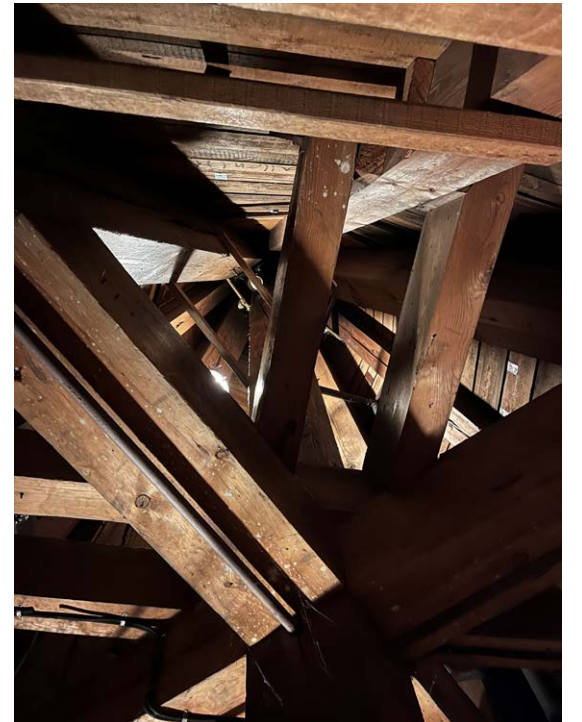


fig. 26
Inside the spire.
Copenhagen, Denmark. October 2022.

THE HORIZONTAL CITY

The center of Copenhagen evolved during a very different time than Chicago. It was initially constrained within protective walls to protect it from enemy attacks and evolved over time rather than being meticulously planned out. The infrastructure was laid out long before the logic of the automobile and the technical means of the skyscraper. This meant that density here took on a very different urban form of low-dense. The demand for space took the form of infill architecture wherever possible. The medieval city, however unsanitary and dark it might have been, was the original five-minute city and through its narrow streets only the spires of public and religious institutions were visible. All this matters because it shows that Danish verticality has always been symbolic, embedded in ritual and public life, not an expression of continuous economic pressure to stack more floor area. The spire speaks, then withdraws. The mound marks, then blends back into the plain.

1. A Monument to Welfare

By the twentieth century, a different kind of verticality appeared. Europe, rebuilding after war, embraced functionalism as both necessity and ideology. One of the most prominent voices in the development of a European language of high-rises was Le Corbusier. He was immensely inspired by the tall buildings and green spaces he had seen in American cities. He admired their virility and potential but thought them too closely packed, too bound by the logic of profit, and even lacking in height (Cohen 1995). In his vision, the skyscraper should be freed, surrounded by light and air, lifted above the clutter. His idea took form in plans for Paris, never realized, but deeply influential. Across Europe, tall residential towers began to rise on the outskirts of cities. They were the European interpretation of vertical living, rational, collective, green and an alternative to the medieval cities. The American skyscraper had been a monument to commerce; the European high-rise would be a monument to welfare.

Denmark’s first experiments with this kind of vertical living began in the postwar years on the outskirts of Copenhagen. Bellahøjhusene, completed in the early 1950s, stood as both symbol and solution. It was not a skyline of ambition but of equality, a promise that everyone deserved light, air, and a decent home. Inspired by the renowned Finger Plan (1948) developed by the Regional Planning Office, urban planning for Copenhagen’s continued development during the 1950s and 60s was strongly shaped by the vision of external suburban centers with tall buildings placed closest to the train stations, surrounded by mid-rise apartment blocks and outer rings of single-family houses.

Functionalist high-rises were built for living, while the great institutions of the welfare state such as schools and ministries remained horizontal, signaling openness, communication, and equality. The hospitals, however, rose above them. Herlev Hospital, completed between 1966 and 1976, remained Denmark’s tallest building up until 2022 and still maintains a 3rd place at 120 meters. Hospital architecture, as urban historian Poul Sverrild observed, “conveyed an unchallenged medical authority throughout the period when all other forms of authority were being questioned.” The heart of the public healthcare system became a symbol of collective care, an emblem of the state’s promise to protect its citizens (Sverrild 2008).

The welfare state’s high-rises inverted the logic of the American skyscraper. Where the office tower celebrated the individual and capitalism, the Danish high-rise celebrated community, equality,

Foto by Kristoffer Trolle.



fig. 27
View from Rundetårn against northwest with Telefonhuset and the high-rises at Bellahøj.
Copenhagen, Denmark. November 2015.

Foto by Hubertus.



fig. 28
Herlev Hospital.
Herlev, Denmark. August 2013.

and socialism. Everyone was entitled to a good home, and one of the solutions was to build tall. These developments were built in very large units, sometimes thousands of dwellings at once, forming self-sufficient towns with shopping centers, schools, and playgrounds. Everything had been accounted for in the modernist city. Almost everything. Only the individual had been forgotten in the grand plan.

2. Disconnected

By the 1960s, new concepts like miljø and trivsel (environment and well-being) entered the architectural debate, and the great welfare towers came under fire. They were criticized for their uniform and brutal exteriors, for poor construction, and for cheap materials. The open lawns between the buildings, once imagined as communal spaces, remained empty. Separated traffic systems left no real street life, and the building density was hardly greater than in the surrounding suburban neighborhoods. The modernist dream of light and air had, paradoxically, produced silence and isolation.

This was also the moment Jan Gehl began his research. Observing the failures of modernist housing, he studied how people actually behaved in cities, how long they stayed in a space, where they gathered, when they stopped to talk. His findings were simple but transformative: that human life in cities unfolds at eye level, that social interaction and sensory experience diminish sharply after the fifth floor, that height distances us from the world we share. For Gehl, the livable city was one that encouraged encounter and exchange, not separation. His work Life Between Buildings (1971) became a quiet foundation for a new kind of urban thought, one that centered human experience rather than technological progress.



fig. 29
Scene at Sankt Hans Torv.
Copenhagen, Denmark. June 2010.

Where American modernism had embraced height as freedom, Gehl saw it as disconnection. The more elevated the dwelling, the weaker its link to street life. The city’s social fabric, what he called the soft edge between public and private, frayed as façades lifted off the ground. In the Danish context, his ideas resonated deeply. They aligned with a broader cultural preference for proximity, transparency, and equality, values embedded not only in planning but in the national psyche.

Criticism of prefabricated housing construction (especially the high-rise kind) peaked in 1969 when a report from the Danish Building Research Institute, drawing on British and Swedish studies, concluded that high-rises were generally unsuitable for family housing, as children did not thrive in tall buildings. The report and ensuing debate led the Ministry of Housing to withdraw state subsidies for large-scale prefabricated construction. Since then, very few residential high-rises have been built in Denmark (Mechlenborg & Hauxner 2021).

3. Technological Exhibitionism

By the 1970s and 80s, Danish architects had turned away from the tower entirely. “The kind of recklessness and untamed vitality required to raise such buildings has never existed in Denmark,” said professor Carsten Thau. He described his peers as “nature-enthused material romantics,” drawn to brick, wood, and stone, materials with texture, humility, and truth. High-rises, he argued, were “technological exhibitionism,” symbols of international capital, and therefore foreign to Danish sensibilities. Within architectural circles, height became almost synonymous with bad taste (Thau 2005). Architect Steen Esvad Petersen was even harsher in his critique, writing: “Both as housing, as

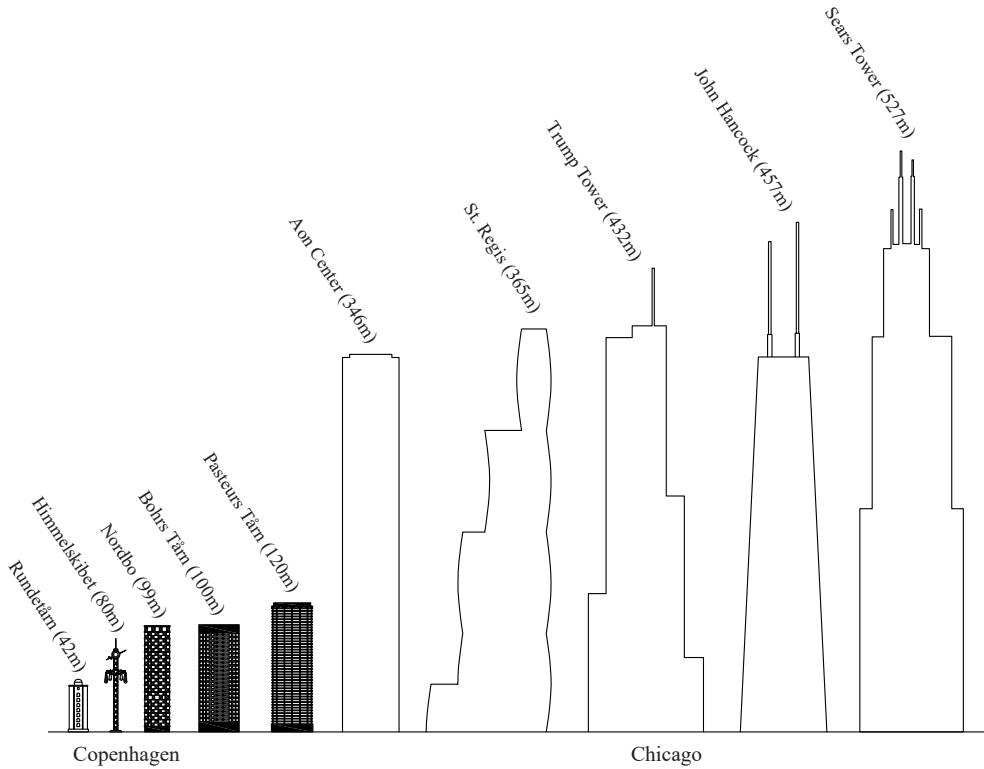


fig. 30
Tallest towers of Copenhagen and Chicago.

workplaces, and as visual pollutants of the cultural landscape, high-rises are a dubious phenomenon.” (Petersen 2004).

Yet by the 1980s and 90s, globalization and city branding began to erode these boundaries. Every city with self-respect, as one architect put it, wanted a high-rise. But the towers that appeared were no longer about social ideals. They were financial instruments, designed to attract investors, to put the city on the map. When a 102-meter hotel tower was proposed near Tivoli in 2007, the public outrage was immediate. By May 2008, after massive public protest, the project had been voted down by the City Council, but outrage still lingered. A representative of “Friends of Tivoli” wrote in Jyllands-Posten: “This monstrosity of a tower was to be built right next to Copenhagen City Hall—and even taller than it!” (Christensen 2011) That the tower would surpass the height of the nearby City Hall tower (105.5 meters) was, in fact, untrue, but it captures the sentiment.

This resistance is also tied to something deeper than aesthetics. In Denmark, the symbolic right to height has historically belonged to the state and the church, both institutions of collective life, not private gain. When business builds tall, it claims a position in the public skyline that was never meant to be bought. The tower becomes a declaration of hierarchy in a culture that is deeply suspicious of hierarchy.

This is where the physical and the social converge. Danish horizontality is not only a feature of the landscape. It is a feature of the culture. The Law of Jante, the unwritten Nordic social code that discourages standing out, boasting, or considering oneself above others, runs quietly beneath the surface of Danish life. It does not explain everything, and it has its critics. But it helps explain why a building that reaches skyward can feel, in Denmark, like an act of presumption. Height here is not neutral ambition. It is hubris made visible.

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4. The Return of the High-Rise?

Through all this, Danish attitudes toward verticality have remained cautious and ambivalent. In a culture defined by horizontality, in landscape, in light, in politics, the tower still feels foreign. But the pressures of growth, affordability, and sustainability are changing the conversation. The horizontal city may no longer be enough. Slowly, Denmark seems to be moving past the trauma of its first vertical experiments. New towers are rising.

Foto by SEB2700.



fig. 31
Carlsbegbyen.
Copenhagen, Denmark. September 20, 2024.

Foto by kallerna.



fig. 32
Cactus Towers.
Copenhagen, Denmark. October 18, 2025.

THE CASE FOR UP

1. The Urban Potential

There is a version of the argument for tall buildings that begins and ends with land prices and investor returns, and it is the version that has done the most damage to the reputation of height in cities like Copenhagen. It reduces a genuinely complex urban question to a financial transaction, and it tends to produce exactly the kind of building that deserves resistance; glass, generic, indifferent to its surroundings, designed for maximizing profit rather than for a city.

But there is another argument for building tall, and it has nothing to do with investment vehicles or luxury premiums. It is an argument about the social, cultural, sustainable, and economical potential of cities, and what they can offer when they are dense enough.

Rem Koolhaas, spoke of the maximization of urban potential. The idea that the city's fundamental gift is the concentration of difference, of people and activities and possibilities pressing against each other in productive friction. The city is not valuable despite its density. It is valuable because of it. Density is not a side effect of urban growth to be managed and minimized. It is the condition that makes urban life possible in the first place.

This is worth stating plainly, because so much of the planning tradition that shaped Copenhagen's postwar development operated on the opposite assumption. That density was a problem to be solved by dispersal and demolition, that people would be healthier and happier if given more space, more air, more separation from their neighbors. The welfare towers stood in open lawns. The suburban fingers reached outward from the city. The bebyggelsesprocent (plot ratio or FAR) kept new buildings at a respectful distance from each other. The underlying logic was hygienic: the city as a source of contamination, to be diluted.

2. The arithmetic of the footprint

Let us begin with the simplest argument. A building that houses five hundred people on a single urban plot occupies a fraction of the land that five hundred



fig. 33
*Demolition on Antonigade.
Copenhagen, Denmark.*

detached houses would require. That land, the land not built on, remains available for agriculture, for parks, football fields, and plazas, for the natural systems that absorb carbon and support biodiversity. Urban density is, in this sense, an act of restraint toward the landscape. The compact city gives back to the earth what dispersal would consume.

The choice between building up and building out is not merely aesthetic or cultural. It is a choice about how much of the country's surface is given over to settlement, and how much is left for everything else. In a time where land use is a heavily debated topic it is relevant and important to challenge our current assumptions and habits. A city that refuses to grow upward does not stop growing. It grows sideways, into fields and forests and the edges of small towns that gradually lose their own identity to the expanding periphery.

The smaller footprint also changes the mathematics of infrastructure. Roads, pipes, cables, heating networks all become more efficient per household as



fig. 34
*Mulberry St., New York City.
New York City, NY. Ca. 1900.*

density increases. District heating, which Denmark has developed into one of the most sophisticated systems in the world, works best when the buildings it serves are close together (Khosravi, Aghaei, & Yan 2022). Dispersal is the enemy of shared infrastructure. Density is its natural ally.

3. What the city makes possible

Above a certain density threshold, walking and cycling become not just possible but optimal. If the distances are short enough, the destinations varied enough, the street life rich enough that the car becomes unnecessary rather than merely inconvenient. Copenhagen's cycling culture is not simply a product of flat terrain and political will. It is a product of a city dense enough that most destinations are within

a comfortable cycling distance. Spread that density thinner, push the housing further from the center, and the bicycle becomes impractical and the threat of the car returns.

Public transit operates by the same logic. A tram or metro line is only viable above a minimum ridership threshold, and that threshold requires density along the route. The great transit cities of the world, Tokyo, Amsterdam, Zurich, Copenhagen itself, are not transit cities because they invested in trains. They invested in trains because they were already dense enough to make trains work, and the trains in turn reinforced and extended that density. Sprawl and transit are genuinely incompatible. You can run a bus through a suburb, but you cannot make it useful without the density that gives people somewhere worth going.

The carbon argument emerges from all of this.

People living in dense cities have significantly lower per-capita carbon emissions than those living in suburbs or the countryside. Not because urban residents are more environmentally conscious, but because the city does the work for them (Dodman 2009). Short distances mean less energy spent on movement. Shared walls mean less energy spent on heating. Access to transit means less dependence on private vehicles. The dense city is, structurally and almost automatically, the lower-carbon way to live (Lungman et al. 2024). This is one of the most important and least discussed arguments for urban density, because it reframes the entire question. Building tall does not have to be an environmental cost to be offset. It is, when done well, an environmental strategy.

4. The productivity of proximity

There is an economic argument for density that goes deeper than the efficiency of shared infrastructure, and it concerns what happens when people are physically close to one another over time. The urban economist Edward Glaeser has documented extensively that cities make people more productive not despite their density but because of it (Glaeser 2011). Wages are higher in dense cities. Innovation rates are higher. Patent filings cluster in places where people are pressed together, where the chance encounter between someone with a problem and someone with a solution is not a matter of deliberate arrangement but of ordinary urban life. Knowledge, it turns out, is not well transmitted by screens and cables. It travels most efficiently through conversation, through the sidewalk meeting, through the shared lunch and the overheard argument. It moves at the speed of proximity.

The implications are significant and extend well beyond individual productivity. The economist Enrico Moretti has shown that each high-skilled job created in a dense urban environment generates several additional jobs in the surrounding local economy. A multiplier effect that simply does not operate at lower densities (Moretti 2012). The city is not just a place where productive people happen to live. It is the mechanism by which productivity is generated and distributed. Density is not a byproduct of economic success. It is one of its causes.

This reframes the housing question entirely. Providing genuinely affordable, well-located, close to the center homes in the city is not merely a social welfare measure. It is an economic investment in the productive capacity of the people who live there, and by extension in the city itself. Which is an argument I have not heard laid out by any politician when discussing the current housing crisis in Copenhagen. When land costs and low density push people to the periphery, they are not simply inconvenienced by longer commutes. They are removed from the network of exchange that the dense city provides. The ideas they might have had, the collaborations that might have formed, the knowledge that might have passed between them and their neighbors simply do not happen.

There is a democratic argument here that Danish society is particularly well placed to hear. The dense city, built tall enough to house many people close to its center, distributes access to urban life and its offerings more equally than the sprawling one. When the center is accessible only to those who can afford to live near it, the city’s offer becomes a privilege rather than a common good. Densification, when it produces genuinely mixed and affordable housing rather than luxury towers, is an act of urban democratization. It gives more people proximity to the things that make city life worth choosing and worth being productive within. The alternative is not more equal. It is simply more spread out, with inequality distributed across a larger and lonelier geography.

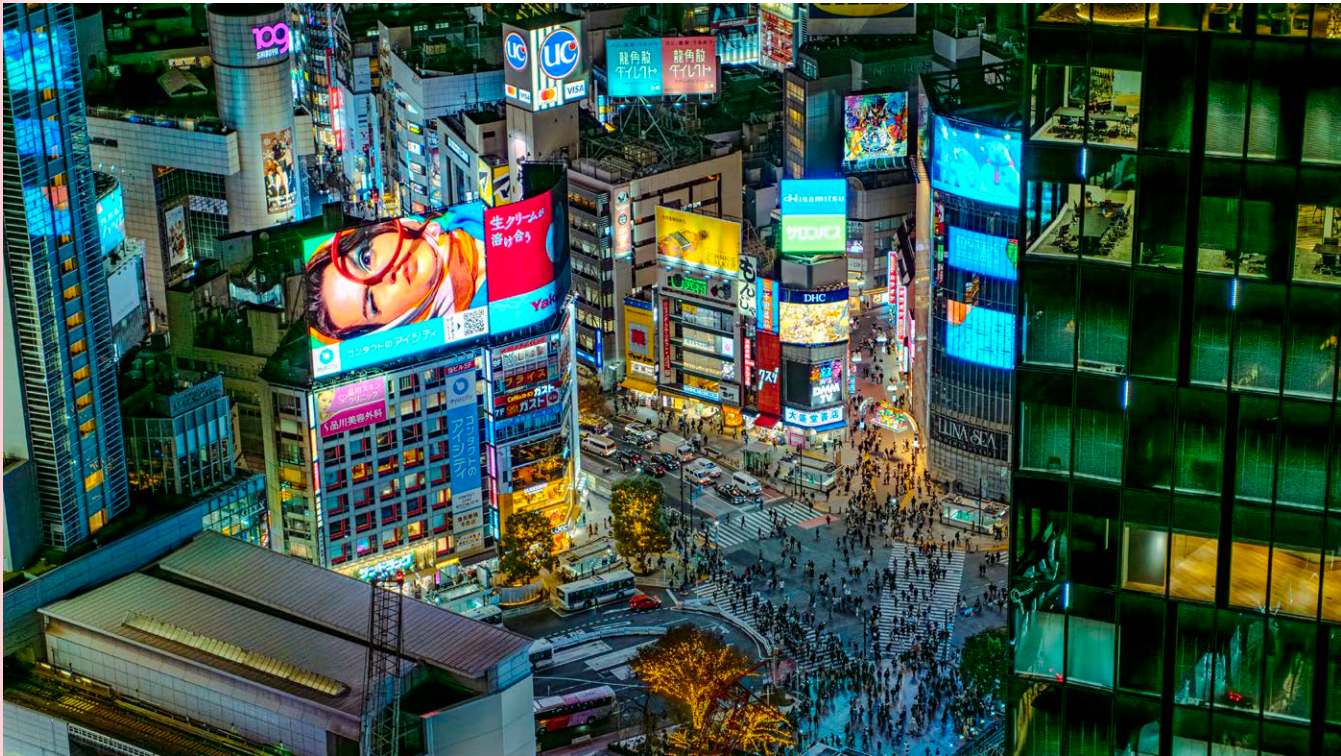
5. The culture of proximity (Stor by eller Storby?)

Above a certain population threshold within a walkable area, things become possible that simply cannot exist at lower densities. The specialist bookshop, the restaurant serving a cuisine from a region most of its customers have never visited, the choir, the climbing gym, the community of practice around an obscure craft or an unusual interest. These are the textures of a life rich enough to sustain curiosity and difference. They exist only when enough people live close enough together to support them, and they disappear when density falls below the threshold that makes them viable.

This is what Koolhaas means by urban potential. **Not the skyline, not the square footage, but the cultural and intellectual life that density makes possible and dispersal extinguishes.** The city that refuses to grow upward does not preserve some more human scale of existence. It slowly empties itself of the variety and surprise that made it worth living in.

fig. 35
Shibuya Square.
Tokyo, Japan. December 4, 2023.

Foto by David Kernan.



SKYLINE AS MYTH

Every city that has one sells it. On postcards and keychains, on the banners of local businesses and the covers of travel guides, the skyline is reproduced and miniaturized and held up as the city’s essential image. Its signature reduced to a silhouette.

The skyline announces arrival before the city itself can be felt or heard. Approaching by car across a flat plain, by plane beginning its descent, by boat across open water the towers appear on the horizon long before the streets do, long before the smell of urine or the sound of traffic. The city speaks in outline before it speaks in any other language.

From a sailboat on Lake Michigan, I saw Chicago lose its particularity entirely. It was no longer a grid of streets or a collection of lobbies and windows, of elevator banks and office carpets and the small transactions of ordinary working days. It became something abstract, almost geological. A mountain range of towers silhouetted against the sky. As the sun dropped, the outlines dissolved into light. Buildings no longer read as offices or apartments. They became glowing forms, their reflections stretching across the water until the skyline felt doubled, floating both above and below, belonging as much to the lake as to the land. We sat and looked at it for a long time, the way you might watch a sunset from a mountaintop, in the particular silence that grandeur sometimes produces.

I found myself thinking of the many who once arrived in America by ship, passing through Ellis Island with the skyline of New York rising before them. For those passengers, the view was not abstract at all. It was a sign. The jagged horizon of towers became synonymous with the city itself, carrying the full weight of hope and fear and the promise of a life not yet lived. The skyline did not need to be legible. It needed only to be overwhelming. And it was.

This is what the skyline does that no individual building can. It operates at the scale of myth. A single tower, however tall, is a building. A skyline is a landscape, and landscapes carry the kind of meaning that accumulates slowly and cannot be designed directly. Los Angeles has a downtown cluster of towers

that almost nobody spends time among, streets that empty after six, blocks that belong more to the car than to the pedestrian. And yet the skyline appears on every postcard, every television establishing shot, every piece of civic branding. The buildings are used as an image of a city that largely ignores them. In Paris, a single iron structure from 1889 performs the same function for an entire metropolis, visible from dozens of arrondissements, appearing in the background of photographs taken miles away. The Eiffel Tower is the city’s myth made vertical.

What these silhouettes share is not height or style or age but the capacity to stand for something larger than themselves. To compress a city’s identity, its ambitions, its self-image, into a shape that can be held in the mind and carried home in a pocket. The skyline is the city dreaming about itself. Seen from the water, in fading light, with the towers glowing and their reflections shifting on the surface below, it is almost possible to believe the dream entirely.

Foto by Matthew T Rader.w



fig. 36
Chicago Skyline at Dusk.
Chicago, IL. June 2016.

Foto by Indianadunes



fig. 37
View of Chicago Skyline from Indiana Dunes National Park.
West Beach, Indiana. August 2015.

WE LIVE HORIZONTALLY

However tall the city grows, the body remains oriented to the ground. Our field of vision is wide and lateral. We are made for scanning the horizon, for reading the street, for the peripheral awareness of who is approaching and what lies ahead. We experience vertigo when we look up or down great distances precisely because height is not our natural axis. The horizon is where we are comfortable. The plumb line is where we are not.

Even inside the vertical city, life organizes itself on flat planes. The floor plan is horizontal. We move through buildings laterally from corridor to threshold to room, negotiating space the way we always have, with our feet on the ground and our eyes level. The elevator is the one moment of genuine verticality in the daily experience of a tall building, and it is telling that we spend it in suspension, facing a door, waiting for it to be over. The lift carries us upward and deposits us into another horizontal world, indistinguishable in its spatial logic from the one we left thirty floors below. We orient ourselves, find the corridor, move laterally to the room. The height is a fact but not an experience. It is something the building knows and the body forgets.

This is a central paradox of the skyscraper: a vertical form organized entirely around horizontal life. And it raises a question that the earliest theorists of the tall building were willing to ask before the weight of convention closed the question down. If each floor is functionally a ground plane, a piece of the city lifted into the air, why should it repeat the floor below? Why should the section of a tall building be a single idea multiplied rather than a stack of different ones?

The 1909 theorem, that speculative drawing imagining each floor of a Manhattan skyscraper as an independent plot of virgin land, be it a farm, a tennis court, a formal garden, a private estate, was partly a provocation and partly a genuine proposal. It suggested that the skyscraper need not be a single building at all but a vertical city, each level with its own logic, its own character, its own relationship to light and air and use. Sullivan had proposed a tripartite division (base, shaft, crown) which was already an acknowledgment that not all floors are equal. But what if the subdivision went further? What if each floor was genuinely distinct, the way sediment layers in desert rock are distinct. Different in color, texture, and composition, laid down at different times under different conditions, readable as a record of accumulated time rather than a single repeated gesture?

The exterior would tell you something true about what was happening inside. Not a curtain drawn uniformly across a repeated floor plan, but a face that varied because the life behind it varied. A building you could read from the street the way you read a cliff face. As a record, a history, a thing that took time to become what it is.

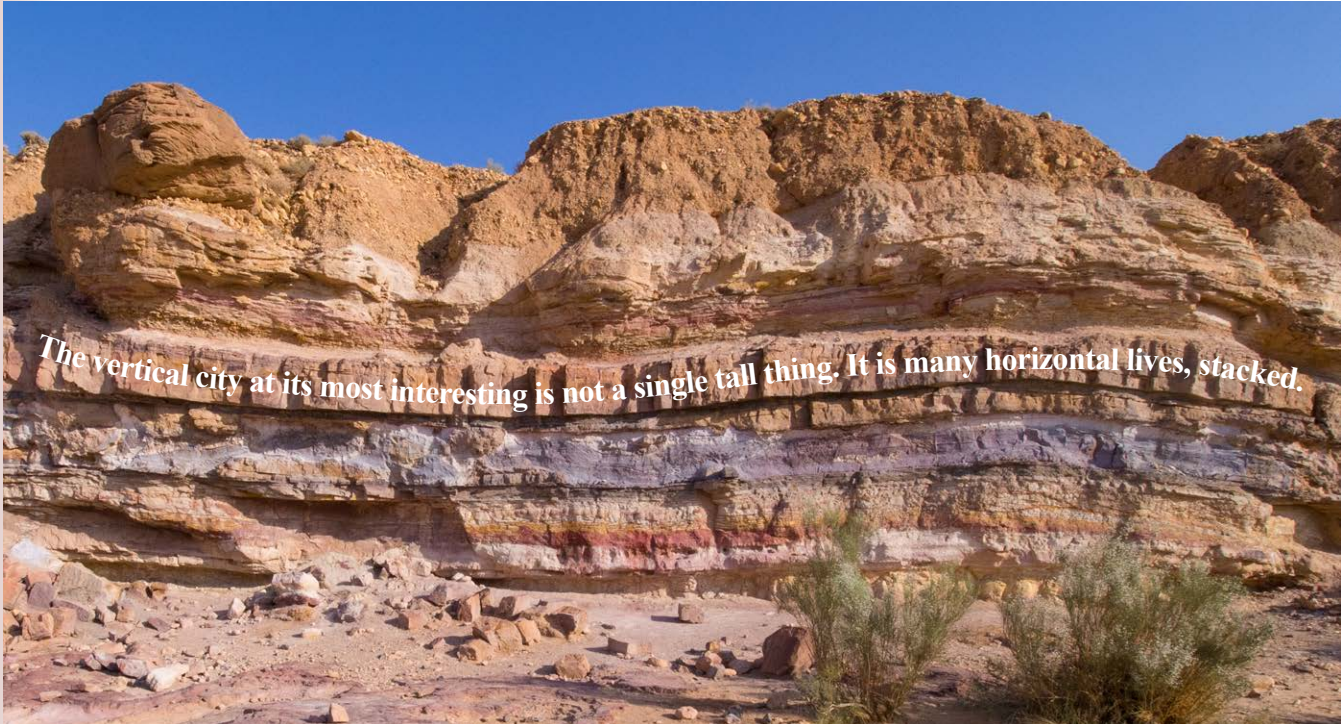
This remains mostly unbuilt. Convention and the economics of repetition are too compelling and the logistics of genuine variety too demanding for the standard development model to accommodate. But the idea does not go away. It surfaces in projects that treat each floor or cluster of floors as a distinct architectural event, that vary the section, that let the exterior reflect the horizontal worlds stacked within. It is there in the ambition, if not always the execution, of the best tall buildings, the ones that feel inhabited rather than extruded, that surprise you as you move around them rather than resolving immediately into a single repeated gesture.

Foto by J.-H. Janßen.



fig. 38
The Netherlands Pavilion at the Expo 2000 by MVRDV.
Hanover, Germany. October 4, 2000.

Foto by Rhododendrites.



The vertical city at its most interesting is not a single tall thing. It is many horizontal lives, stacked.

fig. 39
Sedimentary rock layers in Makhtesh Ramon.
Makhtesh Ramon, Palestine. March 2017.



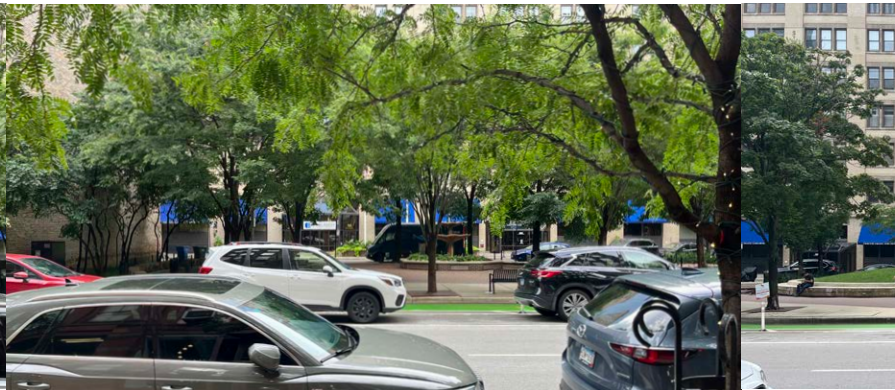
S Dearborn St. & Polk St. 744
2020: Myefski Architects
(2 Floors) 742



734 732 730
1912: George C. Nimmons, Franklin Building II
(14 Floors)



720 714
1892: William Le Baron Jenney, Rowe Building
(70.4m, 8 Floors)



Printers Row Park



620



616



600
1911: William Strippelman, Transportation Building
(70.4m, 22 Floors)



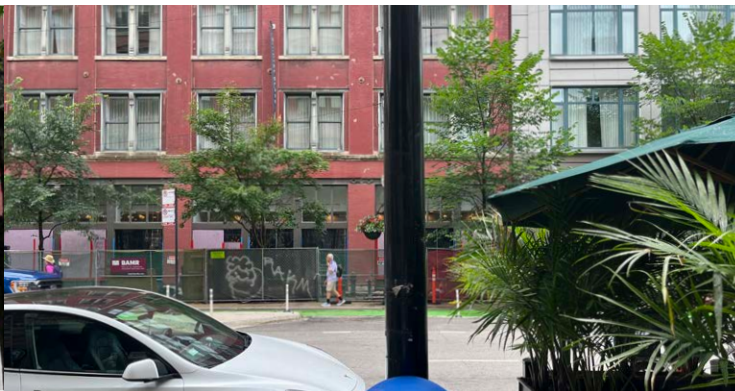
W. Harrison St.

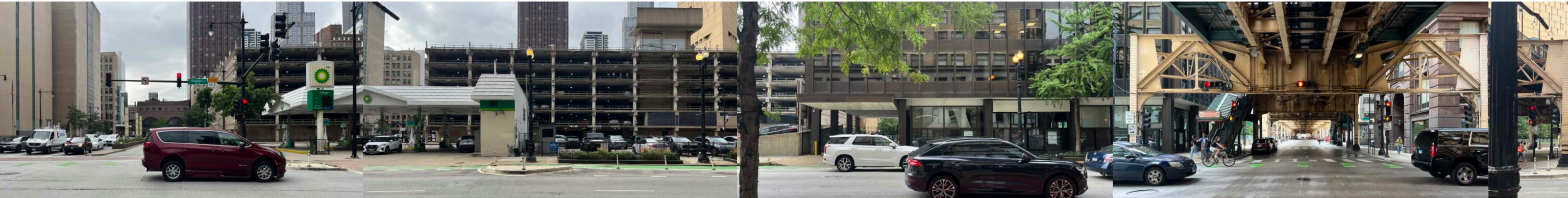


542
1891: Holabird & Roche, Pontiac Building
(53m, 14 Floors)



538
1896: William Le Baron Jenney & Charles Mundie, Morton Building
(12 Floors)

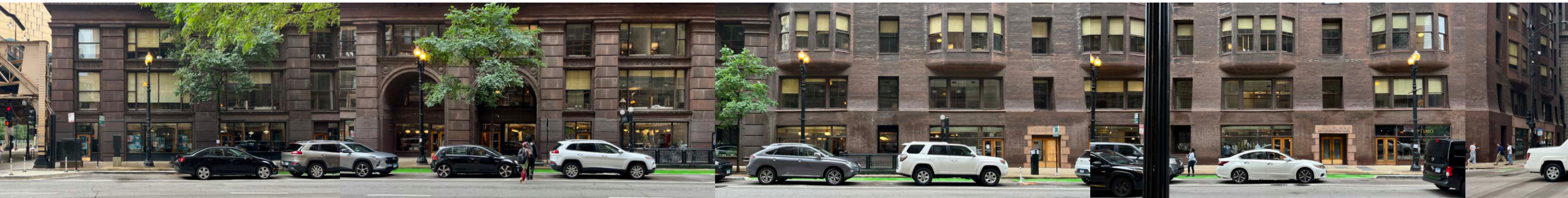




W. Ida B. Wells Dr.

422

W. Van Buren St.
CTA Brown, Orange, Pink, & Purple Line, Harold Washington Library



348
336
332
1893: Holabird & Roche, Monadnock Building (Steel Frame)
(60m, 17 Floors)
330

316
312
306
1891: Burnham & Root, Monadnock Building (Masonry)
(60m, 17 Floors)
CTA Blue Line, Jackson



W. Jackson Blvd.
230
1974: Ludwig Mies van der Rohe, John C. Kluczynski Federal Building
(171.3m, 42 Floors)

Chicago Federal Plaza

W. Adams St.



140
1895: Holabird & Roche, Marquette Building
(62.5m, 17 Floors)

W. Marple Pl.
CTA Blue Line, Monroe

55 W. Monroe
1980: Murphy/Jahn Architects, Xerox Center
(150.9m, 41 Floors)

W. Monroe St.

Exelon Plaza



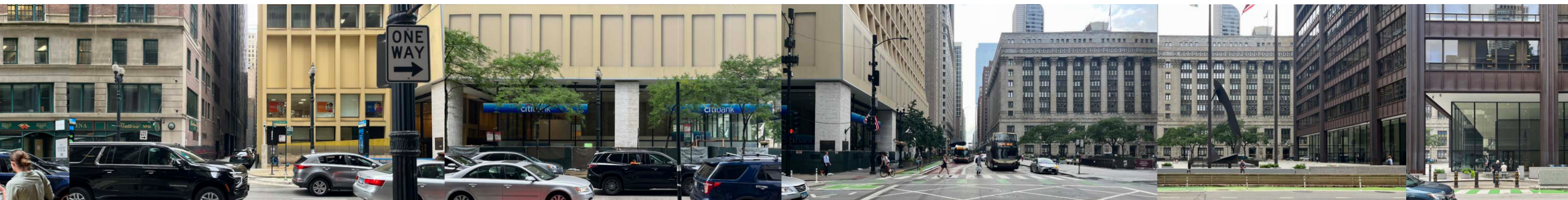
10
1969: C.F. Murphy Associates & Perkins & Will, Chase Tower
(259m, 60 Floors)

S. Dearborn

W. Madison St.

N. Dearborn

10
1923
(11 Floors)



W. Calhoun Pl.

69 W. Washington St.
1964: Skidmore, Owings & Merrill, Cook County Administration Building (Tube System)
(144.8m, 35 Floors)

W. Washington St.

Daley Plaza

CTA Blue Line, Washington



1965: SOM, Loeb, Schlossman, Bennett & Dart, Richard J. Daley Center
(198m, 32 Floors)



150



1925: Howard Van Doren Shaw, Goodman Theatre
(4 Floors)



W. Lake St.



1989: Lisec & Biederman, 200 North Dearborn Apartments
(141m, 47 Floors)



1968: C.F. Murphy Associates, Blue Cross-Blue Shield Building
(78m, 16 Floors)

A walk down Dearborn... Dearborn Street runs through the heart of the Loop, and along its length you can stand at the foot of buildings from almost every era of the tall building's short life. Gothic revival and glass curtain wall. Terracotta ornament and exposed steel. Buildings that reach for the sky and buildings that simply occupy it. Think about the way the city presents itself to the body rather than to the plan. At ground level the skyline disappears. There is no overview, no silhouette, no myth. There is only the base of the building in front of you: the way it meets the pavement, the quality of its stone or glass, whether it opens toward you or closes against you, whether it offers anything to the person passing or simply rises indifferently above them.

A tower out of context is just a wall.



Foto by Tom Reading.

fig. 40
Chicago Temple. Worlds tallest church and only steeple in the Loop.
Chicago, IL. Janurary, 2006.

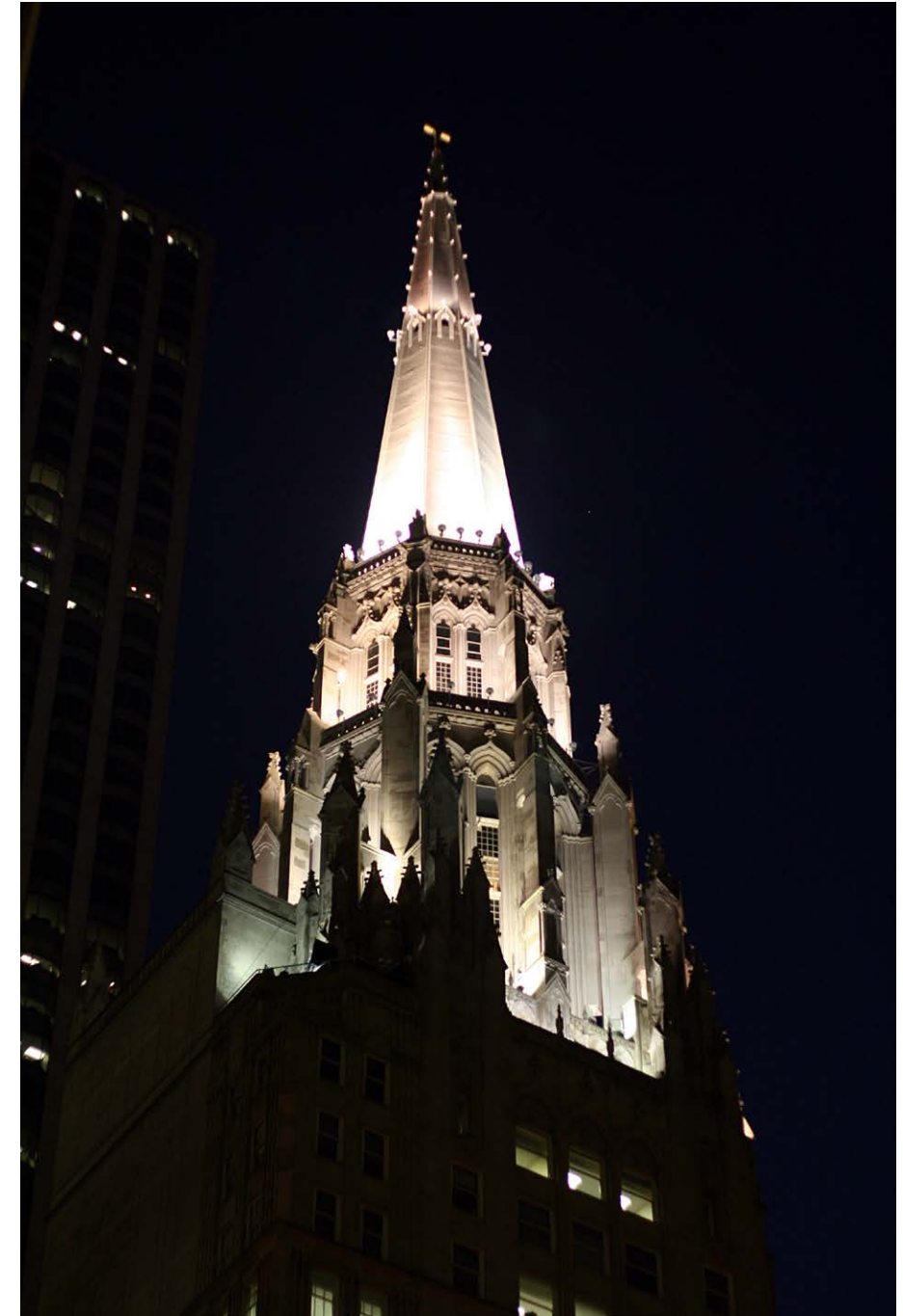


Foto by Marit and Toomas Hinnoaar.

fig. 41
The steeple at night.
Chicago, IL. November, 2011.

THE CHAPEL IN THE SKY

I ducked into the Chicago Temple on Clark and Washington to dry off from the rain and roamed around waiting for the tour. The building is French Gothic in style with pointed arches, limestone, tracery, and backlit stained glass. An interesting mix of beautiful craftsmanship and gimmicks. It stands twenty-eight floors tall in the middle of the Loop, sandwiched between office towers, its spire competing with steel and glass rather than with the open sky. Inside the sanctuary I met Mrs. Beverly, and she eagerly dove into the history of the building.

The Chicago Temple is home to the First United Methodist Church, the oldest congregation in the city, founded in 1831, six years before the founding of Chicago itself. The congregation held services in the homes of its members until 1834, when a log cabin was built for the purpose on the site of what is now the Merchandise Mart. Four years later, they floated the cabin across the river and rolled it on logs to its present site(!).

A conventional brick church replaced the cabin in 1845. Then in 1858 the congregation had an idea. They built a four-story mixed-use structure with stores and businesses on the lower two floors and church space above. Commerce below, the sacred above. It was reduced to ashes in the Great Chicago Fire of 1871. Another multi-use building took its place until the present tower was erected in 1924, after a twenty-year fundraising effort and two years of construction. The church needed special permission from the planning council, as the building exceeded the height limits of the time. This was, as Beverly put it, a process of typical Chicago politics where money exchanged hands. When it was completed, it was the tallest building

in the city for six years. A monument to God, built with the same ambition and machinery the city used for everything else. Like many European skylines, I thought, where the church spire still presides over the surrounding city.

But the building has other ambitions too. To survive in a city built on rent, the church leases its middle floors to tenants. Lawyers, nonprofits, small offices. So, between the grandeur of the nave below and the chapel above, there are the fluorescent lights, the bad carpet, and the corridor logic of a mid-century office building. The sacred and the administrative share a floor plan.

Higher still, the spire was domesticated. A three-story penthouse was built within the steeple for the pastor of the church. Beverly believed it was the popular radio preacher Charles Ray Goff who had the idea to turn it into his residence. The steeple, that ancient symbol pointing toward God, became a private dwelling. The church had performed its own version of the annexation of the tower.

And at the very top is the Chapel in the Sky. Steel trusses span the space, but they are covered in carved ash wood, so that the industrial skeleton of the skyscraper is dressed in the warmth of something older. The stained-glass windows obscure the city entirely. You do not see Chicago from up here. The room turns inward. There is a wood carving of Jesus overlooking the city. He is weeping, Beverly told me. Because there is no peace.

It is beautiful and slightly artificial, the way a stage set is beautiful. But it is also genuinely inventive. A congregation that has survived nearly two centuries in one of the most competitive cities on earth by continuously adapting, renting out its own walls, domesticating its spire, and building a chapel where the view has been deliberately refused. The church chose not to look out at the city. It turned inward, folded itself into the sky, and wept.

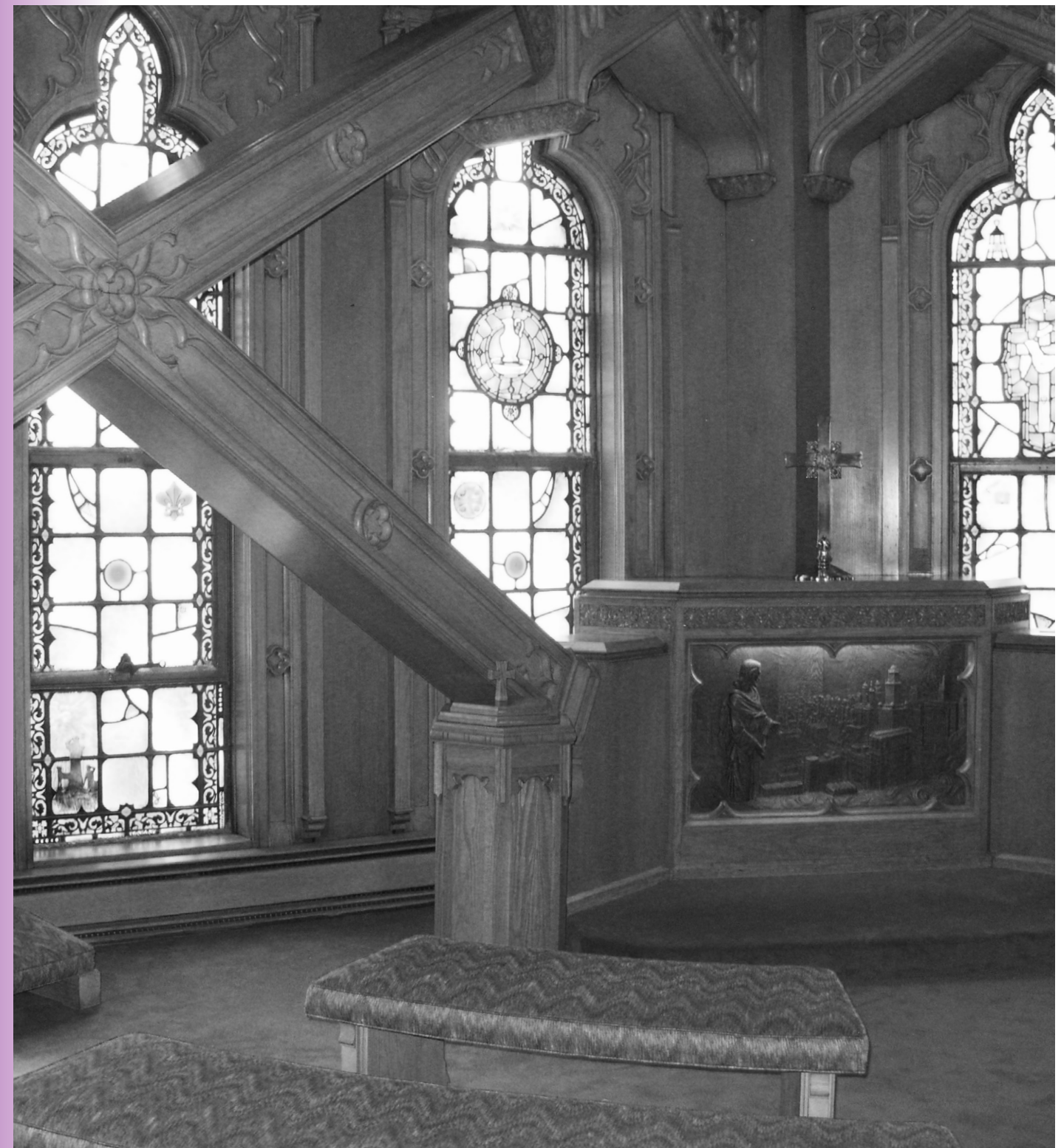


fig. 42

The altar in the Chapel featuring a wood-carving of Jesus overlooking the city of Chicago and crying as there is no peace. The Chapel was funded by the Walgreens family and the ash used in the space came from the family's private residence. Chicago, IL. July, 2025.

26	Chapel in the sky
25	Parsonage
24	Parsonage
23	Parsonage
22	Exhibition
21	Offices
20	Offices
19	Offices
18	Offices
17	Offices
16	Offices
15	Offices
14	Offices
13	Offices
12	Offices
11	Offices
10	Offices
9	Offices
8	Offices
7	Offices
6	Offices
5	Offices
4	Classroom, Nursery, Conference Room, and Choir Room
3	Classroom, Nursery, Conference Room, and Choir Room
2	Dixon Chapel, James Parlor, the Heritage Room, and Church Offices
1	Lobby, Retail, and Sanctuary
B1	Theater

fig. 43
The vertical programming of Chicago Temple.



fig. 44
View of the steeple from the parsonage.
Chicago, IL. July, 2025.



fig. 45
A red brick entryway to the penthouse of the pastor as part of the architecture meant to domesticate the tower.
Chicago, IL. July, 2025.

Instead, the leaders of the church followed the dictum of the great Chicago architect Daniel Burnham who famously (maybe) said: “Make no little plans. They have no magic to stir men’s blood and probably themselves will not be realized. Make big plans; aim high in hope and work... Let your watchword be order and your beacon beauty. Think big.” (Reardon 1992)



fig. 46
Once the tallest point in the city this space now boasts a dining area.
Chicago, IL. July, 2025.



fig. 47
Meeting room in the office section of Chicago Temple.
Chicago, IL.

LOST SKYSCRAPERS

1. The Danish Tribune submittal

While searching through old issues of the Danish journal *Arkitekten* for Danish commentary on the American skyscraper, I found something unexpected. Tucked among the critical dispatches from Copenhagen’s architectural establishment was a 1922 submission by the Danish architect Anton Rosen for the Chicago Tribune Tower competition. It was a soaring, rhythmic pillar of masonry and ornament, its vertical ribs rising toward a crowned summit, its surface alive with the same decorative confidence that Sullivan’s generation had brought to the Loop. It looked perfectly at home in the very skyline that surrounded me.

This made the next discovery all the more interesting. Two years after the Tribune submission, in 1924, Rosen drew up a proposal for a new twenty-story head office for DSB (the Danish national railway) to be built near the central station in Copenhagen (*Arkitekten* 1928, 157–172). The two projects share a family resemblance so close it is almost impossible to miss. Rosen had been to Chicago, at least in his imagination, and he had come back with something. He was, in the small and careful world of Danish architecture, something close to a vertical dreamer.

The DSB project was not built. In fact it was not merely rejected, it was pathologized. The critical climate in Danish architectural circles at the time was deeply suspicious of what Georg Brandes had already called *amerikanisme*, a term the cultural establishment deployed to describe a restless commercial spirit lacking, as Brandes put it, in “*aandelig Finhed*,” intellectual refinement (Sørensen 2025). Rosen’s business palace, it was argued, would crush the authority of City Hall and ruin the city’s quiet horizontal silhouette. The objection was not technical. It was moral.

Rosen himself died in 1928, four years after the DSB proposal, his vertical ambitions unrealized. Yet he is still among one of the most prominent Danish architects of his time known for projects like the Palace Hotel and the Tuborg administration buildings, both ornate, decorative, and quintessentially Copenhagen.

His Tribune competition entry and his DSB tower are footnotes, mentioned in obscure internet forums and rarely elsewhere. But they are telling footnotes. They show that the impulse to build tall existed in Denmark at the exact moment when it was defining the skylines of Chicago, New York, and a dozen other American cities. It was not absent.

2. The tower in the field

Almost a century after Rosen’s rejection, the most extravagant act of Danish vertical ambition in recent memory was proposed not in Copenhagen but in a rural town in central Jutland with a population of seven thousand people.

Brande is the hometown of Bestseller, the family-owned fashion conglomerate behind Vero Moda, Jack & Jones, and ONLY. Its owner, Anders Holch Povlsen, the richest man in Denmark, announced in 2017 that he intended to build the company’s new headquarters there. The building would be 320 m (1050 feet) tall. Designed by Danish architect Dorte Mandrup, it would surpass the Shard in London and become the tallest building in Western Europe. It would be visible from 60 km (37 miles) away in every direction (Rea 2019). It would put Brande on the map.

What the Bestseller Tower reveals, in its conception and its cancellation, is the particular confusion that results when the American skyscraper logic is transplanted without the urban context that gave it meaning. In Chicago, height emerged from density. The tower was a product of urban pressure. It was also a social object, surrounded by other towers, embedded in a grid of streets, constituting a skyline that the city read as a collective self-portrait. The individual tower was ambitious; the skyline it joined was civic.

In Brande, there was no density, no grid, no competing towers, no urban context to join. The building would have risen from the heathland visible as part of a skyline but as a singular vertical interruption of an otherwise horizontal world. A local architect named Trine Kammer, one of the very few voices of dissent in a community where Povlsen’s company functions as a kind of civic religion, put it plainly: “Such a big

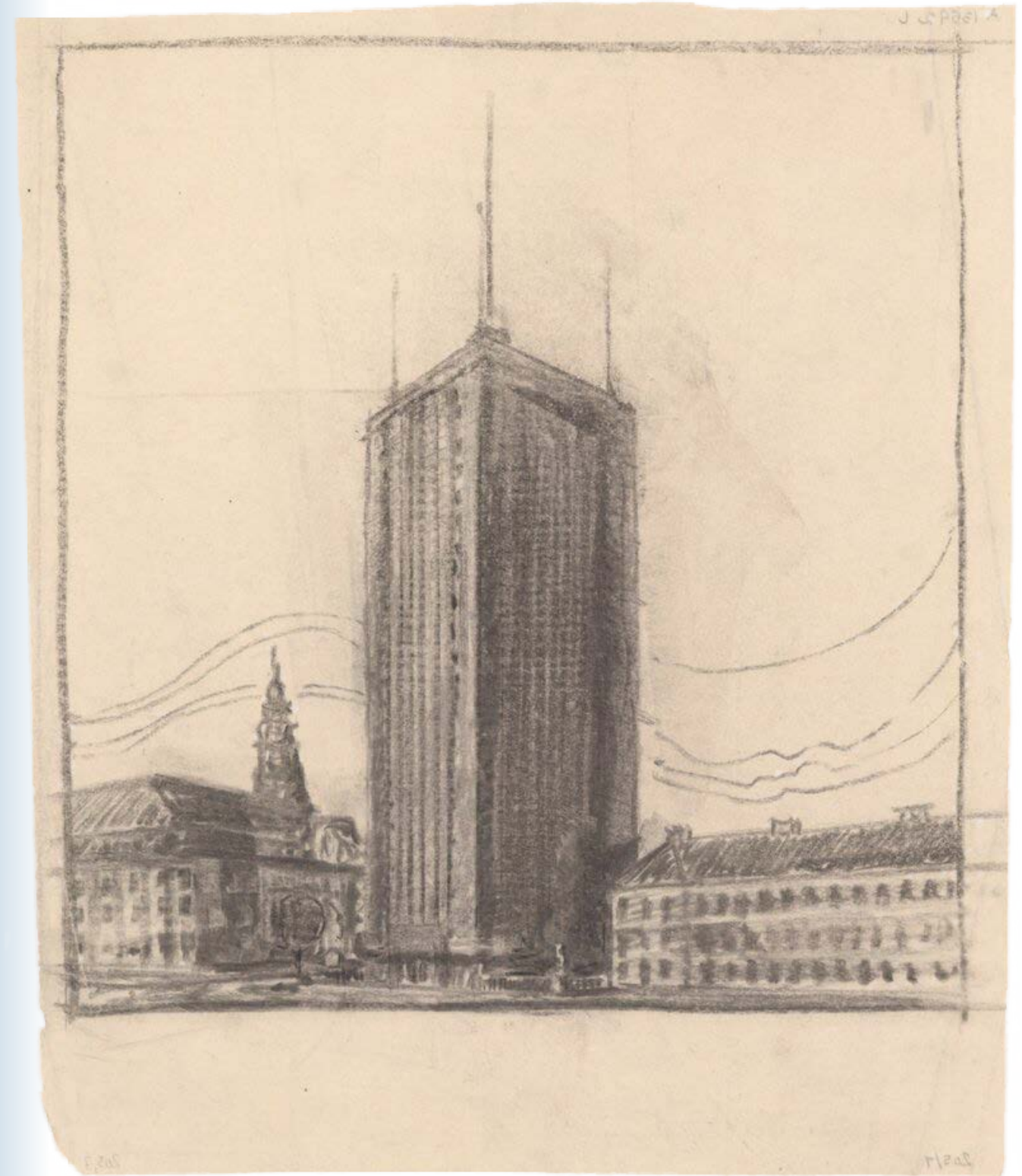


fig. 48
Anton Rosen.
Copenhagen, Bernstorffsgade, Office Tower for DSB, 1924.

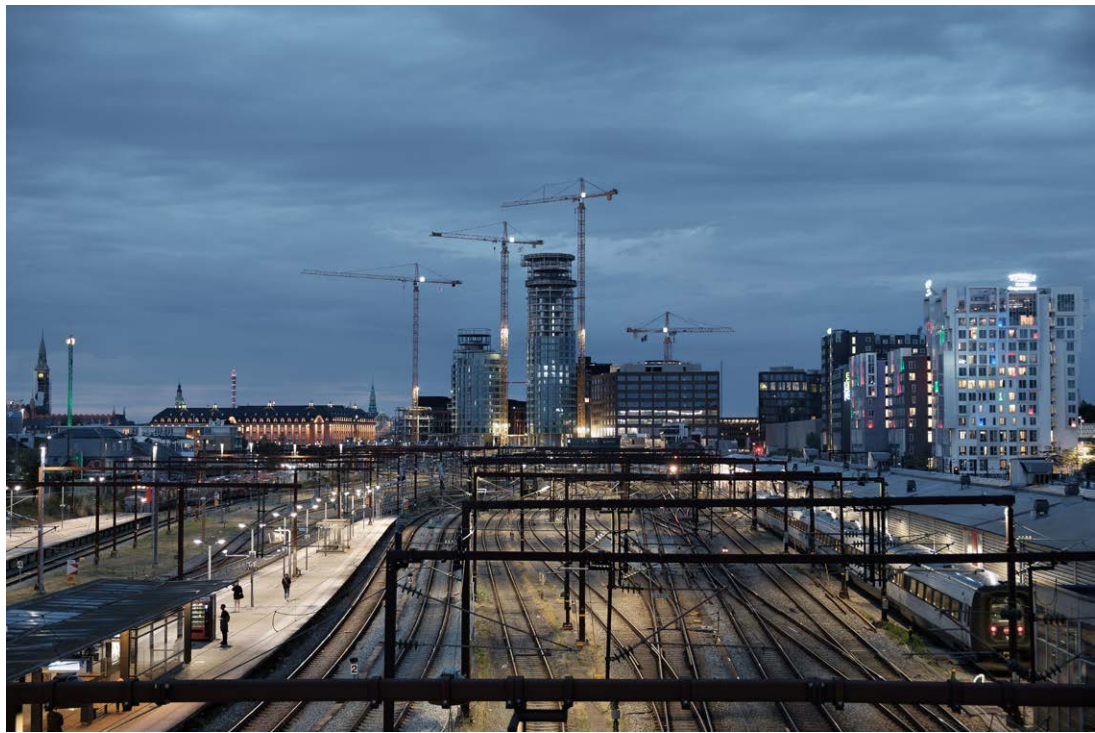


Foto by Kristoffer Trolle.

fig. 49
Dybbølsbro looking north towards the new towers in Postbyen.
Copenhagen, Denmark. July 2023.

building will make the world claustrophobically small. Why do I have to be reminded of Bestseller when I'm walking by myself in a quiet wood?" (Rea 2019).

The question is more profound than it might appear. In Chicago, the tower announces the city. In Brande, there was no city to announce. The tower would have announced only itself, the company, and the man behind it. This is the American skyscraper logic in its purest and most naked form: height as personal monument, as declaration of individual arrival, severed from the urban fabric that in its original context gave it at least a kind of civic meaning. The logic had traveled from the city to the field, but something essential had been left behind.

3. The return

Now, a century after Rosen's DSB proposal was rejected as a moral threat to Copenhagen's horizontal order, a cluster of towers has risen on almost the same site. Postbyen, the development at Bernstorffsgade near the central station, has topped out with a group of rounded glass towers that finally populate the corner Rosen envisioned in 1924. The vertical gateway he imagined has arrived.

It looks nothing like what he drew. Where Rosen offered a Danish take on art deco tower with ornament, rhythm, masonry climbing skyward, Postbyen offers glass, roundness, and the smooth neutrality of contemporary commercial architecture. The towers, I believe, are permitted because they are multifunctional with housing, office, hotel and commercial space combined under the banner of the mixed-use neighborhood, the fifteen-minute city, the Copenhagen model of the happiest urban life in the world. It speaks into the collective story of our city (Even though the infamous Blackstone was part of the initial development, and the fact that all the apartments are luxury rentals). They are justified not by individual ambition but by collective benefit. The ghost of the Americanism debate still shapes the terms on which height is allowed.

The irony is not lost. Denmark spent a century refusing to build what Rosen proposed, and when it finally built something on his site, it arrived in the language not of ornament and craft but of glass and

function. The very aesthetic that represented the furthest possible departure from everything he valued: the city got its towers. It got them in spite of itself, hedged with justifications about mixed use and urban density and sustainable development. It got them in the one form that could not be accused of individual vanity: the anonymous, multifunctional, carefully branded package of the new urban neighborhood.



Foto by John Vachon.

fig. 50
View North on Michigan Ave.
Chicago, IL. July, 1940.



Foto by John H.

fig. 51
State Street in the Loop.
Chicago, IL. October, 1973.

THE URBAN CANYON

The view from our office down Michigan Avenue is impressive in the way that geological formations are impressive: a sheer cliff face of stone and glass receding into distance, the street below cut between towers like a river through rock. From up here the people are reduced to movement. Small, purposeful, passing through the canyon.

The realization that followed me home from a trip to New York City was quieter than I expected. We had spent upwards of two weeks in Hell's Kitchen, within walking distance of some of the most dramatic vertical architecture on earth, and we almost never went near it. We walked the avenues and craned our necks and were duly impressed. But when it came time to actually be somewhere, to eat or linger or talk, we drifted elsewhere. SoHo, the Village, Chinatown. In Brooklyn we found ourselves in Williamsburg and Park Slope, using the towers of Midtown as a distant compass, orienting ourselves from brownstone stoops. The skyscrapers were a backdrop. Life happened in front of something lower.

This is what the urban canyon does well and what it cannot do at all. It is magnificent to pass through, thrilling at first encounter, genuinely awe-inspiring from certain angles and at certain hours. But it is not structured for the slower activities that make a city worth living in. The lingering, the gathering, the accidental conversation, the decision to stay somewhere longer than planned. Those things require a different relationship between building and street.

An architect and writer named Christopher Botham, who runs a blog about verticality that I stumbled across while writing this book, the coincidence of the subject matter was hard to ignore, has described the problem with a clarity I have not been able to improve on (Botham 2020). Walking a dense tower street in most Western cities, he writes, daylight and sky exist somewhere above, out of reach at ground level. The trees struggle, starved for light and dwarfed by the surrounding urbanity. The facades offer steel and glass wrapped around a minimalist lobby or a large retailer.

The pedestrian moves through it in a kind of imposed humility. Botham contrasts this with the main street of a smaller town: a patchwork of four and five story buildings, individual shops at ground level, sky present, daylight reaching the pavement, trees and buildings at roughly the same scale. The human register intact. The street belonging to the person walking it.

The contrast is simple and it is devastating. We know what streets that work feel like. We choose them, instinctively, when we are given the option. The canyon impresses. The cobblestone is where we actually want to be.

William Whyte spent years watching what people do on city streets and found that they stop where there is something to stop for, gather where the architecture offers friction and invitation rather than smooth indifference. Jane Jacobs understood that a block's vitality depends on the density of incident along it: doors, windows, entries, uses, the small constant variation that signals that many different kinds of life are being lived here. Jan Gehl measured what happens above a certain height: social interaction thins, the eye can no longer read a face, the building stops participating in the street and begins simply to overshadow it.

Botham proposes what he calls the urban valley as a corrective: a street wall held at four or five stories, varied in height along the block to give each building its own identity; towers stepped back from that wall so they do not block sky or sun from the pavement below; connected rows of trees forming a genuine canopy rather than isolated specimens fighting for light; and the inhuman scale of the tower relocated to the center of the block, away from the street edge, leaving the ground level in the hands of smaller structures that can actually participate in it. It is a simple set of ideas and they are probably right. They describe, more or less, the conditions under which streets are actually pleasant to be on. I see this in my favorite lunch spot. Nestled at the foot of a tower by the river. Only this tower has been softened by a row of townhouses at its base completely changing the cityscape.

He also notes that Paris and Vienna made a more radical choice, concentrating their towers in La Défense

and Kaisermühlen entirely, preserving the old city fabric at a scale that still works for people. There is something honest about that approach: a recognition that the canyon and the cobblestone may simply be incompatible, and that protecting one sometimes means containing the other somewhere else.

In New York I also sought out the grand Park Avenue apartment buildings by Rosario Candela. These are, in my humble opinion, about as beautiful as residential architecture gets in any city. But these are also fortresses for the wealthy. Their beauty does not fold out into the street. It is addressed to the sky and to the occupant above, not to the person passing at pavement level. You admire them as you might admire a cliff face: with genuine feeling, and then you move on.

GEOGRAPHY AND CONSTRAINT

Architecture is not made in a vacuum. It is shaped by the specific weight of a place: its light, its wind, its social habits, the angle of the sun in December. In Scandinavia, all of these press on the way people build and live more directly than almost anywhere else. The long dark winter, the horizontal grey light of February, the particular quality of a summer evening that seems to last forever. These are not background conditions. They are the conditions that produced an entire architectural and domestic culture.

The concept of hygge is often reduced to a lifestyle brand, but it has a geographic explanation. It is the culture of the interior as refuge, born from winters where you spend months largely indoors. The Danish home is designed with deliberate care for warmth, light, and tactile comfort: the low lamp over the table, the candle on the windowsill, the window detail oriented to catch whatever light is available. At the same time, Danish buildings are carefully planned to maximize what natural light there is. South-facing windows, generous openings, the deliberate avoidance of forms that would cast neighboring buildings into shade. This is not merely aesthetic preference. It is a response to geography.

Which makes the skyscraper a genuinely complicated import.

There is a persistent European fascination with the American vertical city. Copenhagen’s Ørestad development was conceived partly as a kind of inverted Manhattan with tall dense buildings surrounded by open parkland rather than the other way around. The Levantkaj development in Nordhavn has been described in similar terms, as an imagined Manhattan at the water’s edge (Pålsson 2018). Brussels at various points in its planning history aspired to become the Manhattan of Europe. The skyline cluster, rising from flatness, announces arrival and ambition. It is a powerful image. But the image was made somewhere else, under very different conditions.

New York may have cold winters, but New York City sits at the latitude of Madrid. Chicago, which defines the word frigid in the American imagination, is on the same line of latitude as Rome. The sun in these cities, even in December, arcs high enough to reach the streets. Tall buildings cast shadows, but those shadows move through in hours. The sky is still a source of light and warmth for much of the day.

Copenhagen sits roughly on the latitude of Moscow. In the winter months, the sun barely clears the horizon. It rises low in the south, traces a shallow arc, and sets again before the working day is over. A tall building in this context does not cast a temporary shadow. It can deprive neighboring buildings and streets of direct sunlight for the better part of every day from October through March. This is not an aesthetic concern. It is a matter of health, warmth, and the fundamental liveability of the spaces around it.

Copenhagen’s own municipal strategy for high-rises acknowledged this directly. Shadow diagrams are required for all proposed towers, and the strategy states clearly that slender buildings are to be preferred, precisely because their shadows pass more quickly (Københavns Kommune 2017). **A wide tower creates a deep, slow shadow; a slender tower leaves a long but fast-moving one.** Shade and sun here carry a weight they do not carry in Chicago or New York.

Foto byLeandro Neumann Ciffo.

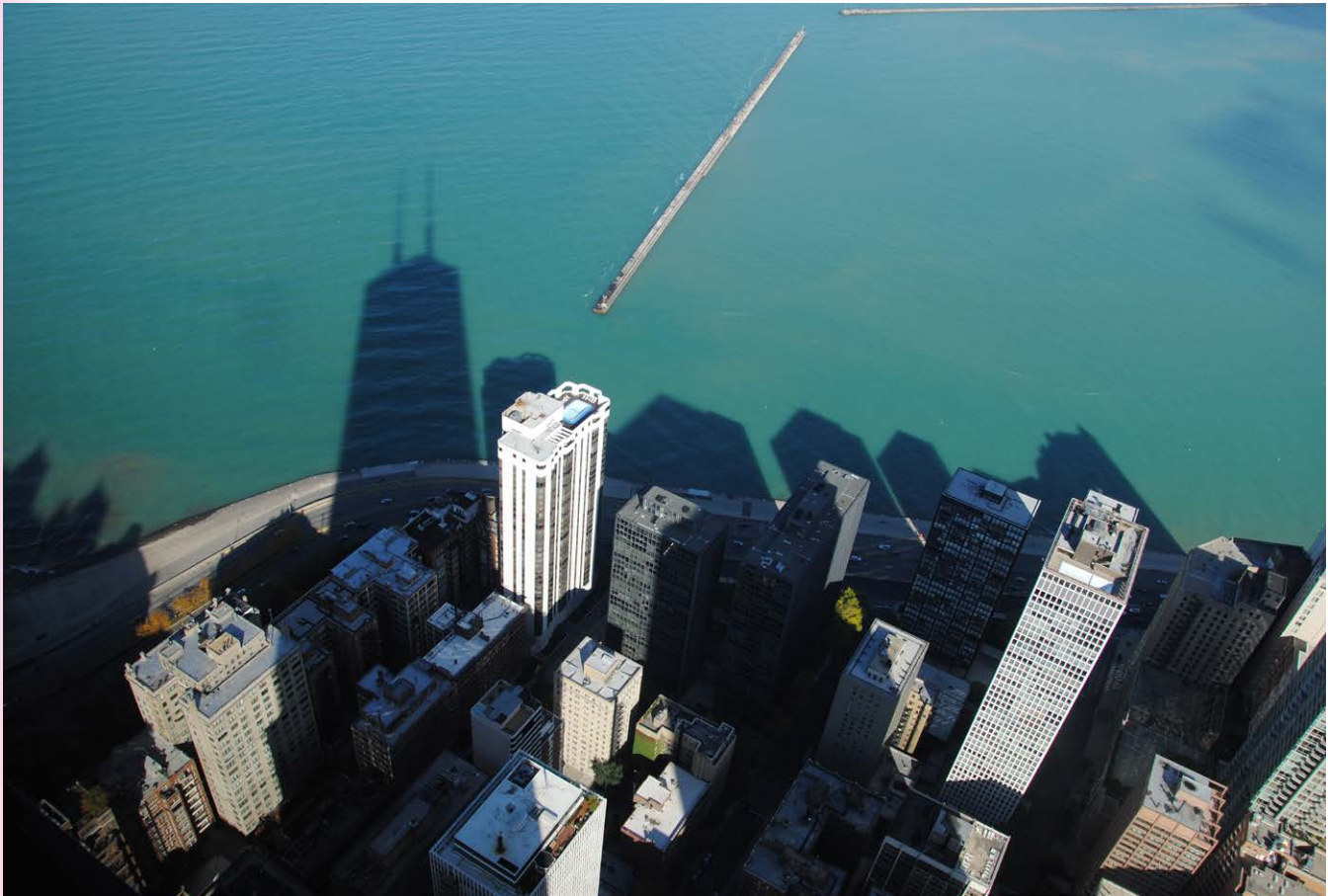


fig. 52
John Hancock casting its shadow.
Chicago, IL. October 7, 2012.

“Chicago has the windiest places, not because of the local wind (which isn’t really so very much stronger than in other cities), but because the drafts down the sides of the giant John Hancock and Sears towers are macro in force—often so strong as to prevent people from using the plazas, even if they had reason to.”

— William Whyte (1980)



Foto by Guillaume Baviere.

fig. 53
Amager Fælled with a view of Bella Sky.
Copenhagen, Denmark. January 3, 2016.

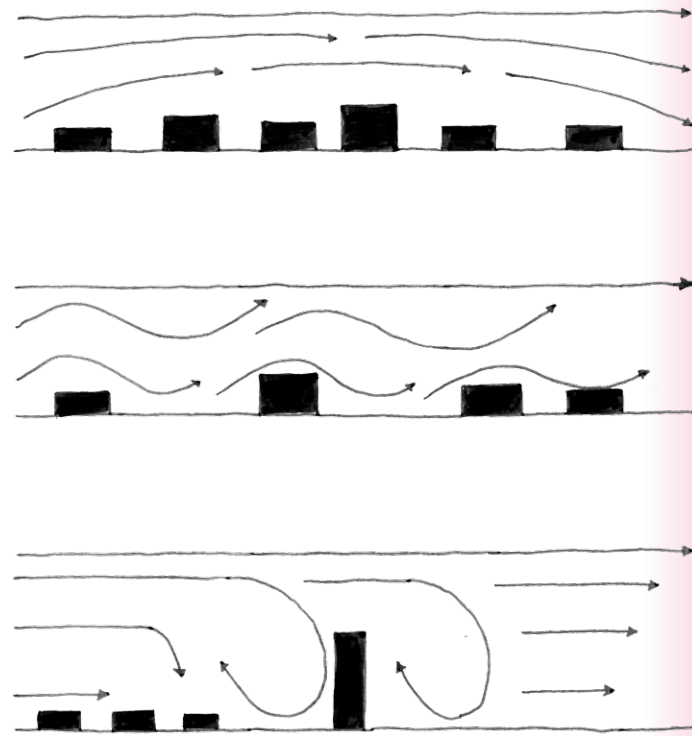


fig. 54
Wind Diagram.

Then there is the **wind**.

Tall buildings do not only affect light. They redirect airflow, compressing and accelerating it at their bases in ways that can make the surrounding streets genuinely unpleasant, and at worst, genuinely dangerous. The Copenhagen high-rise strategy notes that wind is pressed down along the building facade and creates high velocities and turbulence in the immediate surroundings. This is a known and solvable problem, addressed through aerodynamic forms, setbacks, and base widening. But it requires deliberate design, and it is frequently underestimated.

In Copenhagen the wind problem has particular urgency. The city's primary mode of transport is the bicycle. Wind turbulence at the base of tall buildings is not an inconvenience for someone walking to a car; it is a hazard for the person cycling past. The tower on Gl. Kongevej 60 already generates wind conditions at its base strong enough to knock cyclists from their bikes. This is not an isolated example or an unlucky accident of siting. It is what happens when tower form meets flat, open city without sufficient attention to the climatic conditions on the ground. The Copenhagen municipal strategy explicitly illustrates this problem with an image of pedestrians struggling at the foot of the SAS Royal Hotel and that building is modest by contemporary standards (Københavns Kommune 2017).

Research into how people actually experience living in new Danish high-rises confirms that the wind problem is systematically underestimated. A 2021 study by BUILD at Aalborg University found that across six of eight residential towers studied, residents described developing what the researchers call a "weather compass": an acquired knowledge of wind directions and conditions that shapes when and how they use their balconies and outdoor terraces. Balconies were appreciated as connection points between inside and outside, nearly all residents said the ability to open a door and feel the air was important, but actual use was often limited to a handful of times a year (Mechlenborg and Hauxner 2021). The private outdoor space that residents expected and the outdoor space they could actually inhabit were two different things. This gap between expectation and experience is not a failure of individual preference. It is a failure to fully account for what height does to wind in this particular climate.

What it suggests is the need for something that the history of Danish high-rise development has largely not produced: a vernacular. A tower form that takes the specific conditions of Scandinavian geography seriously, the way Danish domestic architecture takes the dark winter seriously. This might mean towers that are genuinely slender, narrow enough to leave the sky open and the shadows quick. It might mean generous setbacks at the base, as the American wedding-cake towers of the 1920s provided, creating protected zones at street level where wind is broken before it reaches the cyclist. It might mean tree-lined streets and thoughtful landscaping at the tower's feet, not as decoration but as climate infrastructure. It might mean orienting towers to maximize winter sun on the surrounding streets rather than the views from the apartments above.

The American skyscraper was developed in a flat Midwestern city at the latitude of Rome, by people who had just watched their city burn to the ground and had no particular reason to be cautious about what came next. That origin story does not travel. The Danish version, if there is to be one, will need to be invented rather than borrowed, built from a different understanding of what the sky means at this end of the world, and what we owe to the people at its feet.

1. The American Dream

There is a formal similarity between Lake Shore Drive and Ørestad that is easy to state and harder to make sense of. Both line one edge of open nature with tall buildings. Both involve a hard road separating architecture from landscape. Both were conceived, at some level, in the image of the American city. The similarity ends there.

Lake Shore Drive was not planned. It grew. The Lincoln Park Commission had drawn up a pleasure drive along the lakefront edge as early as 1870, imagining it as a scenic route through the park rather than a corridor of real estate. What followed was less planned than attracted: wealthy families came to the water, built mansions, and were followed by apartment buildings that translated the prestige of the address upward into

the sky. What accumulated over eighty years was a layered, varied streetscape of architectural ambition featuring Beaux-Arts facades, a Candela Penthouse, and the Miesian glass towers at the lake's edge that felt like a culmination rather than an imposition. The Drive earned its condition incrementally. Each building arrived into a context that already had weight and character.

Ørestad was announced. In the 1990s, Copenhagen needed to finance its new metro and the solution was to sell development rights to a flat, empty, formerly military tract on the southern edge of Amager. The name was invented. The vision had a slogan: an inverted Manhattan, dense towers surrounded by open nature rather than the other way around. The aspiration was American. The execution was Danish, which is to say cautious, regulated, committee-approved, and carried

Foto byLeandro Ben Schmitt



fig. 55
Apartment buildings along Lake Shore Drive.
Chicago, IL. August 5, 2011.

Foto byLeandro Johan Wessman.



fig. 56
The Metro in Ørestad.
Copenhagen, Denmark. June 2, 2021.

out by a rotating cast of developers and architects who shared little except a zoning envelope. Twenty years later, the result is a neighborhood genuinely difficult to characterize fairly.

There are real experiments with contemporary Danish urban living. The VM Houses by BIG and JDS are inventive responses to housing density. The 8 House makes a serious attempt at creating a mixed urban section in a single building. But these sit alongside a much larger quantity of buildings that are simply adequate. Flat-fronted brick veneer blocks that could have been built anywhere in northern Europe in the last thirty years. The towers are tall by Danish standards, though they do not approach the scale of anything on Lake Shore Drive. The streets between them are wide by Copenhagen standards, though they do not generate the urban density that makes wide streets tolerable in Chicago or Manhattan. The park is indeed on the outside, but it functions as a backdrop rather than as the social infrastructure the inverted Manhattan concept implied. On a weekday afternoon, the main boulevard can feel closer to an airport service road than to a city street.

Lake Shore Drive has its own failures at ground level. The buildings are often fortress-like in their relationship to the street with grand lobbies sealed against the pavement, service entrances consuming entire block faces, the pedestrian largely irrelevant to the building's self-image. The Drive itself is a highway. An open wound between the city and the lake. Crossing it on foot to reach the lake requires patience and a tunnel. The architecture addresses the water and the sky. The street between is an afterthought.

Lake Shore Drive had the lake, one of the great natural features of the North American continent, with a horizon that reads as ocean and a shoreline that Chicago has, by and large, kept public. It also had eighty years of gradual development and the genuine real estate pressure of a city growing rapidly toward a defined edge. Ørestad had a metro line, a planning document, and a flat field. These are not equivalent starting conditions. You cannot manufacture the conditions that make a place desirable by announcing that they exist and then building high rises to fill the space.

But the comparison is not irrelevant either, because

the ambition was comparable. The people who named Ørestad and wrote its development brief were not trying to build a Danish neighborhood. They were trying to build something closer to a Manhattan, and they said so. The inverted Manhattan formula was not a casual metaphor. It was a design intention. And what it reveals is a persistent fascination in Danish planning culture with the American vertical city, a desire to import something of its energy and confidence, that tends to founder not on bad intentions but on the fundamental mismatch between the conditions that produced the original and the conditions available for the copy.

2. Earned and announced

What Ørestad has produced, despite its urban design failures, is harder to dismiss than its critics suggest. The density itself, however poorly organized, has generated something. In twenty years it has become Denmark's most international neighborhood, drawing the international workforce of Maersk, Novo Nordisk, and Nordea into a community that is genuinely unlike anything else in Copenhagen (Politiken 2025). This is not the inverted Manhattan the planners drew. But it suggests that the density, even imperfectly organized, produces conditions that dispersal cannot. Whether that justifies the urban form it arrived in is a different question.

Perhaps the more honest comparison is not with Manhattan at all. Lake Shore Drive along its northern residential stretches, with apartment buildings at moderate height lining a parkway edge, cycling infrastructure woven through Lincoln Park on the water side, and a street condition that belongs to the pedestrian rather than the car. This is closer to something that might have worked on the Amager edge with different premises. Not the extreme vertical city. Not the inverted Manhattan. Something more modest and more specific: a waterfront neighborhood that took the best of what Chicago had done along its lake and ran it through a Copenhagen logic of public space, cycling infrastructure, and the particular Danish understanding of what the space between buildings should feel like.

Foto byLeandro Leif Jørgensen.



fig. 57
Crowne Plaza Towers.
Copenhagen, Denmark. March 2, 2017.

Foto byLeandro John PickenPhoto.



fig. 58
Lake Shore Drive building facades.
Chicago, IL. June 16, 2008.

WHETHER THE LIGHTS ARE ON

At some point between Sullivan and today, the skyscraper stopped being primarily a place to work or live and became primarily a place to park money.

The elevator had already inverted the building’s social logic making the upper floors desirable rather than marginal, turning altitude into a commodity. The penthouse emerged as its natural conclusion: the highest floor as the most exclusive address, the city visible from above as a kind of trophy. For most of the twentieth century this remained a local transaction. The wealthy of a given city paid a premium to live above it. The building was still, in some meaningful sense, theirs.

What changed was the globalization of the buyer. Of the roughly 16,000 new luxury condos built in New York City since 2013, one in four remained unsold by 2019, and nearly 30 percent of those that had sold were quietly relisted as rentals by investors unwilling to put them back on the market. On Billionaires’ Row near Central Park, half the units are empty while the other half are owned by people who rarely visit (Moses 2019). The same pattern

appears in London, Vancouver, Sydney, and Paris. The apartment is not a home. It is a position in a portfolio. A store of value that happens to have a view, the high rise takes on this role more than any other typology.

The architecture has adjusted accordingly. The luxury towers rising today on Billionaires’ Row or along the Dubai Marina are engineered to a specific brief: maximum floor-to-ceiling height, minimum columns, imported marble in the lobby, a silhouette distinctive enough for a brochure. Seventeen of the world’s twenty tallest buildings are now in Asia or the Middle East, and most of them are less expressions of urban life than declarations of national or corporate wealth (Council on Tall Buildings and Urban Habitat 2026). The Jeddah Tower, currently under construction in Saudi Arabia and set to reach one kilometer, has been described by its architects as a symbol of the kingdom’s economic ambitions. Not of its cities or its streets.

What Sullivan intuited and Carol Willis documented, about skyscraper’s form has arrived at a conclusion that neither of them could quite have anticipated. What the globalization of capital has produced instead is a building

type that has been progressively stripped of that local accountability. The tower today is often designed in one country, financed from another, built with materials sourced across three continents, sold to buyers who may never visit, and left half-empty in a city that has little claim on what happens inside it. Willis described the early skyscraper as a vernacular of capitalism. What has emerged since is capitalism without a vernacular: placeless, portable, and indifferent to the street below.

There is an environmental dimension to this that rarely enters the conversation about empty towers. A luxury high-rise is an extraordinarily carbon-intensive object to produce. The concrete, the steel, the glass curtain wall. Building materials account for roughly eleven percent of global greenhouse gas emissions (Architecture 2030 2022), and the structural complexity of a supertall multiplies those costs well beyond what a mid-rise building of equivalent floor area would require (Qing & Li 2024). When that investment of material and energy sits half-occupied, or unoccupied entirely, in large luxury units, the calculation becomes difficult to defend. The tower was built. The carbon was spent. The

city received, in exchange, a sealed lobby and a postcard silhouette. The tall building, of all building types, carries the strongest obligation to justify its existence in the life of the city around it. Its footprint, in every sense, is too large for it to be merely a financial instrument.

Chicago also tried the opposite experiment. Its public housing towers, built with the same modernist logic that produced the Danish welfare high-rises, arrived under conditions of chronic underfunding and political indifference at a fate considerably worse. Cabrini-Green, the Robert Taylor Homes, the Stateway Gardens. Most have been demolished. High-rise living in Chicago has reverted almost entirely to those who can afford Lake Shore Drive or River North.

What connects the failed social housing tower and the empty luxury investment tower is that both represent versions of the tall building that stopped asking what the city around it needed. One was built for a bureaucratic idea of collective welfare that was never properly resourced. The other is built for a financial idea of individual wealth that has no particular relationship to the city it stands in.

The lights in both cases were often off.

Foto byLeandro Haha169.



fig. 59
Zifeng Tower in Nanjing (450m).
Nanjing, China. September 28, 2017.

Foto byLeandro Willis40 art.



fig. 60
111 West 57th Street (435m).
New York City, NY. May 25, 2022.

Foto byLeandro N509FZ.



fig. 61
CITIC Tower (528m)
Beijing, China. September 27, 2021.

Foto byRgonilleb310.



fig. 62
St. Regis (365m)
Chicago, IL. December 1, 2020



Foto by Aheihner.

fig. 63
Burj Khalifa (828m).
Dubai, United Arab Emirates. March 11, 2008.



Foto by Stephen Colebourne.

fig. 64
View from Burj Khalifa.
Dubai, United Arab Emirates. January 21, 2011.

TODAY AND TOMORROW

To understand where Danish high-rise development currently stands, it helps to trace what the tall building has become across its short history. There are roughly three generations, and they represent three different ideas about what height is for.

The first arrived in Chicago in the 1880s. These early towers were in a sense ordinary buildings that had been stretched. Sullivan's Guaranty Building in Buffalo: a terracotta facade on a steel frame, its vertical ribs straining upward, but still in recognizable proportion with its neighbors. It participated in the street. Its base was open. Height followed finance, as Carol Willis documented (Willis 1995), and that economic grounding kept the tower accountable to its context. It was a local object, shaped by local materials, local pressures, and a local ambition that was still, in some meaningful sense, urban.

The second generation declared war on all of that. Mies arrived in Chicago in 1938 and brought with him a vision of architecture as pure structural logic: steel and glass, the grid and the void, nothing that was not necessary. The building detached itself from the street, from its neighbors, from its city. It was often beautiful and it was also placeless. A Miesian glass tower in Chicago looks essentially identical to one in Frankfurt or Singapore, which was partly the point. The building was not trying to be of its place. It was trying to be of its time.

The third generation is where we often find ourselves now. The ultra-thin residential towers appearing in New York, London, Dubai, and increasingly in northern European cities are engineering achievements more than architectural ones. Their slenderness is a product of luxury economics. They offer views and exclusivity and tend to give almost nothing to the street. They are monuments to the buyer's altitude, not to the city's life.

Most current debates about tall buildings in Copenhagen are drawing on all three generations at once, borrowing the aesthetics of one, the economics of another, the ideals of a third, without fully reckoning with the contradictions between them. The confusion is

visible in the debates happening right now.

In Aarhus, the new tallest tower in Denmark is developing its 145-meter skeleton on the harbor signaling their claim as a significant city. In Copenhagen, a 120-meter tower has been proposed at Langelinie by the Lord Mayor, framed as a response to the housing crisis. The enthusiasts are there in online forums, but so are the skeptics. In online articles and comment threads people speak against the project, with critiques ranging from the location to the architecture to the fundamental incompatibility of high rises and Copenhagen. Some question whether it will contribute any genuinely affordable housing, or whether it will instead accelerate the very investment logic that is already pricing people out (SkyscraperCity 2026). That concern belongs recognizably to the third generation: the tower as financial instrument, its civic justifications worn like a borrowed coat.



fig. 65 & 66
Langelinie Tower Proposal (120m).
Copenhagen, Denmark.



Renders by Vilhelm Lauritzen Arkitekter/Lendager/Sted By & Landskab.

The Problem of the Formula

What connects these three generations at their worst is the floor plan. The standard residential tower plan has become remarkably uniform: a central core of lifts and stairs, a ring of apartments, a corridor connecting them. It is efficient and it is deadening. It is a global template, as recognizable in Carlsberg Byen as in Nine Elms or the Dubai Marina, and it eliminates almost every spatial condition that Danish residential culture has historically depended on: the threshold, the semi-private landing, the negotiated zone between inside and outside where ordinary social life accumulates.

This uniformity has nothing to do with height itself. It is a product of how buildings are financed, designed, and marketed in a global development model that has progressively stripped the tall building of its local accountability. Carol Willis described the early skyscraper as a vernacular of capitalism (Willis 1995). What has followed is capitalism without a vernacular: portable, placeless, and largely indifferent to the street

below or the sky above.

There is one planning instrument worth naming, not to resolve but to question. The bebyggelsesprocent, the permitted plot coverage ratio inherited from 1950s functionalist planning, was designed for a planning ideology that has since been largely discredited. In practice it caps how much of a given plot can be built upon, and the result, when applied to a tall building on a generous site, tends toward precisely the condition Jan Gehl spent his career documenting as a failure of human life: a tower standing alone in open lawn, separated from the street, the space around it too exposed and too undefined to be used (Gehl 1971). The ratio does not just limit density. It actively reproduces the spatial logic of the ideology that created it. This is not an argument for abolishing it. It is an observation that the instrument measures the wrong things, and that a planning framework oriented toward urban and architectural quality might find more useful tools. The city's existing high-rise strategy moves in this direction with its shadow diagrams and wind assessments (Københavns Kommune 2006). Whether the underlying regulatory framework follows is a different and still open question.

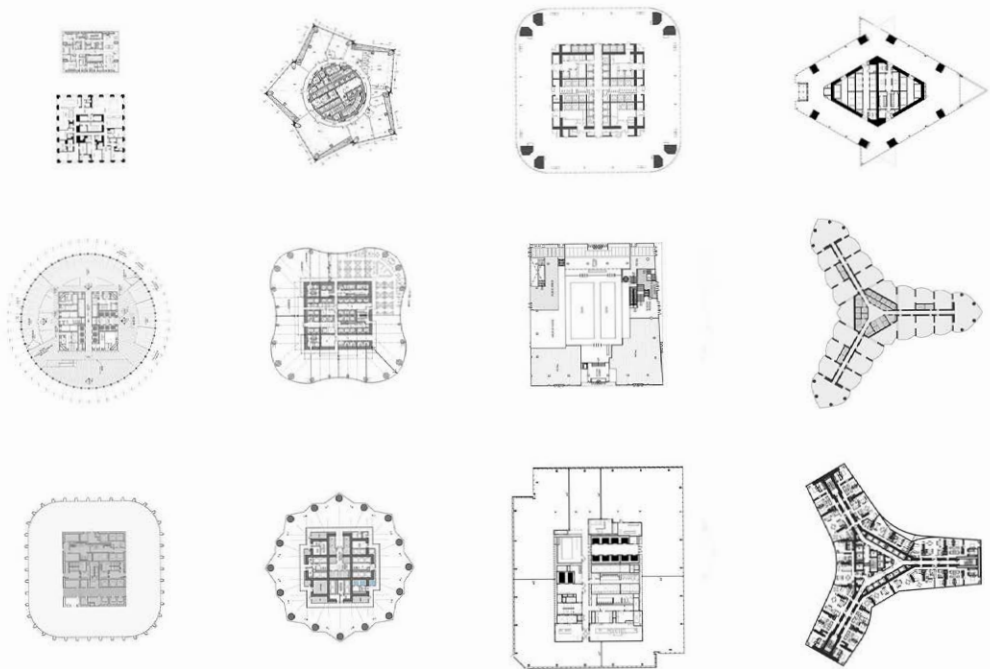


fig. 67

Top Row: 432 Park Avenue, 111 West 57th St., Lakhta Center, CITIC Tower, Merdeka 118.
Second: China Resources Tower, Tianjin CTF Finance Centre, One Vanderbilt, Burj Khalifa.
Third: Guiyang WTC Landmark Tower, Chengdu Greenland Tower, 30 Hudson Yards, Jeddah Tower.

An Opening

The tall building is back on the Danish agenda. Across Scandinavia, something quieter and more considered is beginning to appear: buildings that take height seriously as an architectural problem rather than a speculative one, that reach into local material traditions rather than importing the global glass template.

Some projects reaffirm my belief that it is possible to create a vernacular. A development in Stockholm has built four residential towers up to thirteen stories in cross-laminated timber, one of the largest mass timber housing projects in the world. Built with over 8,700 cubic meters of Swedish CLT, the buildings were designed with architecture, construction, and sustainability informing each other from the outset (Eder et al. 2026). Inside, the apartment layouts reference the classical Stockholm flat, with rooms in enfilade and long sight lines, a nod to the city's own residential history rather than to any global template.

Their success lies not in a formula. Rather, it is a method beginning from what is local, what the climate and the material culture and the urban history of a place actually offer, and letting the building follow from that. It is a tall building that could not have been built anywhere else, which is perhaps the simplest and most demanding criterion for a genuine vernacular. The importance of these buildings, if we choose to erect them can be put simply: a tall building is architecture raising its hand. And when you raise your hand, you must have something to say.

That obligation is not only architectural. Because a high-rise is visible from a great distance, because it reshapes the experience of an entire neighborhood for a century or more, it carries a civic weight that most buildings do not. It has to be held to our highest standards. It has to be good enough to be worth preserving. That means materials that age gracefully, a design with enough generosity and variety that people will fight for it rather than against it when the question of its future eventually arises. The buildings that have earned that loyalty in Chicago, Sullivan's terracotta, Mies's glass at the lake's edge, the Gothic crown of the Tribune Tower, are buildings that were made with enough conviction to outlast the moment of their construction.

Then there is the question of the crown. Sullivan proposed base, shaft, and capital as the skyscraper's organizing logic,



fig. 68

The apartment high-rise Pasteurs Tårn in Carlsberg Byen, Copenhagen, Denmark. September 24, 2022.



fig. 69

Pasteurs Tårn meeting the street.. Copenhagen, Denmark. September 2024.

Foto by Leandro Leif Jørgensen.

Foto by Google.



fig. 70
Nordhavn looking at Murmanskgade.
Copenhagen, Denmark. July 15, 2024.

and the capital has always been where the building makes its most symbolic statement. For most of the twentieth century that statement was commercial: the company logo, the penthouse, the altitude sold to the highest bidder. The luxury penthouse subsidizes the building below it and concentrates its most elevated space in the fewest hands.

Whether that is the only available logic is worth asking. The Chicago Temple, built by a congregation that could not afford to waste a single floor, leased its middle stories to lawyers and nonprofits and put its most sacred space at the very top, refusing the view, turning inward. The crown belonged to the community, not to the market. That arrangement may not translate directly into a residential tower in Nordhavn. But the principle underneath it, that the highest and most visible part of a building might owe something to collective life rather than to the buyer who can pay most for the altitude, is one that a culture with Denmark's egalitarian traditions is probably better placed than most to take seriously.

Sullivan's old tripartite logic keeps returning as a

useful frame, not as historical pastiche but as a set of genuine questions. What does this building owe to the street it stands on? What does it offer to the people who will live in its middle floors, at the latitude it occupies, in the light available in February? And what happens at the top, where the building reaches highest and is most visible and most symbolic, the place where the church once put its spire and the corporation puts its logo? Who does the crown belong to?

These are not technical questions. They are civic ones, and they are probably better held as questions than answered too quickly. The argument is still in progress. The skyline is still being written. As illustrated by the heated online discussions regarding the plans for the new 120 m tower in the harbor of central Copenhagen, the conversation about what kind of city Copenhagen wants to become is, fortunately, unfinished.



fig. 71
Cederhusen Interior.
Stockholm, Sweden. 2024.



fig. 72
Cederhusen Exterior.
Stockholm, Sweden. 2024.

VERTIGO

The word has two meanings.

The first is physiological. A disturbance of the inner ear, or a disturbance of the eye's relationship to the ground. The sensation that the stable world has begun to move, that the floor is not where you left it, that something fundamental about your orientation has been quietly revised. It is not fear of heights exactly. It is the sudden awareness of them.

The second meaning is more colloquial and less precise. A kind of overwhelm. Too much to take in. The city from above, or the city from below, looking up.

I have experienced vertigo, in both senses, throughout the writing of this book.

Standing at the base of the Sears Tower the building disappears above you. You cannot see its top. You cannot see its middle. You can only see the base, the street-level black metal facade and the revolving doors and the people moving through them, and then the wall rising, and then the sky somewhere above that, and the building somewhere between. The thing you came to see is the thing you cannot see from where you are standing. You have to step back. You have to cross the street and crane your neck and squint. Even then it resolves into parts rather than a whole. A chunk of bundled tube, a setback, another chunk, the antenna, the clouds. The skyline you recognize from photographs is available only from a distance, from the lake or from the elevated expressway. Up close the building dissolves.

I keep thinking about the Chapel in the Sky. About Mrs. Beverly telling me that Jesus, carved in wood, weeps over Chicago. No peace. And about the fact that the chapel has no view. The stained glass refuses it, turns the room inward, refuses the city its claim on the sacred space. I thought at the time it was a kind of withdrawal. Now I think it might have been wisdom. There is a kind of looking at cities that requires distance. And there is a kind of being in them that requires you to stop looking and simply be inside.

I grew up horizontal. I know what it feels like to walk to the water across flat land and watch the horizon approach without ever quite arriving. There is a patience in that landscape, a willingness to wait. The vertical city has no patience. It insists. It announces. It gets into the line of sight whether you asked for it or not. And when it works, when the engineering and the ambition and the accident of good light come together, it does something to you that the flat landscape cannot, which is to say it lifts your eyes.

The experience of vertigo is diagnostic. It tells you that your sense of where you are in relation to the ground is less secure than you believed. It tells you that orientation is something you maintain, not something you possess. A condition, not a property.



fig. 73
Juxtaposed.

Danish cities are re-entering the argument about height. New towers are going up, and more are proposed, and the conversation is happening in planning offices and residents' meetings and architectural offices around the city. It is mostly a conversation about numbers: height, plot ratios, shadow diagrams, wind studies. These are necessary conversations. They are not sufficient ones.

What is missing, still, is a willingness to talk about what it actually feels like. Not what the building looks like from the harbor. What it feels like to live on the fourteenth floor in February when the sun barely clears the rooftops across the street and the wind has been coming from the northwest for a week. What it feels like to wait for the elevator with a neighbor you have never spoken to in three years of sharing a wall. What it feels like to stand on a balcony you can only use a handful of times a year and look out at the city that continues, indifferently, at a distance.

Architecture makes these conditions. It does not choose the feelings people bring to them, but it does structure the space in which those feelings are possible or impossible. A building that eliminates thresholds eliminates the conditions for encounter. A building that exposes every balcony to the northwest wind eliminates the conditions for lingering. A building that privatizes its crown eliminates the conditions for shared life at altitude.

The best argument for building tall is not economic, though the economics are real. It is not environmental, though the environmental case is serious. It is this: that the city at its densest is the city at its most generous, the place where the most different kinds of people are pressed close enough together that something might happen between them. The tall building, done well, is one way of achieving that density without consuming the ground. It is a wager that human life can be sustained above the fifth floor without becoming estranged from itself.

Whether the wager can be won depends on decisions made long before the building is completed. It depends on who is designing the threshold between the corridor and the front door. On whether the crown belongs to the residents or to the highest bidder. On whether the base offers something to the cyclist stopping in November or closes against the street like a fist.

I do not know if Denmark will build well at height. I suspect it will build adequately, as it usually does, with occasional excellence and occasional failure, and that the conversation will continue for longer than the buildings take to rise. The argument about what the vertical city is for is not going to be resolved by any single building or any single book. It accumulates the way a skyline does: slowly, incrementally, each addition changing the meaning of everything that came before.

I came to Chicago to learn something about towers. I think I learned something about standing at their feet, looking up, with a particular kind of bewilderment.

Vertigo, in the end, is not a problem to be solved. It is a form of attention. The body's way of registering that it has arrived somewhere it was not originally designed for, and is trying, with some urgency, to make sense of where the ground has gone.



fig. 74
Image from my first visit to New York when I lost my head.
New York City, NY, 2014.

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