Modernism Reinterpreted Through Manhattanism

A history thesis on the relation between the early work of OMA and the principles of Modernism
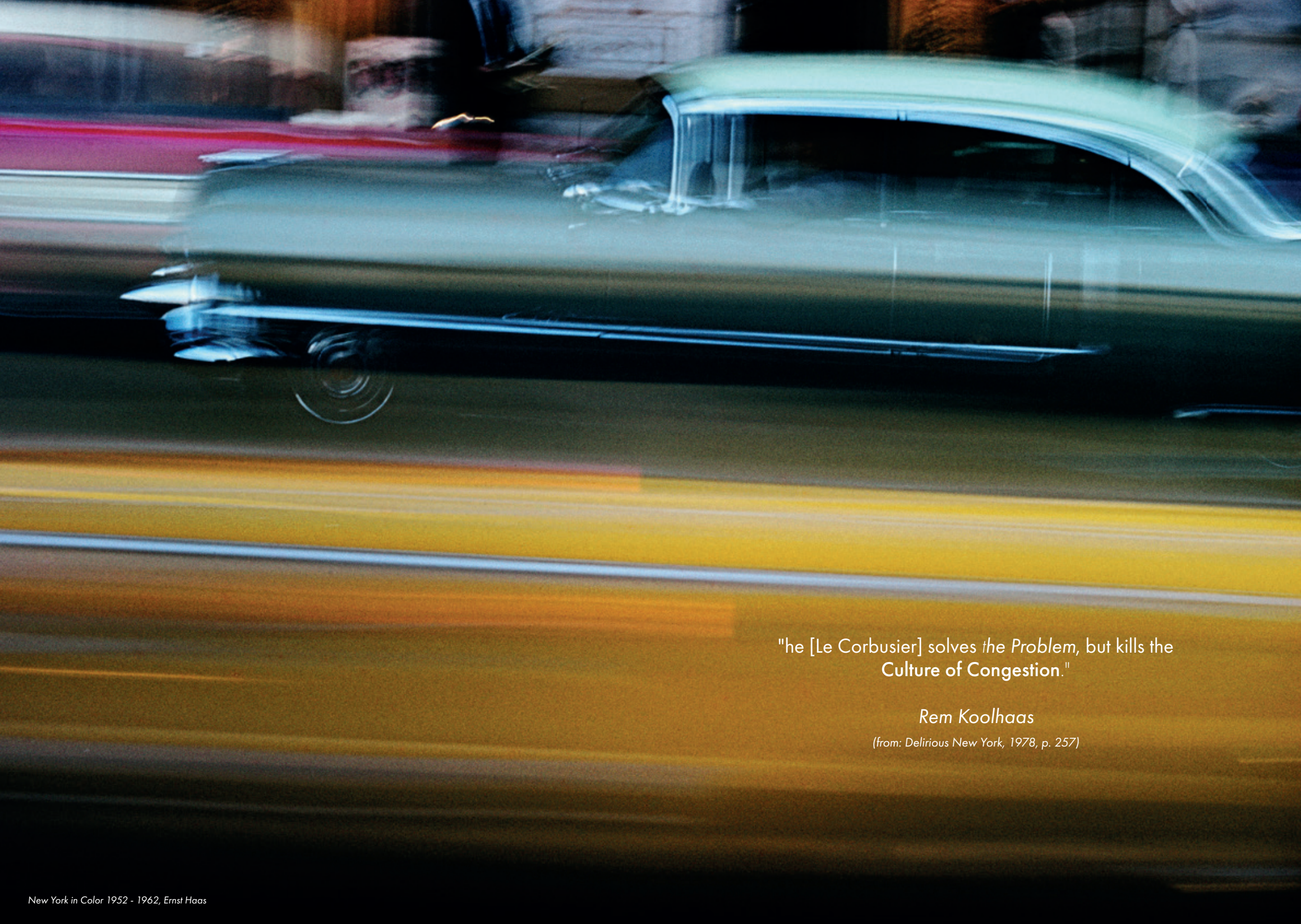
Joost Hoepman

5073308

17.04.2025

History Thesis

Modernism Reinterpreted Through Manhattanism

A history thesis on the relation between the early work of OMA and the principles of Modernism

Joost Hoepman

"he [Le Corbusier] solves *the Problem*, but kills the
Culture of Congestion."

Rem Koolhaas

(from: Delirious New York, 1978, p. 257)

New York in Color 1952 - 1962, Ernst Haas

Figure 1: The Educatorium, Utrecht (OMA, 1995)

Preface

In March 2023, I visited the Educatorium in Utrecht, the Netherlands, together with an architect, who was at that time also my employer. The building was conceived by the Office for Metropolitan Architecture (OMA) and served as the backdrop for a discussion about the origins of its creator's ideology – Rem Koolhaas. The architect in question, Herman Hertzberger, argued that Koolhaas's architecture had in essence, from the very beginning, fallen back on the modernist principles of Le Corbusier.

But why? Why did Hertzberger – who had witnessed the full transformation from Le Corbusier to Koolhaas throughout his career – draw this comparison at the end of it?

The research before you, written as part of the Master's program in Architecture at Delft University of Technology, took this question as its starting point. It provided an opportunity for a more detailed examination of the work of the Netherlands' most renowned – and arguably most controversial – architect.

This would never have been possible without the fantastic supervision by Marcel Teunissen, who strongly encouraged experimentation with the topic throughout the research process.

Also, I would like to thank the city from which every word of this research was written: Buenos Aires, a grid city on an immense scale, a modernist utopia described by both Le Corbusier and Koolhaas, that made me experience the theory I was studying firsthand.
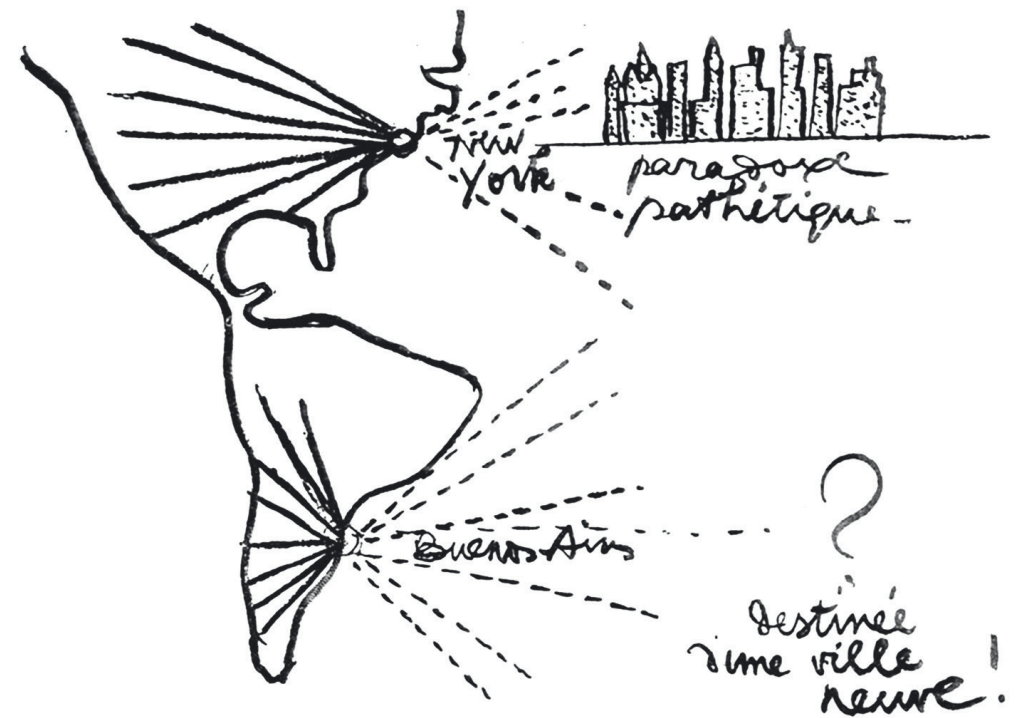I am grateful for this experience.
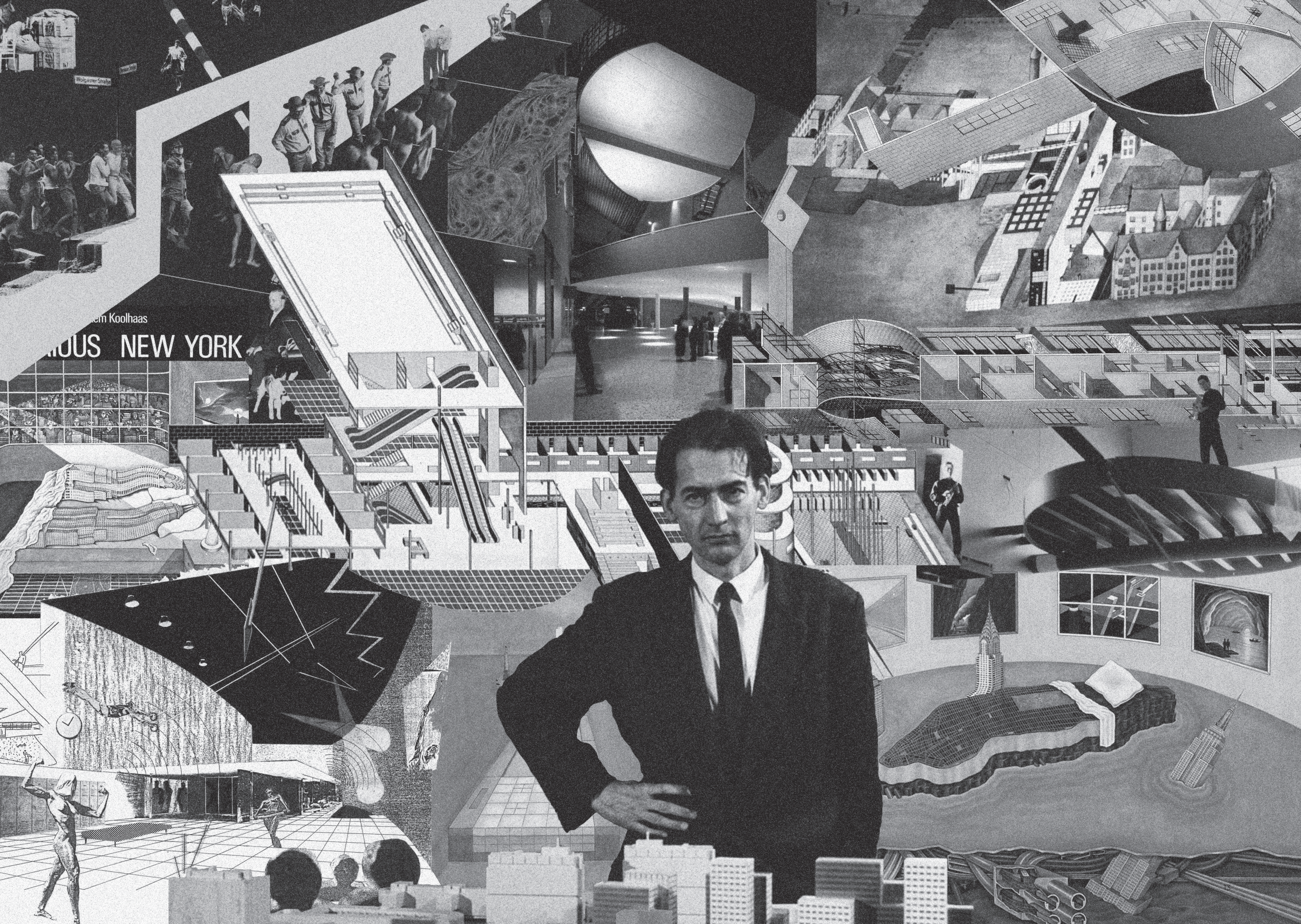
Buenos Aires, April 2025

Figure 2: 'Illustration for the Radiant City: Buenos Aires, Argentina, last stopover for [Le Corbusier] on his way to New York. "New York: pathetic paradox... Buenos Aires? Destination of a New City!"' (Koolhaas, 1978, p. 260)

Contents

INTRODUCTION

The subject

"There is no other way to put it; Koolhaas is the Le Corbusier of our times", according to Jeffrey Kipnis (1996). While he could have limited this analysis to underlining the significance of the two leading architects, the inquiry goes beyond a mere research into the two characters and joins architectural theorists and historians, who have identified compelling formal parallels in some of their designs too (Böck, 2015). Rem Koolhaas – architect and founder of the Office for Metropolitan Architecture (OMA) – actively engaged himself in the debate surrounding the legacy of Modernism, commenting, during a stay in the United states in the early 70's, that Le Corbusier: *"solves the Problem, but kills the Culture of Congestion. He creates the urban non-event that New York's own planners have always avoided (despite their lip service to it): Decongested Congestion"* (Koolhaas, 1978, p. 257).

Here, the paradoxical relationship between Koolhaas and Le Corbusier becomes apparent: while their work might reveal similarities to the external observer, Koolhaas simultaneously offers an explicit critique of Le Corbusier's theories. This became typical for Koolhaas' broader body of work and thinking, that architectural theorists have characterized as 'a tangle of contradictions or, at least, paradoxes' (Böck, 2015).

They tend to situate Koolhaas's work within structuralist or postmodern theoretical and design frameworks, aligning it with constructivist and surrealist sensibilities. Alternatively, he is portrayed – following the conventions of architectural hagiography – as a singular genius, seemingly detached from any clearly traceable lineage of architectural discourse. The latter appears to emphasize solely the final outcome – the formulation of a 'new solution' – while disregarding the process through which this outcome is achieved. In the field of architectural design, however, it is common practice to reuse conceptual frameworks and strategic approaches to generate new solutions. Within this process, previous design typologies serve as a source of knowledge, enabling designers to build upon existing ideas rather than initiating each project

from a blank slate (Van Dooren et al., 2013). This does not necessarily result in a literal repetition of history, as each situation – however similar – remains fundamentally unique. However, this also does not preclude the possibility of recurring patterns or structural repetitions (Koselleck & Tribe, 2004).

Using this process as a foundation, one group of theorists furthers postmodern readings of Koolhaas's work, suggesting that Koolhaas' view on architecture emphasizes the functional organization of the program by generating statistical diagrams in a way similar to Le Corbusier at the start of the twentieth century (Jencks, 2002). While they produced a vast – but by no means endless – bulk of essays, articles, and other publications on Koolhaas and OMA over the recent decades, the theoretical frameworks and research studies scarcely examine Koolhaas's early work thoroughly in terms of recurring design themes and strategies, borrowed from Modernism.

Therefore, the aim of the present study is to conduct a critical and in-depth examination focusing on the differences and similarities between the practices of Modernism and OMA, taking Koolhaas's previously mentioned statement regarding Le Corbusier as a starting point. What precisely did Koolhaas intend by referring to *the Problem*? And in what manner did Le Corbusier seek to solve it? Furthermore, what constituted the *Culture of Congestion* that he supposedly eliminated? How should one interpret the notion of *Decongested Congestion*? And how did Koolhaas respond to this, both architecturally and in terms of urban theory and practice? Addressing these questions should ultimately contribute to formulating a response to the central research question:

To what extent did OMA draw upon the architectural and urbanistic principles of Modernism during the first two decades following its founding?

Methodology

In order to answer the research question(s), this thesis will review literature from a range of primary and secondary sources. To provide a historical context, in Chapter 2 various books, journal articles and essays from the period in which Modernism emerged as a movement in architecture will be used, whereby original editions of publications are sought as much as possible.

In Chapter 3, this literature is compared with writings by and about OMA, which was founded in 1975. Therefore 'the first two decades following their founding', as was mentioned in the research question, is defined as their work between 1975 and 1995. Furthermore, this theoretical foundation will be complemented by case studies, comprising comparative analyses of relevant projects from the two distinct time periods.

When carrying out these case studies, it will be kept in mind that unlike general history, which involves knowledge of what happened in the past, architectural history also involves what is often still present as a physical object from the past. In theory, this would make it possible to analyze the buildings within the contemporary context. This research attempts to prevent this, as the aim is to investigate the work of OMA through the lens of the historian. The interpretation of the buildings is therefore aimed at determining and understanding the original architectural intention of the work and its meaning and place in the development of architecture. Ultimately, from these comparisons, a conclusion can be derived that serves as a response to the central research question.

H2

A NEW EPOCH: THE EMERGENCE OF MODERNISM

2.1
'The Problem'

The Industrial Revolution, which emerged from the United Kingdom as a result of the effect of new inventions on production and the emergence of steam-powered machines, gave in the late 18th and 19th century birth to a mechanized industry, which then rapidly spread to the European mainland and the rest of the world. This led to significant changes and the emergence of new approaches in technology, production and economic structures. Not only were these areas profoundly affected, but the broader fabric of human life – including the way people lived – was equally impacted, ultimately influencing the architecture and urbanism that structured these conditions (Menga, 2022).

This implied that architecture was increasingly expected to respond to the consequential societal transformations that had taken place. By the end of the 19th century, three "crises" had become apparent, to which architecture struggled to formulate a response – later referred to as 'the Problem' by Rem Koolhaas.

Crisis 1: *Deplorable living conditions in the city*
The mechanized industry enabled a significant proliferation of factories, while simultaneously allowing for a substantial increase in their operational scale. To meet the ever-growing demand for workers, factory owners started to employ the poor from rural areas, making them exchange the countryside for the city. As a result, the demand for housing in the city was at an all-time high, and with it the prices for a home. In response, landlords sought to maximize profit by accommodating more tenants within the same dwellings. Therefore the settlements in some neighborhoods in the cities reached unprecedented densities (Menga, 2022).

The neighborhoods proved to be ill-equipped for this level of density, and the living conditions became deplorable. To bring to light these low standards of living, in 1869, French artist Gustave Doré began a collaboration with the British journalist Blanchard Jerrold. Together, over four years, they produced a landmark account of the deprivation of mid-Victorian London: *'London: A Pilgrimage'* (Jerrold & Doré, 1872).
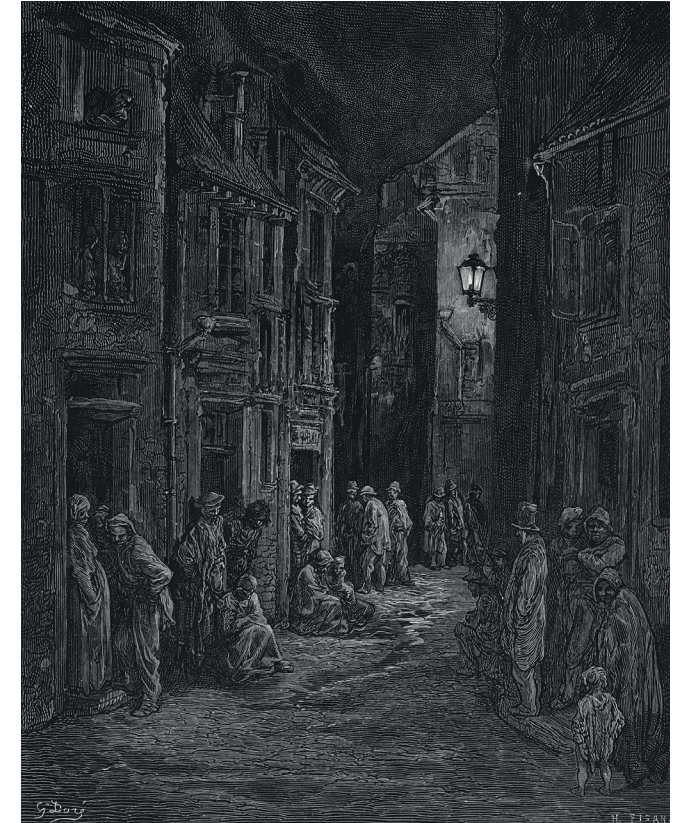

Figure 4: Illustrations from 'London: A Pilgrimage' (Gustave Doré, 1872)

Figure 5: Photograph from 'How the Other Half Lives' (Jacob Riis, 1890)

Around the same time, in New York, Danish-American photographer Jacob Riis started to document the living conditions on the other side of the Atlantic Ocean, where the same process of urbanization had taken place. Using the medium of photography, combined with the new invention of the flash, he was able to portray the living condition inside New York's tenements. The results were published in his book: *'How the Other Half Lives'* (Riis, 1890).

These publications sparked a debate among architects, urban planners, and policymakers concerning the notion of a healthy city – one characterized by clean air and adequate space for the individual. However, the precise form and character of such a city remained undefined.

Crisis 2: *A new role, a new colleague and new typologies*

The mechanized industry, combined with the densification of cities, brought along the demand for new architectural typologies: railway stations, hotels, tunnels, factories, warehouses, markets, customs, greenhouses, silos, exhibition halls, and bridges that could withstand heavy loads.

Accompanying these new typologies was the rise of a new profession: the engineer. This change repositioned the role of the architect—from the traditional 'master builder', who was ultimately responsible for the entire building process, to a more limited role in which calculations and construction design were delegated. It was no longer the architect who stood at the forefront of innovation in construction design; that role had increasingly been assumed by the engineer.

The shift meant that the architect no longer maintained full control over the building process, nor over the final appearance of the architectural product. For architects at the end of the 19th century, navigating the evolving relationship with the engineer and adopting an appropriate stance toward this new professional dynamic proved to be a significant challenge.

Crisis 3: *New innovations in absence of an aesthetic*

The Industrial Revolution was characterized by substantial innovations across various fields. The building industry too underwent significant developments, both in the form of new construction techniques – primarily driven by engineers – and in the introduction of new building materials, also developed by the engineers.

One of these inventions was the use of cast iron structures. Although metal already had been used for about 4000 years, it was during this period that for the first time it could be composed (Menga, 2022). It presented architects and engineers the opportunity to construct larger and more efficient buildings at an accelerated pace. Additionally, in 1879, the French engineer and entrepreneur François Hennebique applied reinforced concrete for the first time, making the material much more versatile. In 1890, he patented his 'Béton Armé' (McBeth, 1998).

These new opportunities however presented architects with a particular challenge as well: what aesthetics should architecture adopt when these new materials were applied? In the 19th century, the prevailing view was still that of Neo-Classicism and Neo-Gothicism, which were based on construction techniques that had been in use for over a millennium. Architecture as a discipline had now entered a period of identity crisis.

2.2
The European Solution:
Modernism

The three crises presented by the rise of the machine age – cramp-full cities, a decline in control for architects and an out of date set of aesthetic rules – gained the focus of attention from a group of architects from, mainly, Europe; the continent which was also responsible for fueling these issues in the first place. Under the guidance of French-Swiss architect Le Corbusier (b. 1887) they gathered to formulate a definitive answer to 'the Problem', in line with the modern era, or 'the new epoch': *Modernism*.

CIAM: *A laboratory for modernism's theorists*
The first Modernist ideas (often used synonymously with functionalism) already had started to develop in the decade leading up to the first official meeting of the think tank that was named the *Congrès Internationaux d'Architecture Moderne* (CIAM). The first meeting was organized in 1928 in Switzerland at Château de la Sarraz and initiated by Le Corbusier, with Sigfried Giedion serving as secretary. The platform held a total of 11 official meetings between 1928 and 1959, with architects gathering in different locations each time. Over the years, more architects became involved in CIAM and the organization successively had the following architects as presidents: Karl Moser (1928 – 1930), Cornelis van Eesteren (1930 – 1947), Josep Lluís Sert (1947 – 1956) (Mumford, 2000).

CIAM produced multiple publications, one of which was called the *Athens Charter*, that proposed a new approach to urbanism, *The Functional City*, that was based on a concept already developed by Le Corbusier in the early 20's: Ville Radieuse.
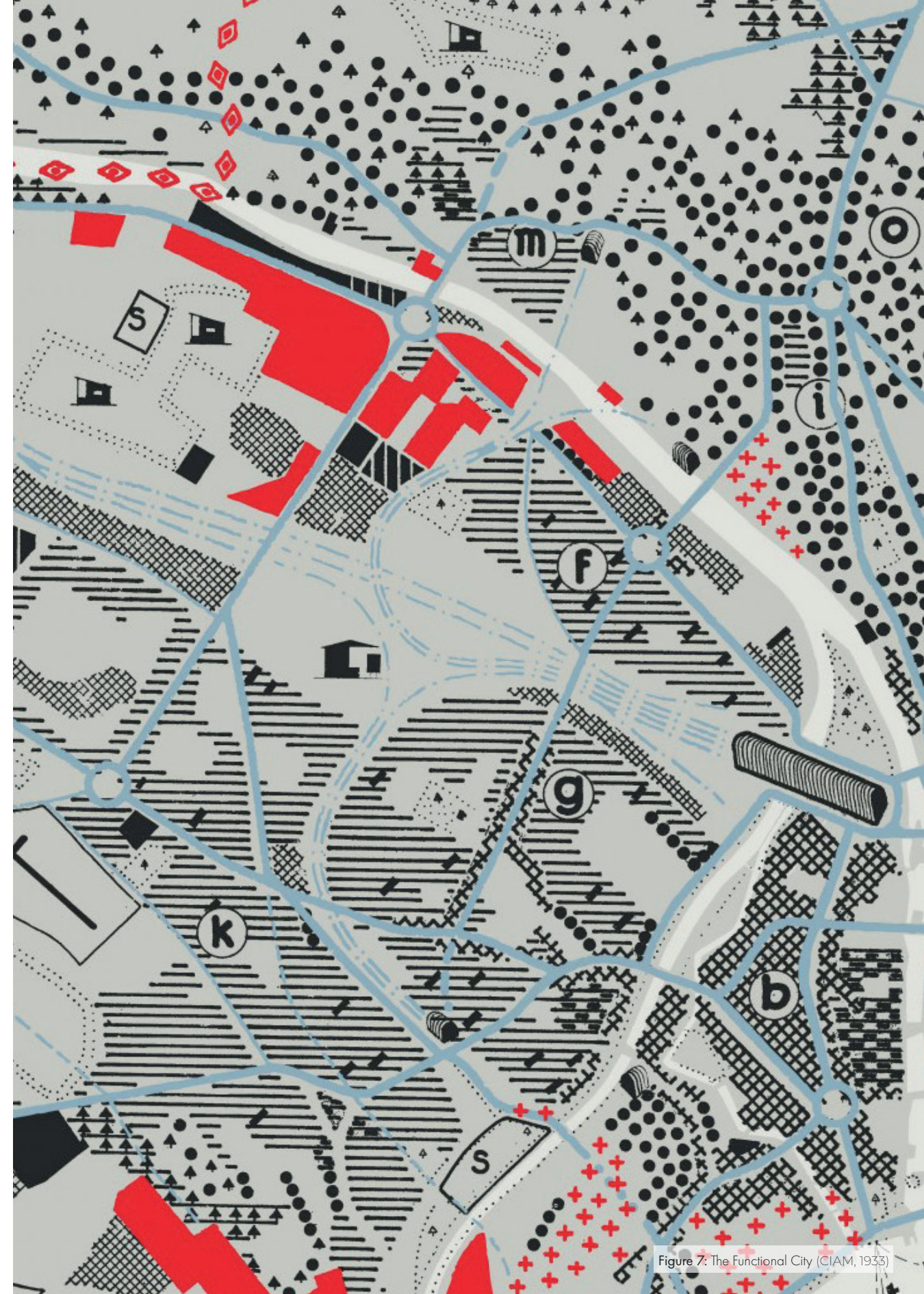
Figure 7: The Functional City (CIAM, 1933)

Figure 8: Model of Ville Radieuse (Le Corbusier, 1935)

Ville Radieuse: *A Modernist's answer to the cram-full cities*
Ville Radieuse (Radiant City) was designed by Le Corbusier as an ideological blueprint for a utopian city, that was intended to form the solution to the congested neighborhoods of the 19th century city and the lack of hygiene therein. It aimed to create the opposite – a healthy and efficient living environment, replacing traditional, chaotic urban growth with a strictly regulated plan (Frampton, 1980).

Le Corbusier proposed an authoritarian hierarchical urban planning, in which different functions were identified and clearly separated: living, working, transportation, and green spaces. This resulted in the concept of 'high-rise buildings in a park-like environment', where the 'air was clean and pure', and the towers 'soared higher than any pinnacle on earth' (Le Corbusier, 1935).

What he did effectively was a process of isolating people from one another in order to give them back space in their homes and the city. In his view, the advent of the automobile made it possible to traverse the city at a much greater speed, to go 'simply from one skyscraper to another', because 'a city made for speed, is made for success'.

Figure 9: Ville Radieuse (Le Corbusier, 1935)

The House-Machine: *Modernists providing a new order – aesthetic*

Not only in the plan for Ville Radieuse, but in general, the functionalists offered new, light residential blocks consisting of multiple floors as an alternative to the existing, dark, overcrowded, and unhygienic worker housing. The ideal formed 'the house as a living machine' (Le Corbusier, 1931, p. 4).

"If we eliminate from our hearts and minds all dead concepts in regard to the house, and look at the question from a critical and objective point of view, we shall arrive at the 'House-Machine', the mass-production house, healthy (and morally so too) and beautiful in the same way that the working tools and instruments which accompany our existence are beautiful" (Le Corbusier, 1931, pp. 6-7).

The term 'machine' – mainly associated with engineers – was used intentionally here by Le Corbusier. While the rise of the engineer had, until then, mostly caused confusion to the architect by challenging the prevailing aesthetic norms, it was now the engineer who also provided the answer to this issue. Architecture could only truly make use of the possibilities brought by the Industrial Revolution when the harmony with which the engineer worked was mirrored in the aesthetics of architecture.

"The engineer's Aesthetic, and Architecture, are two things that march together and follow one from the other: the one being now at its full height, the other in an unhappy state of retrogression. The Engineer, inspired by the law of Economy and governed by mathematical calculation, puts us in accord with universal law. He achieves harmony" (Le Corbusier, 1931, p. 1).

Post-WWII: *Catalyst for a new international reality*

World War II left European cities severely damaged, with some areas entirely wiped out. The primary challenge facing the urban environment was no longer limited to poor hygiene or overcrowded neighborhoods – rather, the very existence of the city was under threat. Nevertheless, the solutions previously proposed for those earlier urban issues proved particularly applicable in this new context. Cost-effective and efficient construction methods, combined with urban planning strategies that accommodated technological advancements, were now implemented on an unprecedented scale. The ideas – previously primarily executed on paper – became a new reality in the physical environment, making it impossible for future generations of architects to brush aside the Modernist ideology (Mgbemena & Okonta, 2018).

Figure 10: The destruction of Rotterdam after WWII. St. Lawrence church stands out as the only remaining building that is reminiscent of Rotterdam's medieval architecture. (Unknown, 1941)

H3

A REINTERPRETATION BY KOOLHAAS

3.1
The American Solution in retrospect: *Manhattanism*

One of the architects involved in discussing the legacy of Modernist architecture – directly and indirectly – was Rem Koolhaas, who started in 1975, together with architect Elia Zenghelis and visual artists Madelon Vriesendorp & Zoe Zenghelis, the Office for Metropolitan Architecture (OMA).

Rem Koolhaas

Remment Lucas Koolhaas (abbreviated to Rem) was born on November 17, 1944; in Rotterdam, the Netherlands. During his childhood, he moved with his family to Indonesia, where his father, Anton Koolhaas – a well-known writer and film critic – worked as the director of a newly formed cultural institution. After returning to the Netherlands, Koolhaas did not immediately pursue architecture but began his career as a journalist and screenwriter. His transition to architecture came later when he studied at the Architectural Association (AA) in London in the late 1960s, where he met the other founders of OMA (Pierce, 2008).

Early in his career, Koolhaas dismissed the architectural focus of the time on the importance of a sense of community, that emerged as a critique on functionalistic architecture, characterizing it as a 'latent longing for a lost harmony' and criticizing it as a form of parochialism.
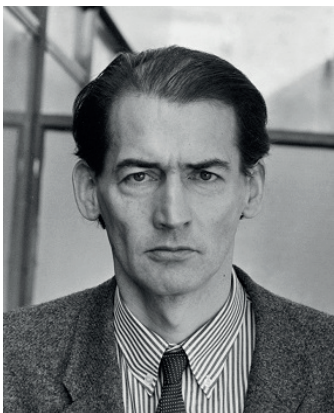
Figure 11: Rem Koolhaas

Figure 12: Nighthawks (Hopper, 1942)

The Metropolis: *A Culture of Congestion*

Instead, Koolhaas turned his focus to the American city. After graduating in 1972, he received the Harkness Fellowship for travel and research in the United States. During this period, he wrote *Delirious New York*, which he described as a 'retroactive manifesto for Manhattan'. In the book he states that the hegemonic architecture of the time ignored – deliberately – the potential of the metropolis to allow individuals to disappear into the anonymity of the masses.

According to Koolhaas, in the masses, traditional hierarchical relationships were replaced by a fundamental equality of isolated, lonely individuals. The metropolis supposedly offered a no man's land of the *non-place*, where one was liberated from the intimate, suffocating relationships that typically defined a township, thus allowing the possibility of becoming – if only temporarily – no one at all. He essentially described the paradox that in the constant togetherness within the metropolis, one was truly able to be alone. Or, as an old Chinese proverb put it: "The mediocre hermit resides in the forest; the great hermit lives in the city."

This anonymity also enabled a form of escapism, allowing one to withdraw from the communities' eyes of judgement. At the same time, however, the metropolis evoked a melancholic sense of entrapment, as if one were perpetually inhabiting a painting by Edward Hopper. One could see the city as 'little more than a densely populated, smoky place filled with ruined figures – devoid of joy, justice, or compassion', while at the same time one could 'move freely through the crowd, without the possibility of ever getting bored' (Van Dijk, 1978).

These conflicting experiences present in the metropolis were explored by Koolhaas in his project *Exodus, or the Voluntary Prisoners of Architecture* (1972). In this project, he, along with collaborators Madelon Vriesendorp, Elia and Zoe Zenghelis, subverts the conventional symbolism of the prison by reimagining it as a voluntary and desirable urban condition. Through a combination of collages, theoretical narrative, and visual assemblage, Exodus proposes a hermetically enclosed Strip that cuts through London, separating the city into two parts: a 'good part', inside the walls of the Strip, consisting of meaningful public space, and a 'bad part', outside the walls, characterized by neglected urban sprawl. The internalized world of the Strip contains a variety of monumental public programs, resulting in a heightened architectural experience, while the external city is rendered trivial and fragmented (Böck, 2015).

Koolhaas proposed exploiting the pressure exerted by the global city, instead of attempting to control it with architectural means; to create an urban condition characterized by extreme density and the constant presence of overlapping functions within limited spatial boundaries – as inside of the walls of Exodus – calling it the *Culture of Congestion*. It emerged as an intensifier of urban life, leading to both spatial compression and increased activity. Rather than being seen solely as a problem of overcrowding, congestion in this context was understood as a generative force – producing new forms of architecture, social interaction, and urban experience.
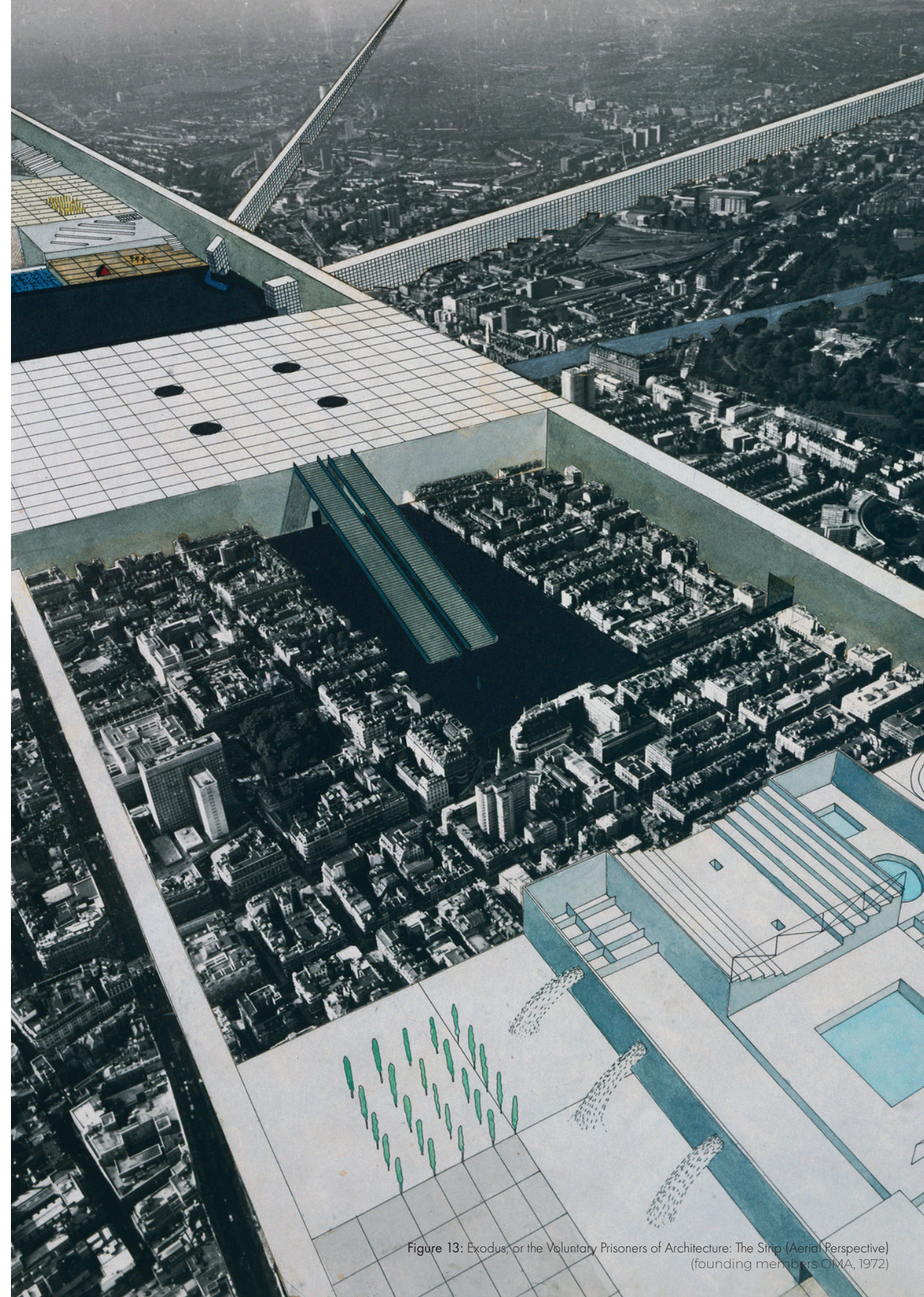
Figure 13: *Exodus, or the Voluntary Prisoners of Architecture: The Strip (Aerial Perspective)* (founding members OMA, 1972)

The Grid: *Neutral organizer of Metropolis' chaos*

In response to the chaotic urban conditions presented by the Culture of Congestion, Koolhaas directed his attention towards the organizing potential of the grid. In a city where all histories, doctrines, ideologies, once carefully separated by space and time, appear simultaneously, the grid becomes "the neutralizing agent that structures these episodes" (Koolhaas, 1978, p. 104). In this model, a city consisted of various islands, each enabling an architectural anarchy, while simultaneously preventing the totalitarian dominance of any single architectural ideology. The more each island celebrated different values, the more the unity of the archipelago as a system would be reinforced.

In his project *The City of the Captive Globe* (1972), he showed this concept of a relentless, theoretical grid, in which each block functioned as an autonomous site for distinct ideological or architectural experimentation. Referencing prominent proposals such as El Lissitzky's *Lenin's Stand*, Le Corbusier's *Plan Voisin*, and Wallace Harrison's *Trylon and Perisphere*, the drawing staged a coexistence of avant-garde and historically incompatible architectural visions within a shared urban framework (De Graaf, 2017). In doing so, the drawing deconstructed the myth of architectural totality, replacing it with a model in which ideologies are spatially confined and mutually invalidating. In this context, architecture 'agreed to disagree', turning the entire population of the city into a jury (Koolhaas, 1978, p. 130).

Koolhaas stated that in this model, each new building strives to be 'a City within a City', turning the metropolis into a "collection of architectural city-states, all potentially at war with each other" (Koolhaas, 1978, p. 89)

In order to enhance the versatility of these urban microcosms, Koolhaas's analysis translated the ideology of the grid into the skyscraper, allowing for a vertical proliferation of independent blocks with diverse programs. Each of these artificial levels could be treated as a virgin site, as if the others didn't exist, to establish a strictly private realm around a single
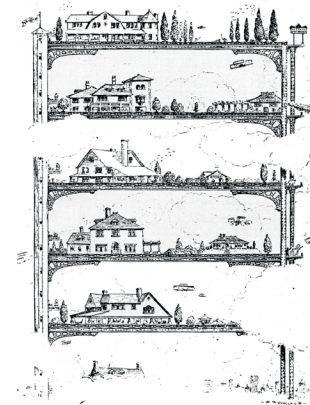
country house, as is depicted in the cartoon, which Koolhaas (1978, p. 82) states "is actually a *theorem* that describes the ideal performance of the Skyscraper". Here too, order is achieved through the complete neutrality of the rack – this time, however, in the vertical dimension.

Figure 14: 1909 Theorem, published in: Delirious New York (Koolhaas, 1978, p. 83)

Figure 15: The City of the Captive Globe (Koolhaas & Vriesendorp, 1972)

3.2
Manhattanism and Modernism:
A pseudo-contrast

Previously mentioned ideas and theories were presented together in Koolhaas's book *Delirious New York* (1978); a retroactive manifesto on Manhattan, which interpreted Manhattan as a product of the unformulated theory of *Manhattanism*. He articulates what might actually have occurred in the city, deliberately choosing to contrast the hegemonic architectural narratives of the time. In the same way that he criticized the critics of Modernism for turning a blind eye to the potential of the global city, he also condemned Modernism itself for its deliberate neglect of the American metropolis, or more specifically, New York. In the book he devotes an entire chapter to discuss Le Corbusier's theories in relation to Manhattanism, saying that "it is Le Corbusier's all-consuming ambition to invent and built the New City commensurate with the demands and potential glories of the machine civilization. It is his tragic bad luck that such a city already exists when he develops this ambition, namely Manhattan" (Koolhaas, 1978, p. 251). According to Koolhaas, in order to create the opportunity to realize a city planned by himself, Le Corbusier dismantled New York, smuggled it back to Europe and made it unrecognizable. He presented to the world this New City as Ville Radieuse.

What Koolhaas, self-declared theorist of Manhattanism, essentially did was drawing a comparison between the ideologies of Manhattanism and Modernism – between Koolhaas and Le Corbusier, yet stating that the only way to understand Le Corbusier's city was by comparison and juxtaposition of the "negative" of Manhattan and the "positive" of the Ville Radieuse. Ville Radieuse was supposedly conceived as an anti-Manhattan, like 'Siamese twins that grew progressively together in spite of a surgeon's desperate efforts to separate them'.

"In his ongoing surgery to separate the Siamese twins, Le Corbusier is now ready for the final solution: to kill the firstborn" (Koolhaas, 1978, p. 269).

According to Koolhaas, Le Corbusier, in order to create his own city, killed Manhattan by draining it of its lifeblood, congestion. *"He solves the Problem, but kills the Culture of Congestion"* (Koolhaas, 1978, p. 257). By isolating the inhabitants of the city, with the intention of creating a city of space, light and air, as a solution to the cramp full cities that the Industrial Revolution brought along, Le Corbusier invented the opposite of what Koolhaas had proposed in Exodus: *Decongested Congestion*. Still, millions of people would live in the city of the future, but, as a result of a new efficiency, without the coincidences, spontaneity and unpredictability, that the metropolis could offer.

Both engaged with the skyscraper as a typological concern; however, whereas Le Corbusier rigidly segregated functions across individual towers, Koolhaas interpreted the skyscraper as a vertical cocktail of heterogeneous programs.
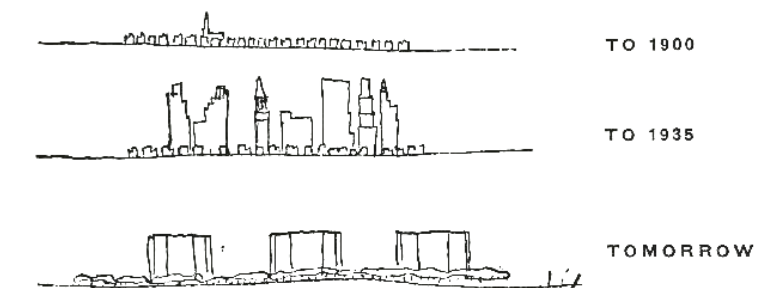

Figure 16: Sketch for Manhattan: the Culture of Congestion replaced by the Decongested Congestion of Ville Radieuse (Le Corbusier, 1936)

3.3
Koolhaas' response in projects:
3 case studies

To illustrate how the architecture of OMA / Rem Koolhaas engages with and responds to the ideas and practices of Modernism, three case studies will be conducted. The first involves a comparative analysis of the *Neue Nationalgalerie* in Berlin, Germany (Mies van der Rohe, 1968) and *De Kunsthal* in Rotterdam, the Netherlands (OMA, 1992).

Secondly, *Maison Dom-Ino* (Le Corbusier, 1915) will be analyzed in relation to *Jussieu – Two Libraries* (OMA, 1992), both theories that remained mainly unexecuted.

In the third and final case study, *Villa Savoye* (Le Corbusier, 1931) in Poissy, France will be compared with another French villa, *Villa dall'Ava* (OMA, 1991) near Paris.
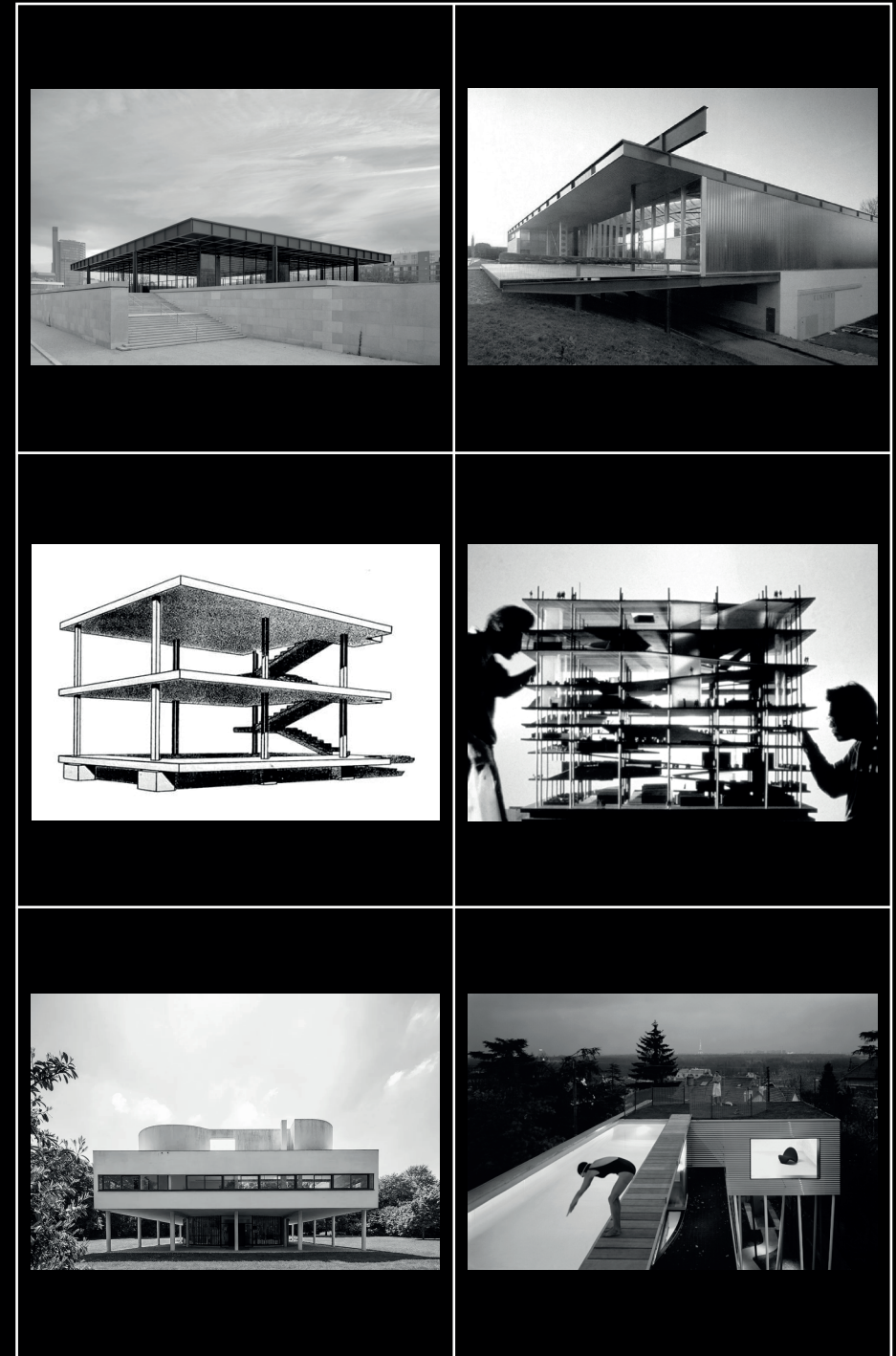
Neue Nationalgalerie

Mies van der Rohe, 1968

&

De Kunsthal

OMA, 1992

In the case of the *Neue Nationalgalerie* in Berlin, the visitor departs from the street level by ascending a monumental staircase, arriving on an expansive, bare concrete plinth that overlooks the whole of the cultural district. This ascent to a higher datum could be interpreted as a modern elaboration of the processional entry sequence of the Renaissance church – where the stairway symbolically elevates the visitor from the 'profane realm of the everyday' to a more contemplative or even sacred domain. Centrally positioned on the plinth stands a platonic glass-and-steel pavilion, which at first glance appears to serve as the culmination of the visitor's journey. However, the interior of the pavilion is revealed to be largely empty, containing only another staircase that descends into the plinth itself – transforming it into a subterranean bunker or crypt in which the artwork is housed. The visitor's path continues through the underground galleries and ultimately concludes in a sunken sculpture garden: a *sanctum sanctorum* that offers an introspective retreat from the surrounding urban fabric. This interplay between a seemingly rational and restrained architectural language and an unfolding, unexpected sequence of spatial experiences, is essential for the comparison between Mies van der Rohe's design and Rem Koolhaas' De Kunsthal in Rotterdam.

Although *De Kunsthal* – unlike the Neue Nationalgalerie – features multiple entrances and therefore allows for multiple spatial sequences, it similarly orchestrates a succession of carefully curated events. A major spatial sequence in De Kunsthal begins in the adjacent park and spirals upward toward the galleries, enacting a parodic inversion of Mies van der Rohe's organizational logic in the Neue Nationalgalerie. As one ascends the ramp, the entry to the galleries is deliberately postponed, while intermittent views into the exhibition spaces and lecture halls are created through transparent partitions. Upon entering and progressing through the galleries, the spatial journey culminates outside the building on a raised platform – reminiscent of a plinth, yet fundamentally different from Mies's isolating podium – where one can visually connect back to the urban fabric.

Figure 17: Neue Nationalgalerie, Berlin (Mies van der Rohe, 1968)

Figure 18: De Kunsthal, Rotterdam (OMA, 1992)

Maison Dom-Ino

Le Corbusier, 1915

&

Jussieu - Two Libraries

OMA, 1992

Le Corbusier's *Dom-Ino* scheme, originally conceived as a prototype for social housing, was primarily concerned with the development of repeatable concrete construction techniques. However, its enduring influence on contemporary architecture stems less from its intended application and more from its potency as a conceptual diagram. The scheme's generic configuration – comprising endlessly extendable and stackable free-plan slabs enveloped by a curtain wall – enabled mass production to enter the architectural discourse. As such, the Dom-Ino model became a blueprint for the formal and spatial expression which Modernism would later adopt.

Koolhaas's proposal for *Jussieu – Two Libraries* can be interpreted as a reconfiguration of Le Corbusier's Dom-Ino diagram, transforming it from a static, repetitive framework of isolating modularity into a fluid field of programmed interactions. In deliberate defiance of the original brief, which called for two distinct thematic libraries, Koolhaas reduced the building to a single, generic structure. This could be achieved through the introduction of a continuous, ramping circulation system – reminiscent of parking garages – that seamlessly linked the otherwise separate plates of the Dom-Ino model into a unified spatial surface. In doing so, just as Le Corbusier had done with Maison Dom-Ino, Koolhaas undermined the legibility of the building in terms of its function – in this case a library – in both semiotic and typological terms. What emerged was more of a self-contained micro-urban landscape: a building conceived as a city. This was further accentuated by incisions into the horizontal slabs and the strategic warping of their edges, allowing visitors to gaze curiously at others above and below.

What was previously established on a theoretical level is here reaffirmed through practice: Koolhaas appropriates a concept from Le Corbusier, extracting its essential logic while subverting its original emphasis on isolation – replacing it instead with a framework that encourages spontaneous interactions and dynamic activity.
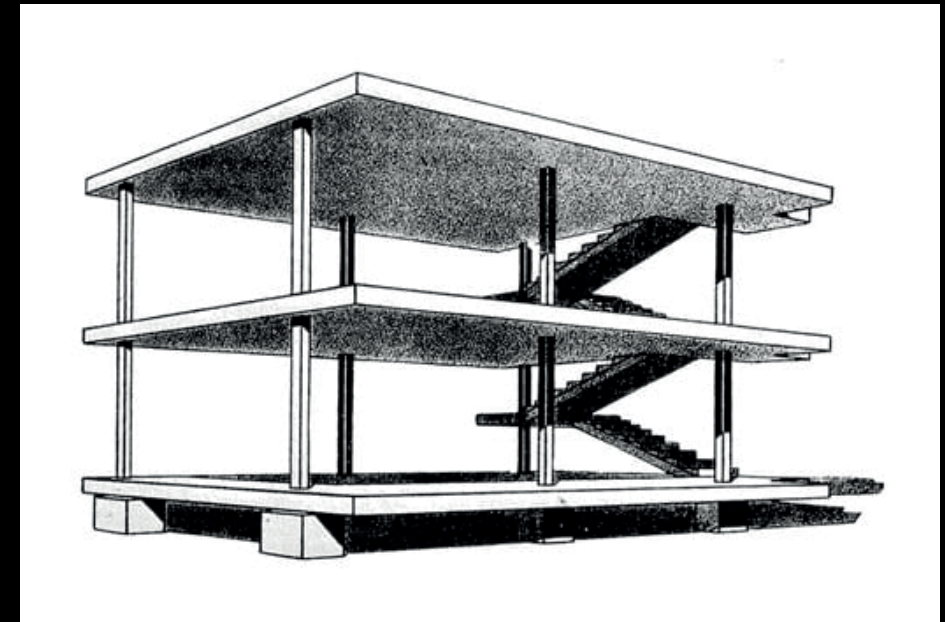
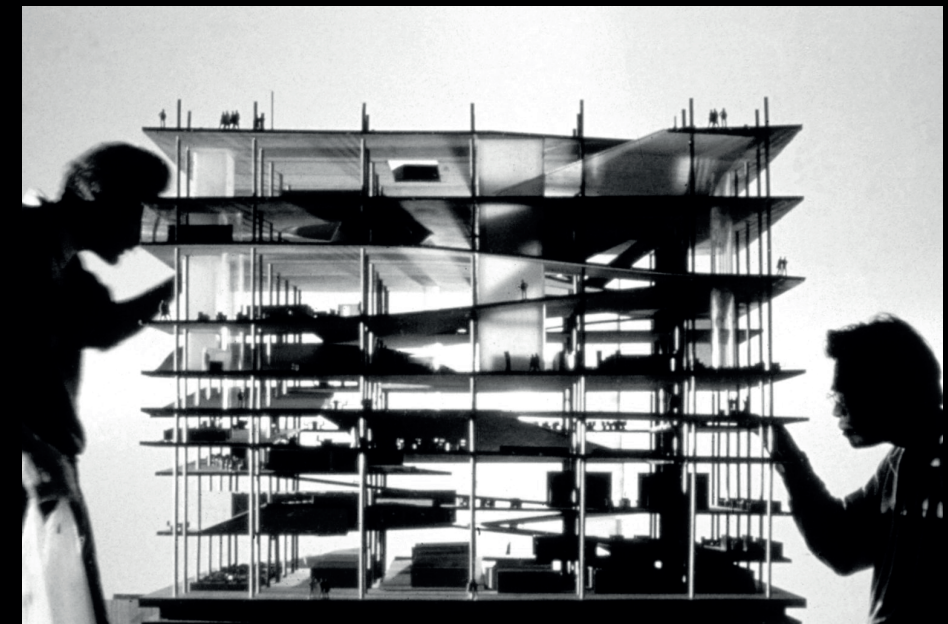**Figure 19:** Maison Dom-Ino (Le Corbusier, 1915)

Figure 20: Jussieu - Two Libraries (OMA, 1992)

Villa Savoye

Le Corbusier, 1931

&

Villa dall'Ava

OMA, 1991

Le Corbusier took the Dom-Ino structure as a foundation for *Villa Savoye* in Poissy, which is, of course, well known for its direct embodiment of *Les 5 points d'une architecture nouvelle,* as he had proposed earlier in 1926: Les pilotis, Le toit-jardin, Le plan libre, La façade libre and La fenêtre en longueur.

Furthermore, Villa Savoye employs the concept of the *promenade architecturale* as an unifying thread that weaves together its diverse architectural elements. The path is not an element in itself, but rather a way through which a sequence of different spatial episodes can be experienced. Within Villa Savoye, this journey is articulated through two distinct means of vertical circulation: the spiral staircase and the gently sloping ramp.

This same idea of architecture from the perspective of the route appears in Koolhaas' *Villa dall'Ava* near Paris, which could be read as 'a corridor to the sublime event of bathing while looking at the Eiffel Tower'. The house unfolds as a cinematic sequence of spatial episodes, organized in a linear composition that reads like a script with a clear introduction, development, and conclusion. The introduction is marked by the spatial experience of traversing a forest of slender pilotis – an initiation path that guides the visitor toward the interior of the house. The further development of the sequence depends on the visitor thanks to the two possible routes, that of the staircase and that of the ramp – the same as in Villa Savoye. Both paths inevitably lead to the roof, where the climax takes place: a private yet open-air domestic space, suspended above the city, from which the inhabitant has become independent.

In addition to the architectural promenade, all five points as formulated by Le Corbusier are present in Villa dall'Ava – though reinterpreted through a series of deliberate twists that transform them into gestures of postmodern irony. Where Le Corbusier applied these principles with a sense of rationalist conviction, Koolhaas subverts them, replacing functional logic with surrealist overtones.

Figure 21: Villa Savoye, Poissy (Le Corbusier, 1931)

Figure 22: Villa dall'Ava, Paris (OMA, 1991)

Conclusion

This history thesis has explored the relationship between the early works of the Office for Metropolitan Architecture (OMA), founded by Rem Koolhaas, and the principles of Modernism as developed during the Congrès Internationaux d'Architecture Moderne (CIAM).

Chapter 2 examined the emergence of Modernism, which arose in response to three crises facing architecture and urbanism, triggered by the Industrial Revolution in the 19th century. First, the rapid urban population growth led to overcrowded neighborhoods with deplorable living conditions. Second, the rise of the engineer as a distinct profession redefined the role of the architect within the construction process. Third, advancements in construction techniques – such as the introduction of reinforced concrete and cast iron – prompted a search for a new architectural aesthetic that could integrate these innovations.

In response to these crises, European architects and theorists convened during CIAM meetings – a laboratory for Modernist theorists initiated by Le Corbusier. He proposed a blue-print for a new city, Ville Radieuse, that addressed the identified crises by organizing urban functions into clearly delineated zones, each housed in high-rise structures spaced apart throughout the city. The result was supposedly a city in which the air was clean and pure, a park-like environment, where people could move freely from one skyscraper to the other. Furthermore, the Modernists embraced the aesthetic of the engineer by using the newly available building methods in order to create mass-production buildings, as if it were machines.

In Chapter 3 Rem Koolhaas' response to Le Corbusier's proposal was examined. Koolhaas acknowledged that Le Corbusier solved the problems presented by the Industrial Revolution, but stated that he killed the Culture of Congestion: an urban condition in which extreme density, and the overlapping of diverse programs and identities, are embraced. Le Corbusier regarded congestion as a problem to control with architectural means, while Koolhaas used it as a generative force and exploited the pressure exerted by the global city.

Unlike many of his contemporaries, just like Le Corbusier, Koolhaas engaged with the skyscraper as a typological concern; however, whereas Le Corbusier rigidly segregated functions across individual towers, Koolhaas interpreted the skyscraper as a vertical cocktail of heterogeneous programs.

Thus, Koolhaas adopted a markedly different approach to urbanism than Le Corbusier, but employed similar typologies such as the grid. Furthermore, the case-studies showed that Koolhaas' architecture too appropriated a Modernist concept, extracting its essential logic while subverting its original emphasis on the isolation of its visitors/inhabitants – replacing it instead with a framework that encourages spontaneous interactions and dynamic activity. In doing so, Koolhaas shifted the architectural focus from the rational to the narrative, a mode in which he has proven to be remarkably gifted.

Annotated bibliography

Böck, I. (2015). *Six Canonical Projects by Rem Koolhaas: Essays on the History of Ideas.* Jovis.
Ingrid Böck did extensive research into different interpretations of Rem Koolhaas' work, that became essential for defining the research gap for this thesis. Furthermore, she delved into projects by OMA, which was used as a source during the case-studies.

De Graaf, R. (2017). *Four Walls and a Roof: The Complex Nature of a Simple Profession.* Harvard University Press, 459–65.

Frampton, K. (1980). *Modern Architecture; a Critical History.* SUN.

Jencks, C. (2002). The New Paradigm in Architecture: The Language of Post-Modernism. *New Haven and London: Yale University Press,* 180-5.

Jerrold, W. B., & Doré, G. (1872). *London: A Pilgrimage.* Grant & Co.

Kipnis, J. (1996). *Recent Koolhaas.* El Croquis No. 79.
This article by architecture critic and professor of architectural design and theory at the Knowlton School of Architecture of The Ohio State University, Jeffery Kipnis, reflected on the architectural practices and theories of Rem Koolhaas two decades after the founding of his office, OMA. He started to draw parallels between the architecture and personalities of Le Corbusier and Koolhaas.

Koolhaas, R. (1978). *Delirious New York.* The Monacelli Press.
Delirious New York is Rem Koolhaas' retroactive manifesto on Manhattan's urbanism, as the unformulated theories of Manhattanism. It was essential to this research as it was the first book by Koolhaas on architecture and urbanism, and formed the foundation for his practice for the coming decades.

Koselleck, R., & Tribe, K. (2004). *Futures Past: On the Semantics of Historical Time.* Columbia University Press. http://www.jstor.org/stable/10.7312/kose12770

Le Corbusier. (1933). *Charter of Athens.* CIAM.

Le Corbusier. (1935). *La Ville Radieuse.* Editions Crès.

Le Corbusier. (1931). *Towards a New Architecture.* Dover Publications.
This book became a manifest for a 'new architecture': Modernism. For this research this book was used to understand what Modernists proposed, and to some extend to what they reacted.

Le Corbusier (1936). *When the Cathedrals Were White.* Mcgraw-Hill Book Company.
Attached to this publication was an article by Le Corbusier, 'What is the American problem?', in which he - at least to Rem Koolhaas - fanaticly skinned Manhattan from its essence. It urged Rem Koolhaas to respond in his book Delirious New York.

McBeth, D. G. (1998). *François Hennebique (1842–1921), reinforced concrete pioneer.* Civil Engineering, 126, 86-95.

Menga, L. (2022). *Industrial Revolution and the Birth of Modern Architecture.* Vision International Scientific Journal, 7(1), 105-122. https:/doi.org/10.55843/ivisum2271105m

Mgbemena, E. E., & Okonta, E. (2018). How International was International Style of Architecture? *American Journal of Civil Engineering and Architecture, 6*(1), 30-37. https://doi.org/DOI: 10.12691/ajcea-6-1-4

Mumford, E. (2000). *The CIAM discourse on urbanism, 1928 -1960.* The MIT Press.

Riis, J. (1890). *How the Other Half Lives: Studies Among the Tenements of New York.* Charles Scribner's Sons.

Van Dijk, H. (1978). *Rem Koolhaas: de reïncarnatie van de moderne architectuur.* Wonen TA/BK.

Van Dooren, E., Boshuizen, E., van Merriënboer, J., Asselbergs, T. & van Dorst, M. (2013). *Making explicit in design education: generic elements in the design process.* International Journal of Technology and Design Education, 24(1), 53-71. https://doi.org/10.1007/s10798-013-9246-8