

BUILDING NARRATIVES

Instances from
the Architecture of Dialogue

nai010 publishers

TU Delft OPEN
Publishing

Edited by

Alice Colombo Kees Kaan

Yağız Söylev

Manuela Triggianese

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FOREWORD

CURATING ARCHITECTURAL INTELLIGENCE

When an architect joins a project, it is already moving. Political ambitions are set. Institutional objectives framed. Budgets allocated. Technical constraints defined. Expectations circulate. We step in while it is in motion. Each project format shapes that movement differently. A competition allows space to test a position. An invitation often carries implicit expectations. A tightly engineered procurement distributes risk in advance and reduces manoeuvring space. None of these conditions are neutral. They determine where agency can be found – and where it quietly disappears.

Design is not the beginning. It is a moment of concentration within an ongoing trajectory. A temporary intensification in which dispersed ambitions are brought into spatial form. The position of the architect is never given. It has to be earned. Not rhetorically, but through work. By making direction visible. By

demonstrating that coherence is possible where fragmentation dominates. By showing that spatial decisions organise intentions rather than merely express them. In practice, this work repeatedly comes down to three questions: Why does this project exist? What is it that we are actually making? How can it be realised within the conditions at hand? The why is tied to institutional ambition, public responsibility, cultural necessity. If the why remains vague, the project drifts. The what is the spatial proposition. Not a building as object, but a configuration of spaces, relations, materials and atmospheres that gives form to intention. The how is the organisational and procedural intelligence that makes the proposition real: governance structures, procurement formats, risk allocation, collaboration models, phasing, budgets. When why, what and how diverge, architecture weakens. When they reinforce each other, direction becomes durable. This alignment is no longer supported by shared cultural frameworks. Religion, state ideology, the belief in modern progress – each once provided an overarching horizon. Today, coherence is not given. It has to be constructed. If architecture retreats – into pure object-making or detached commentary, decisive choices about the built environment will be made elsewhere. Financial logic, legal frameworks or managerial optimisation will determine outcomes without spatial intelligence. Architectural intelligence means staying inside these conditions. Not escaping them. Not romanticising them. Working within them and steering from within.

Design is the sharpest moment in that effort. It intensifies focus. It forces clarity. It exposes contradictions. But architecture is not only spatial; it is temporal. A building stabilises intentions within a longer stream of use, adaptation and reinterpretation. We design structure. Time tests coherence. After completion, a building lives on without us. It is used, altered, loved, neglected. What we concentrated in space continues to operate – or dissolves. The difference lies in whether the alignment of why, what and how was strong enough to endure change.

Building Narratives, is an attempt to name what I see repeatedly in practice. Narrative is not storytelling in a literary sense. It is an operational framework. It connects intention, spatial proposal and process. It ensures that why, what and how reinforce rather than undermine one another. It is disciplined construction of shared direction over time. For practice, this demands more than design talent. It requires strategic awareness and institutional literacy. In practice, narrative is largely visual: drawings, models and diagrams carry the argument, while words remain brief and instrumental.

In academia, narrative works differently. It takes the form of discourse, keeping interpretation open. Practice moves toward construction; academia toward discussion. Both produce knowledge and where they genuinely meet, architecture regains agency. Architectural intelligence is precisely this capacity: to align why, what and how, to give spatial form to collective reasoning, and to construct direction where none is automatically given. That, for me, is one of the essential conditions for the future of architecture and of our role as architects.

KEES KAAAN





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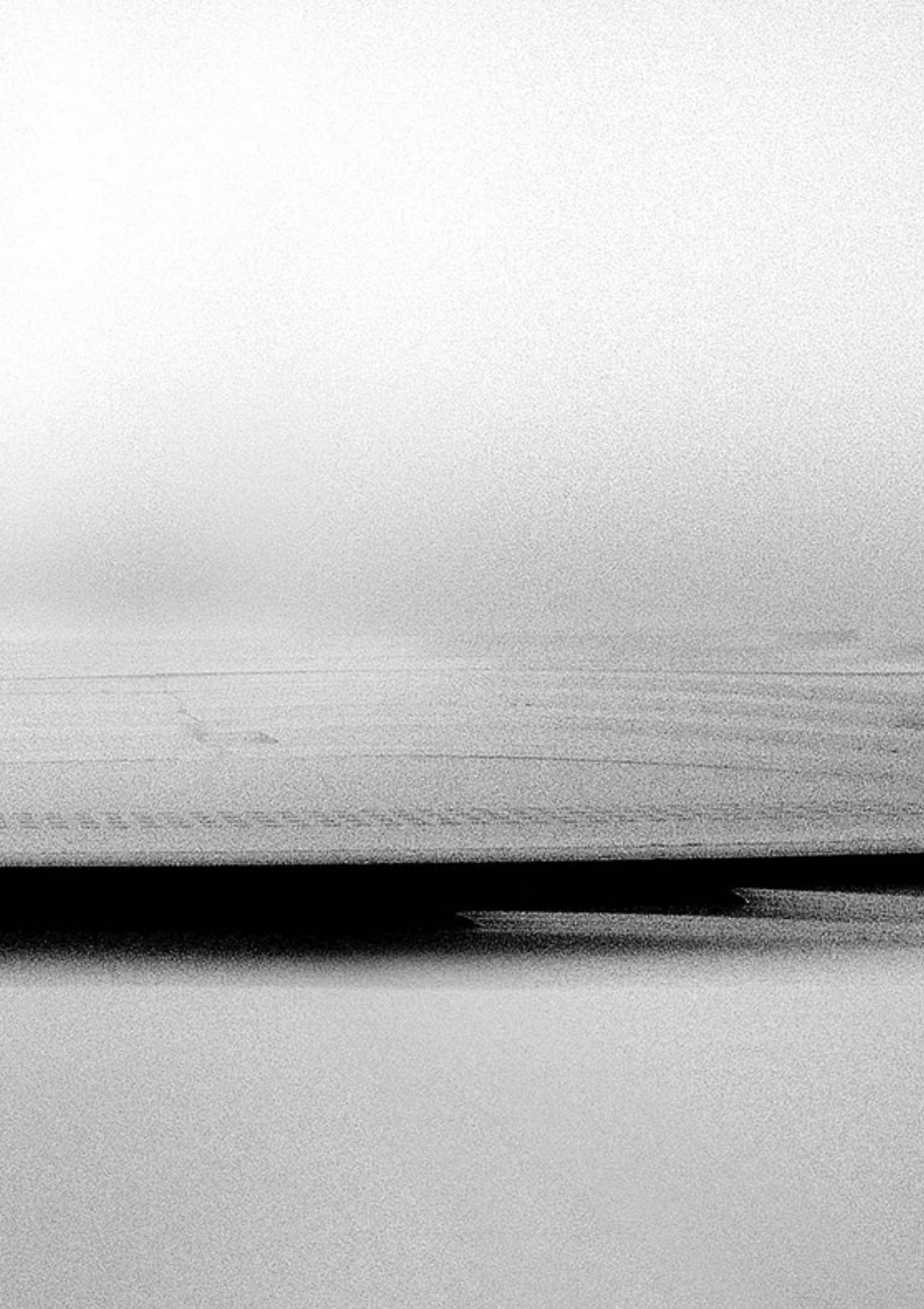
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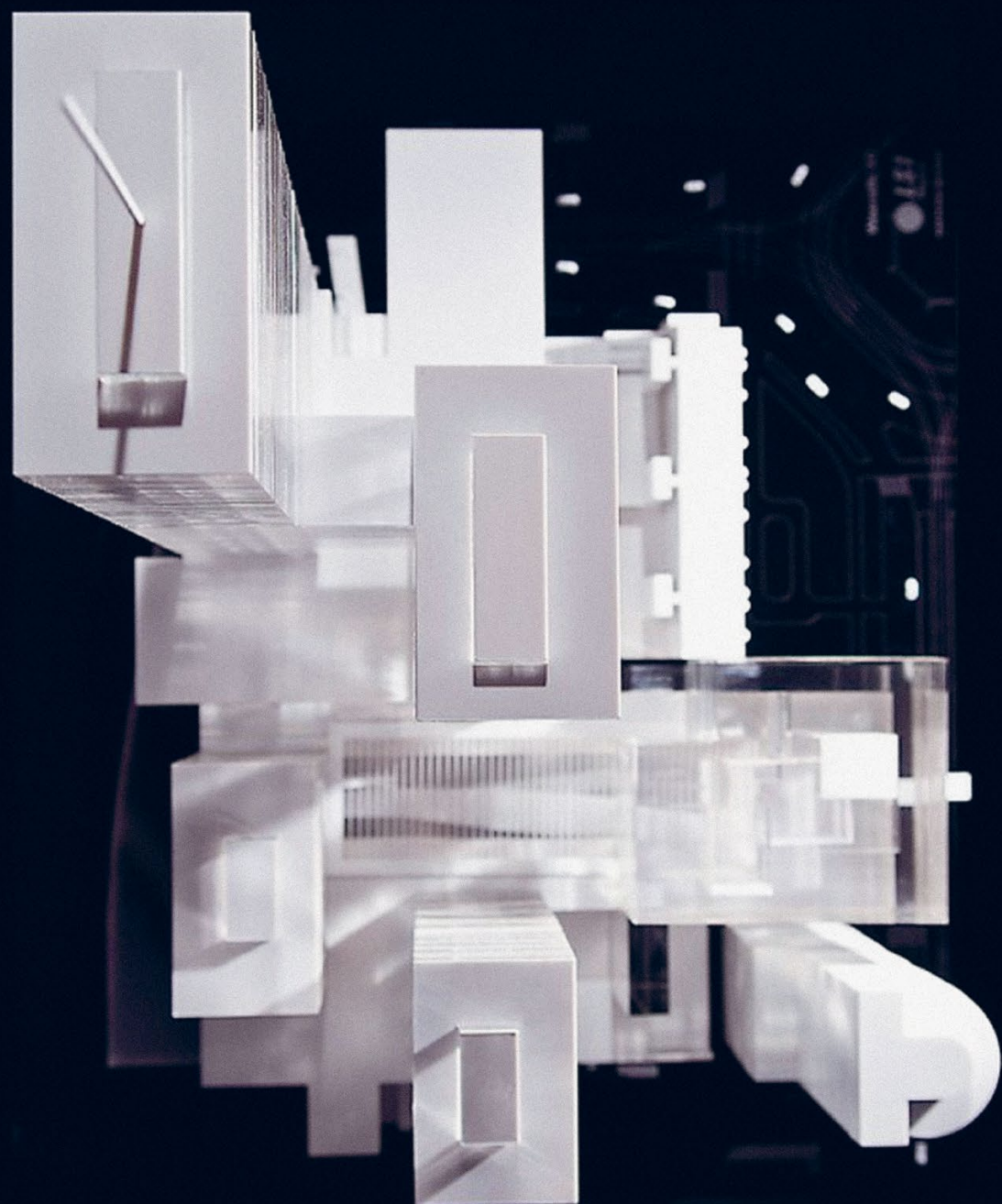
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FROM OBJECT TO PROCESS







Building Narratives arises from an ongoing dialogue between KAAN Architecten and the Complex Projects group at Delft University of Technology.

KAAN Architecten, an architectural practice based in Rotterdam and working internationally, is known for its clarity, precision, and civic presence – qualities developed through large-scale public projects. Complex Projects, through its research and educational activities, explores an architecture of dialogue that is dialectic, inclusive and relational.

The ground for this publication was laid in the key research project *Activating Design*, funded by the Dutch Sector Plan for Design Engineering Sciences in 2022. *Activating Design* investigates design as a form of knowledge production. By analysing collaboration and decision-making, this research deepens reflections on practice while providing new insights that feed back into this. Many contributors move between the domains of practice, education and research, and so introduce practice-based questions into research and education, and return academic knowledge and reflection to practice. The publication that follows is both a reflection on this exchange, and a tool for further inquiry. Every project begins as a question and advances through drawings, models, discussions and decisions that connect diverse fields of knowledge. Design curates knowledge – a dynamic process of communication, collaboration, and choice. This process keeps the project intelligible as it evolves, serving as both vehicle and destination.

In contemporary practice, design extends far beyond the invention of form. Projects unfold through dense constellations of actors, institutions, and technologies. Drawings, models, and presentations span multiple disciplines, enabling different forms of reasoning to converge. The architect's task is no longer limited to producing objects, but now extends to maintaining coherence across these exchanges – translating between technical systems, social values, and civic ambitions. Every architectural project can therefore be seen as an act of knowledge production. Through drawing and modelling, design constructs hypotheses about how realities can coexist: structure and use, regulation and freedom, fact and intention. Each project aligns what can be measured with what must be agreed upon, transforming complex information into a spatial proposition that

others can read, evaluate, and build upon. *Building Narratives* arises from this. It examines architecture as a form of collective intelligence – a practice that organizes knowledge and gives coherence to collaborative processes. Here, design communication is not an outcome but a method, connecting truth and agreement through the continuous work of making.

This expanded role of architecture did not appear from nowhere. To understand its emergence, we must look back at the broader changes that have shaped architectural practice. This has deep roots in the transformation of European architecture at the turn of the twentieth to the twenty-first century, when the discipline shifted away from shaping objects within stable frameworks and towards navigating processes defined by change.

FROM OBJECT TO PROCESS

In the closing decades of the twentieth century, a fundamental shift took place in the culture of building in Europe. The modernist idea of a planned, welfare-oriented city was gradually replaced by an entrepreneurial vision of urban development shaped by competition and visibility. The post-war state – once the primary client and organizer of architecture – retreated from direct investment, leaving space for new constellations of public and private actors. Cities became brands, architecture their primary medium of expression. Throughout the 1980s and '90s, this shift defined a new role for design. Urban landmarks, cultural institutions and infrastructural gateways served as symbols of prosperity rather than as tools of welfare. The construction of museums, events venues and signature buildings turned architecture into a form of communication. Cities announced themselves through skylines rather than social programmes. Governments decentralized responsibility for planning, transferring powers to municipalities and semi-public development agencies. Significant public works were replaced by fragmented partnerships balancing civic ambition with financial pragmatism.

The 2008 financial crisis exposed the fragility of speculative urbanism, and underscored the need for collaboration and continuity. The architect's work was reframed: not as the isolated invention of form, but as the capacity to align interests and sustain coherence across complex processes. Negotiation itself became the central creative act.¹ The following section summarizes the fundamental shift that followed, and that defines design today: while still producing tangible forms, the emphasis is now on the process of creating these. Still, these forms are now understood as episodes within longer trajectories of planning, construction, and use. Buildings express not only material craft, but also institutional reasoning. Drawings, models, and presentations serve as instruments that facilitate dialogue among the various disciplines involved.



¹ Kaan, CHCF., & Triggianese, M. (2014). Negotiating new centralities. In M. Gausa & M Ricci (Eds.), *MED.NET.REP02*(pp. 86-93). LIIST Lab Laboratorio Internazionale Editoriale.

² Wagenaar, C. (2015). *Town planning in the Netherlands since 1800: Responses to Enlightenment Ideas and Geopolitical Realities*. Nai10 Publishers.

[↑] Rietlanden housing, 2001

³ Hoog, M. de. (2013). *The Dutch metropolis: Designing quality interaction environments*. Thoth.

⁴ Carmona, M., Burgess, R., & Badenhorst, M. S. (Eds.). (2009). *Planning through projects: Moving from master planning to strategic planning ; 30 cities*. Techne Press.

The Netherlands was exceptionally well-prepared for this evolution. Centuries of water management had established a political culture based on consensus and shared responsibility – the *polder model*.² By the 1990s, national planning documents, such as the housing development programmes (known as *Vinex*) and the *Key Projects* (Dutch: *Sleutelprojecten*) initiative (facilitating large investments in infrastructure and public facilities), formalized this cooperative ethos.³ A new urban paradigm blurred the traditional boundaries between architecture, urban design, and infrastructure. Projects unfolded across multiple timeframes, with decades-long investments in transport, energy, and housing guided through successive political cycles. Within this fluid context, architecture provided a sense of stability and coherence. It provided the civic dimension that made procedural planning tangible to the public.

STRATEGIC URBAN PROJECTS

The changing role of architecture was most clearly expressed in the emergence of *strategic urban projects*.⁴ Large, hybrid interventions replaced the comprehensive master plans of the post-war period. These projects focused on former industrial, port, and railway areas where public and private interests intersected. Rather than a single design solution, these advanced through negotiation, iteration, and phased implementation. Municipalities needed a way to coordinate investment and vision without reverting to centralized control. The strategic project offered exactly this: a flexible framework linking long-term vision with short-term feasibility. Here, design operated as an organizational method.⁵

Across Europe, the model took different forms. In France, the arrival of high-speed rail was accompanied by the urban development of station districts, such as Euralille, which links national and international infrastructure to local identity.⁶ In Germany, the *Internationale Bauausstellung* tradition redefined architectural innovation as a policy experiment. British regeneration agencies used design competitions to channel private capital into public-realm improvements such as London's Canary Wharf. In Southern Europe, cities such as Barcelona and Turin mobilized architecture to weave together fragmented territories.⁷ Despite their variety, these experiments shared a reliance on architecture as a mediating medium for aligning institutional, technical, and civic agendas. By the mid-1990s, this approach had become an integral part of European planning culture.

The Dutch contribution to this movement was distinctive. The country's compact geography and dense infrastructure demanded coordination across ministries and municipalities from the outset. The new generation of *Key Projects* in 1994 exemplified this approach, linking national transport investment to local urban renewal in station areas such as Amsterdam Zuidas, as well as central station areas of Rotterdam, Utrecht, The Hague, Arnhem, and Breda. Architects were engaged early to visualize options and mediate between technical and civic requirements, turning the design process into a shared tool of governance.⁸ These station-area projects became laboratories for the procedural transformation of architecture.⁹

⁵ International Architecture Biennale Rotterdam. (2012, December 17). *Making city: 5th IABR draws to a close* [Press release].

⁶ Triggianese, M. (2015) Euralille: Twenty years on. In R.J. Rutte, H.J. Engel, E.H. Gramsbergen & O.R. Diesfeldt (Eds.), *OverHolland 16/17* (pp.111-139). Nijmegen: Vantilt.

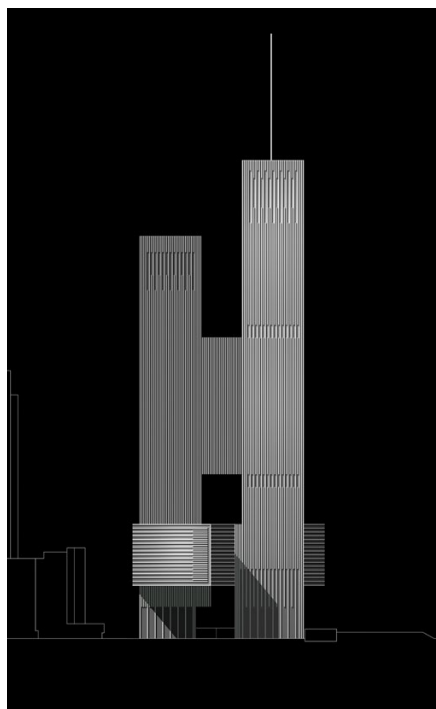
⁷ Smets, M., Il nuovo paesaggio delle infrastrutture in Europa, in Lotus International. *Global Cities*, n. 110, dic. 2001; Sassen, S., (2001) *The Global City: New York, London, Tokyo*, Princeton University Press.

⁸ Schaap, P.M. (2016, October 12) *De Nieuwe Sleutelprojecten: op weg naar 2030*. Spoorbeeld. Retrieved from <https://www.spoorbeeld.nl/inspiratie/de-nieuwe-sleutelprojecten-op-weg-naar-2030>.

ROTTERDAM CENTRAL DISTRICT

Few European examples capture this as vividly as the long-running redevelopment of Rotterdam Central District. When first proposed, Rotterdam's new central railway station was framed as a symbol of metropolitan ambition. The expectation was that improvement of the public transport network would reinforce Rotterdam's position on the European map and establish a new gateway to Schiphol Airport. Early plans, in 2001, envisioned a grand interchange for high-speed trains, surrounded by commercial towers and cultural venues, known as 'the Champagne Glasses'. Yet changing economic conditions and conflicting mandates soon rendered this vision untenable. In 2003, the project was reorganized as a phased collaboration with three leading actors sharing responsibility: Holland Rail Consult (now ProRail, which manages infrastructure); NS Stations, overseeing commercial functions; and the Municipality of Rotterdam, representing civic interests. The design process became a process of ongoing negotiation.¹⁰ Technical studies determined the geometry of the platforms and tunnels, while urban design studies explored how the station could be integrated into the city. Each drawing acted as a record of decision-making in progress.

Around the new station (delivered by Team CS, a collaboration between Benthem Crouwel Architects, Meyer and Van Schooten, and West 8), the Weena Boulevard provided an urban counterpart to the station's transformation. Weena Boulevard Development, designed by architects Claus en Kaan Architecten (later KAAAN Architecten) in collaboration with Maxwan (later PosadMaxwan), engineers, and real estate developer LSI, became a laboratory for design as negotiation. Running east-west through the central business district, Rotterdam's Weena thoroughfare had long been a symbol of post-war modernity: wide carriageways, repetitive slabs, and an impersonal scale. The challenge was to transform this into a mixed, pedestrian-friendly environment without disrupting ongoing investment. Instead of prescriptive plans, the Municipality adopted design guidelines – a document of principles rather than blueprints. It established alignments, building heights, façade materials, and proportions for public spaces, enabling private developers to adapt while maintaining visual coherence. A city-appointed urban designer coordinated proposals, reviewing each intervention in workshops with architects and investors. Over time, the boulevard evolved into a collective composition. Delivered across four local councils, two economic cycles, and one national transport reform process, Rotterdam Central District demonstrates how design served as civic memory, managing to hold together a long sequence of decisions that might otherwise have unravelled. Within this process, design operated as both an instrument and a record: the means by which urban coherence was continually renegotiated. This procedural mode of working – aligning



⁹ Terrin, J.J. (2011) *Gares et dynamiques urbaines Les enjeux de la grande vitesse*. Parenthèses.

¹⁰ Triggianese, M. (2023) Design of Co-creation in Rotterdam Central Station (1996-2007): Architecture and urban design roles in the multi-stakeholder collaboration. *SP00L*, 10 (1), 57-72.

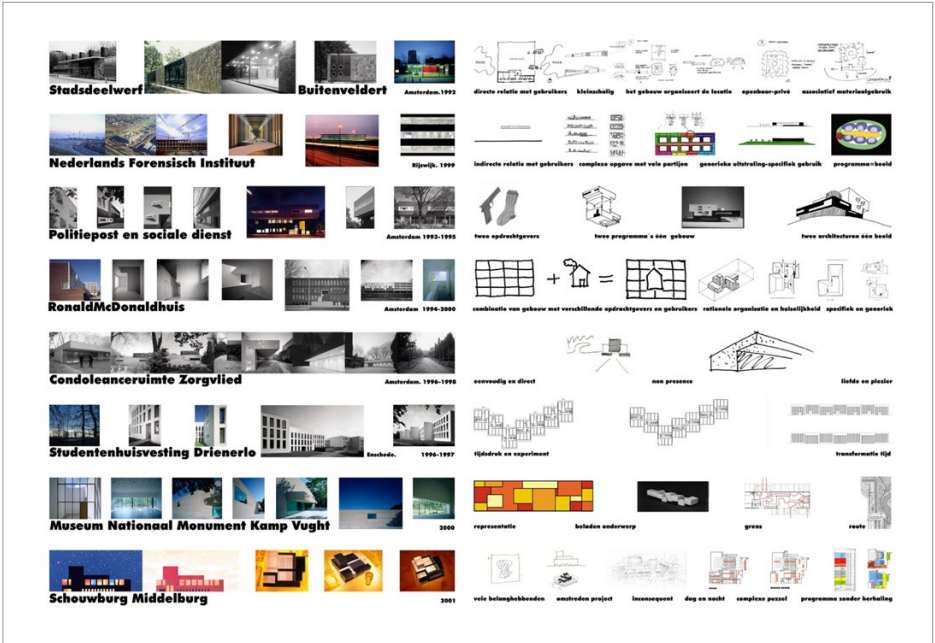
[↑] Weena Boulevard Volume Study: A new landmark

shifting alliances, budgets, and mandates – became a defining feature of Dutch architectural practice in the early twenty-first century, revealing architecture’s capacity to sustain continuity amid change.

ARCHITECTURE AS KNOWLEDGE AND EXCHANGE

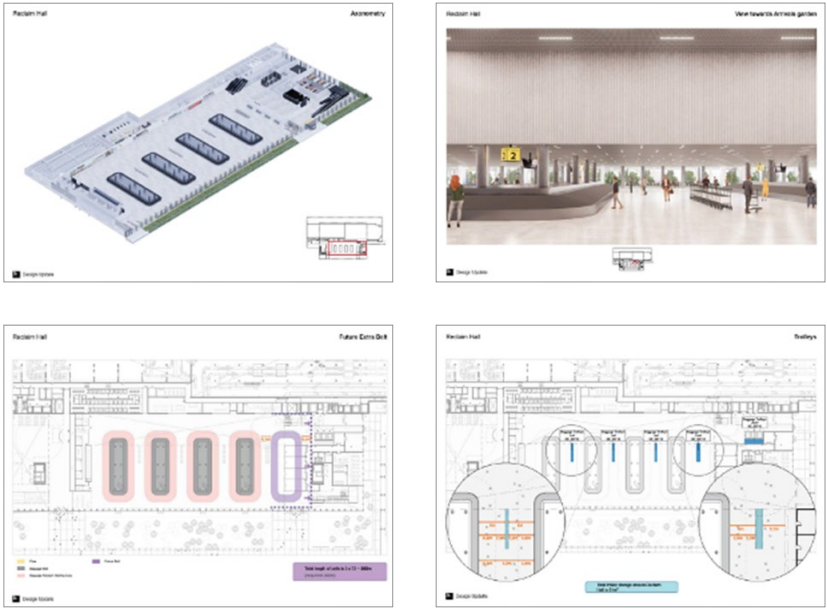
The evolution visible in Rotterdam reflects a broader shift in architectural practice across Europe: design now begins before the brief is fixed, and continues long after a building is completed. Within increasingly complex governance frameworks, architects engage not only in shaping form, but also in defining purpose. The brief itself becomes a design product – constructed, tested, and revised through dialogue between clients, users, and designers.¹¹ Each phase of work, from feasibility to construction, generates knowledge that refines both scope and method. Design communication lies at the heart of this process. Sketches, models, and diagrams serve as a shared language that enables multiple disciplines and institutions to collaborate. These artefacts transform coordination into a creative act: translating complex intentions into spatial propositions that can be discussed and adjusted without losing coherence. Architecture thus becomes a medium through which collaboration remains legible. Such an expanded role requires designers to operate across time as much as across space.

Projects financed and managed through public-private frameworks often span decades, requiring decisions that can adapt to changing regulations, budgets, and technologies. Within these conditions, design functions as an instrument of continuity – maintaining intent and meaning as circumstances evolve. Seen in this light, architecture is a form of knowledge production. It interprets



↑ Visual simplicity as a method

and mediates between technical, political, and cultural rationalities, organizing a collective understanding of the built environment. Each project serves as an inquiry; a means of testing how diverse realities can coexist. Its value lies not only in what is built, but in how it enables learning, negotiation, and shared reasoning. Collaboration replaces hierarchy; knowledge emerges from exchange. The following chapters build on this understanding. They examine how architecture mediates between truth and agreement, how it sustains coherence through negotiation, integration, and activation, and how design, as both a process and a narrative, continues to produce knowledge in a public-facing manner.



FROM CONTEXT TO NARRATIVES

The ideas developed in this introduction are explored through a series of essays and case studies that together define *Building Narratives*. The book unfolds in two complementary parts: the first establishes a conceptual framework; the second examines how this framework operates within specific projects and practices. The opening statement, *Between Truth and Agreement*, outlines the theoretical ground for understanding architecture as a discipline that mediates between what is measurable and what is negotiable. It introduces the notion of the *Critical Design Space* – the zone where truth, agreement, and practice intersect – and positions design as the orchestration of contradictions, rather than their resolution. *A Room Is Still a Room* reflects on the enduring human dimension of architecture. It revisits the discipline's fundamental questions – light, scale, presence, and encounter – within a rapidly evolving technological and social environment, suggesting that the core of architectural meaning persists

¹¹ Blyth, A., & Worthington, J. (2010). *Managing the brief for better design* (2nd ed.). Routledge.

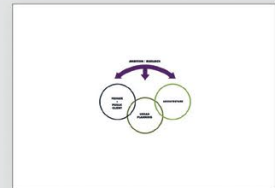
↑ One space, four representations: the combination keeps the dialogue informed and whole

through change. *Design Thinking in Practice* situates *Building Narratives* within the broader discourse of design research. It revisits the debates surrounding rational and reflective modes of thought, and relates these to contemporary practice, demonstrating how narrative-based methods maintain coherence in complex settings. Following the conceptual framework, the book translates these ideas into three project-based studies that examine how negotiation, integration, and activation take shape in practice. SPOT (Design as Negotiation) explores how design mediates between public ambitions and private initiatives within Amsterdam's Amstel III district. NACH (Design as Integration) analyses the Amsterdam Courthouse, showing how structured dialogue within a public-private partnership can align technical, institutional, and civic objectives. Schiphol (Design as Activation) examines the design of the new terminal at Amsterdam Airport, tracing how architecture operates within a state of continuous change, maintaining coherence amid shifting conditions.

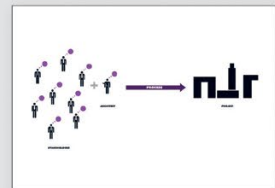
The closing *Conversation: Design as Collective Intelligence*, brings these insights together within a dialogue. Through the exchange between Kees Kaan and Georg Vrachliotis, it examines how architectural reasoning evolves as new technologies, such as Artificial Intelligence, enter the field. The discussion reflects on the changing boundaries of design agency and the enduring responsibility of architects to give coherence to collective thought. Each contribution was developed through collaboration between KAAAN Architecten and the *Activating Design* research group at Delft University of Technology. The book was edited by Kees Kaan, Manuela Triggianese, Alice Colombo, and Yağız Söylev, with contributions from Georg Vrachliotis, Stijn Drolenga, Aldo Trim, Marco Lanna, Giulia Rapizza, and Hrvoje Šmidihen. Together, they trace the continuous dialogue between theory and practice, between the making of buildings and the making of narrative. The research background of *Activating Design* continues at Delft University of Technology through a doctoral programme that investigates design communication and shared intelligence in complex projects. The research of the PhD candidates Ömer Faruk Ağırsoy, Marija Mateljan, Yağız Söylev and Halina Veloso e Zárato is connected to the Activating Design theme.

The long list of contributors to the educational activities includes Henri van Bennekom, Eline Blom, Olindo Caso, Maria Finagina, Esther Gramsbergen, Matrin Grech, Benjamin Groothuijse, Maruli Heijman, Marija Mateljan, Hrvoje Šmidihen, Yağız Söylev, Manuela Triggianese, Jelmer van Zalingen. A roadmap at the end of the book brings together illustrated material, glossary entries, and information on related research and educational activities, offering readers an extended view of the work presented here. Ultimately, *Building Narratives* offers both an insight into a specific body of work and a framework for understanding how architecture thinks through the act of making. It invites the reader to see practice as an evolving discourse that gives form to collective reasoning – where the many truths, agreements, and responsibilities of design converge in tangible expression. It aims to make visible what usually remains implicit in architectural production: the collective intelligence, negotiation, and judgement that allow architecture to appear both rational and self-evident in the world.

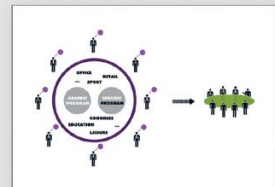
→ Design as negotiation slides from 2016: tracing the beginnings of the office's journey of visual communication in the design process



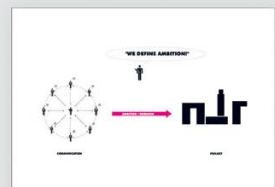
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Compatibility Mode — Saved to my Mac

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Convert to SmartArt

Picture

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Quick Styles

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Designer

Create PDF and share link

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BETWEEN TRUTH AND AGREEMENT

Every architectural project is suspended between truth and agreement.

Truth refers to the objective realities of structure, climate, materials, and context. Agreement is the negotiated consensus found in briefs, budgets, regulations, and shared community values. Understanding these terms is crucial: every project exists in the interplay between what is, and what is agreed upon. Truth speaks of realities we cannot escape. These include the weight of the structure, the demands of the climate, the durability of the materials, and the histories inscribed in the context. These conditions are indifferent to opinion, yet they shape everything we do.

Agreement belongs to another register: the fragile yet powerful domain of consensus. Here, we find briefs and budgets, regulations and rituals, as well as the shared values of institutions and communities. Agreements may diverge from truths, yet they set the stage for action.

And then there is practice, the act of design. Practice is where truths and agreements encounter one another – not as a synthesis, but as a negotiation. This is the space where reality and consensus are provisionally aligned, allowing a building to be imagined, constructed, and inhabited. The liminal space between these is the *Critical Design Space*. Here, truth, agreement, and practice intersect. Design becomes the orchestration of contradictions rather than their resolution. This space reveals architecture as a discipline of contingency, operating not within any

single domain, but in the shifting relations between these domains. Architecture thrives on contradiction, necessity, freedom, permanence, and change. In every project, fact and fiction merge. Architecture does not erase these tensions, but rather gives them form, making conflict into coherence.

What emerges is the recognition that architecture's strength lies in this capacity to make contradiction coexist; to turn the oxymoron into inspiration. The opposition between truth and agreement is not a weakness to be resolved, but a productive tension – a form of double reality. Its power lies in making contradictions legible, tangible, and inhabitable.

Narrative binds truth and agreement together, but does not replace them. It keeps contradictions clear without reducing them. Narrative aligns fact and value, memory and material into a sharable practice. To build narratives is to manage this space, to embrace contingency, and to shape the meeting of truth, agreement, and practice.

Form is nothing more than the consequence of establishing a relationship between human beings. ... Form is an eminently social matter. Anyone who recognizes the right of society recognizes the right of form. — Adolf Behne

History reveals this interplay. Étienne-Louis Boullée embodied abstract truth in monumental geometry, making cosmic order physical. Too often reduced to a slogan, Louis Sullivan treated *function* as inner necessity – form as the visible trace of purpose. Ludwig Mies van der Rohe brought these ideas into

the modern age, understanding architecture as the alignment between *truth* and *will*. For him, form was never the aim, but the *result* of clarity – what remains when structure, material, and intention fall perfectly into place. Aldo Rossi later showed how collective memory – agreements sustained across generations – becomes the very fabric of the city, transforming conventions into urban facts. Each, in their own time, recognized that architecture's coherence emerges not from purity or invention alone, but from aligning what is given with what is willed through form.

This tension between necessity and agreement shapes today's practice, though the frameworks have changed. Civic planning once gave architects a clear mandate. Now, new procurement types and fragmented authorship are redefining the field. Designers navigate a landscape of institutions, markets, and expertise. These forces often favour speed or spectacle over coherence. Yet architecture remains a slow art. Projects unfold over years, outlasting political cycles and economic moods. Materialization is part of the concept: details carry ideas, and a building must ultimately explain itself to client, user, and public through its own clarity. What lasts is not style but physiognomy – a unity of appearance and inner character. 'Form follows function' refers not just to a programme, but to a work's entire nature – structural, spatial, and civic.

Design practice is also a form of research, evolving through recurring, complex situations, not fixed rules. Sometimes programmes are open, sometimes defined – often both. What matters is moving between

uncertainty and precision so that knowledge, agreement and form develop together.

Designers rarely start by producing solutions. They first formulate the questions that make solutions possible. The early phase of the project presents a paradox: we know the least, and yet decide the most. Early decisions shape everything that comes after. As knowledge grows, freedom narrows. 'Design freeze' is a misleading concept – a design must keep thinking and adjusting, or it stops being design.

Narrative holds the work together in all situations. It does more than describe; it activates. Proposals invite expertise and keep collective intelligence moving. A strong narrative allows many contributors to work together without losing coherence. Narrative moves knowledge through a project. It links drawings, meetings, and models into a logical chain that clarifies choices. When a project's logic is explained, tested, and shared, it becomes collective. Design depends on this flow; it keeps buildings, methods, and ideas connected across minds and times.

Design is not just the invention of form, but the curation of information and knowledge. It organizes what is known, allowing work to continue while conditions change. Each project gathers fragments of experience, insight, and precedent, and rearranges these for the present. This keeps complexity legible and opens up possibilities, making design a living form of research – a culture that learns through action.

A recurring question informs this work: *If all knowledge were connected and easily available, how*

would we design? This is not a dream of omniscience, but of connection. Architecture relies on collective intelligence: engineers, planners, builders, users, and historians. The task is to connect their memories, data, and intuition in such a way that abundance becomes understanding.

Artificial Intelligence will enter this shared space, adding another voice. Its value comes not from automation, but from helping weave knowledge across fields. Like others, its suggestions must be tested and integrated into the project. Used critically, it widens the conversation.

Architecture's contradictions are not flaws to erase, but rather the ground the discipline stands on. Architecture thrives by allowing truth and agreement to coexist. In any context – loose or choreographed, modest or complex – narrative aligns minds, keeps disagreements visible, and moves the project forward.

To practice is to work between truth and agreement. Real constraints and shared decisions shape this work. Buildings record how these forces align, making arguments solid. Fact, mandate, and belief coexist until new conditions call for new negotiation. Architecture endures by giving contingency a durable form. It weaves stories in matter, binds differences without erasing them, and turns contradictions into culture. As design meets new forms of intelligence, the field will expand. Narratives must hold more voices and modes of reasoning. The critical design space will widen, and our task of alignment will extend to new horizons.





**A ROOM
IS
STILL
A ROOM**







It's hard to imagine an architects office in 2025 without rows of monitors lit up and the sound of a mouse clicking but not so long ago, the tools were pencils, markers, and tracing paper stretched across wide drafting tables. Drawings travelled by post or fax, and you might wait a day, sometimes longer, before picking up the phone to discuss them. Meetings were face to face, and projects unfolded over tables scattered with sketches, coffee cups, and conversation.

Today, in marked contrast to the analogue methods of the past, digital technologies are embedded in almost every stage of the process, from early sketches to final construction details. Communication has shifted from the slow exchange of paper drawings to shared BIM models and AI-driven tools, and from print magazines to the immediacy of social media feeds. This stark acceleration mirrors the broader technological transformations that have reshaped every part of society, altering how we work, communicate, and organize our lives. Meanwhile, political, economic, and historical contexts have continually shifted. While architecture inevitably absorbs and adapts to these rapid changes, the discipline remains anchored in its enduring purpose, even as the modes of communication and operation diverge so widely from the past.

In a world where the pace of change can feel disorienting, the simple observation – that *a room is still a room* – serves as an anchor. This acknowledges the constant undercurrent of evolution that architecture has to navigate. And yet, it also quietly affirms that not everything is in flux. While architects now communicate in real-time and curate their portfolios on digital platforms, the fundamental challenges of the profession remain unchanged. The act of shaping space to support life, facilitate experience, and nurture connection endures. A room is still a room. It still contains conversations, movements, silence, and presence. Real-life social interaction still happens within buildings: there's simply no replacement.

In this context, it is more crucial than ever – especially for architects – to distinguish between what changes rapidly and what evolves slowly, or hardly at all. The rapid evolution of communication tools and design technologies reflects broader societal transformations, yet many shifts are temporary or superficial. The challenge lies in discerning which developments truly alter how space is inhabited and experienced, and which will fade before the foundations are laid. Architecture, as a manifestation of social interaction, inevitably absorbs all of

← A scene from KAAAN Architecten office, 2020

these shifts, but its strength lies in identifying which will have a lasting impact. In this sense, the architect's role is as much about interpreting as it is about designing, ensuring that each project addresses what will still matter long after the first sketches are made.

COMMUNICATION AT THE SPEED OF THOUGHT

Over the past few decades, architects have experienced a profound transformation in how they communicate, collaborate, and construct their work. At KAAAN Architecten, we have inevitably lived through this. What follows is not a precise chronology, but a brief history pieced together from our own practice, looking back at the tools we have used, the methods we have adapted, and how these changes have shaped the way we think and work.

Architecture now performs in a dense ecosystem of digital tools, instantaneous exchanges, and curated visual narratives. The arc from print publications to real-time collaboration platforms is not merely about efficiency. It reveals how architects perceive, produce, and share their work, how knowledge moves through images, files and conversations that never really stop

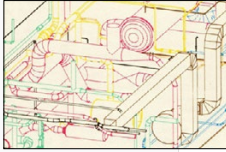
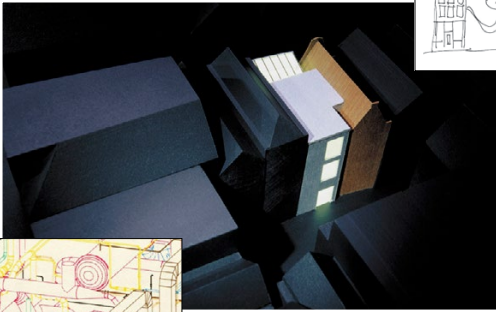
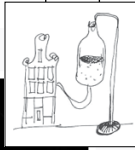
EARLY MODES: LETTERS, PHONE CALLS AND PHYSICAL PRESENCE

In the pre-digital era, architectural communication was deliberate and tangible. Letters, phone calls and face-to-face meetings formed the backbone of professional exchange. Drawings travelled through the post: a letter was written, placed in an envelope with a stamp, sent, and received the next day or the day after. Only then came the follow-up call to ask whether it had arrived, and whether something needed explanation. This rhythm of sending and waiting fostered a culture of attentiveness. Once a letter or a set of drawings was dispatched, there was no instant recall or revision. The delay between sending and receiving demanded foresight, patience, and care.



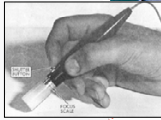
↑ A scene from the former KAAAN Architecten office, 2005

→ Timeline of the evolution of how representation, technology and communication affect each other



■ Digital Drafting 1980s

- Key Software:
- ↳ AutoCAD (Autodesk, 1982)
 - ↳ Archicad
 - ↳ Intergaph CAD



■ WIREFRAME VIEWS 1982

- key developments:
- ↳ sketchpad (1963)

■ MODEL_PHYSICAL ∞

■ HANDDRAWING ∞

● POST ∞



▲ PRESENTATION_ANALOG pre - 1980s

- Key Techniques:
- ↳ Hand-Drawn Presentations
 - ↳ Physical Models
 - ↳ Carousel Projector

● E-MAIL 1980-present



■ MODELLING_TRADITION ∞

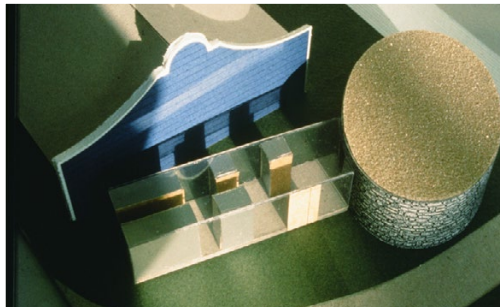
- Key Techniques:
- ↳ X-Acto knives / scalpels
 - ↳ Hot wire cutters
 - ↳ Spray adhesives, cutting m



● FAX MACHINE 1980s

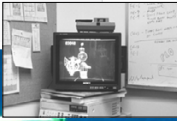


● PHONE_WIRED until 1950s



1989 1990 1991 1992 1993 1994

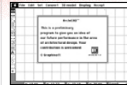
RENDERMAN 1989



PHONE_ANALOG MOBILE (1G) 1980s

Key Characteristics:
 \ First generation analog mobile networks.
 \ Large, heavy, poor battery life

3D.STUDIO 1990



Early 3D Modeling 1990s

Key Software:
 \ 3D Studio / 3ds Max
 \ MicroStation
 \ Archicad (Graphisoft)



Birth of the World Wide Web 1990

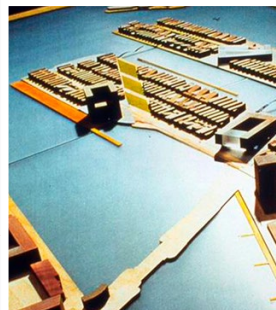


Toshiba R4000



MODELLING_DIGITAL 1990s

Key Characteristics:
 \ Laser cutter (CO₂ laser)
 \ Early CNC milling machines



VAL 1980s

ats



DESKTOP mid 1980s

GUI and Mass Adoption:
 \ Graphical User Interface (GUI)
 \ Widespread use of keyboard and mouse
 \ Hard drives became standard
 \ Office software emerged



Intel i486 Chip 1990s



PHONE_DIGITAL MOBILE (2G) 1990s

1989 1990 1991 1992 1993 1994

1995

1996

1997

1998

1999

2000

■ BIM + Parametric Tools 2000s

Key Software:

- ✓ Revit (Autodesk)
- ✓ SketchUp (Google → Trimble)
- ✓ Rhino (McNeel) with Grasshopper

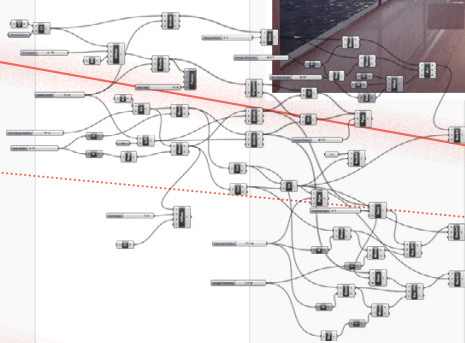
○ Cloud Storage



▲ PRESENTATION_DIGITAL 1990s

Key Techniques:

- ✓ CAD Drawings
- ✓ Digital Rendering & Photoshop
- ✓ PowerPoint Presentations



■ LAPTOP mid 1990s

Key Characteristics:

- ✓ Portability
- ✓ Wireless Connectivity
- ✓ Battery-Powered Operation

Chip 1995s



□ Sony Emotion Engine Chip 2000

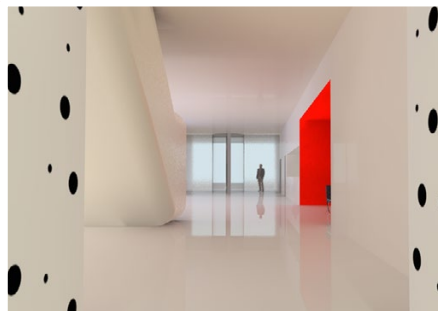
+

Y2K (Year 2000 Problem) 2000



+

Introduction of the Euro 1999



1995

1996

1997

1998

1999

2000

2001

2002

2003

2004

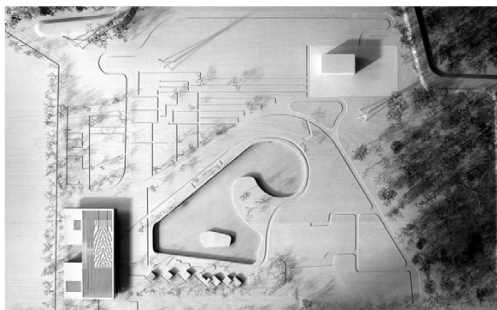
2005

2006

age 2000s-present



LINKEDIN 2003



YOUTUBE 2005



TWITTER 2006



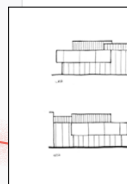
V-RAY + CINEMA 4D 2002

- Key Characteristics:
- ↳ User-Generated Content
 - ↳ Global Reach
 - ↳ Monetization Options
 - ↳ Algorithm-Driven Recommendations



MODELLING COMPUTER-AIDED FABRICATION 2000s

- Key Characteristics:
- ↳ Parametric Design
 - ↳ FabLabs / Makerspaces
 - ↳ CNC routers
 - ↳ Early 3D printers

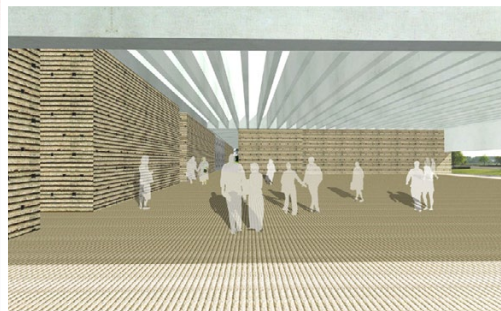
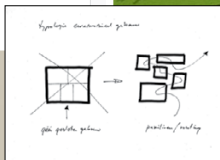


2000s



PHONE SMARTPHONES (3G) 2000s

- Key Characteristics:
- ↳ Mobile internet, email, basic apps
 - ↳ Introduction of color screens
 - ↳ QWERTY keyboards



2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012



Global Financial Crisis 2008

□ ENSCAPE + TWINMOTION + LUMION 2010s

Real-Time Rendering Era:

- ↳ Real-time feedback
- ↳ Scene navigation
- ↳ Simplified material libraries



● Real-Time Collaboration 2010s-present

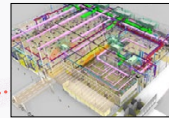
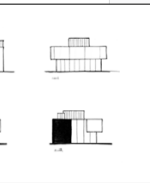
● PHONE SMARTPHONE BOOM 2010s

- Key Characteristics:
- ↳ High-speed 4G/5G, high-end cameras
 - ↳ Phones as all-in-one devices
 - ↳ AI

■ Integration + Collaboration 2010s

Key Software:

- ↳ Revit (advanced with Dynamo and BIM 360)
- ↳ Rhino + Grasshopper (parametric workflows)
- ↳ Archicad (with BIMcloud)



▲ PRESENTATION_INTERACTIVE 2010s - today

- Key Techniques:
- ↳ BIM and Parametric Modeling
 - ↳ Virtual Reality (VR)
 - ↳ Interactive Presentations



■ MOBILE + CLOUD ERA 2010s

GUI and Mass Adoption:

- ↳ 24/7 via Wi-Fi/4G/5G
- ↳ Cloud-based storage + apps
- ↳ Thin, lightweight ultrabooks and tablets
- ↳ Touchscreens, voice assistants



2007

2008

2009

2010

2011

2012

2013

2014

2015

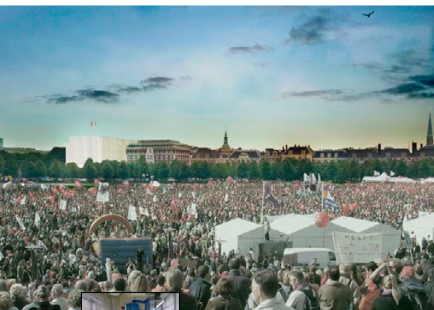
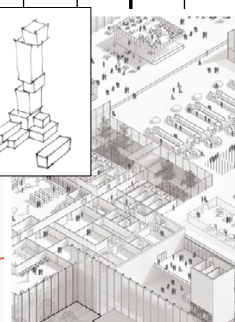
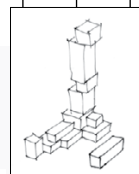
2016

2017

2018



INSTAGRAM mid 2010s



AI + Generative Design 2020s

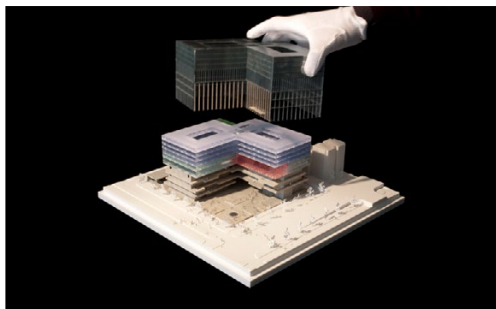
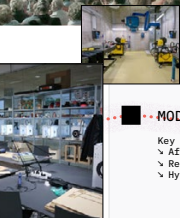
- Key Software:
 - Spacemaker AI (Autodesk)
 - FormIt Pro (Autodesk)
 - Hypar



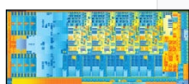
End

MODELLING DEMOCRATIZATION OF DIGITAL FABRICATION 2010s

- Key Characteristics:
 - Affordable desktop 3D printers
 - Resin printers
 - Hybrid workflows



World's population 7,5 billion 2017



Intel Core i7 Chip 2015s



2013

2014

2015

2016

2017

2018

2019

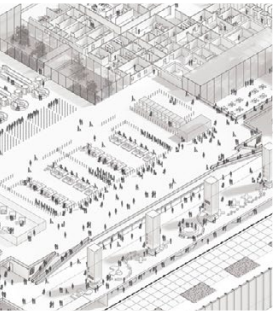
2020

2021

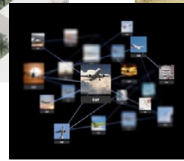
2022

2023

2024



AI-Driven File Management 2020s-present



TIKTOK 2020s



MULTIMAKER 3D 2020s

+ COVID-19_SARS-CoV-2 2020s



VANTAGE + D5 + MIDJOURNEY 2020s

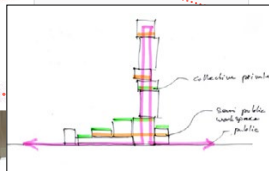
AI & Hybrid Rendering Era:

- AI-based Denoising (e.g. NVIDIA OptiX)
- AI Prompt-to-Render tools (Midjourney, DALL-E)
- Cloud Rendering & Streaming
- XR Rendering for VR/AR environments

er-3 2018s



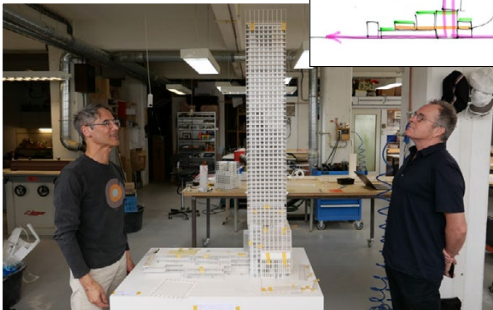
Formlabs Form 4 2020s



MODELLING_HYBRID & FABRICATION 2020s

Key Characteristics:

- Model making blends digital and traditional craft
- Tiny details and large Architectural Prototypes
- Robotic arms + 6-axis CNC



2019

2020

2021

2022

2023

2024



FUTURE OF PERSONAL COMPUTING 2025s - beyond

- Key Characteristics:
- AI-first interfaces and productivity tools
 - On-device AI chips (NPUs)
 - Foldable, rollable, or wearable displays
 - Voice, gesture, and even brain-controlled interfaces (BCI)
 - Sustainable, modular, repairable designs

PRESENTATION_EXPERIMENTAL beyond 2025

- Key Techniques:
- AI-Assisted Presentations
 - Generative Design Tools
 - Mixed Reality



PHONE_FUTURE & EMERGING TECH (6G) 2030s

- Key Characteristics:
- Holographic calls, BCI, full AI integration
 - Phones may evolve into wearables
 - Neural interfaces



Intel Gaudi AI Chip 2025s

+ CO₂ Emissions reduced by 50% in EU 2030



Within the office, communication followed a similar rhythm. Before computers, drawings filled the tables, and evenings often ended with walking through the studio to review what had been done during the day. Notes were left directly on tracing paper, or on sticky notes waiting to be found the next morning. A tactile, almost curatorial ritual; a way of keeping the work visible, and the dialogue alive through paper. The office itself became a living exhibition of drawings in progress.

When computers arrived, this landscape of drawings disappeared. At night, screens went dark, and there was nothing left to see. The evening walk through the office lost its substance. The only place where the work still appeared was if it was printed out on a printer. Standing there with a coffee, watching the prints roll out, became the new form of contact. A moment to see what had been produced during the day, to meet colleagues as they came to collect their prints, and exchange remarks with them before they returned to their desks.

Physical presence was essential. Lectures, seminars, and professional gatherings were key arenas for debate and exchange. 'Very physical, very being there' was the norm; a professional culture built on direct encounter and shared space. Such proximity cultivated trust and natural understanding: qualities that no document or screen could replace. The quantity of information required for permits or to begin construction was also smaller then. Work advanced with fewer layers of control and documentation than today.

A GRADUAL SHIFT: FAX AND E-MAIL

The late twentieth century introduced the first changes to this rhythm. The fax machine allowed drawings to travel with new speed, although they were still bound to paper. Around 1995, it was already possible to fax sketches from anywhere in the world to the Claus en Kaan team in Amsterdam. The sense of immediacy was astonishing; what once took days could now happen within minutes. This felt like a small revolution; the first glimpse of real-time exchange that would later come to define digital practice.

E-mail soon followed. In its early form carrying only text; images still had to be faxed or couriered. Words travelled through one channel, visuals through another. This hybrid moment merged new habits with old. Communication accelerated, but reflection still resided in the pauses between messages. The tempo of practice quickened, without yet abandoning the slower forms of attention.

COMPUTER-AIDED DESIGN

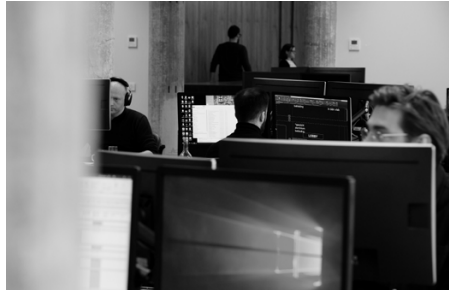
Computer-Aided Design (CAD) was the first digital tool to reshape daily life in the architectural office. AutoCAD, in particular, quickly became the workhorse of drafting: drawings could be produced, copied, and adjusted far faster than on paper. It was not only about speed; this changed the way architects thought. Lines could be endlessly moved, erased, or multiplied without wearing through tracing paper, and entire drawing sets could be updated in hours rather than days.

The introduction of CAD marked a shift from the discipline of the

drawing board to an iterative, screen-based process. Offices became defined less by the smell of blueprint machines and more by the hum of processors. Precision reached new levels, enabling work on conceiving entire building plans to be done at millimetre scale. This precision, in fact, exceeded what could ever be achieved on the building site itself, subtly altering the relationship between design and construction. A new kind of literacy emerged. The first generation of architects to grow up with CAD developed a different way of thinking. The tactile understanding of scale that came from drawing by hand, the bodily sense of distance, proportion, gave way to the quick modifications and iterations born of working on the screen. The analogue discipline of abstraction of building elements loosened under endless zooming in and out of the drawings and the illusion of perfect accuracy. This new expectation of precision and exactness set the foundation for the data-driven systems that would follow.

THE DIGITAL ACCELERATION

With the new millennium, the speed of exchange multiplied. Faster internet, lighter file formats and digital photography made the circulation of drawings and images almost immediate. Architectural presentations moved from printed boards to fluid PowerPoint decks, richly rendered images, and live video calls.



The rise of Adobe's design suite revolutionized not only how architects presented their work, but how they imagined it. Architects could layer atmospheres onto renderings, refine colours, and create publication-ready layouts in-house. Design and representation became inseparable from communication. The drawing no longer ended at the office plotter. It continued into the visual narrative that accompanied the project in competition, publication, or online. Soon after, social media brought about another leap. Architects no longer depended on editors or established institutions to circulate their work – they were now able to publish directly to a global audience. Built projects, competition entries and speculative images began to coexist within the same feed, collapsing the boundary between the realized and the rendered. This autonomous control of representation was empowering, but also demanding: every project became a public statement from the moment it appeared on screen.

BUILDING INFORMATION MODELLING

Building Information Modelling (BIM) went beyond drawing; it redefined collaboration. Unlike CAD, which focuses primarily on geometry and drafting, BIM embeds layers of data into a single, shared digital model. Beyond documenting the design, BIM allowed engineers, contractors and architects to work simultaneously, testing and iterating elements of the project in real time. This collaborative model enabled the detection of clashes, performance simulation,

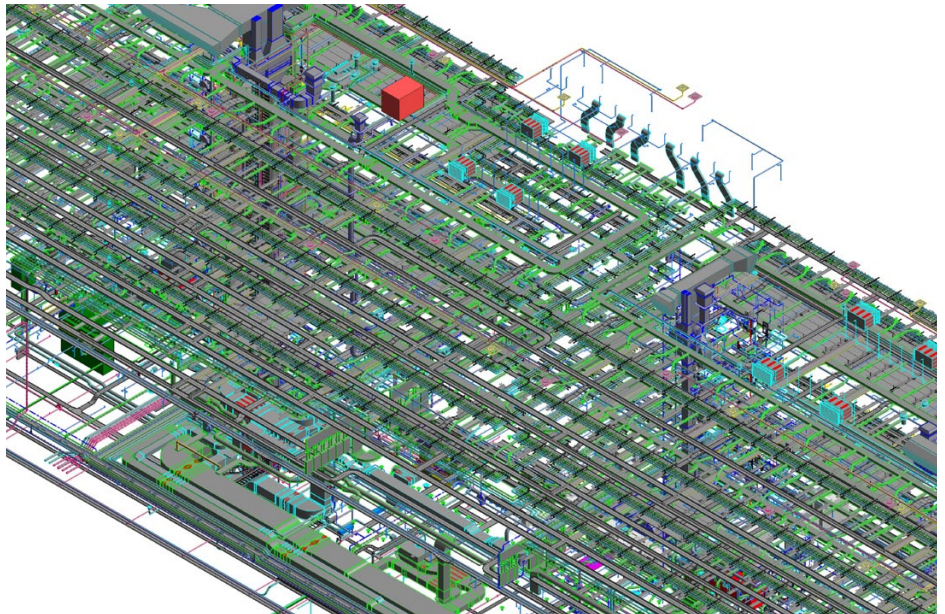
↑ A scene from the KAAO Architecten office, 2020

and cost analysis within a single environment. This period redefined architectural authorship: the architect became both designer and narrator, balancing imagination and verification across multiple platforms. Design culture learned to live with the constant double image of its work – both the project and its representation – while each influenced the other.

Evolution did not stop with BIM. Cloud-based platforms made project files accessible from anywhere. The BIM environment soon became linked to other technologies, including cloud sharing, augmented and virtual reality, turning the model into a live interface between design and decision-making. Artificial Intelligence (AI) has entered this workflow as a new kind of collaborator, rather than a new tool. Algorithms began to evaluate, simulate, and even propose within the same environment. AI has extended the collective reasoning that digital practice has been building for decades. Where CAD accelerated drawing and BIM coordinated information, AI began to participate in the process of reflection. AI learns from the work it observes, and feeds this back into the process.

THE PARADOX OF SCALE

As tools grow more powerful, the scales they connect grow harder to contain. What once unfolded within the bounds of the drawing board now stretches across vast networks of data, regulation, and collaboration. The same technologies that compress time and distance also multiply the layers of control surrounding a project. Miniaturization and expansion advance hand-in-hand: chips shrink to nanoscale while infrastructures expand into global systems of servers, cables, and data centres. The supposedly weightless cloud rests on heavy ground. Architecture, too, mirrors this contradiction. While design decisions can now be



↑ BIM view on display

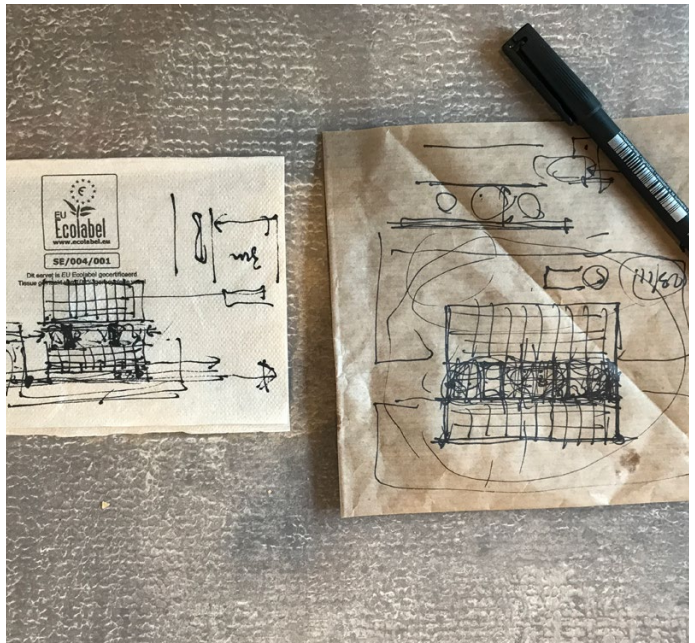
drawn and shared with millimetric precision, the frameworks that govern them – permits, reports, and contracts – have grown into systems almost as intricate as the projects they describe. The amount of documentation required for a project has grown exponentially.¹ Each new possibility for coordination brings new expectations of proof. What once travelled as a trusted exchange between collaborators now circulates through spreadsheets, models, and checklists, all demanding verification. The tempo that initially promised efficiency often results in accumulation: more images, more information, more records of compliance.

Within this shift, the culture of architecture has quietly undergone a change. Where dialogue and proximity once anchored collaboration, processes now rely on traceability and confirmation. The profession has become increasingly shaped by proof rather than trust – a situation that safeguards accountability, yet risks displacing judgement with procedure. The same precision that defines our tools now governs how we communicate, measure, and agree.

THE NARRATIVE IS THE GLUE

In an environment of accelerating tools, concurrent workflows, and rising expectations for flawless, high-performance buildings, the design process can easily become overwhelmed by its own information flows. The role of narrative becomes more crucial than ever in this context of excessive data and increasing complexity. It provides a counterbalance; the thread that binds together technical drawings, stakeholder opinions, spatial intentions, aesthetic ambitions, and functional requirements and points them in a coherent direction. In architecture, narrative is not a fixed statement but a living process – reshaped with each drawing, image, or word until it gathers into a shared understanding. It holds a project together not by freezing it, but by offering a centre from which change can unfold. The narrative keeps the design open and responsive while maintaining continuity. It aligns thought as much as action, intent as much as execution. Even those who join the process from the periphery can find their bearings within it. Once established, a narrative becomes a compass, quietly guiding each contribution back towards the essence of the work.

The duality of visual and oral storytelling explains why narrative is both indispensable and universal. Humans have always relied on stories to build consensus and to



¹ Elizabeth Bowie Christoforetti and Jacob Reidel (2024). *Documenting Complexity*, Instruments of Service, Harvard Design Magazine, No. 52.

↑ Architectural framework on a napkin



work together.² Through storytelling, groups can organize across time, distance, and expertise. Architectural narratives tap into this same capacity to create consensus, inspire commitment, and unify diverse participants around a shared goal. A visual narrative, in particular, functions as a shared language, bridging disciplines and cultures through symbols, diagrams and images that communicate where words alone might fail.

A strong narrative does more than explain a concept; it structures the work. As projects unfold through phases, the narrative acts as connective tissue, binding the shifting parts. It preserves focus as new complexities emerge. In an environment where hundreds of people engage with the project at different stages, narrative serves as both a collective memory and a shared vision. Plans, diagrams and models each carry fragments of the story, shaping how collaborators and clients understand the design. These representations are not static illustrations but active thinking tools; frameworks that align different perspectives, reveal relationships, and make decisions visible.

Narrative holds a project steady even as it adapts to shifting data, regulations, or priorities. It is both anchor and compass, preserving coherence while allowing change, and pointing always to what will endure beyond the first sketches.

A STILL POINT IN A TURNING WORLD

Architecture stands between systems and people. It translates rules, data, and materials into spaces that can be lived in and shared. However far the tools evolve, architecture still sets out from the same question: how to give form to the relations through which life takes place? The quiet work of turning truth and agreement into space.

Through all these transformations, one condition persists: a room is still a room. It continues to frame our conversations, movements, and encounters. However intricate its processes or advanced its technologies, architecture still begins with the simple act of giving shape to presence – defining how light enters, how sound settles, how one body meets another in space.

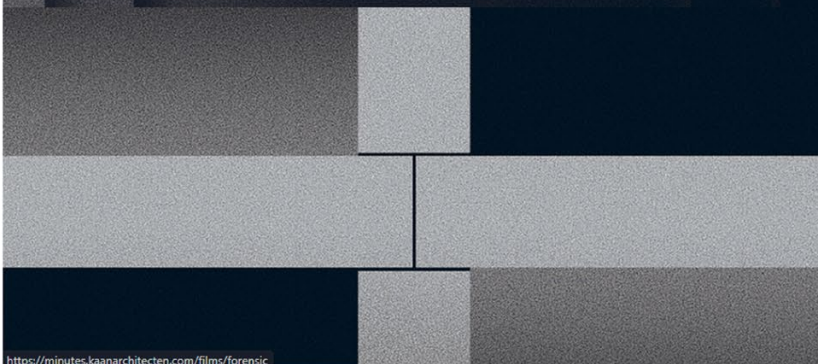
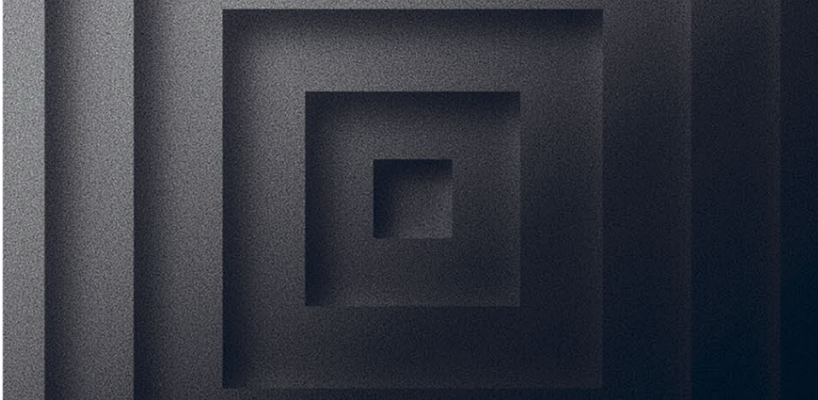
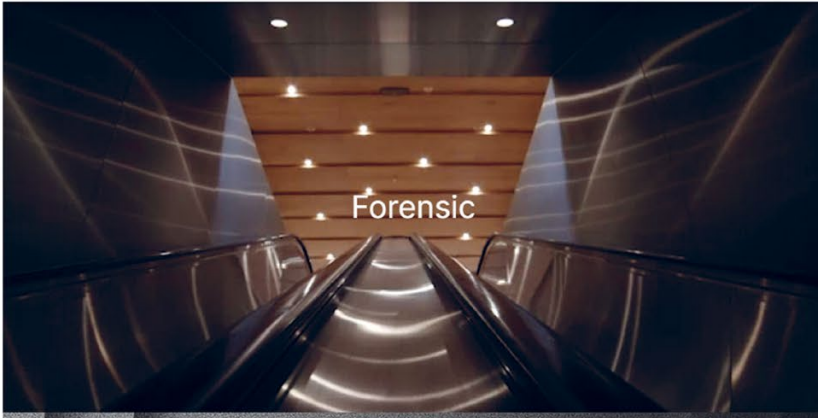
While instruments evolve and expectations soar, the essence of design remains this negotiation between change and permanence. The digital age has multiplied the means of production and representation, but it has not displaced the fundamental questions of space, relation, and care. The room is still a room. And architecture must keep making that room matter.

² Yuval Noah Harari (2025). *NEXUS: A Brief History of Information Networks from the Stone Age to AI*, Yahav-Hazari Group Ltd.

↑ Books, drawings, a hand at work

→ Minutes, short film series portraying architecture: building narratives take many forms

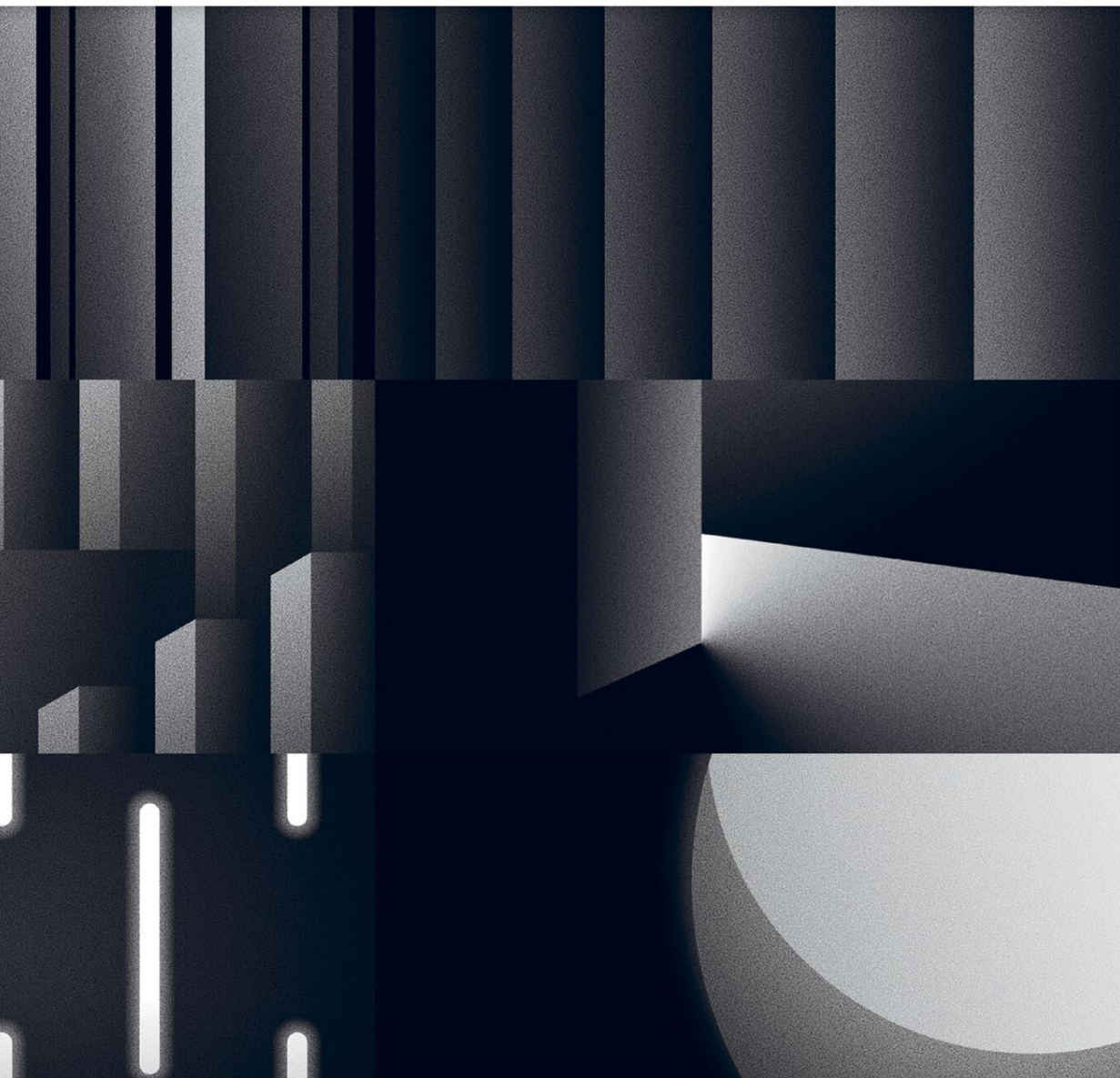
MINUTES S PORTRAYING ARCHITECTURE THROUGH THE LENSES OF INTERNATIONAL



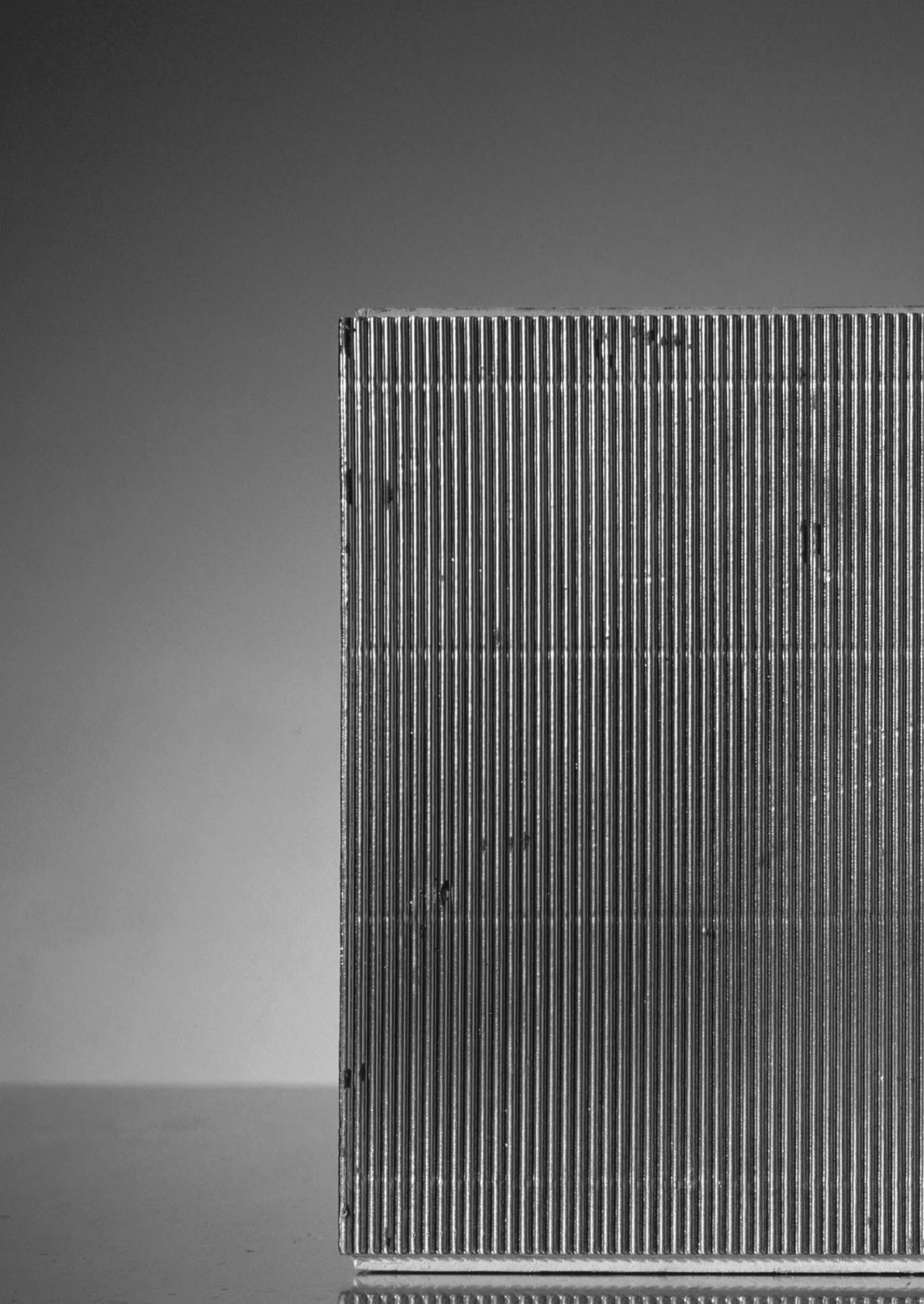
en.com/films/forensic

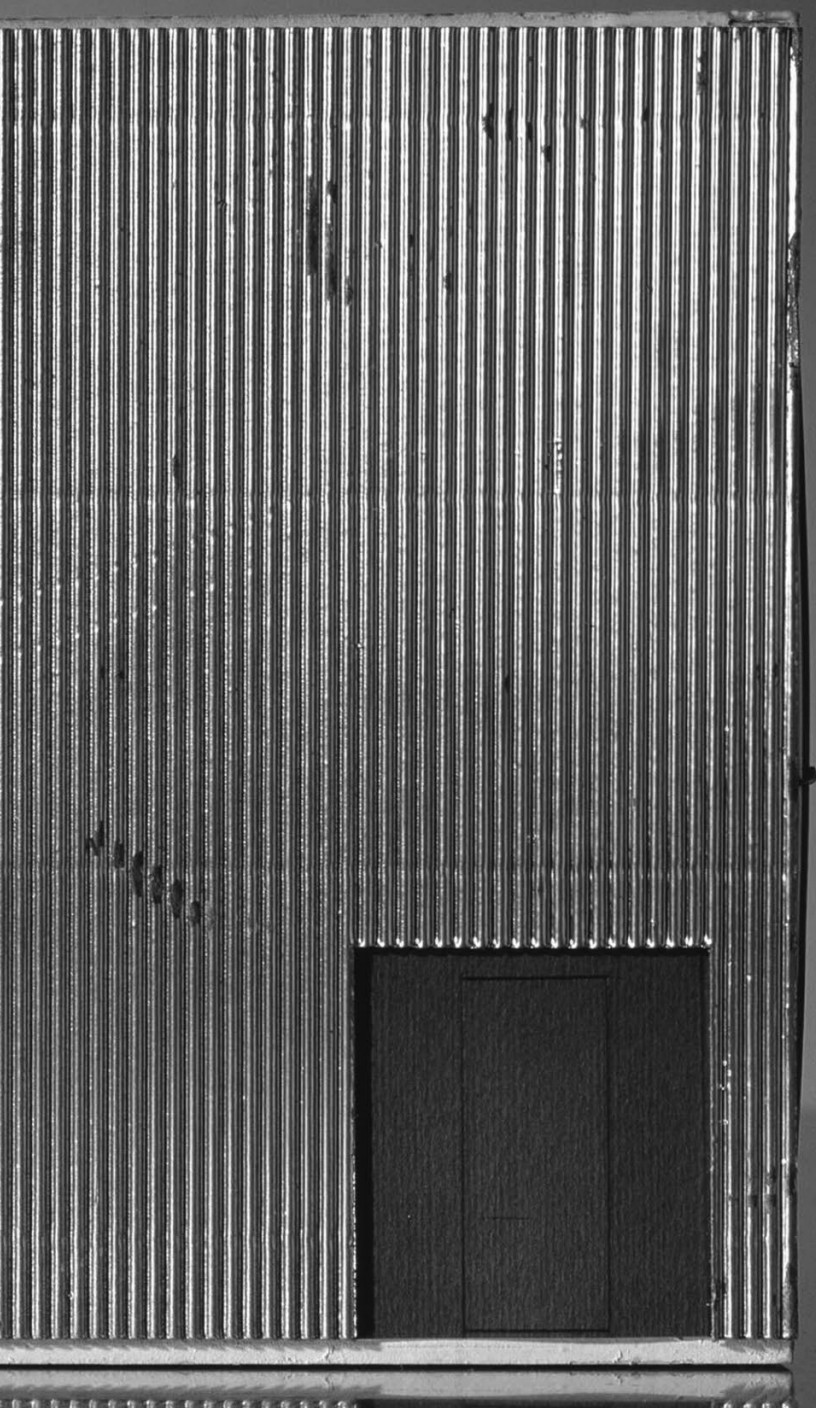


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DESIGN THINKING IN PRACTICE







The design process can feel like being caught up in the 1993 film *Groundhog Day*: a never-ending cycle of presenting, adjusting, and presenting again. In an unpublished 2015 essay on design communication, Kees Kaan used this metaphor to describe the early phases of an architectural project, where ideas are presented, discussed, adjusted, and presented again to slightly different audiences. Meetings multiply, yet the questions stay the same. Seductive images can secure quick support, while more abstract concepts require careful translation to be understood by varied stakeholders.

Interest in design thinking has long shaped architectural discourse, but the context in which practice takes place is being rapidly redefined. Today, architects must respond to intensifying environmental and social challenges, increasing stakeholder complexity, and new design tools – all of which demand a deeper understanding of how design thinking functions and how decisions are made under new conditions. Traditional accounts of design thinking, rooted in historical frameworks, require reassessment in the light of current realities. This chapter synthesizes recent design thinking literature and presents an ethnographic case study at KAAN Architecten, introducing *Building Narratives* as a methodology with which to address contemporary architectural challenges.

Building Narratives establishes a practical, adaptable framework for design and decision-making rooted in Dutch practice, where consensus-building, co-design, and innovative procurement have redefined the architect's role. Using case studies from KAAN Architecten's work, this chapter explores narrative as a participatory, visual, hands-on medium for addressing project complexity – rather than just a storytelling device or retrospective justification.

RECONSIDERING DESIGN THINKING

The literature on design thinking has been shaped by enduring tensions: design as science versus as a discipline; rational method versus creative intuition; optimization versus exploration. As projects grow more complex and more interdisciplinary, these oppositions start to lose their clarity. What appeared to be clear alternatives now coexist within the same field.

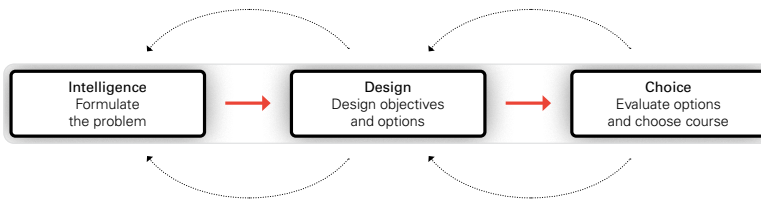
← A design meeting at KAAN Architecten

Nigel Cross traced the rise of ‘new design methods’ to the 1960s, when post-war industries and research cultures sought systematic, even scientific, ways to organize creativity. The first generation of design methods treated design as a process that could be modelled and repeated. A second generation in the 1970s recognized that real problems were too messy for strict procedures and began to value open-ended, participatory ways of working with clients and users. By the 1980s, design had matured into a discipline, with its own ways of knowing.¹

Much of the subsequent debate has been framed through the contrast between Herbert Simon’s *The Sciences of the Artificial* (1969)² and Donald Schön’s *The Reflective Practitioner* (1983).³ Simon, trained in cognitive science and systems theory, described design as a rational process shaped by limited knowledge – a concept he referred to as bounded rationality. Schön, writing from within the professions, described it as reflection-in-action, a dialogue between the designer and the situation at hand. For a long time, these two figures stood as opposites: Simon represented method, while Schön represented intuition.

Recent writings have challenged this divide. Scholars such as Chua, Dorst, and Dijkhuis⁴ note that Simon’s later work already recognized contingency and non-linearity – ideas often claimed by the reflective camp.⁵ In the 1981 edition of *The Sciences of the Artificial*, design appears not as a fixed sequence but as an iterative process guided by judgement as much as logic. Seen together, Simon and Schön describe two scales of the same reality: the organisational frameworks that give design stability, and the reflective moments that keep it alive.

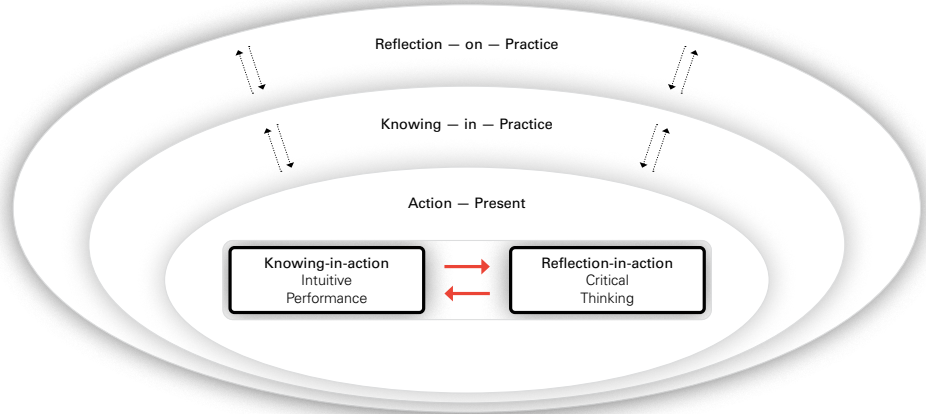
The interplay between rational and reflective modes is not abstract. It can be observed in practice. Albena Yaneva’s ethnographic study of architectural practice offers a revealing example.⁶ When she observed the process in real time, it appeared fluid and uncertain, full of sketches, models, and quick shifts in direction. Yet when she later asked participants to recount what had happened, the same process became linear and orderly, a story of clear stages and steady progress. The two versions are not contradictory; they simply show reality taking place at different scales. One – Schön’s reflection-in-action – captures design as it unfolds; the other – Simon’s rational model – as it is later organized and recorded.



¹ Cross, N. (2007). Forty years of design research. *Design Studies*, 28(1), 1–4. <https://doi.org/10.1016/j.destud.2006.11.004>.
² Simon, H. A. (1981). *The sciences of the artificial* (2nd ed.). MIT Press. (Original work published 1968).
³ Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Routledge.

↑ Herbert A. Simon’s IDC Decision-Making Model
 ↗ Donald Schön’s Reflective Practitioner model

Similarly, at KAAAN Architecten, project documentation often presents the process as a sequence of phases – concept design, design development, technical documentation – each with defined deliverables and deadlines. In day-to-day practice, however, work within these phases unfolds through iterative cycles of exploration, testing, and revision, shaped by unexpected discoveries and shifting constraints.



Recognizing this layered reality reframes the relationship between Simon and Schön. It shifts the question from choosing one paradigm over the other to understanding how they operate together, each addressing different yet equally necessary dimensions of design. The sequential structures recorded in schedules and procurement frameworks provide the scaffolding within which iterative, reflective work unfolds. This interplay is a defining condition of contemporary practice and becomes particularly evident when we consider the complexity of the problems architects are called upon to address.

COMPLEXITY AS THE DESIGN CONDITION

Architectural projects are often described as complex because they involve multiple interdependent systems, competing priorities, and timelines. In contemporary practice, this complexity has intensified. Social, political, and environmental conditions shift constantly, and every decision now reverberates through layers of regulation, technology, and expectation. The problems architects face are rarely well-defined; they are what Horst Rittel and Melvin Webber (1973) called ‘wicked problems’ – situations that cannot be solved once and for all, only navigated through informed judgment.⁷

Farrell and Hooker (2013) condensed Rittel and Webber’s ten criteria for wickedness into three: finitude, complexity, and normativity.⁸ These offer a useful lens through which to view architecture. *Finitude* points to the limits of

⁴ Chua, S. M. J. (2009). Donald Schön, Herbert Simon and The Sciences of the Artificial. *Design Studies*, 30(1), 60–68. <https://doi.org/10.1016/j.destud.2008.09.001>; Schaathun, H. G. (2022). Where Schön and Simon agree: The rationality of design. *Design Studies*, 79, 101090. <https://doi.org/10.1016/j.destud.2022.101090>; Schaathun, H. G. (2025). On the common core of science and design. *Design Studies*, 98, 101305. <https://doi.org/10.1016/j.destud.2025.101305>.

⁵ Chua, S. M. J. (2009). Donald Schön, Herbert Simon and The Sciences of the Artificial. *Design Studies*, 30(1), 60–68. <https://doi.org/10.1016/j.destud.2008.09.001>.

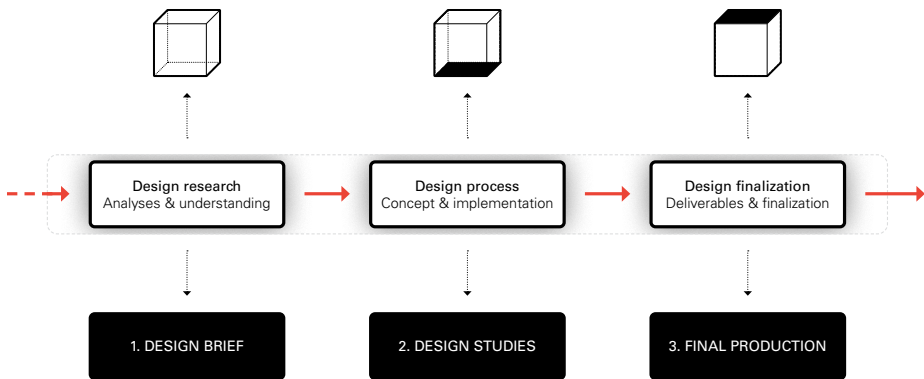
⁶ Yaneva, A. (2009). *Made by the Office for Metropolitan architecture: An ethnography of design*. 010 Publishers.

⁷ Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a General Theory of Planning. *Policy Sciences*, 4(2), 155–169.

human and material capacity – what Herbert Simon described as bounded rationality. *Complexity* refers to the interdependence of numerous variables, including budgets, structures, laws, and lives. *Normativity* concerns what ought to be rather than what is – the ethical and cultural dimension that keeps design open to interpretation. Because every building is shaped by changing purposes and by those who inhabit it, no architectural question can ever have a single or permanent answer. Solutions remain provisional, judged only by how well they fit their moment.

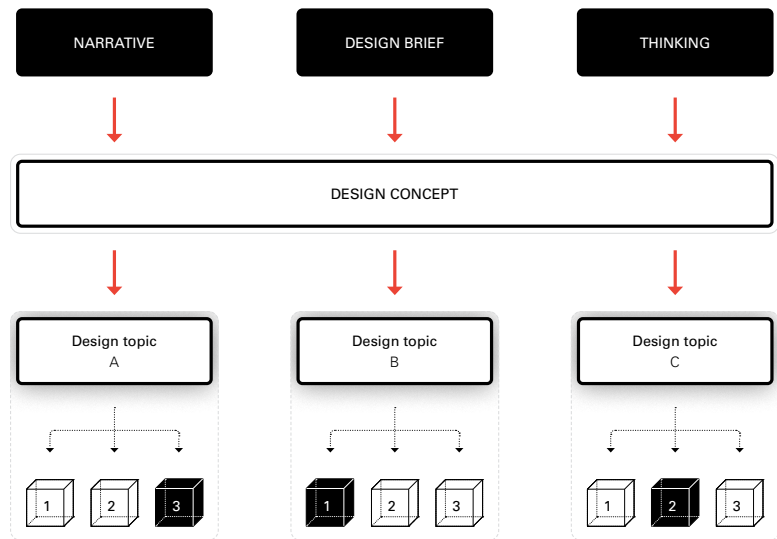
The Amsterdam Courthouse (NACH) exemplifies one kind of complexity: a project with stable requirements, but deep challenges in terms of integration. Procured under a DBFMO (Design, Build, Finance, Maintain and Operate) contract, it began with a precisely defined brief; however, turning this brief into a coherent building required aligning security, openness, technology, and maintenance over three decades of operation. Each design decision had consequences that rippled through other systems. Complexity here did not stem from uncertainty about what to build, but from how to integrate many precise requirements into a cohesive architectural whole. In this sense, integration itself became a form of design thinking – an act of translation between performance, experience, and governance.

At the other end of the spectrum lies Schiphol Airport’s Terminal – a project where both the what and the how were in flux. Regulations, technical systems, and even the need for a new terminal were repeatedly questioned and revised. Each change reframed the problem itself, forcing design to operate as



8 Farrell, R., & Hooker, C. (2013). Design, science and wicked problems. *Design Studies*, 34(6), 681-705.<https://doi.org/10.1016/j.destud.2013.05.001>.

↑ Donald Schön's Reflective Practitioner model



a continuous negotiation. Rather than a stable framework to be resolved, the project became a living process of coordination, where the task of architecture was to maintain legibility and direction within a field of constant change.

Seen together, NACH and Schiphol represent two faces of architectural complexity. One concentrates this within the framework of integration; the other disperses it through change. Both demand a form of design thinking that can hold reflection and structure together – adaptive enough to move with shifting conditions, yet disciplined enough to maintain continuity. Schön's *Reflective Practitioner* captures the designer's engagement with uncertainty at the scale of individual action;⁹ Simon's *Sciences of the Artificial* accounts for decision-making at the organizational scale. Read together, they point toward the collective frameworks needed for architectural practice today, where reflection and coordination have become inseparable.

Laura Malinin's extension of Schön's work describes this capacity at the level of the practice itself, what she calls reflection-on-practice.¹⁰ This is the ability of a design community to adapt when external forces, from politics to technology, unsettle its methods. The three projects explored in this book – SPOT, NACH, and Schiphol – can be read in this light: SPOT as the negotiation of what to design within a market-driven setting, NACH as the integration of fixed requirements into a civic whole, and Schiphol as the activation of design under continuous change. Each unfolds as a situated social practice, rooted in specific institutions and cultures, and each develops tools to make complexity navigable, rather than reducible.

⁹ Tan, L., Kocsis, A., & Burry, J. (2023). Advancing Donald Schön's *Reflective Practitioner*: Where to next? *Design Issues*, 39(3), 3–18. https://doi.org/10.1162/desi_a_00722.

¹⁰ Malinin, L. (2018). Situated design-thinking in architectural practice: Analyzing and extending Schön's epistemology. *Ardeeth*, 2, 53. <https://doi.org/10.17454/ARDETH02.05>.

† The design concept organizes narrative, brief, and thinking into parallel tracks, keeping multiple options in development concurrently

→ Complex Projects 'Amsterdam 2050' Graduation Studio Final Exhibition at TU Delft

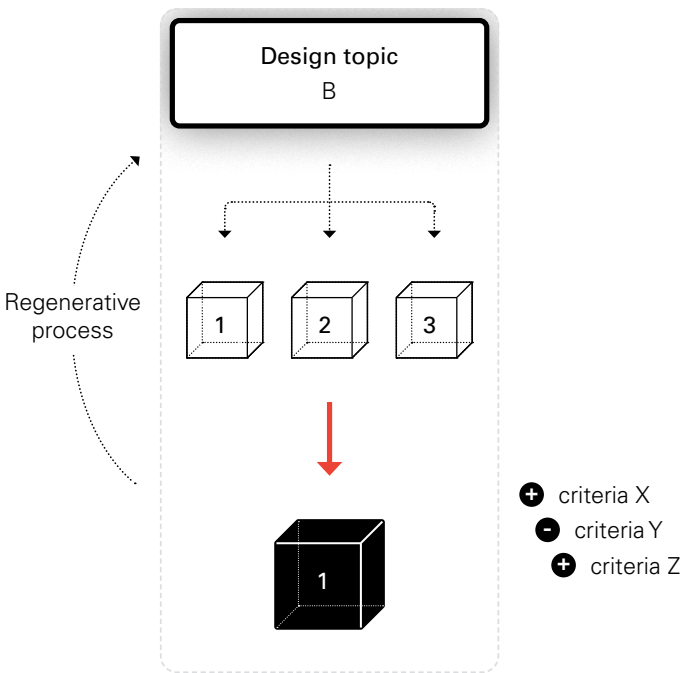




THE DUTCH CONTEXT FOR NARRATIVE-BASED DESIGN

The Netherlands offers a distinctive environment for developing narrative-based design methods. Its long tradition of consensus-building – the *polder model* – grew from the collective management of land and water, but has evolved into a broader culture of negotiation. Decision-making here rarely follows a single line of authority, instead unfolding through dialogue, consultation, and the careful balancing of public and private interests. Planning is therefore both collaborative and procedural; a structure that rewards approaches capable of communicating complex design intentions across multiple disciplines and institutions.

Since the 1990s, Dutch area-development strategies (in Dutch: *gebiedsontwikkeling*) have shifted from prescriptive master plans to open frameworks that can accommodate change while maintaining a shared direction. These strategies outline conditions rather than dictate outcomes, seeking precision and flexibility in equal measure. The same balance characterizes effective design communication: sufficient clarity to inform decisions, along with sufficient openness to accommodate evolving circumstances.



↑ Each round of options is evaluated against criteria; the feedback loop generates new design questions

The challenges Amsterdam currently faces in relation to transformation demonstrate this tension clearly. The city must absorb growth, repurpose ageing office districts, and address climate adaptation, all within limited budgets. In areas such as Amstel III, where private land ownership is fragmented and market forces drive development, the Municipality relies on design proposals not only to deliver form, but also to align interests. Architectural drawings and diagrams often become the space where fundamental questions are put to the test: not simply *how* to build, but *what* to build, and for whom. Other situations invert this relationship. Public clients are increasingly using DBFMO contracts, which link construction to long-term operation. Investment and maintenance are treated as one equation: higher upfront costs can reduce decades of energy and service expenditure. This shifts attention from immediate delivery to total life-cycle value, making operational data and maintenance criteria active parts of the development of a design.

The Schiphol Terminal project exacerbates this condition. Although its purpose was clear – to expand capacity – the regulations, operations, and even the premises for a new terminal changed repeatedly. The design team had to work without a stable brief, aligning dozens of disciplines while the ground kept shifting beneath their feet. Here, design acted less as a plan to be executed than as a medium of coordination; a means of holding the conversation together while its content evolved. Across these settings, *Building Narratives* describes how design communication can operate as connective tissue. Narrative becomes not a story told after the fact, but an organizing principle that helps different actors see their work as part of a shared structure. Within the Dutch context, where planning depends on negotiation and adaptation, such narrative frameworks provide the continuity that allows complexity to remain legible.

DEFINING BUILDING NARRATIVES

Across these varied settings, *Building Narratives* describes a way of working where design communication itself becomes a method of working. The narrative is not something added on afterward; it is the structure that holds a project together as it develops. It operates through drawings, diagrams, and models that evolve in tandem with the design, translating shifting priorities into a shared visual language.

This narrative is not linear in time, but is spatial in form. It unfolds across plans, sections, and perspectives – artefacts that connect reasoning and representation. These documents are not illustrations of finished ideas but instruments for thinking and collaboration. They clarify intentions, reveal conflicts, and enable different disciplines to assess how their decisions intersect with one another. In this sense, the narrative acts as both map and process: it gives shape to the work while keeping it open to change. Because architectural reasoning is inherently visual, *Building Narratives* keeps communication grounded in the medium of drawing. A section can reveal hidden relationships; an axonometric diagram can explain structure; a site plan can chart time through phasing and transformation. These forms of representation sustain coherence where words

fall short. They enable diverse teams to collaborate effectively without reducing their perspectives to a single viewpoint. A key quality of this approach is its balance between precision and incompleteness. As Rowe and Chung observe, design communication must provide 'enough shape to be provocative in moving forward' while retaining openness to redefinition.¹¹ Visualization plays a critical role here: without concrete spatial representation, abstract concepts remain difficult to evaluate, and misalignments between actors may go undetected until late in the process. By iterating between visualized options and stakeholder feedback, *Building Narratives* helps maintain direction while keeping the design responsive to emerging conditions.

A SPECTRUM OF COMPLEXITY IN PRACTICE

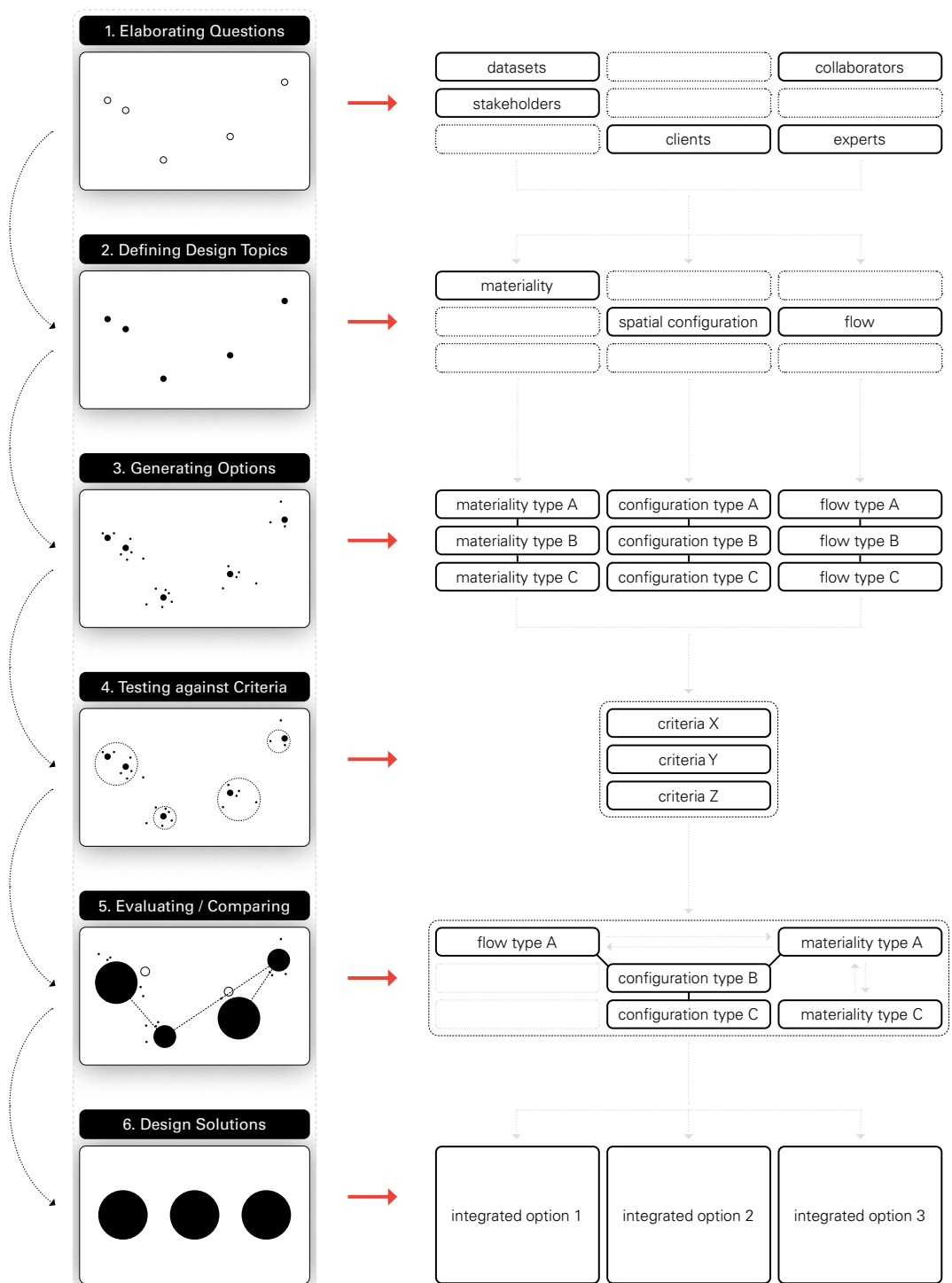
The three case studies examined in this book occupy different positions along a spectrum of architectural complexity – from defining what to design, to determining how to deliver this, to keeping both in motion simultaneously.

SPOT, a market-driven redevelopment in Amsterdam's Zuidooost district, unfolded in a context where neither requirements nor development strategy was fixed at the outset. Fragmented land ownership, overlapping private interests, and changing market conditions meant that design became a tool for shaping the project's very purpose. Early proposals functioned less as final schemes and more as frameworks for discussion, testing spatial and programmatic possibilities to expose the implications of these. Drawings and diagrams made trade-offs visible, allowing stakeholders to identify shared ground while keeping the process open to adjustment.

NACH began from the opposite condition: a detailed brief and stable requirements defined through a DBFMO contract. Here, the challenge was not to decide what to build, but to integrate an intricate set of technical, spatial, and institutional demands into a coherent civic form. Design communication became an instrument of alignment, translating specialist knowledge into a shared architectural language. Representation served to identify conflicts early, maintain coherence across parallel work streams, and preserve design intent within a procurement system driven by performance metrics.

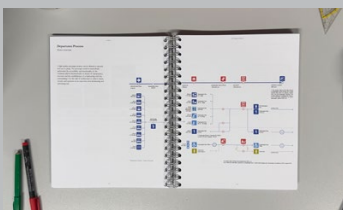
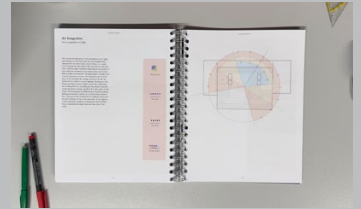
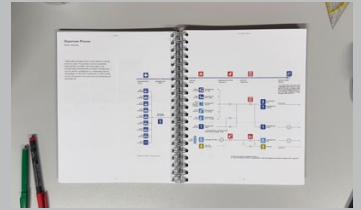
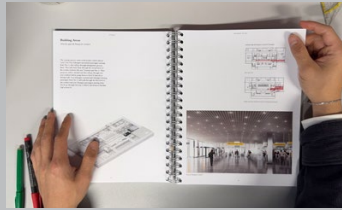
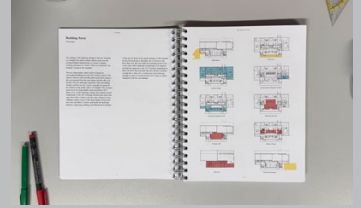
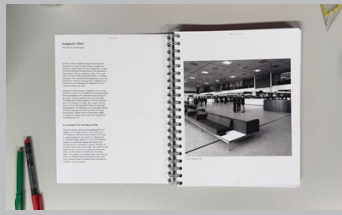
At Schiphol Airport's Terminal, both parameters were in flux. Technical systems, regulations, and operational ambitions shifted repeatedly, sometimes calling into question the very premise of the project. Design, therefore, operated as a process of continuous coordination, maintaining direction while absorbing change. Each revision triggered new rounds of drawing and discussion; architecture became the medium through which uncertainty could be organized, rather than eliminated. Seen together, these cases describe a gradient of architectural reasoning. SPOT negotiates collective purpose; NACH integrates difference within order; Schiphol activates coherence in motion. Each reveals a distinct way of working with complexity, negotiation, integration, and activation, yet all rely on narrative to keep multiple actors moving together without losing a sense of the whole.

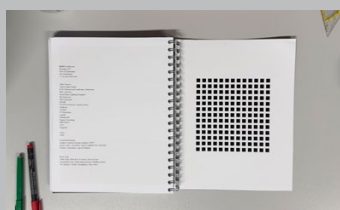
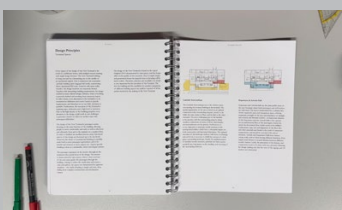
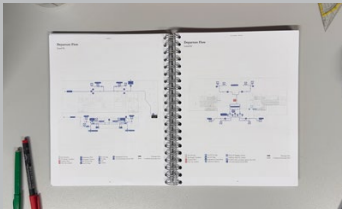
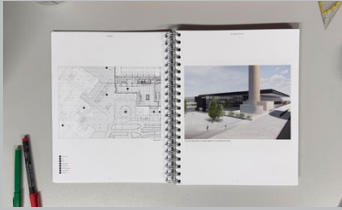
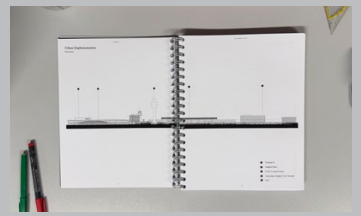
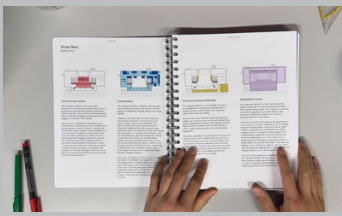
¹¹ Rowe, P. G., & Chung, Y. (2024). *Design Thinking and Storytelling in Architecture*. De Gruyter.



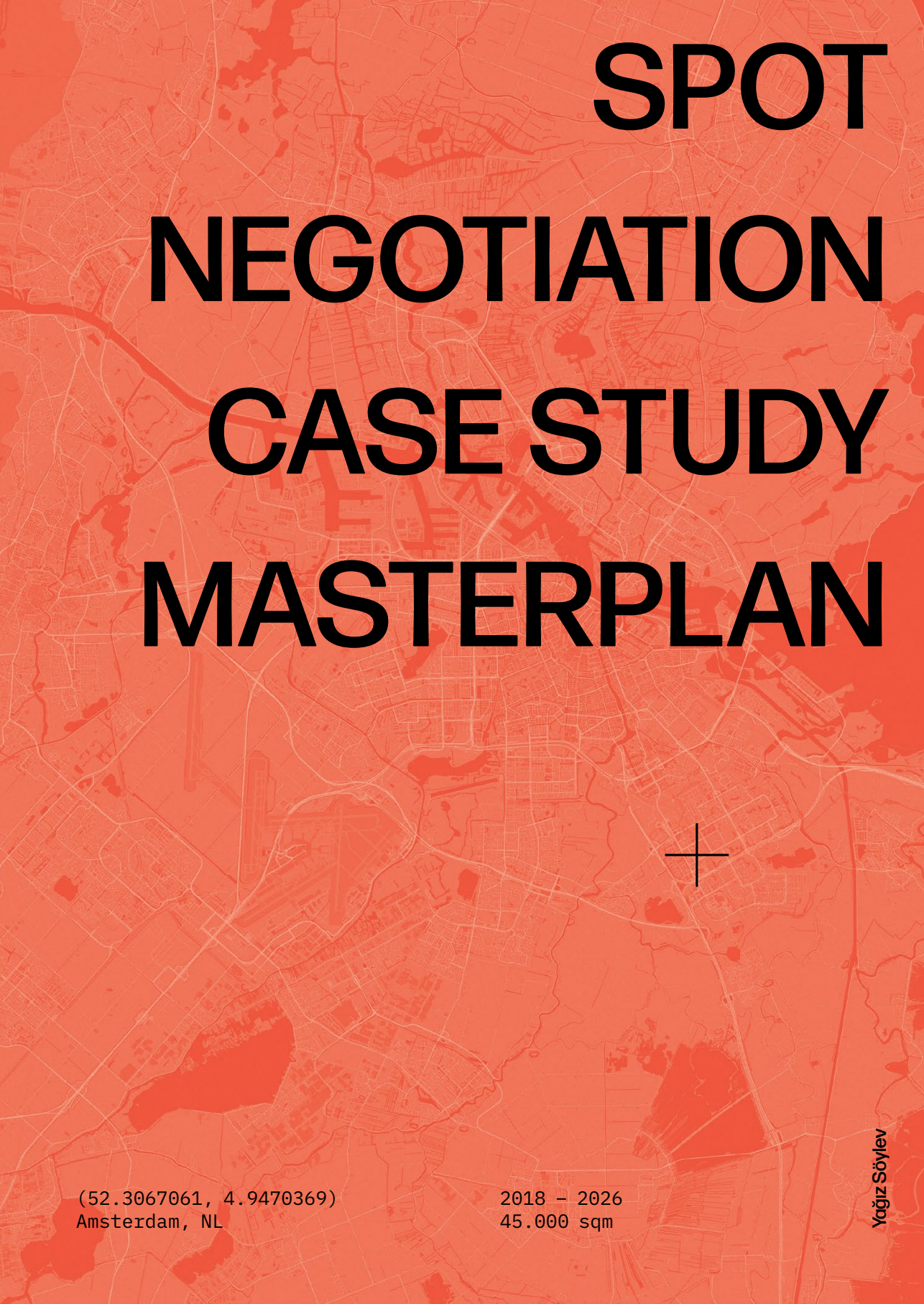
↑ The optioneering process: parallel options tested against criteria, with feedback loops that grow project knowledge and keep every decision traceable.

→ Schiphol Terminal A Competition process booklet





**SPOT
NEGOTIATION
NACH
INTEGRATION
SCHIPHOL
ACTIVATION**



SPOT NEGOTIATION CASE STUDY MASTERPLAN



(52.3067061, 4.9470369)
Amsterdam, NL

2018 – 2026
45.000 sqm







Amsterdam's Amstel III in 2016 was a district in transition: a landscape of 1980s office buildings along Hogehilweg, increasingly vacant despite clear locational advantages. It was an area waiting for direction – one that neither municipal planning nor private development had yet managed to clearly define. When Revital Investments approached KAAN Architecten and Inside Outside, the ambition was not simply to increase density, but to establish the conditions for meaningful transformation itself. The resulting project, SPOT, operated less as a fixed masterplan than as a flexible framework for negotiation: a flexible urban formula applied plot by plot, gradually reshaping not only the site, but also the Municipality's long-term strategic approach to the district as a whole.

SPOT emerged at a distinctive moment in Dutch urban development, following the 2008 financial crisis. From 2008 to 2015, Amsterdam halted expansion planning due to the collapse of the housing market; this led to institutional uncertainty that neither government planning nor private development was able to resolve. SPOT represents an approach that arose from necessity during a period of planning stagnation, when Amsterdam's planning focus shifted to infill spaces around the ring road (through a plan known as *Koers* [English: Course] 2025). The Zuidoost district was off the municipal urban planning map and received little attention. Architects helped developers gain momentum and advance negotiations in this overlooked area. When economic recovery began around 2015-2016, multiple developers acquired positions in Amstel III, prompting the Municipality to



↑ Office complex on Hogehilweg. An archival view (1986) of Amstel III's office landscape. Source: Stadsarchief Amsterdam
← Existing office buildings on Hogehilweg, Amstel III

pay attention. This led the Municipality to scale up and create capacity in order to guide projects through a form of ‘co-creation’. The City of Amsterdam consequently identified Amstel III as a strategic opportunity: mid-size office buildings of approximately 3,000 square meters, surrounded by ground-level parking, were experiencing increasing vacancy levels despite their location advantages. The Municipality aimed to build 15,000 new homes in Amstel III by 2040, requiring coordination approaches that could align private initiative with public planning objectives while maintaining architectural quality across multiple phases.

Unlike most Amsterdam developments, where municipal authorities own the land through a long-term ground lease system known in Dutch as *erfpacht*, SPOT originated from a different ownership structure. Revital Investments held six ground leases covering seven buildings in ownership within the sixteen-plot area. Through the ground lease contract, the Municipality retains control over developments; however, the fragmented ownership creates conditions that require new planning coordination approaches. Revital adopted a plot-by-plot strategy, beginning with one building and the associated ground lease. The Municipality initially showed limited interest in facilitating larger development. Through strategic acquisition of

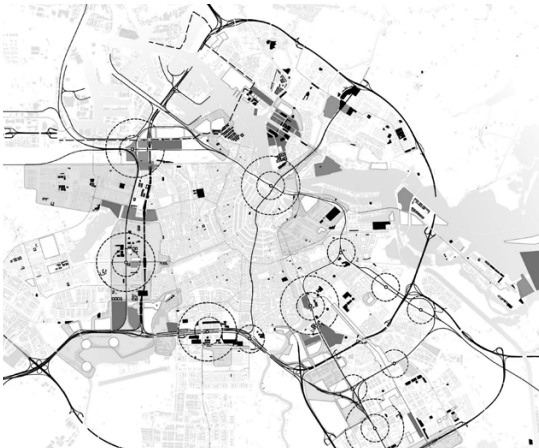
additional plots, combining lease transfers with building ownership, Revital established sufficient scale to be recognized as a serious development partner. This consolidated ownership created critical mass that enabled financially viable development, providing space for adequate parking, high-rise construction and larger programme-related functions.



The site’s situation on the Southern flank, an economic corridor from Schiphol through Zuidas to Amstel III, provided strategic advantages and created potential to densify and establish an integral urban area through logical urban planning based on mobility and infrastructure. Fragmented ownership meant architectural narratives needed to function simultaneously in relation to individual plots, developer-controlled clusters, and wider district transformation scales.

FROM CLUSTERS TO FRAMEWORK

Site analysis revealed that office buildings were already arranged in clusters (of two, three, or four) around central parking lots, giving a basic neighbourhood feel despite the monotony of the building programme. KAAJ Architecten recognized this clustering as a creative constraint, developing an incremental method that works within fixed boundaries and builds upon existing



^ Project plot in relation to infrastructure: an accessible new destination.

† Koers 2025 location overview: strategic development across Amsterdam. Source: Ruimtelijk- en programmatisch Ontwikkelperspectief Amstel III.

conditions, instead of clearing sites. Feasibility studies revealed that conventional approaches were insufficient: simple residential additions would yield inadequate density, while complete office-to-housing conversions would contravene employment preservation requirements. The cluster approach could optimize density while restoring essential office functions and creating cohesive public spaces from existing parking areas.

The landscape design and architecture of tower bases went hand-in-hand to define a new atmosphere and identity. The concept was to blend inside and outside, creating a continuous world. Inside Outside developed solutions for entry zones, bicycle parking, sports facilities and playgrounds, and multi-level planted gardens that addressed wind and water retention issues created by the tower configurations. This landscape infrastructure was essential for creating liveable public spaces between the towers and managing the environmental challenges of high-density development.

A key strategic goal was to develop an approach compelling enough to attract neighbouring private landowners to adopt similar transformation methods, thereby enabling district-wide coordination beyond Revital's six plots. The team developed visual communications strategies, three-dimensional diagrams, section studies, massing models, and illustrations of cluster transformation without compromising spatial logic. These visual representations were crucial in helping stakeholders understand complex spatial relationships and development possibilities.

DIAGRAMMATIC COMMUNICATION

Instead of typical architectural drawings, the team developed diagrams representing urban relationships, phasing strategies, and stakeholder roles as active negotiation instruments: *Cluster Diagrams* – Three-dimensional representations showing existing office building

relationships and transformation potential while maintaining spatial logic. These enabled stakeholders to understand how private development on six plots could catalyse broader district transformation. *Phasing Visualizations* – Time-based diagrams showing incremental development and continued coherence, allowing municipal planners to understand the integration of private initiative with district planning. *Programmatic Mapping* – Diagrams showing the distribution of functions (residential, office, retail, amenities) that meet market and policy requirements, supporting precise discussion of 40-40-20 housing policy implementation and 50-50 residential-employment balance goals. *Infrastructure Integration Studies* – Technical drawings showing how new development connections to transport networks, utility systems, and green spaces demonstrate the contributions to infrastructure goals.

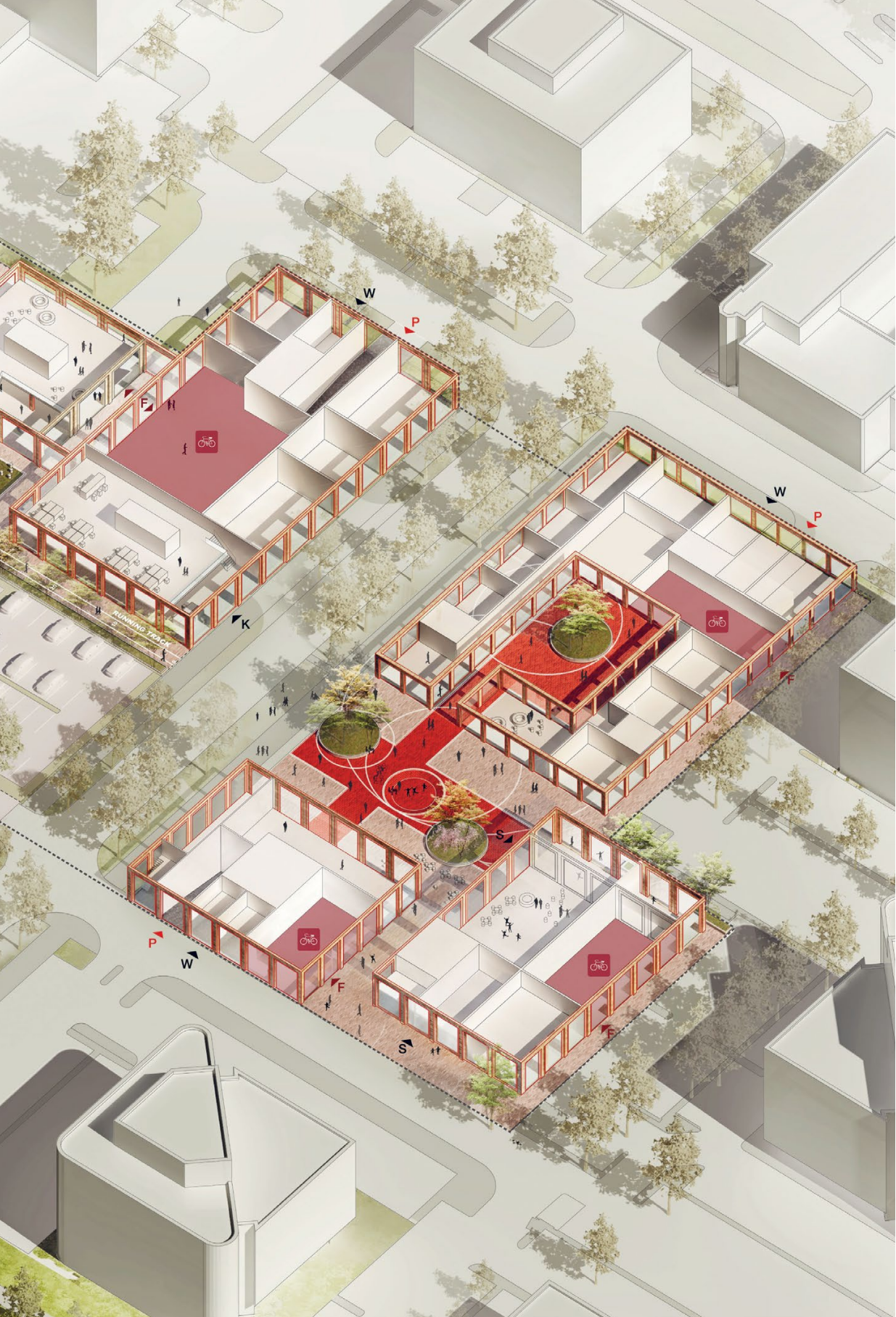
IMPLEMENTATION FRAMEWORK

By 2017, after the City of Amsterdam had set up an Amstel III planning office, KAAAN Architecten developed cluster concepts into technical frameworks. Working with the Municipality meant turning design ideas into implementable spatial strategies, coordinating with district planning and giving flexibility to private projects. For practical implementation, the project was divided into three sub-plots (X, Y, Z) serving multiple functions: The sub-plot division addressed phasing based on market conditions and finance, coordinated basement structures and shared infrastructure, ensured even programme distribution to maintain functional coherence, structured municipal permit and land-use regulation discussions, and established shared utilities, parking, and public space infrastructure planning.

The plot division strategy provided as a spatial framework that neighbouring property owners could replicate, showing how transformation could extend beyond Revital's six plots to achieve district-wide coordination. The division

→ Framed courtyards, colonnaded edges, and connected ground-level designed in collaboration with Inside Outside







into three sub-plots (X, Y, Z) focused on phasing needs, with earlier decisions having been made on distribution in relation to the building programme according to location and municipal requirements for variety.

Residential focus reflecting the position away from the main Hogehilweg corridor, accommodating high density while maintaining required office functions at podium level.

Higher office concentration due to the strategic Hogehilweg location, with flexible building configurations accommodating market-responsive residential-to-office ratios.

Similar mixed programming as the other plots, but distinguished by school and community facilities, with technical coordination ensuring private development timing aligned with public facility delivery.

BUILDING TYPOLOGY AS URBAN LANGUAGE

Architectural decisions regarding building form served as communication devices addressing multiple stakeholder concerns. Rather than Amsterdam's typical perimeter blocks, the project adopted a tower-and-podium approach, with residential towers varying in height from 16 to 100 meters, typically located above

multifunctional podium buildings. The tower typology maximizes floor area and unit count for market viability while maintaining office space, commerce, amenities and housing at podium level. Varying heights enable market differentiation; taller towers command higher prices, while shorter configurations provide affordable housing options. Block sizes were designed to maximize living qualities such as variation, views, daylight, and human scale while maintaining functionality and efficiency, and providing proper landings for the high-rise

towers, creating a diversity of building types that prioritizes spatial variety and residential quality. Buildings and towers are positioned to create a variety of public spaces ranging from paths, streets, and courtyards to squares, with tower separation distances providing residential privacy while maintaining visual connections across the development.

AMSTERDAMSE LAAG

The conceptual framework divided development into three zones: the base layer (known in Dutch as the *Amsterdamse laag*); intermediate structures; and high-rise towers. This stratification served as an architectural language intelligible to the various stakeholders, accommodating diverse programmes and enabling coordination across multiple development phases. The *Amsterdamse laag* referenced traditional urban fabric while adapting to contemporary density requirements. At street level, building elevations referenced traditional Amsterdam proportions to maintain human scale. Retail, commercial, and community functions activated ground-level public spaces, while building entrances, parking access, and utility connections were coordinated with urban infrastructure. Materials and proportional systems were kept sufficiently

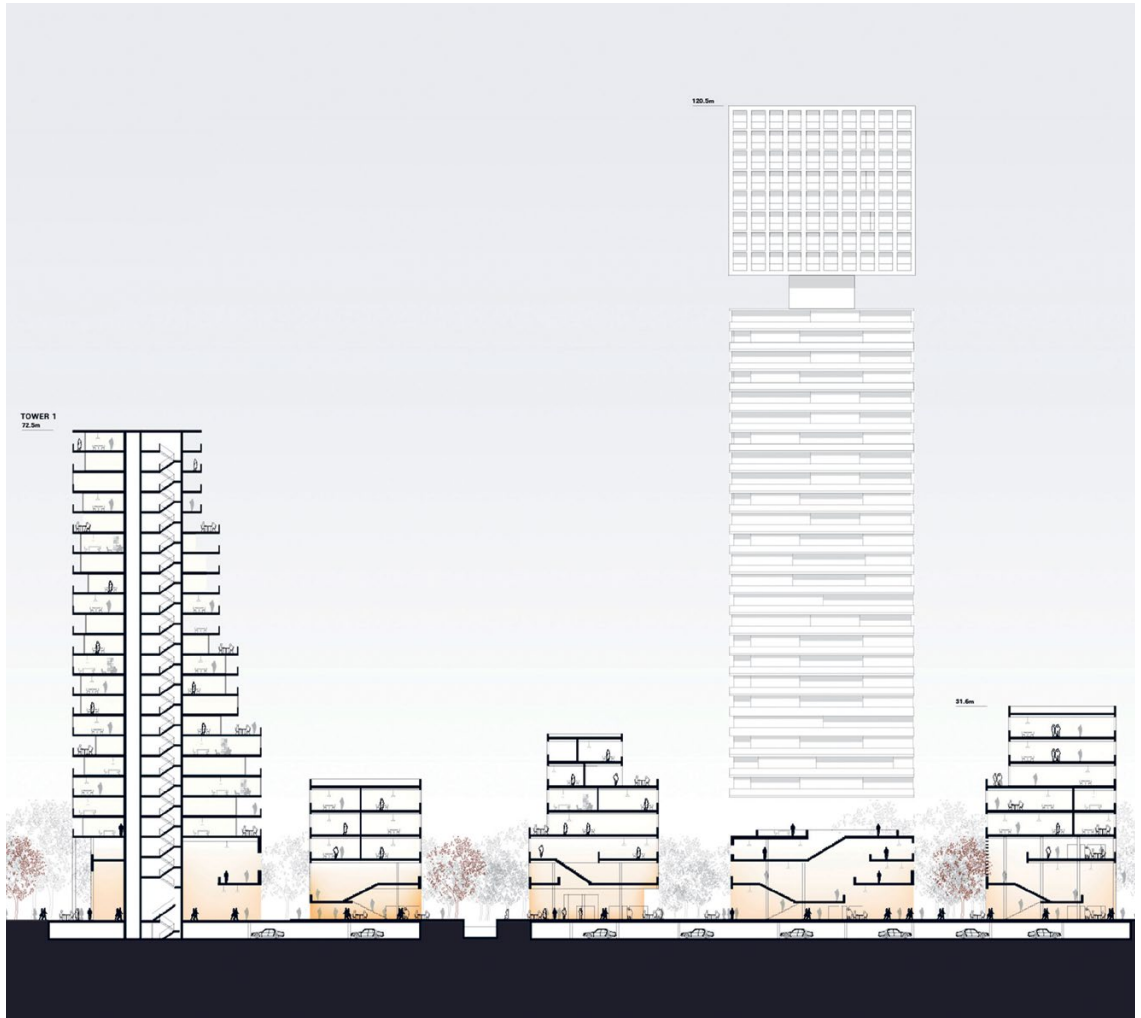
↑ Site plan

open to be interpretable by different architects while maintaining visual coherence across the district. Intermediate structures provided transition zones between the Amsterdamse laag and towers, typically accommodating office functions as architectural mediators between development scales. High-rise towers established landmark elements, achieving density goals while their varying heights and strategic placement created visual markers across the district. This three-layer system facilitated communication between preservation of the

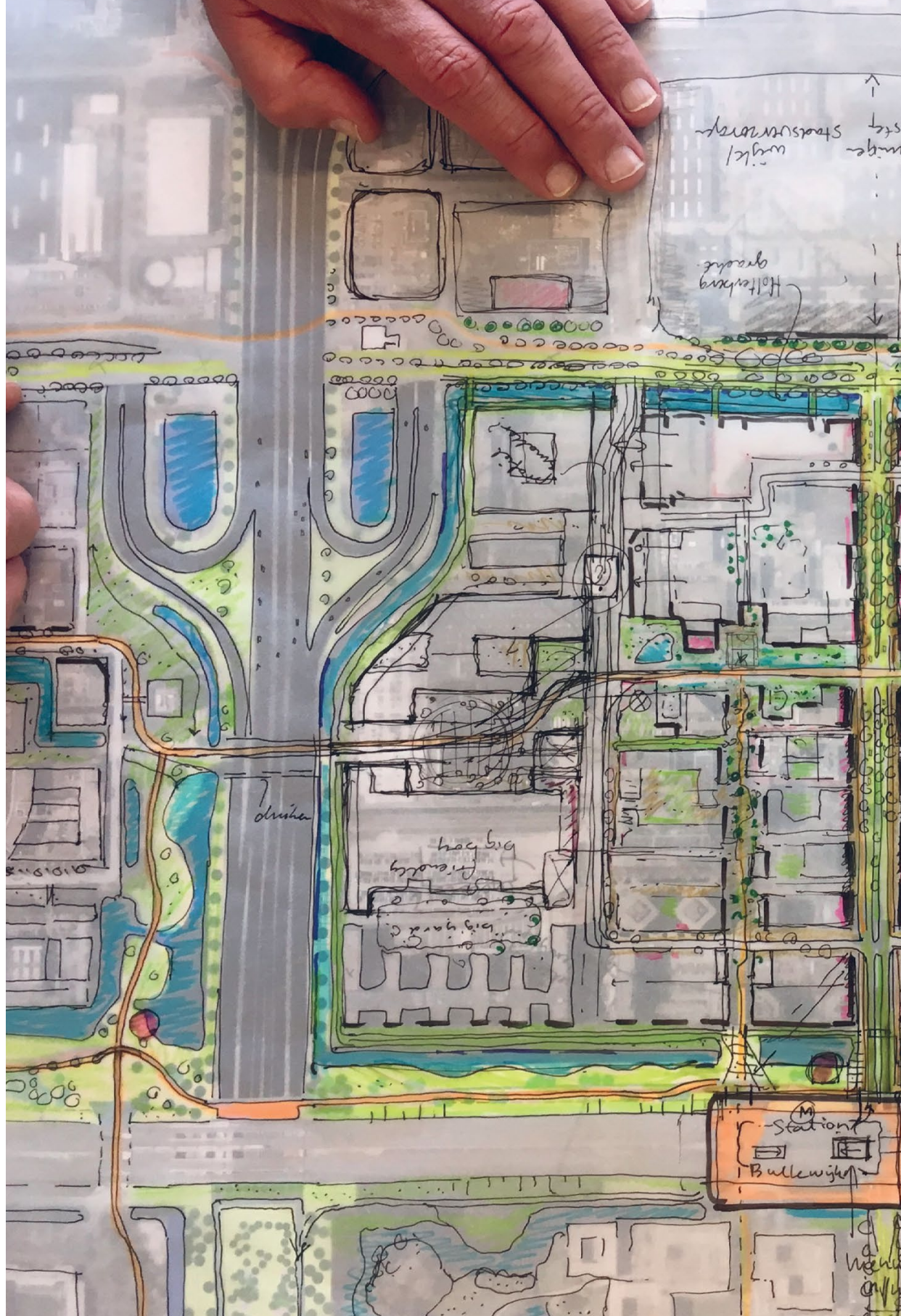
urban character and acceptance of transformations of scale, providing a shared vocabulary for discussions on architectural quality across multiple development phases among different architects.

PLOT PASSPORTS

Translating architectural narrative into implementation guidelines required specific techniques that could function across multiple development phases and architectural teams. The architects abstracted design principles



- ↑ Three layers of the section: podium, intermediate structures, and towers of varying heights
- In-meeting trace overlay from the participatory design process.



Wijk/
Stadsuurswys

Hollend
gracht

drusha

hag
bry
bry

Station

Bullewicht

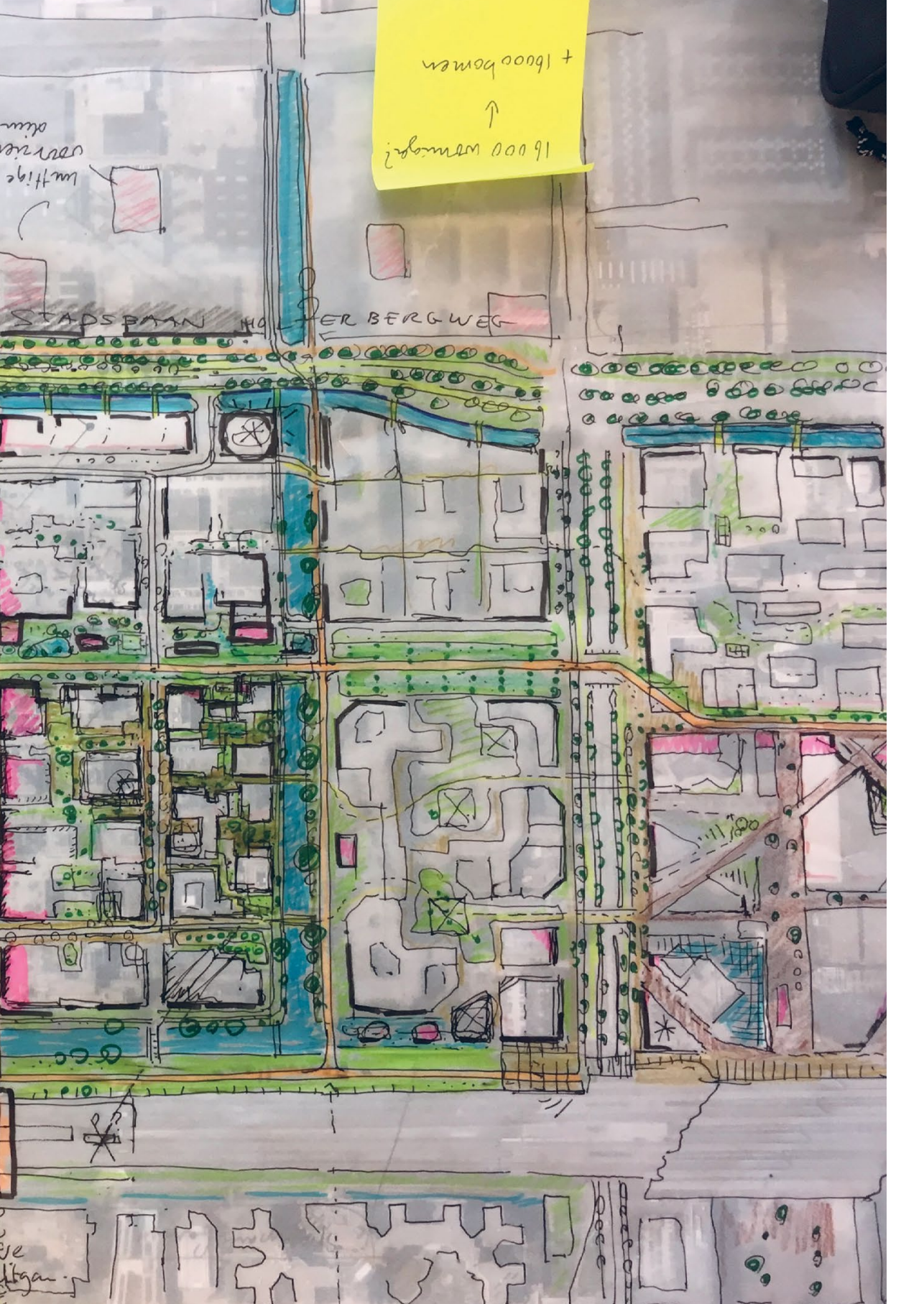
Wijk
in

16000 wohnfläche
↑
16000 bomen

luftige
verweil
fläche

STADSPARK

DER BERG WEG



into technical guidelines addressing building height, setbacks, tower distances, public space requirements, architectural materials, and other parameters. The Municipality adopted these guidelines into formal 'plot passports' (Dutch: *kavelpaspoorten*), a regulatory tool that Amsterdam started using in the 2010s to specify buildable envelope, programme requirements, and design parameters for each parcel. This reversed Amsterdam's usual development sequence, whereby municipal authorities establish regulations before design begins. In SPOT, market-driven design established technical parameters through a process of 'co-creation' between government and market parties, and these subsequently formalized into rules. 'Plot passports' functioned as narrative translations, converting design intentions into implementable technical requirements while maintaining flexibility of architectural interpretation. Each plot passport included:

Technical Specifications – Buildable envelopes, maximum heights, minimum setbacks, floor area ratios derived from architectural framework studies. *Programme Requirements* – Specific residential, office, retail and community function mixes, based on district planning goals



and market analysis. *Architectural Guidelines* – Materials palettes, facade proportions and design principles maintaining visual coherence while enabling creative interpretation. *Infrastructure Standards* – Parking ratios, utility connections and public space contributions required for each development plot. *Phasing Coordination* – Technical requirements for coordination with adjacent developments and shared infrastructure systems.

DESIGN SUPERVISION AS NARRATIVE GOVERNANCE

By 2018-2019, as construction commenced, a crucial challenge emerged: maintaining design quality and narrative coherence across multiple architects and development phases, while enabling architectural diversity and market responsiveness. The Municipality appointed a design supervisor; a governance innovation functioning as a 'narrative guardian' for the technical framework. This supervisor operated with considerable independence within the Municipality, enabling active pushing of municipal departments to make decisions and accelerate processes when project momentum required this. The supervisor's role required an understanding of both architectural design and urban development processes: reviewing architectural proposals for framework adherence while enabling creative interpretation, facilitating dialogue between different architectural teams to ensure compatible solutions, managing technical modifications as conditions evolved, and translating between architectural decisions and broader stakeholder concerns about neighbourhood development. This created a mechanism for maintaining architectural narrative continuity while allowing creative interpretation. The position managed translation between original architectural narrative and implementation by different design teams, ensuring decisions remained aligned with shared transformation goals while accommodating new insights and changing conditions.

↑ The SPOT massing model as a collaboration tool



NEGOTIATION AS DESIGN PROCESS

Programme function distribution required technical solutions to municipal policy requirements while maintaining market viability. Amsterdam's long-term vision for Amstel III aimed for a 50-50 residential-employment balance; however, successful transformation initially required a predominance of housing to ensure neighbourhood viability. The programming strategy recognized this temporal challenge: housing needed to predominate initially, sufficiently to support neighbourhood amenities such as supermarkets, a local school and daycare centres, with office development compensating later to achieve the fifty-fifty balance. The housing programme incorporated Amsterdam's 40-40-20 policy requirements (40% social housing, 40% mid-range housing, 20% expensive owner-occupied housing), but for SPOT this was adjusted to 10% social housing, 55% mid-range housing, and 35% free-market housing. This adjustment reflected the existing large amount

of social housing in the Amsterdam Zuidooost district (Bijlmer) and aimed to make development financially more feasible, while generating alternatives for residents who wanted to move from social housing to mid-range rental or ownership. This approach balanced market-driven development with public policy objectives through a phased strategy adapting to changing conditions.

MARKET ADAPTATION AND TECHNICAL EVOLUTION

The market's response to SPOT's initial development required ongoing adaptation of the architectural framework. As residential demand exceeded projections and market conditions for office space shifted, the balance between residential and employment functions needed to be adjusted, while maintaining a commitment to long-term district planning goals. Technical modifications included:

→ Programme Flexibility:

Adjusting the rigid 50-50 residential-employment balance, accommodating market conditions while maintaining overall district diversity.

→ Phasing Adaptation:

Accelerating certain development phases while delaying others based on infrastructure capacity and market demand.

→ Typological Innovation:

Developing hybrid building types accommodating changing programme requirements over time.

→ Infrastructure Scaling:

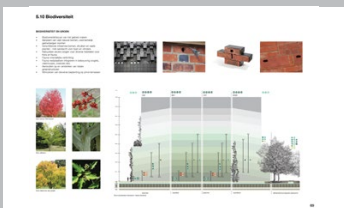
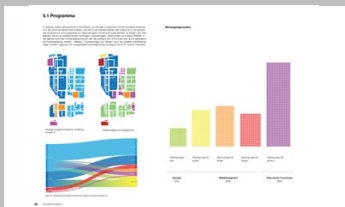
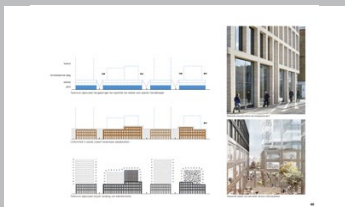
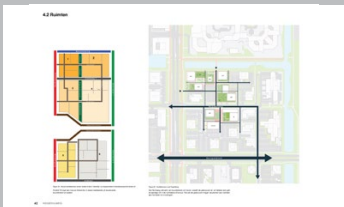
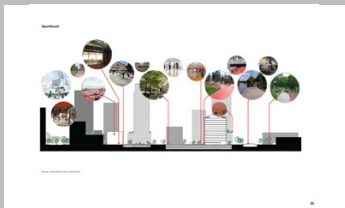
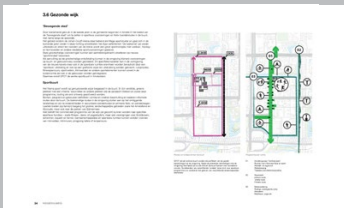
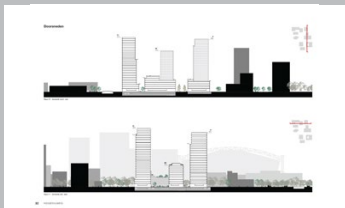
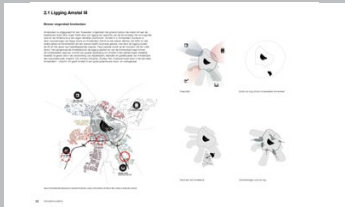
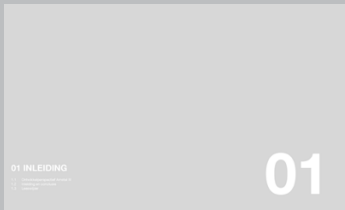
Expanding utility and transportation infrastructure supporting higher than anticipated development densities.

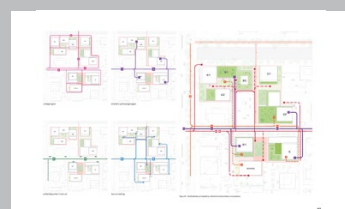
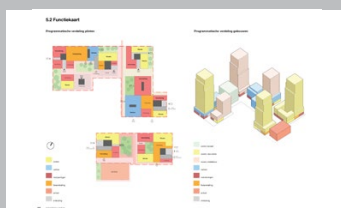
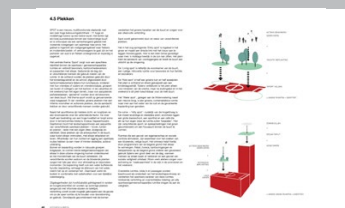
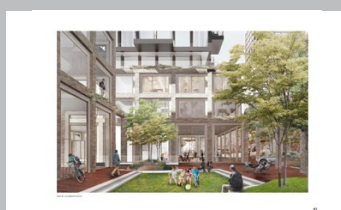
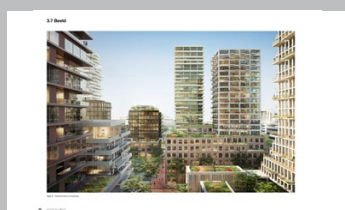
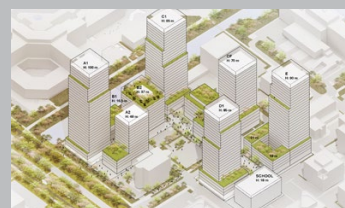
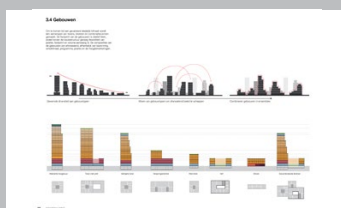
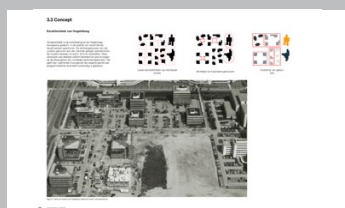
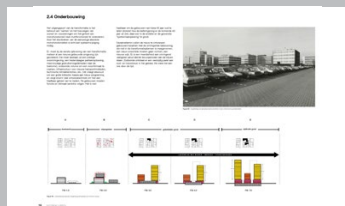
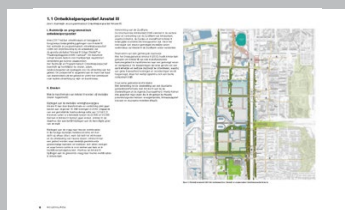
OUTCOMES

SPOT demonstrates how specific architectural techniques facilitate meaningful stakeholder participation, encompassing diverse expertise, interests, and authority, in urban development

↖ An early rendering of the podium and towers

→ Pages from the SPOT Project Booklet, 2018







decisions. This approach – cluster-based urban conditions, plot division frameworks, building typologies, and regulatory innovations – proved particularly powerful in bridging differences in architectural knowledge and professional language. The project reveals several insights concerning building narratives.

Spatial analysis of existing conditions, the office clusters, parking arrangements, and infrastructure, became generative rather than merely constraining, providing the guiding logic for new development strategies. Specific architectural forms, particularly the tower-and-podium configuration and the Amsterdamse laag, functioned as shared languages through which complex trade-offs between density, quality, and economic viability could be discussed across different teams and phases. The adaptation of the plot passports system showed how existing regulatory frameworks can be modified to fit specific development contexts, maintaining narrative coherence while allowing flexibility of implementation. And the phasing strategies

themselves operated as a form of temporal narrative, sequencing development in ways that accommodated changing market conditions without abandoning the long-term transformation goals.

NEGOTIATION AS CONTINUITY

By 2017, growing interest in the Amstel III district led The City of Amsterdam to establish a *Spatial and Programmatic Development Perspective* – a framework intended to guide private initiatives in the area. This document outlined transformation goals for the district and set out programmatic guidelines. During the same period, SPOT's master plan was still in development (completed in 2018), creating a two-way exchange: the municipal framework partly drew on lessons from SPOT, while SPOT in turn had to respond to the City's broader ambitions. This reciprocity demonstrates how architectural projects can inform planning instruments without being subsumed by them.



^ Stepped volumes, balconies, and shared outdoor spaces.

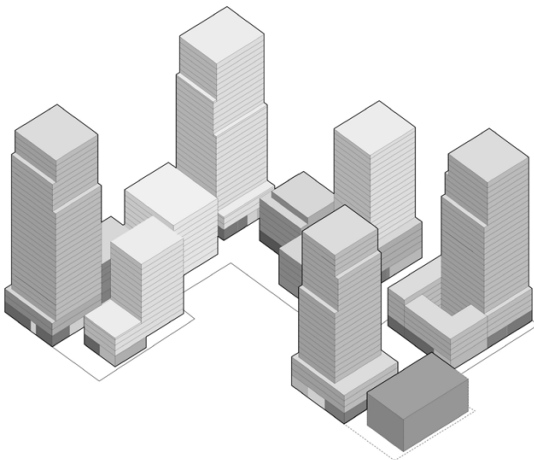
† Framed courtyards, colonnaded edges, and connected ground-level.

The negotiation that shaped SPOT continued on a different scale, where its methods – the cluster logic, the plot frameworks, the diagrammatic tools – informed municipal thinking about transformation elsewhere in Amstel III. The adaptation of the plot passports system and the introduction of a design supervisor provided tangible means for managing complexity while retaining narrative continuity across phases and actors.

The reconfiguration of Hondsrugweg into a linear park, first proposed within the SPOT framework and later adopted by municipal planners, illustrates how an idea tested in one project can become infrastructure for a larger territory. This transformation reframed the perception of the area: what had been an anonymous office strip became part of a connected public landscape. Rather than a catalyst in the promotional sense, SPOT functioned as a prototype that exposed the conditions under which coordination between private initiative and public planning could occur. By the time the project's public identity – *SPOT*, 'from anywhere to somewhere' – was introduced in 2018, this no longer referred only to a real-estate brand,



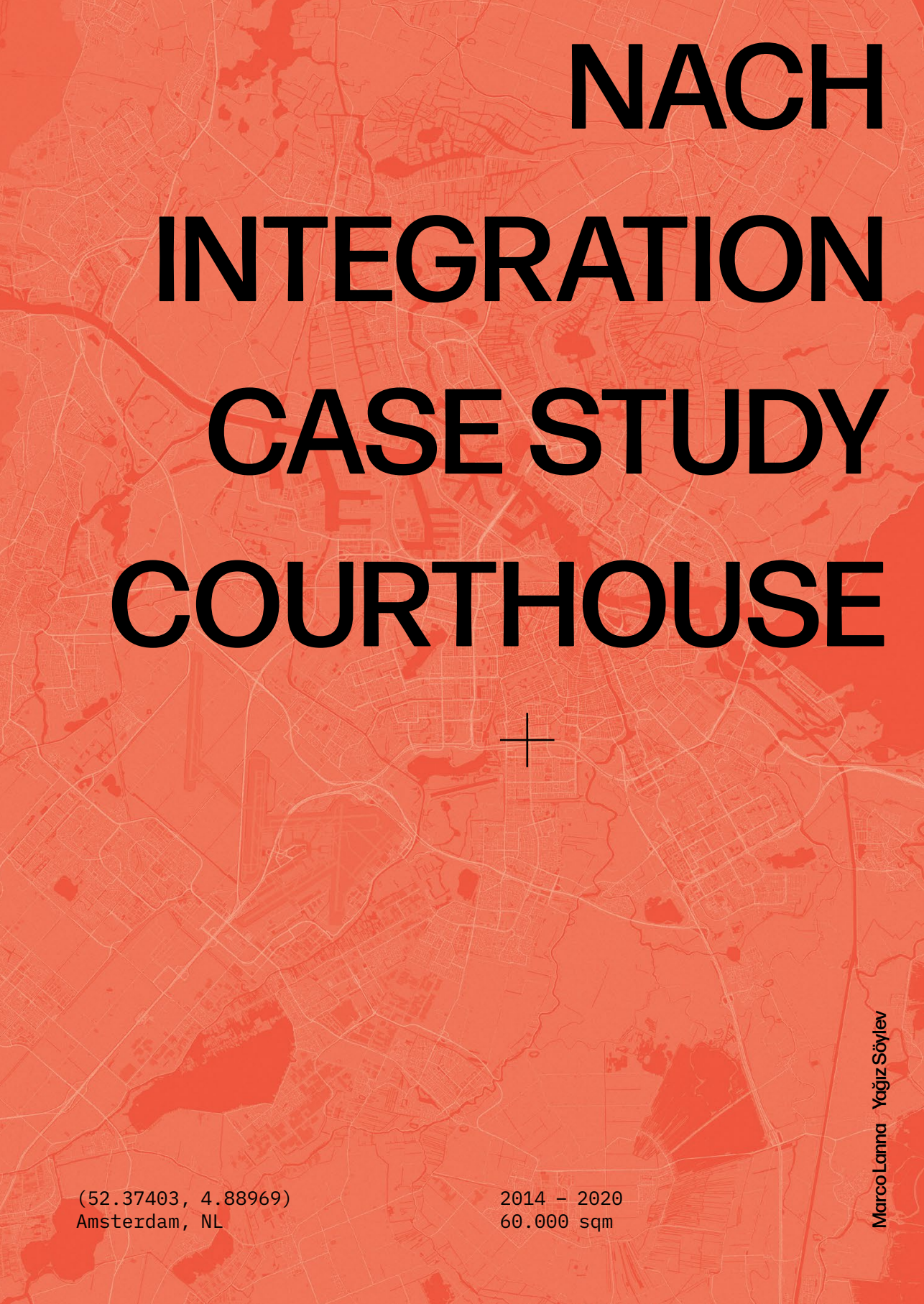
but to a collective narrative that communicated the area's shift in meaning. The act of naming became part of the negotiation: a way to hold together multiple design teams, phases, and public stakeholders under a shared story, while acknowledging the fluidity of the process. SPOT showcases negotiation not as a managerial phase before design, but as an architectural condition that extends through all scales of the project – from plot to district, from drawing to policy. Through its incremental consolidation of ownerships, frameworks, and agreements, the project demonstrates how spatial design can sustain dialogue among actors whose interests rarely align completely. In this sense, SPOT is less a finished environment than an evolving framework. Its architectural language and regulatory instruments continue to guide subsequent developments in Amstel III, suggesting that narrative can operate not only as description or persuasion, but also as shared ground on which urban transformation remains open to revision.



- ↖ Spatial narrative framework for incremental development
- ↑ SPOT as brand and curated project imagery
- SPOT under construction, 2021







NACH INTEGRATION CASE STUDY COURTHOUSE



(52.37403, 4.88969)
Amsterdam, NL

2014 – 2020
60.000 sqm







A courthouse must be open and secure, authoritative and accessible, transparent and private. These are not contradictions to be resolved but conditions to be held together. The Amsterdam Courthouse, procured through a DBFMO contract binding a consortium to thirty years of design, construction, and operation, presented exactly this challenge: how to turn competing institutional demands into a coherent civic form. Where SPOT relied on informal negotiation in a market-driven context, NACH embedded structured dialogue in the partnership from the outset. The project's answer was to treat contradiction not as a problem but as the architectural opportunity itself.

Both projects operate within Amsterdam's shifting governance landscape, yet they occupy different positions on the spectrum. Where one arises from bottom-up market initiatives, the other involves top-down institutional control. Dialogue processes in SPOT suggest design as an 'interface' for stakeholder negotiation. By contrast, NACH embeds structured dialogue in the partnership, making conversation a systematic method for delivering complex projects. The Courthouse project demonstrates how seemingly conflicting institutional requirements can be integrated into coherent architectural solutions through structured dialogue. This is the project's main methodological contribution: transforming competing demands, which previously relied on compromise, into spatial strategies that simultaneously satisfy multiple objectives. Instead of treating institutional requirements, urban constraints, and operational needs as separate issues, the NACH process finds ways for such challenges to reinforce one another in architectural solutions.

PROJECT INITIATION

The NACH project began when the Dutch judiciary (Dutch: *De Rechtspraak*) and the government agency that owns Dutch judicial buildings (Dutch: *Rijksvastgoedbedrijf*, RVB), recognized that the facilities could no longer handle the rising number of cases. In response, RVB initiated the development of new courthouse facilities. Acting as a 'delegated developer' for end users, the RVB is responsible for processes such as site selection, programme definition, and contract form. For large projects like NACH, the government sometimes spreads costs over several years. Since 2005, RVB has applied a procurement model from the infrastructure sector: the Public-Private Partnership (PPP), based on a DBFMO contract. During NACH's feasibility stage, RVB's in-house architects performed preliminary massing studies for the programme. While still modest at the time, this practice is now more commonplace, with RVB occasionally tendering projects only after developing a draft design internally.

← NACH in urban context, 2021

For this contract, a consortium formed by a General Contractor, a Facility Management (FM) and Maintenance provider, a Financing party, and a Design Team (Architect and Engineers) was assigned the contract to design, build, maintain, and operate the building for a period of 30 years, and to finance these costs.

The Government pays the consortium every year, and on top of that the consortium earns revenue from catering and other paid FM services. Following some preliminary studies, the RVB launched a call for applications in 2014. Five teams were formed and selected, but three of these pulled out immediately after the start. Two teams made it to the end, and KAAAN Architecten was a member of the winning team. At the moment of the competition launch, RVB provided a comprehensive database containing all functional, technical, and service-oriented requirements. This system served as dynamic framework for coordination throughout the process, and remains operative during the 30-year operation phase.

This extended contractual relationship fundamentally altered the design challenge. Unlike traditional procurement, where separate parties

optimize their contributions, the DBFMO structure creates incentives for holistic thinking across the design, construction, and operational phases. The 30-year timeline meant that design decisions would be evaluated not just for their initial performance, but also for their capacity to maintain coherence over extended periods and changing circumstances.

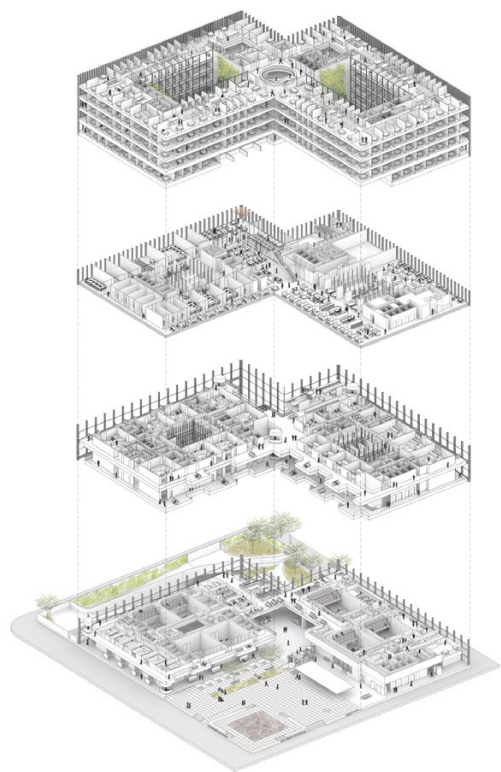
DESIGN CHALLENGE: THE FOUR REQUIREMENTS

The design responded to the four keywords stated by the RVB in its ambition document, and reacted specifically to the urban context of Amsterdam's Zuidas district. The keywords were: *Visible* – The public function of the Courthouse should be visible from outside the building. *Recognizable* – The building should be recognizable as a public building and an expression of the democratic State among the corporate real estate of the area. *Authoritative (Dutch: Gezagwekkend)* – The building should convey authority, while remaining accessible to users. It should not induce fear in visitors. *Functional* – The building should accommodate the required spaces and, most importantly,



¹ Chabard, P (2022). Architecture as dialogue. In K. Kaan & A. Colombo (Eds.), Portraits: 15 buildings KAAAN Architecten (pp. 189–204). Park Books.

[↑] Demolishing of the old Courthouse of Amsterdam (1975), designed by Ben Loerakker. Photo: Dominique Panhuysen



the primary usage processes, which consist of codified sequences of actions that require dedicated circuits for different user groups. These requirements embodied fundamental tensions in contemporary judicial architecture: transparency versus security, authority versus accessibility, symbolic representation versus practical functionality. Rather than resolving these tensions through compromise, the challenge became to create architectural solutions that enhanced all requirements simultaneously. The Courthouse needed to be more visible, more secure, more authoritative, and more recognizable *because* it was more functional. This approach required design development that moved beyond literal interpretation and towards what Pierre Chabard identifies as the architectural figure of the 'oxymoron': 'the juxtaposition of two opposing elements

and exploitation of maximum tension between them'. The Courthouse had to embody authority and accessibility as seemingly contradictory yet mutually reinforcing qualities, whereby the achievement of one objective strengthens rather than compromises the others.¹

URBAN CONTEXT: ZUIDAS AND VAN EESTEREN'S LEGACY

Strategic Urban Position Zuidas is part of the New Key Projects (Dutch: *Nieuwe Sleutelprojecten*), a strategic national initiative aimed at developing areas near major transportation hubs. The area's importance extends beyond business. Zuidas station is a crucial transportation node, relieving Amsterdam Central station by taking on commuter and visitor traffic from the broader metropolitan region. This dual role, as both business district and transit hub, creates unique conditions for public building development. The area's development is closely tied to the A10 ring road, completed in the 1960s and '70s, giving Amsterdam-Zuid its infrastructure base. The Zuidas business district was designed in the 1980s and accelerated as a



↖ Exploded axonometric view of NACH, illustrating programme stacking and internal organisation

↑ Jakoba Mulder presents the first detailed plan of the revised AUP, 1962. © Nationaal Archief. Source: Stadsarchief Amsterdam / ANEFO

→ Jan Rothuizen, hand-drawn map of NACH with notes and observations. Published in *de Volkskrant*, 12 February 2024.

DE RECHTBANK VAN AMSTERDAM

DIT GEBOUW OP DE ZUIDAS IN AMSTERDAM MOEST VAN DE OPDRACHTGEVER GEZAG HEBBEN EN INDRUKWEKKEND WORDEN, GEZAGWEKKEND?

DE GEVEL IS VAN ONDEREN OPEN EN NAAR BOVEN TOE MEER GESLOTEN ZOALS EEN TOGA VERHULT HIJ DE MENSEN IN HET GEBOUW DIE HET 'ECHT VERTEGEN - WOORDIGEN

VOEL JE DAT? SPAANS MARMER

NOEMEN ZE HIER LIEVER NATUURSTEEN (KLINTK CHIQUE?) ALS JE DE 'TEKENING' IN DE STEEN SPIEGELT NOEM JE DAT VLINDEREN

SCHUIFHEK

DIKE AUTO MET DONKERE RAMEN RIJDT IN HOOG TEMPO NAAR BUITEN, GEVOLGD DOOR EEN ZWARTE AUTO

GEZICHTSBEDROG? VANUIT DE AUTO (OP DE A10) LIJKT HET GEBOUW TRANSPARANT ONDANKS AL DAT STEEN

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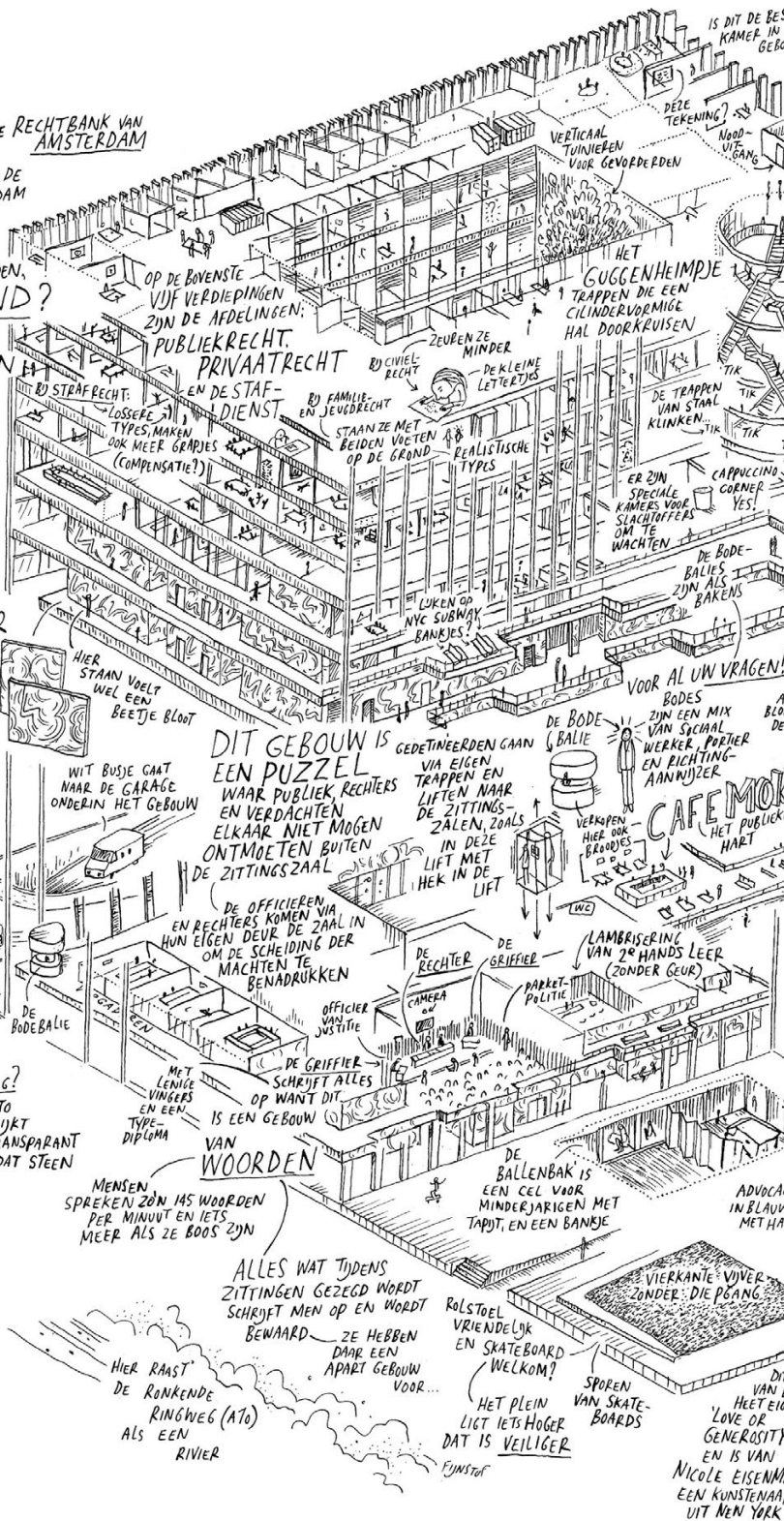
HIER RAAST DE RONKENDE RINGWEG (A10) ALS EEN RIVIER

ROLSTOEL VRIENDELIJK EN SKATEBOARD WELKOM? HET PLEIN LIGT IETS HOGER DAT IS VEILIGER

SPOREN VAN SKATEBOARDS

ADVOCATEN IN BLAUW MET HET HAAR

DIJ VAN HET EIGEN 'LOVE OR GENEROSITY' EN IS VAN NICOLE EISENMAN EEN KUNSTENAAR UIT NEW YORK



PUBLIEKRECHT PRIVAATRECHT

OP DE BOVENSTE VIJF VERDIEPINGEN ZIJN DE AFDELINGEN:
 RIJ STRAFRECHT:
 LOSSERE TYPES, MAKEN OOK MEER GRAPJES (COMPENSATIE?)
 RIJ CIVIEL RECHT:
 ZEUBEN ZE MINDER DE KLEINE LETTERTJES
 RIJ FAMILIE- EN JEUDRECHT:
 STAAN ZE MET BEIDEN VOETEN OP DE GROND
 REALISTISCHE TYPES
 LUKEN OP NYC SUBWAY BANKJES?
 DE TRAPPEN VAN STAAL KLINKEN
 ER ZIJN SPECIALE KAMERS VOOR SLACHTOFFERS OM TE WACHTEN
 CAPPUCCINO CORNER YES!
 DE BODE-BALIES ZIJN ALS BAKENS
 VOOR AL UW VRAGEN!
 DE BODE-BALIE
 ZIJN EEN MIX VAN SCHAALWERKER, PORTIER EN RICHTING-AANWIJZER
 VERKOPEN HIER OOK BEAARDJES?
 LAMBRISERING VAN 20 HANDS LEER (ZONDER GEUR)
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 DE GRIFFIER SCHRIFT ALLES OP WANT DIT IS EEN GEBOUW
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 OFFICIER VAN JUSTITIE
 CAMERA
 PARKEER- POLITIE
 DE BALLENBAL IS EEN CEL VOOR MINDERJARIGEN MET TAPJIT, EN EEN BANKJE
 VIERKANTE VLOER ZONDER DIE PGANG
 ROEST VAN HET EIGEN 'LOVE OR GENEROSITY' EN IS VAN NICOLE EISENMAN EEN KUNSTENAAR UIT NEW YORK

DIT GEBOUW IS EEN PUZZEL WAAR PUBLIEK, RECHTERS EN VERDACHTEN ELKAAR NIET MOGEN ONTMOETEN BUITEN DE ZITTINGSAAL

DE OFFICIEREN VIA EN RECHTERS KOMEN DEUR DE ZAAL IN HUN EIGEN OM DE SCHEIDING DER MACHTEN TE BENADRUKEN

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SCHRIFT ALLES

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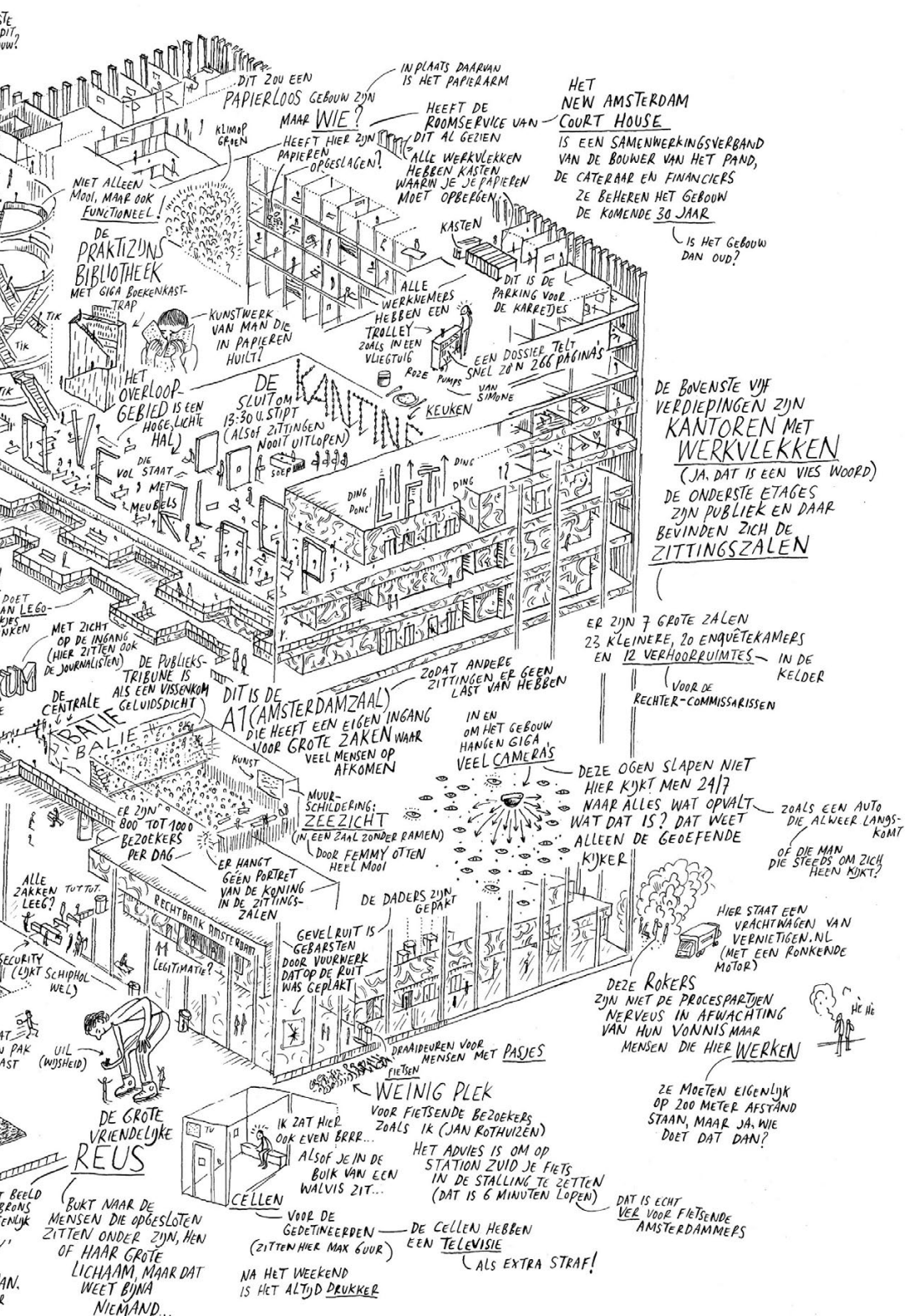
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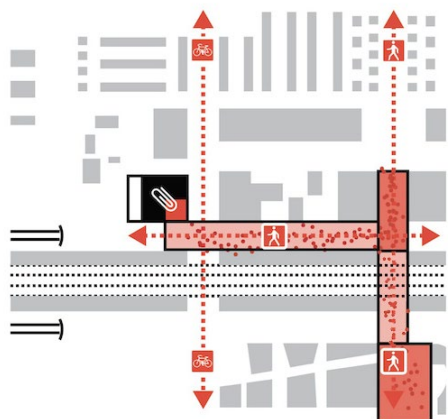
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VOOR...





national project during the 1990s, building on Cornelis van Eesteren's AUP (General Extension Plan) principles of accessibility and zoning. The Courthouse ties itself to a district shaped by modernist planning and late-twentieth-century infrastructure. The decision to locate the new Courthouse in Zuidas built on the fact that the previous facility already stood on this site. While RVB explored alternative locations, it ultimately opted to remain here for several reasons. This choice contributed to activating Zuidas by anchoring the area with a major public institution, and maintained continuity within the supply chain of the judiciary, since many law firms were already established nearby, in the Zuidas and Amsterdam Zuid districts.

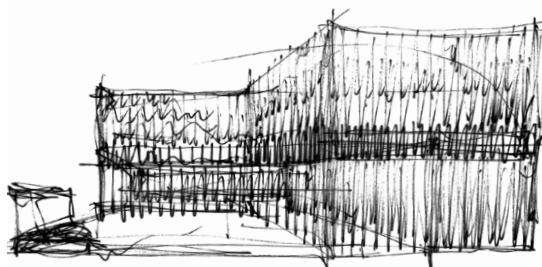
More broadly, the decision reflects strategic thinking about accessibility and positioning: unlike traditional courthouses embedded in historic city centres, this one affirms judicial presence within Amsterdam's most contemporary urban district, prioritizing connectivity and alignment with current patterns of regional mobility over symbolic ties to the old city core. Zuidas has developed into a district characterized by high-density office towers and the highest plot values in the Netherlands. This commercial context presented particular challenges: to design a civic building that could establish public presence while responding

to the area's corporate architectural character without simply mimicking or rejecting this. The Courthouse needed to be a recognizably civic building while retaining urban coherence; distinctly public, while contextually responsive.

GRID RESPONSE AND URBAN CONTINUITY

The building's geometry responds to Van Eesteren's urban grid. Its orthogonal arrangement echoes the 'Scottish Tartan' pattern defined in the AUP. This alignment links internal circulation to the surrounding city, making for intuitive movement between the city and the Courthouse. The dialogue process showed how this geometric choice could address both urban design goals and internal functional needs.

The façade grid references the urban context, with its proportions drawn from the fabric of the surrounding structures. While maintaining geometric continuity with the district's development pattern, the Courthouse distinguishes itself from the neighbouring commercial architecture through its articulation of materials and degree of transparency. Rather than treating the façade as a surface for representation, as many nearby buildings do, NACH shifts the emphasis toward exposure and legibility. In the lower levels in particular, the façade recedes as a symbolic skin, allowing the processes and activities behind it to remain visible. Through this calibrated difference, the building participates in the shared organizational logic of the district while asserting its civic identity, transforming



↖ Urban implementation and continuity

↑ Early sketch studies exploring massing, organization, and facade



the façade from a medium of image-projection into one of engagement with the public realm. The relationship to Van Eesteren's planning legacy extends beyond formal gestures to also encompass spatial organization principles. The Courthouse's internal circulation systems reflect the rational organization characteristic of modernist planning, while adapting these principles to contemporary security and operational requirements. The design illustrates how Van Eesteren's geometric logic can inform contemporary judicial procedures, which necessitate controlled movement patterns and distinct circulation routes for various user groups. By drawing on historical principles rather than rejecting them, the design achieves greater functionality through continuity.

FROM REQUIREMENTS TO DESIGN PRINCIPLES

The design translates the four requirements defined by the RVB – visibility, recognizability, authoritativeness, and functionality – into five narrative starting points, on which the design is based, and which are respected at all times and at all scales throughout the design process. This systematic process represents the project's core methodological innovation: transforming competing requirements into mutually reinforcing architectural strategies through structured dialogue. Each principle addresses multiple requirements simultaneously, creating solutions that enhance rather than compromise the building's capacity to fulfil its complex institutional mission.

↑ Urban context rendering

1. All-sided Building:

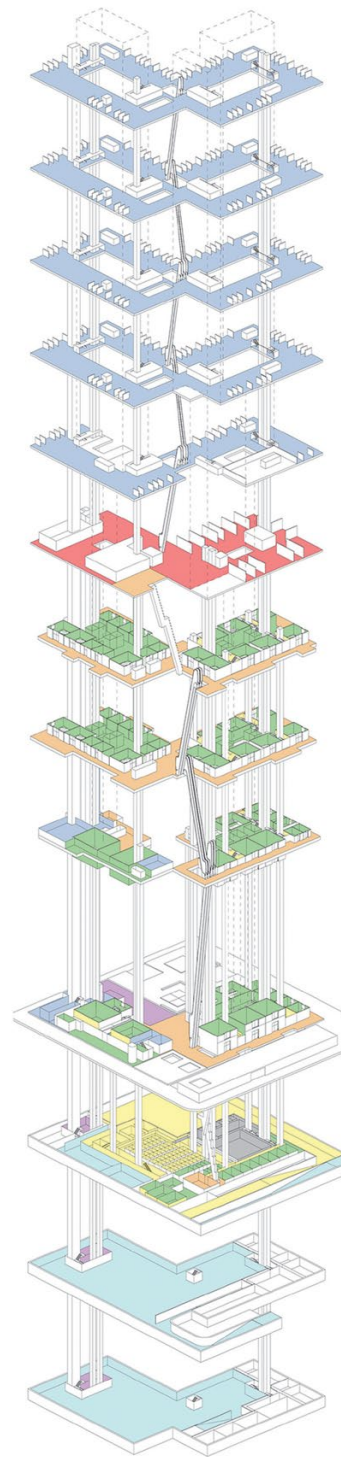
Eliminating Hierarchical Facades

The schedule of requirements is organized so that all façades maintain the same quality of relationship to the outside. On the lower public floors, this is achieved by setting the courtrooms back from the façade, creating continuous foyer spaces along the perimeter. The courtrooms act as 'buildings within the building', while the foyers serve as transitional zones between the city and the interior. This also creates inherent security by positioning courtrooms and judges' circulation areas internally, keeping judges out of public view. Moreover, unlike corporate buildings that use façades to convey brand identity, this approach makes the Courthouse recognizable as a civic building by activating all its façades through inhabited foyers.

2. Space for Public Space:

Civic Gesture in a Commercial Context

From the outset, it was recognized that this building needed to address a key urban issue: the scarcity of public space in an area with extremely high land values and virtually no public squares. Despite the schedule of requirements not explicitly requiring this, KAAN Architecten had the intuition to reserve generous space for a forecourt, directly responding to this urban need. The forecourt addresses multiple institutional requirements through a single spatial gesture, making the building recognizable by introducing a spatial logic that is absent from the surrounding commercial architecture. This conveys authority through its generous scale and refined materials, such as natural stone-clad columns on the façade. At the same time, it supports accessibility by guiding users toward the courtrooms through a sequence of graduated thresholds, rather than imposing confrontational barriers. Functionally, the forecourt offers a dignified setting for press coverage and public gatherings, seamlessly blending media functionality with civic presence. On the



↑ Exploded axonometric overview of functions and vertical organisation.

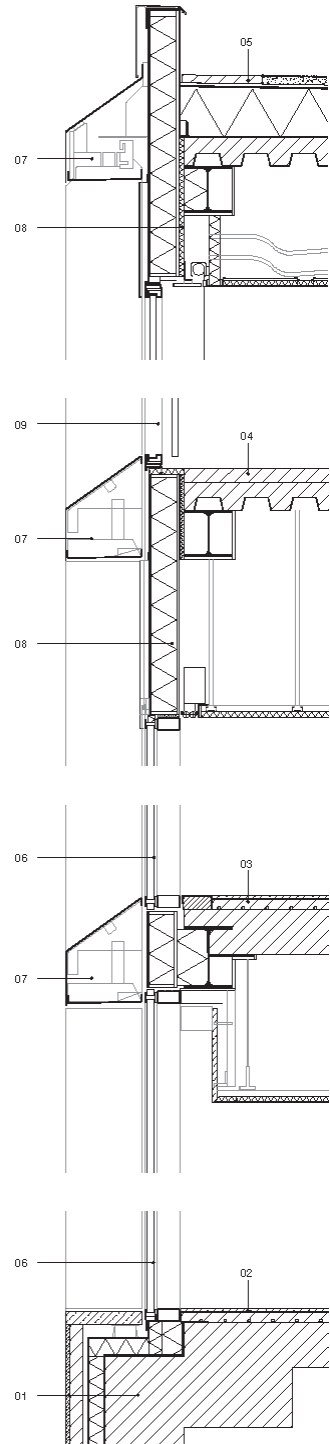
opposite side, a similar cut in the volume forms a garden courtyard, introducing daylight into the interior and completing a balanced spatial composition that serves both architectural expression and programmatic needs.

3. Permeable Ground Floor: *Urban Grid as Organizing Logic*

Within the overall concept, it was clear early on that the forecourt and the surrounding foyers at ground level would serve as mediating spaces between the public realm and the building's interior. The circulation layout on this level extends the logic of the surrounding urban grid, translating Van Eesteren's orthogonal order into a system of internal passages that connect the various entrances and foyers. In this way, the urban grid becomes both an external reference and an internal organizing logic, reinforcing the building's permeability and civic openness. To preserve this public ground floor, some aspects of the schedule of requirements – primarily detainee logistics – had to be reconfigured. Typically located at the rear of courthouses, this entire functional cluster was relocated to the basement, complete with a dedicated entrance, vehicle ramp, and optimized circulation and holding areas. Though unconventional, this decision enabled the creation of transparent ground-floor spaces that make judicial activity partially visible while maintaining full separation between public, judicial, and detainee flows. The result is a building that remains secure yet open, integrating functionality and civic expression within the same spatial logic.

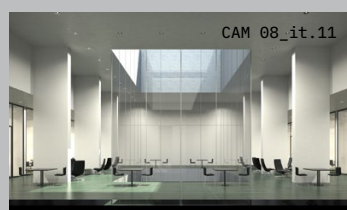
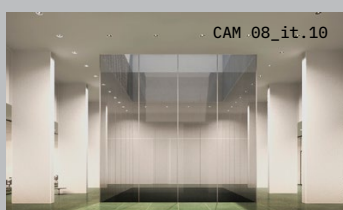
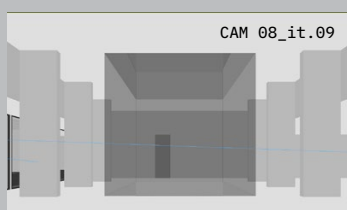
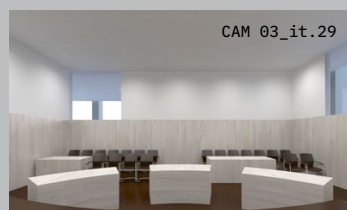
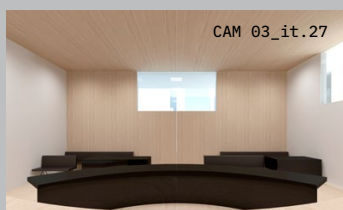
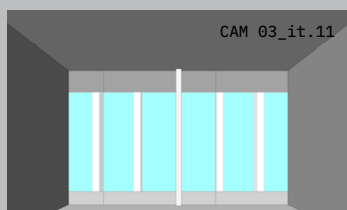
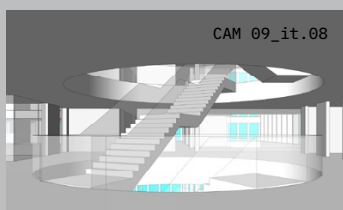
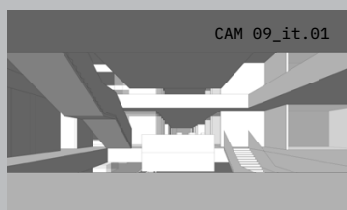
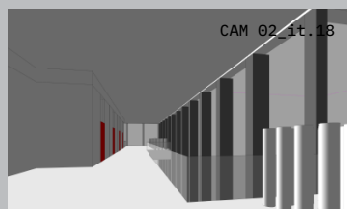
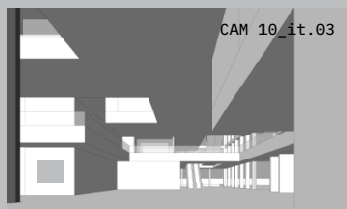
4. Readable Functional Stacking: *Programme as Architectural Expression*

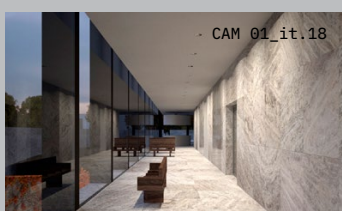
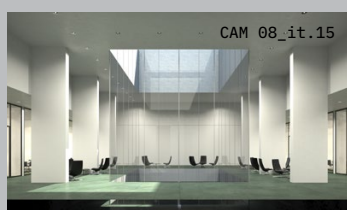
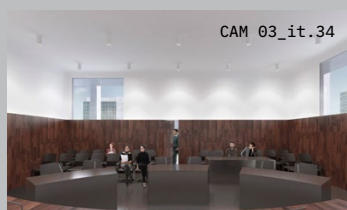
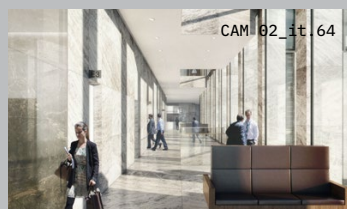
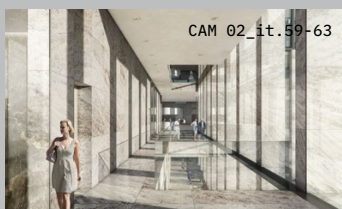
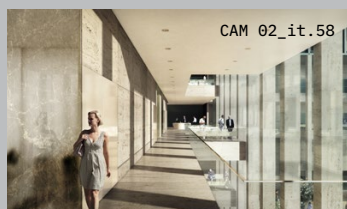
The decision to create a large forecourt in front of the Courthouse, sacrificing nearly a quarter of the plot, reduced the space available for the programme. As a result, the main programme clusters could no longer fit on the site side by side, prompting a new solution based on



↑ Detailed facade section

→ Evolution of courthouse key spaces throughout design process, each render chronologically ordered (e.g. CAM 09_it.1 = view camera 09, iteration 1 etc.)





vertical stacking. The public programme was situated at the base, with offices above, and between them a 'sky lobby', defined in the brief as a 'transition zone' for employees, serving as an intermediate layer connecting the two. Each of these three zones has a distinct spatial character and specific requirements for façade performance. Rather than concealing this variety, the concept allowed programme requirements to shape architectural expression. The façade of the public areas was kept as open and transparent as possible to make the judicial process visible. In contrast, the office façade on the upper floors was designed to provide solar protection and include operable windows, resulting in a more compact and solid appearance. By making the programme stacking explicit and legible in the façade, functional requirements were combined with recognizability: the façade grid measures 3.60 m at the base, 1.80 m in the middle, and 0.90 m at the top.

5. No Columns Visible:

Security Through Spatial Clarity

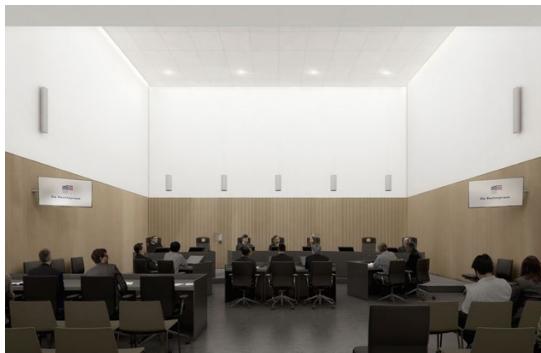
The design eliminated any visible free-standing columns within the interior spaces. This approach addressed security concerns by preventing people from hiding in public areas, while also fulfilling functional requirements for the upper floors by enabling a fully flexible, single-span office layout. From the outset, the structural concept positioned the load-bearing line along the façade and placed the structural

elements outside the glass line, thereby keeping the interior face of the façade flush. Placing the load-bearing structure on the façade posed significant detailing challenges, particularly in managing tolerances, but achieved coordinated performance across multiple objectives. A clear example can be seen in the inner corner columns in the lower part of the building: originally not foreseen in the structural design but later deemed essential, these were carefully integrated and concealed within the façade package. After testing multiple options, the team concluded that shaping the column as a proportionally reduced version of the building's footprint provided the most effective solution. This detail demonstrates how structural logic could generate, rather than constrain, architectural form. The resulting clear, unobstructed interior spaces reinforce the building's authoritative presence while maintaining the transparency and flexibility required for judicial operations and long-term adaptability.

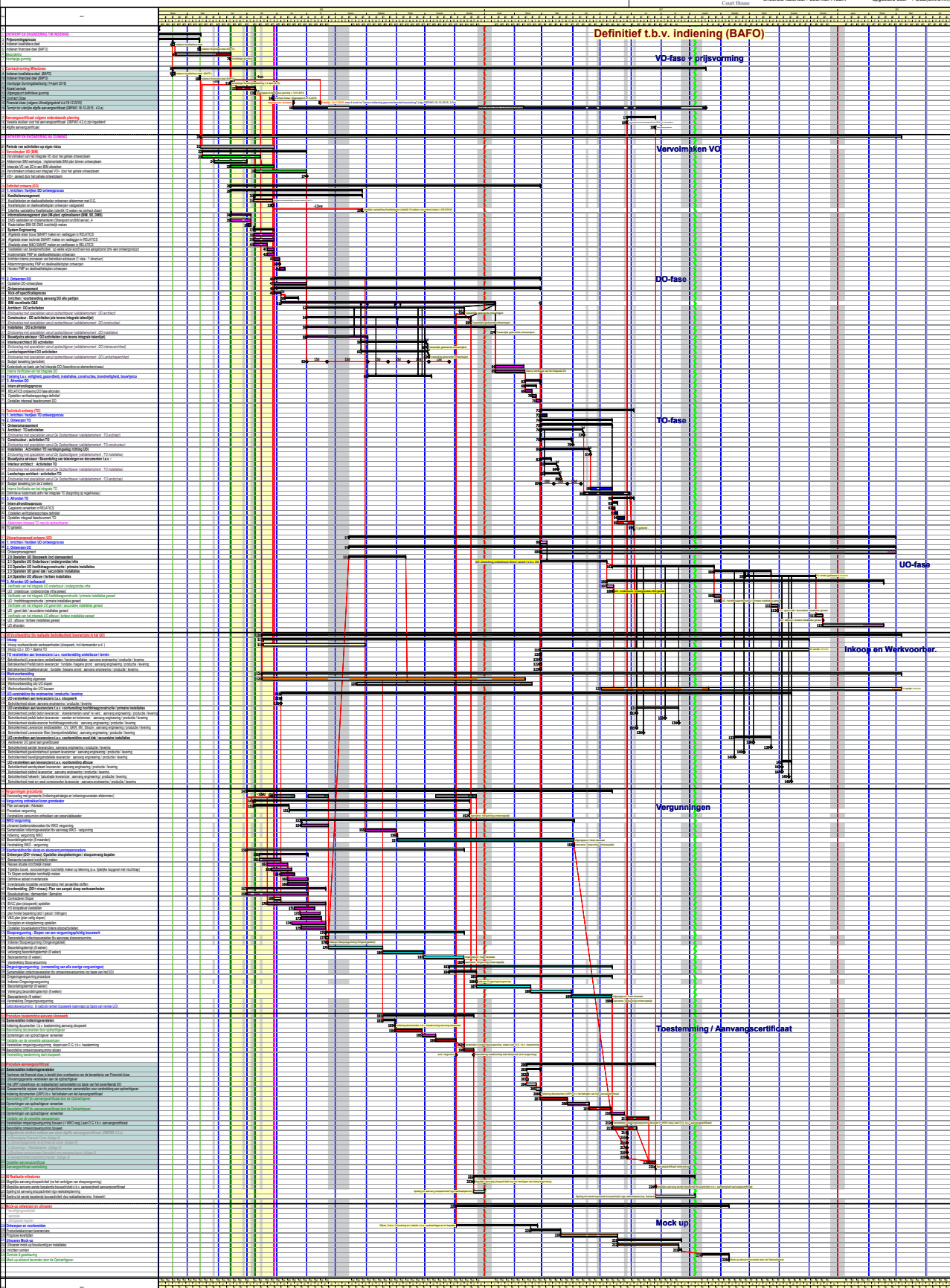
DIALOGUE AS DESIGN PROCESS

The dialogue structure supported systematic development across three phases. The first dialogue phase established the concept: how different requirements could be mutually reinforcing. The second phase involved developing spatial strategies: how different functions, users, and systems could be organized. The third dialogue phase refined technical coordination: how construction, operational, and financial systems could work together to maintain design coherence throughout implementation and long-term operation.

This phased approach prevented premature optimization based on a single criterion, while ensuring that conceptual strategies could be refined for practical implementation. The monthly dialogue rhythm provided regular opportunities for assessment and course correction, enabling the team to maintain focus on comprehensive solutions while addressing detailed technical challenges.



^ Early render of a courtroom interior
→ Integrated project planning





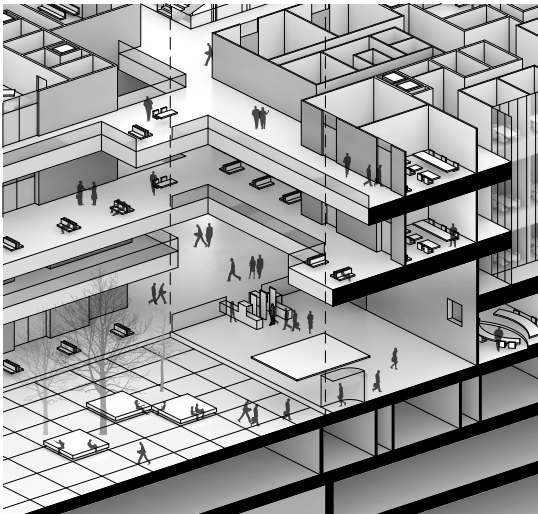
DESIGN AS COMMUNICATION INTERFACE

The design process for NACH demonstrates how design can function as a 'communication interface' in contemporary architectural practice. The Courthouse project employed design strategies as unifying devices, enabling diverse specialist requirements to be synthesized within architectural frameworks rather than coordinated across separate systems.

What distinguishes this approach is its capacity to engage productively with what Chabard describes as architecture's fundamental dialectical nature: the practice of creating coherence through 'inherent tensions' rather than resolving these through elimination (Chabard, *Architecture as Dialogue*). The Courthouse design displays methodical coordination of security requirements with public accessibility, a balance that is particularly challenging in contemporary judicial architecture. Rather than treating these as conflicting requirements that necessitate optimization trade-offs, the approach developed spatial strategies that enhanced both security and accessibility simultaneously. The building's entry sequence exemplifies this approach. Instead of relying on a single, heavily controlled access point,



the design creates a graduated transition from public space to secure interior zones, strengthening security while maintaining a sense of welcome. The forecourt plays a key role in this transition, as its slightly elevated platform and reflecting pool together establish distance and separation from the street, while also contributing to the public character of the approach. These elements serve practical protective purposes without diminishing the civic quality of the space. The sequence as a whole provides multiple opportunities for assessment and control while preserving the openness essential to democratic judicial institutions, thereby achieving enhanced performance in both domains through thoughtful design.



Through the dialogue sessions, teams explored how materials choices could coordinate institutional expression with practical performance requirements. This materials strategy required coordination between aesthetic objectives, performance requirements, and long-term maintenance considerations, facilitated by the extended contractual relationship inherent within the DBFMO model. The interior materials palette balances multiple considerations, including acoustical performance requirements for courtrooms, durability expectations for high-traffic areas, and the psychological effects on users who experience stressful legal proceedings. Instead of separate optimization for each criterion, the materials strategy integrates different

↖ The permeable ground floor and the stacking of public, transitional, and office zones

↑ NACH foyer rendering showing the graduated transition between public space and secure interior

← Facade construction, 2020

performance requirements through systematic selection and detailing approaches. Courtyards and skylights combine natural light ingress with spatial quality enhancement, while reducing operational energy consumption. The artificial lighting systems coordinate the precise visual requirements of judicial proceedings with the building's civic presence in the urban landscape after dark.

LONG-TERM THINKING

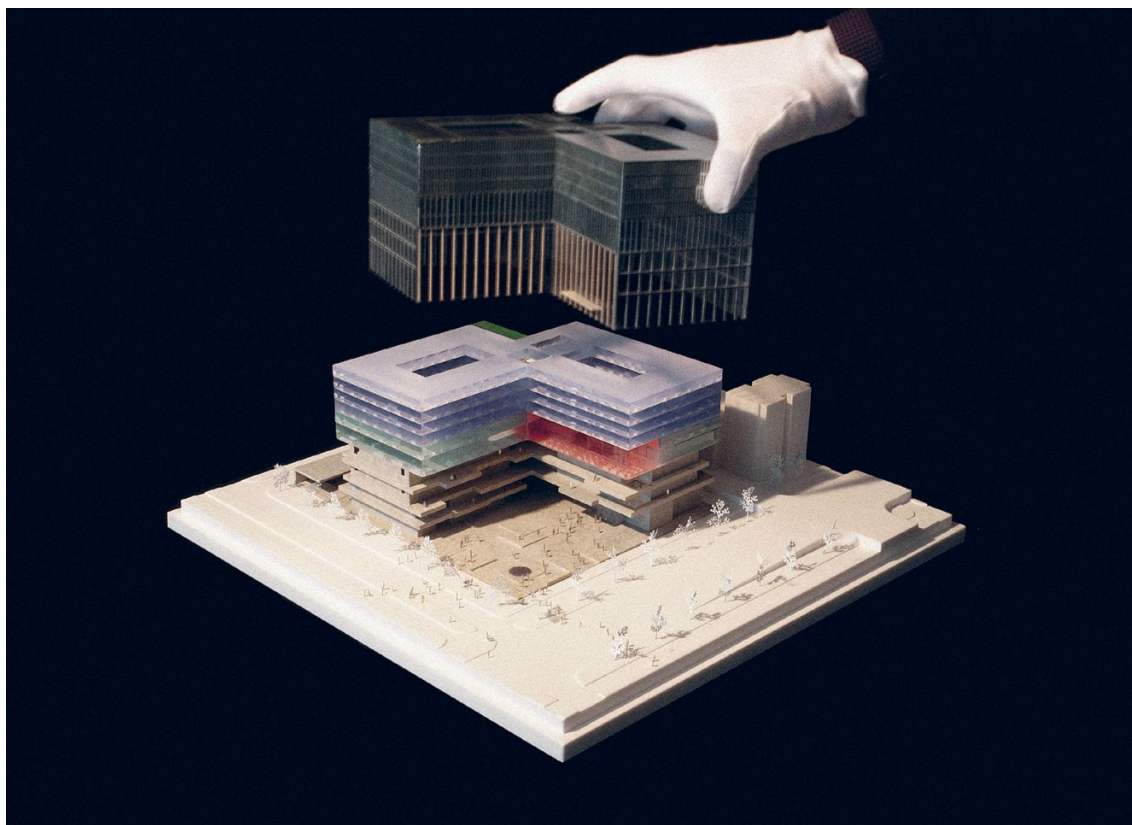
The 30-year contract period fundamentally altered the design challenge. Unlike traditional procurement models, where separate parties optimize their contributions over limited timeframes, the DBFMO structure created opportunities for systematic coordination across design, construction, and operation. This long horizon influenced every design decision, requiring evaluation of both immediate performance and long-term coherence. The design team understood that their choices would affect operational costs and user experience over three decades. This required approaches that could maintain coherence across changing circumstances and evolving institutional needs. In infrastructure projects, this is referred to as a life-cycle approach; design, construction,

operation, and maintenance are considered as one continuous system. NACH adapts this thinking to architectural practice, ensuring that materials, spaces, and systems were judged not only for their initial impact but also for their performance and upkeep across the building's operational life. This unfolded in concrete examples. Materials selections were assessed for durability in high-traffic environments, ease of cleaning and replacement, and their capacity to maintain visual and acoustics qualities over decades. Façade systems were designed with maintenance access and replacement cycles in mind, allowing for long-term upkeep to be integrated without compromising architectural expression. Interior finishes, particularly in courtrooms and circulation areas, strike a balance between robustness and a calm atmosphere for users under stress. Even lighting systems were calibrated for both judicial precision and urban presence, anticipating technological change and replacement needs over the contract period.

Rather than optimizing for initial cost or immediate effect, materials and systems choices were aligned with maintenance requirements, replacement cycles and performance degradation patterns over a 30-year period. The DBFMO structure also required an evolution in practice. Traditional architectural services, which typically conclude with the completion of construction, proved inadequate for the systematic coordination required here. Instead, the team had to work across extended collaboration periods, integrating design expertise with operational knowledge, financial analysis, and risk management. The traditional client-architect relationship, focused on service delivery, shifted toward facilitating dialogue among multiple parties with diverse expertise and at times conflicting objectives. Architects became collaboration coordinators as much as designers, developing competence in collective problem-solving across the building's full life cycle.



↖ Façade mockup



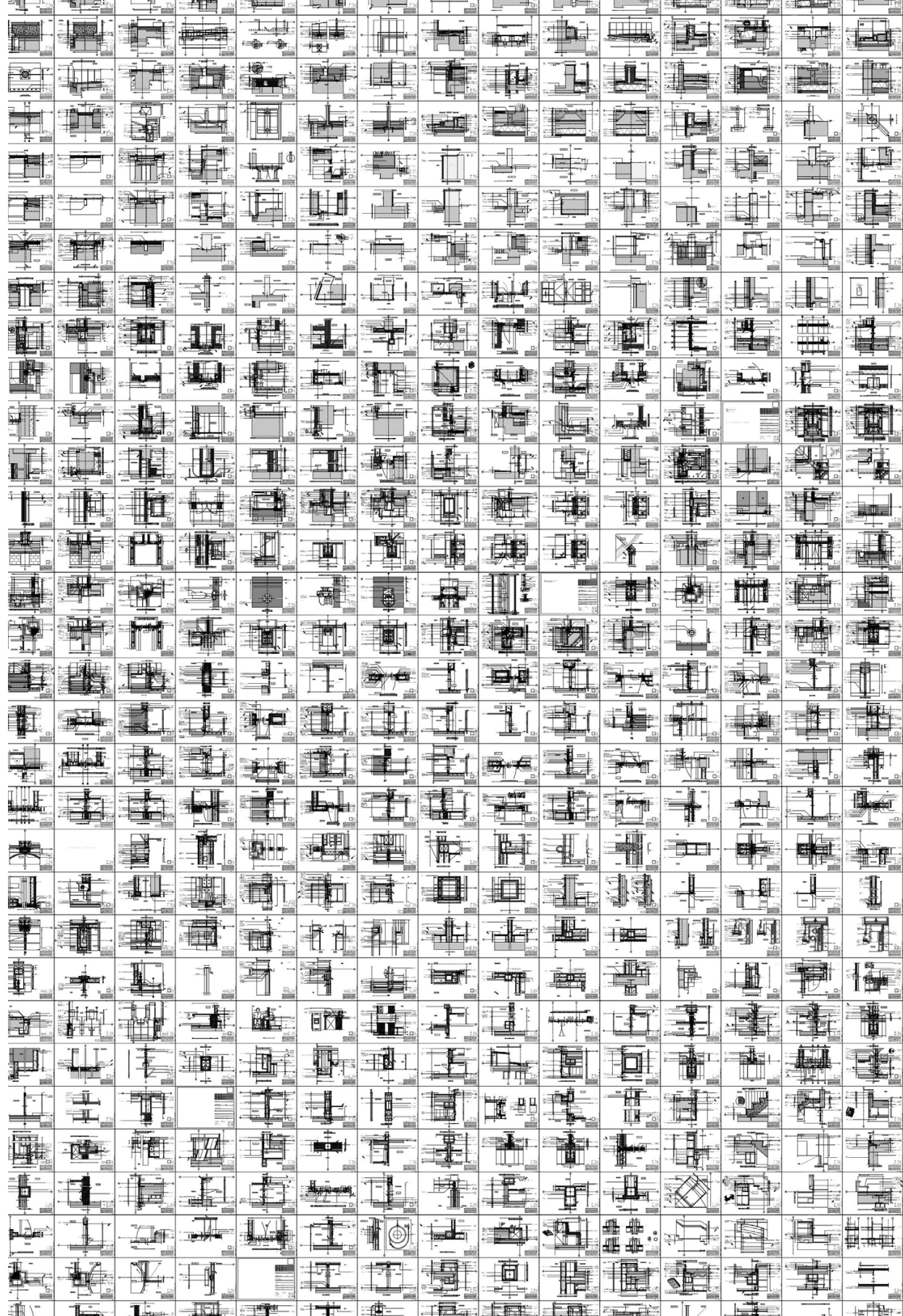
DESIGN AS INTEGRATION

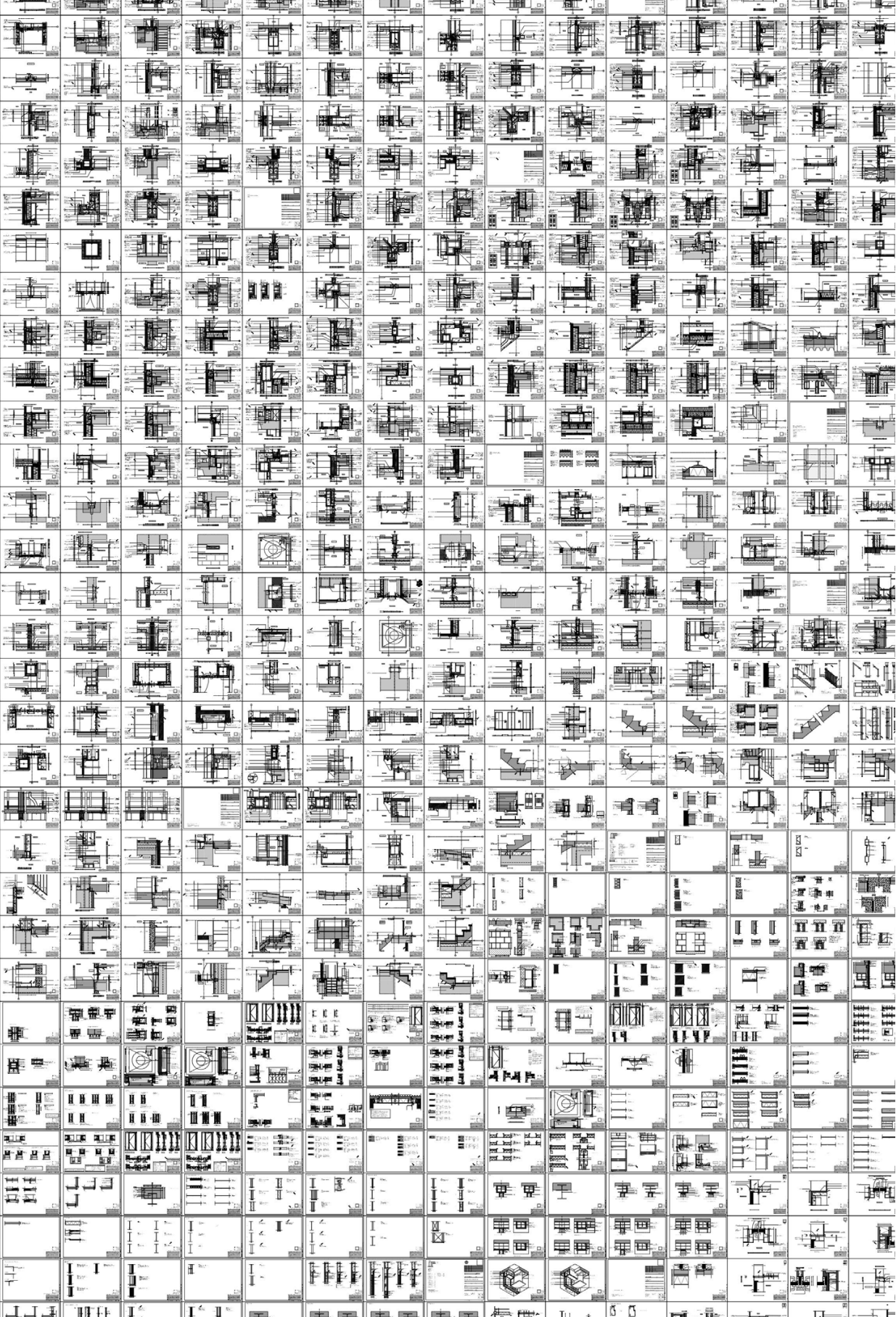
The NACH project demonstrates the dialogue-based design processes that are embedded in public-private partnership structures. Thanks to the DBFMO contract's 30-year framework, KAAN Architecten developed five design principles that addressed the RVB's four requirements – visibility, recognizability, authority, and functionality – by integrating conflicting requirements in a mutually reinforcing manner.

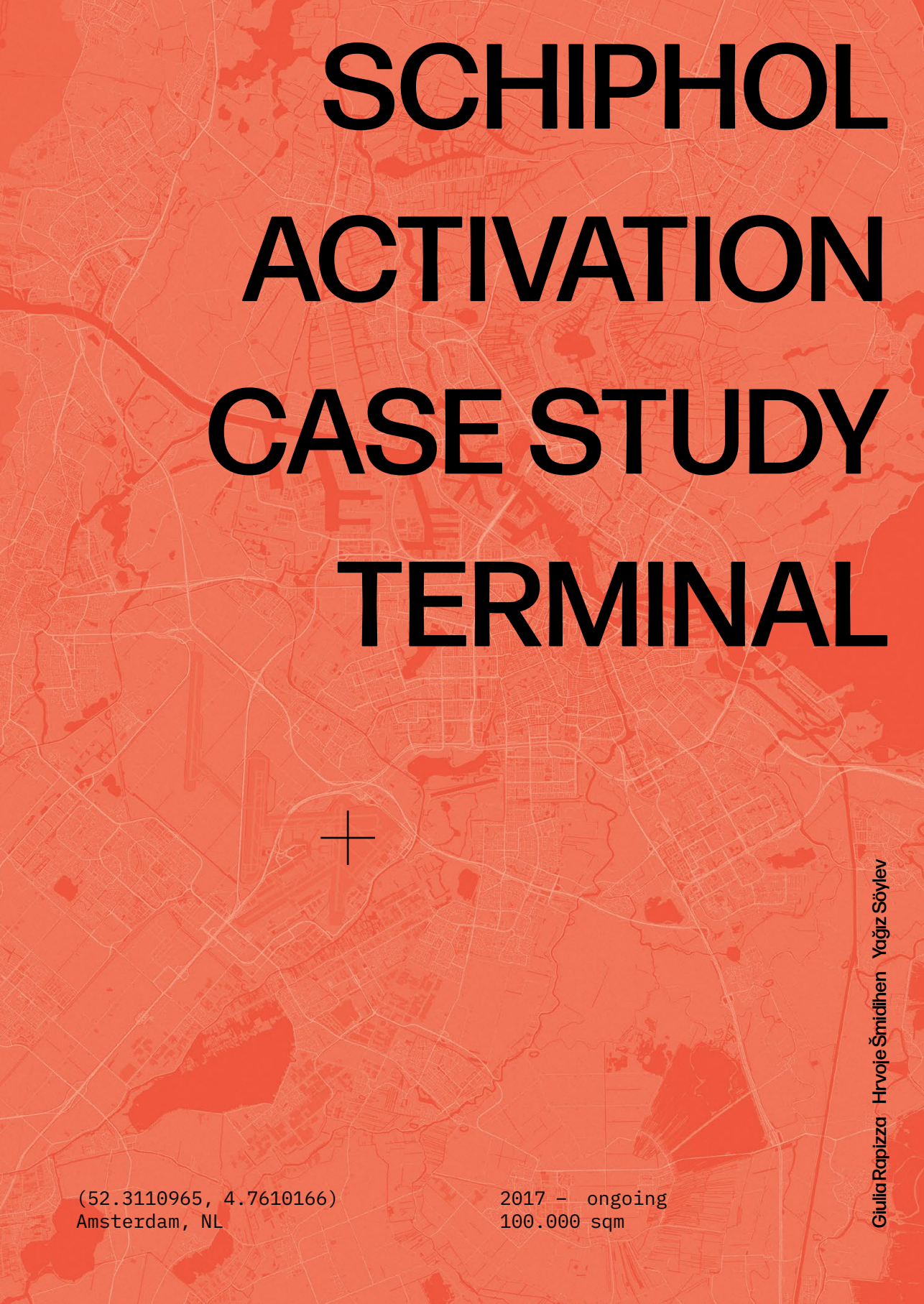
The Courthouse's location in Amsterdam's Zuidas district required balancing civic presence with the district's commercial character. The design achieved this through strategic moves: eliminating hierarchical façades to ensure security while maintaining transparency, creating a public forecourt in an area of scarce public space, organizing circulation

around Van Eesteren's urban grid to connect city and building logics, expressing programme stacking clearly within the façade to distinguish this from corporate architecture, and removing visible columns to enhance both security and spatial clarity. The dialogue process evolved beyond stakeholder coordination into a design methodology in itself. Monthly sessions across three development phases enabled the team to develop solutions that enhanced multiple objectives concurrently. Security was strengthened, accessibility improved, functional requirements generated architectural expression, and urban responses informed internal organization. By transforming competing requirements into narrative starting points, design became the integration framework that wove strict governmental demands, urban context, and operational needs into a coherent building narrative.

↑ Physical model
→ Evolution of courthouse key spaces throughout design process







SCHIPHOL ACTIVATION CASE STUDY TERMINAL

(52.3110965, 4.7610166)
Amsterdam, NL

2017 – ongoing
100.000 sqm

Giulia Rapizza Hrvoje Šmidhen Yağız Söylev







Ventrek
Departures 1

A brief with over 2,192 requirements, each capable of changing. Passenger forecasts that shifted mid-design. Regulations revised while construction was underway. At Schiphol, uncertainty was not an obstacle to be managed but the condition within which design had to operate.

Schiphol Terminal continues the trajectory established by SPOT and NACH, but under radically different circumstances. The question here is not what to design, nor how to integrate competing demands, but how to stay in motion without losing coherence.

Here, design is an activating process that keeps complex systems coordinated as parameters evolve. Instead of responding to a fixed brief, the project responds to change. Each adjustment, regulation, or insight creates new conditions, requiring the design to continually adapt to a moving target. Architecture has always negotiated with time, but large infrastructure projects amplify this relationship. A building is conceived under one set of assumptions, and realized under another. What begins as an urgent question must remain relevant long after it is posed. At Schiphol, the acceleration of technological and operational change has transformed this familiar delay into a fundamental design condition. What was once a stable point of reference – the brief, the capacity forecast, the regulation – becomes fluid. The design must hold together what has not yet been decided.

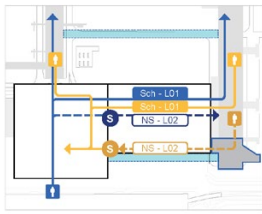
The development of this project coincided with the COVID-19 pandemic; a disruption that brought the instability described above into sharp focus. Construction delays and global uncertainty exposed the fragility of long-term

planning, while also reinforcing the central argument of the project: that coherence in architecture depends less on stability than on adaptability.

The Schiphol Terminal project thus represents a shift in the architect's role: from master planner or integrator, to activator. The architect operates less as an author of form than as a curator of processes, weaving multiple storylines from clients, engineers, regulations, and data into a shared and constantly updated narrative. This narrative is not merely descriptive; it is operational. It structures work, enables decision-making, and provides continuity in an environment characterized by constant revision.

Seen within the broader context of *Building Narratives*, the Schiphol Terminal marks the furthest point on a spectrum that began with negotiation (SPOT) and progressed through integration (NACH). Where SPOT defined what to design through collective negotiation and NACH determined how to deliver this through integration, Schiphol must do both at once. It is the architecture of activation: design as the force that keeps collective work coherent amid uncertainty.

← Early rendering of the Terminal A Facade

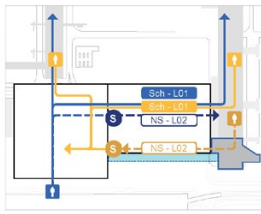


Phase 02

SCENARIO 1A

Temporary NS arrivals corridor on L02
AB Link as Temporary Sch corridor for arrivals & departures

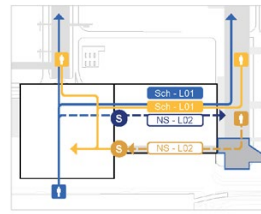
- + No conflict between temporary Pier A corridor and construction Lounge extension
- Removal AB link (additional stand) depending on Phase02 Lounge extension
- + De-investment in temporary structure



SCENARIO 1B

Temporary NS arrivals corridor on L02
Temp. Sch corridor for arrivals & departures on L01

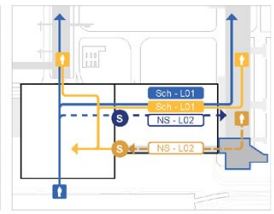
- + No conflict between temporary Pier A corridor and construction Lounge extension
- + Removal AB link (additional stand) not depending on Phase02 Lounge extension
- + De-investment in temporary structure



SCENARIO 2A

Fixed NS arrivals corridor on L02
Temporary Sch corridor for arrivals & departures on L01

- + No conflict between temporary Pier A corridor and construction Lounge extension
- + Removal AB link (additional stand) not depending on Phase02 Lounge extension
- + De-investment in temporary structure



SCENARIO 2B

Fixed NS arrivals corridor on L02
Fixed Sch corridor for arrivals & departures aligned with AS facade

- Challenging construction of Lounge extension between operational Pier A Sch/NS corridors
- + Removal AB link (additional stand) not depending on Phase02 Lounge extension
- + No de-investment in temporary structure

PROJECT INITIATION AND CONTEXT

The Schiphol Terminal project commenced in 2017 with an international competition for the design of a new terminal and pier, as part of the airport's long-term capacity consolidation plan. The assignment was straightforward in name but volatile in substance: to increase passenger handling while keeping the existing airport fully operational, compliant with ever-changing regulations, and consistent with Schiphol's unique 'One Terminal' philosophy.

The winning consortium for the terminal, named KLAIR, comprised KAA Architecten, ABT, Studio Lamela, and Ineco, with Amsterdam Airport Schiphol (NV Schiphol Nederland B.V., SNBV) as the client. SNBV, a subsidiary of Royal Schiphol Group, manages the airport's operations and development. The partnership between the client and design team was close: the KLAIR organization mirrored SNBV's own structure so that each discipline, from architecture to baggage logistics, had a direct counterpart. This symmetry made communication transparent, but also meant that every adjustment on one side immediately triggered recalibration on the other. From the outset, the project's parameters refused to stay still. The client's System Requirements Specification listed more than 2,192 individual criteria, ranging from passenger throughput and luggage handling speed to daylight factors

and blast-resistance zones. Each requirement was assigned to a responsible discipline to be verified and validated at every design phase. Yet the criteria themselves were not fixed: as passenger forecasts, regulations, and technologies evolved, so did the data driving the design. The result was a feedback loop in which each new simulation redefined the brief. This continuous recalibration demanded an adaptive working method. Within the larger scheme of sequential design phases with clear handovers, the team established an iterative system of options, evaluations, and updates; an approach later described as 'optioneering'. The project's narrative became a living script: each revision was recorded, assessed, and folded back into the design logic. Through this method, change did not appear as disruption but as activation – the trigger that kept the collective process moving.

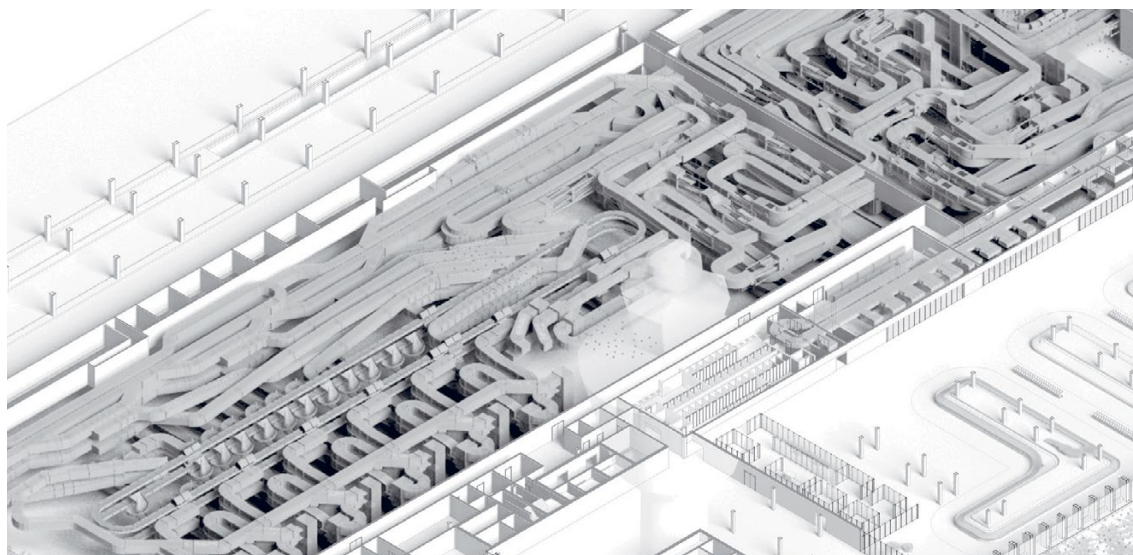
Time itself was both the constraint and the subject of design. Large infrastructure projects like airports operate on extended horizons; by the time construction begins, the original assumptions are often obsolete. The pandemic made this temporal instability visible, halting construction and forcing renewed reflection on flexibility and resilience. Yet the delays also revealed a deeper insight: that the design's strength lay not in the fixity of its form but in its

↑ An optioneering scenario from the decision-making process, 2022

capacity to absorb and coordinate uncertainty. At the conceptual level, Schiphol's ambition was rooted in its Airport City model – a hybrid environment where aviation, business, commerce, and leisure converge. Since its first flight in 1916, Schiphol has grown through a principle of evolutionary expansion rather than radical replacement. The 'One Terminal' idea, introduced in the 1960s, treats the airport as a single, interconnected organism rather than a collection of detached terminals. The new building had to extend this legacy without fracturing it, appearing as one more piece in a long story rather than a new chapter detached from the old. KLAIR therefore faced a double challenge. Technically, to create a terminal that could adapt to regulatory and operational flux. Culturally, to sustain the spatial DNA that makes Schiphol recognizable: horizontality, openness, and clarity. These qualities, simple in appearance and complex in execution, reflect a distinctly Dutch approach to public architecture, combining engineering precision with civic modesty. The Terminal's initial studies organized the design around four interdependent components: Processor, Building, Surroundings, and

Shell. Each served as a coordination framework linking design intent to specific disciplines. The Processor handled the invisible systems of passenger and baggage flow; the Building defined public interiors and circulation; the Surroundings connected the terminal to the airport city; and the Shell, the roof and façades, gave these systems their architectural unity. Together, they formed the stage on which activation would play out, turning procedural complexity into a coherent spatial experience.

Day-to-day, activation relied on parallel teams facing each other across the table. KLAIR organized architecture, structure, MEP, and systems leads to mirror SNBV's internal structure. A typical coordination began with a single drawing: a flow diagram overlaid on the BIM (Building Information Model) view. Baggage logistics would flag a pinch point, security would overlay new buffer requirements, architecture would test visibility, and structure would test span adjustments. Within hours, the architectural team would issue an update with two or three optioneering sketches, each linked to traceable assumptions. The client's



↑ Terminal Processor
→ Physical model of Schiphol Airport

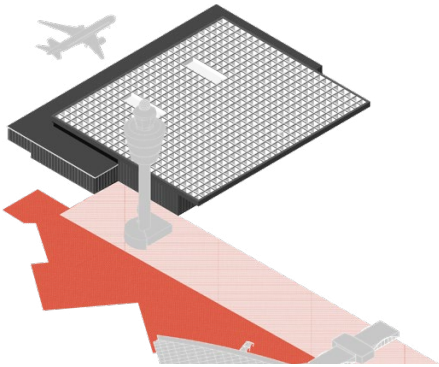




counterpart team would then reply in kind, not with abstract comments but with annotated views that could be re-imported into the model. The point was not speed alone, but a shared language of evidence. Decisions crystallized when all eyes could read the same drawing for different reasons, and still agree that the story held together.

FROM AMBITIONS TO DESIGN STRATEGIES

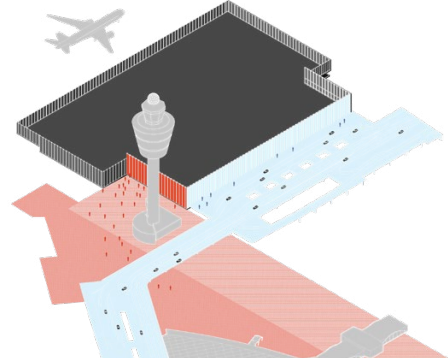
At the heart of Schiphol's expansion lies a paradox: how to design a building that must be both fixed and flexible, instantly recognizable yet continuously adaptable. During the competition phase, KLAIR distilled the client's Ambition Document into eight design strategies that defined the project's framework from the outset. These transformed abstract goals into operative principles, offering a structure that could evolve without losing its coherence.



1. Plein – The Compact City

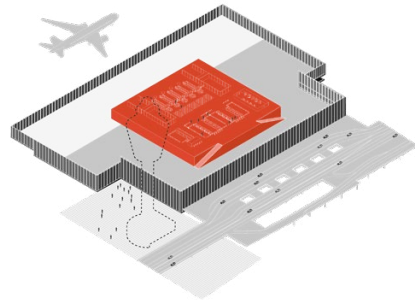
Schiphol's identity as a 'One Terminal' airport depends on its continuity at ground level, where urban life meets the aviation machine. The concept of the Plein – the Dutch word for a public square – anchors this continuity. Rather than treating the new terminal as an isolated volume, this concept extends the sequence of existing plazas and forecourts that connect

terminal buildings, the railway station, and Schiphol Plaza. This continuity preserves the sense of a compact city under one roof. The square becomes a civic threshold, maintaining openness and orientation even as circulation patterns or security rules evolve.



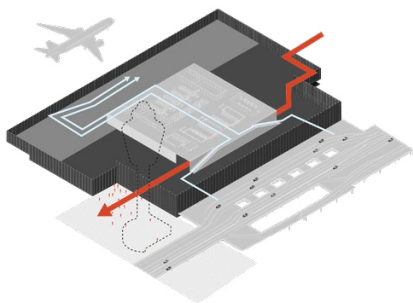
2. Two Addresses – Orienting Movement

In this particular case, due to the building's position and the limited depth of the available plot, arrivals and departures follow perpendicular routes, each with its own rhythm, yet visually linked. The 'two addresses' strategy distinguishes these flows without separating them. Arriving passengers move straight through baggage reclaim toward the Plein; departing passengers rise diagonally to the raised Plateau. Their paths cross in view, but not in space, creating a choreography that can accommodate operational changes, an activating diagram rather than a fixed plan.



3. Stratification – The Plateau

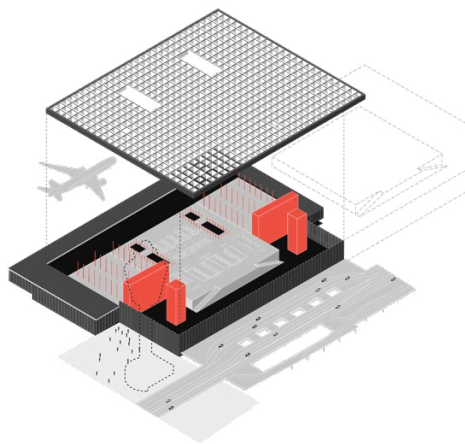
The Plateau introduces a clear spatial hierarchy, while allowing constant reuse and technical flexibility. Raising the departures level frees the baggage hall below and creates a naturally lit void that connects both worlds. For passengers, this height difference translates into psychological clarity: they can read where they are and where they are going. For designers, the Plateau becomes an adaptive platform; a structural and spatial buffer that can integrate future technologies and reorganized flows.



4. Flows – Exacting Functionality

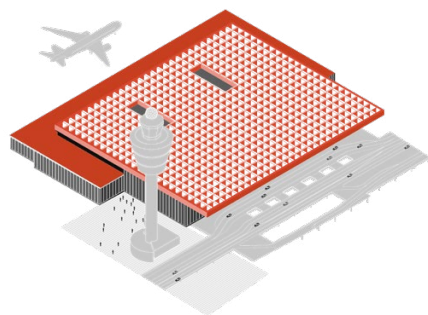
If the Plateau provides structure, Flows provide motion. This design prioritizes functionality and precision. Every line of movement—human or mechanical—was mapped, simulated, and tested. These analyses became instruments of activation. By visualizing performance through diagrams and models, architects and engineers aligned decisions across disciplines, turning technical data into shared spatial intelligence. The baggage handling system (BHS), for example, was based on straight-line efficiency. Bends introduce failure points; elevation changes increase energy use and maintenance. Linearity became a rule of thumb, ensuring reliability while allowing future upgrades to integrate seamlessly. This logic extends from plan into section. The Plateau's structural rhythm organizes the system: service corridors align with truss bays, intervention points stay visible

from maintenance routes, and latent capacity is built into reserved zones for expansion. Small architectural decisions safeguard performance, showing that technical rigor and spatial clarity are mutually reinforcing.



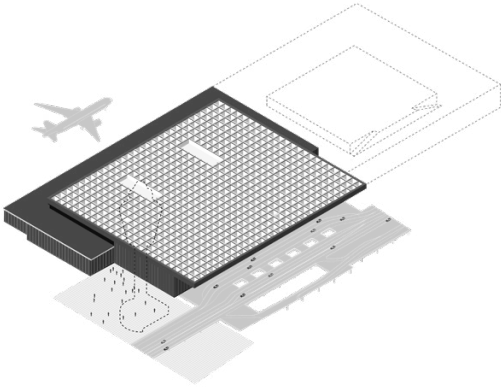
5. One Space – The Public Interior

The new terminal continues Schiphol's tradition of open, easily readable halls. Under a continuous roof, departures and arrivals coexist within a single spatial volume articulated by light rather than by walls. The large void connecting the two levels allows orientation through visibility, letting travellers sense the totality of the building. The structural orthogonal rhythm of columns and trusses creates calm repetition; an environment robust enough to host future alterations without losing its legibility.



6. Big Roof – The Common Horizon

Spanning almost 180 by 150 metres, the roof unites all components under a single horizon. Its geometry and daylight openings express the Dutch pursuit of clarity and precision, while concealing a dense network of technical systems. The roof's scale transforms engineering into atmosphere, making light the mediator between technology and experience. As regulations and energy strategies change, the roof continues to act as the project's adaptive interface – both shelter, and instrument for modulation.



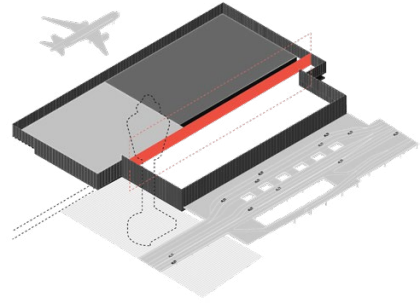
7. Growth – Architecture in Motion

For over a century, Schiphol has expanded through incremental growth. The new terminal inherits this logic. Every dimension, from structural grid to façade module, anticipates replication. The building is designed not as a final form, but as a step in an ongoing sequence. Its apparent stability conceals a latent capacity for change, ensuring that future extensions can continue the same story. Growth is not a by-product but a design principle; the spatial expression of activation through time.

8. Demarcation Line – Crossing Worlds

The threshold between landside and airside, ordinary life and controlled space, is marked by the Demarcation Line. At this point, passengers cross not only security filters but also

a subtle atmospheric boundary. Changes in ceiling pattern, light temperature, and acoustics mark the transition from public to detached space. Here, architecture translates regulation into perception. The experience of passing through the Demarcation Line reminds travellers that even the most technical protocols can be expressed as a spatial narrative.



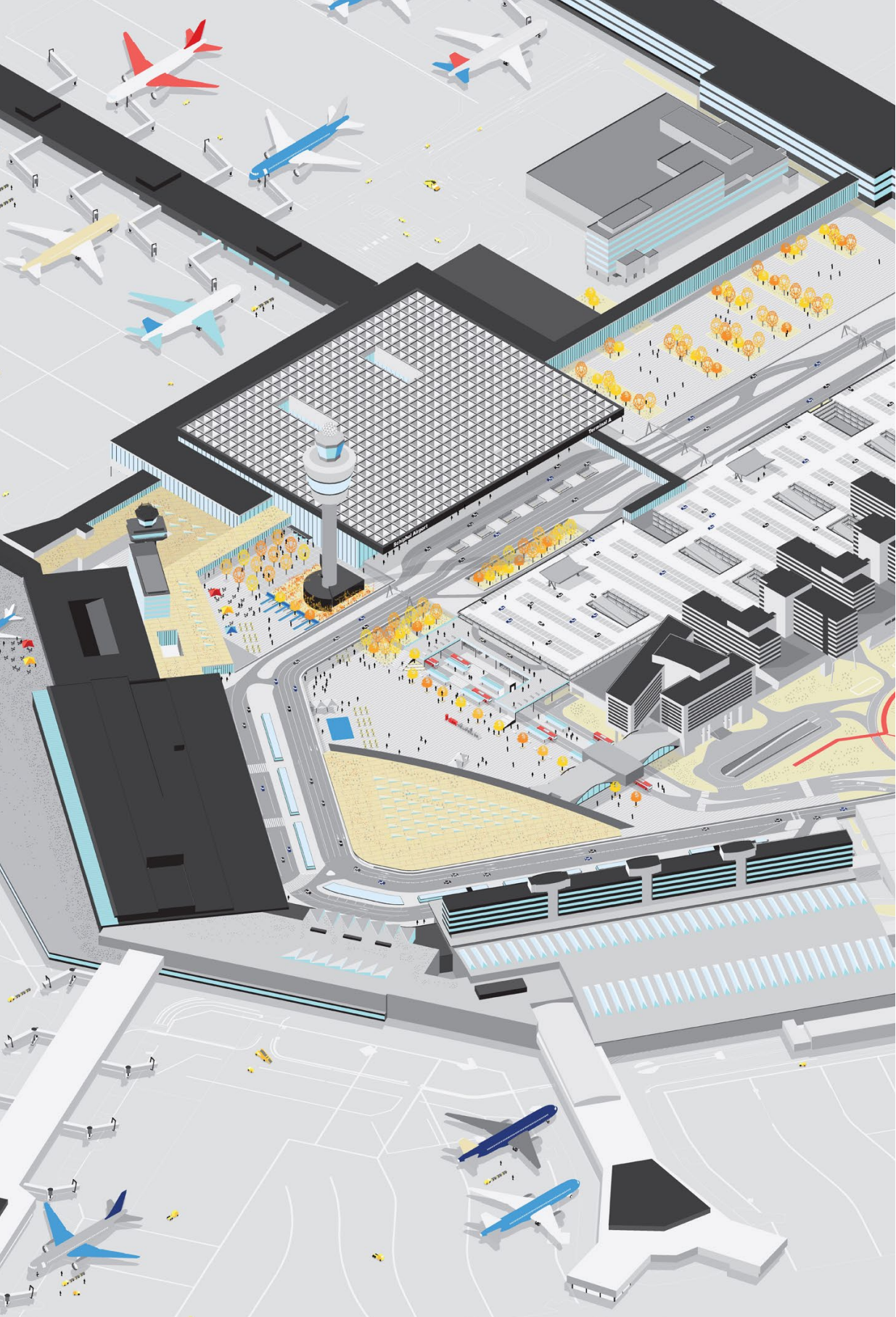
Each of these strategies operates on multiple levels: physical, operational, and communicative. Together, they form a system flexible enough to guide years of design iterations. The eight strategies set out above provided continuity as ambitions evolved, sustainability targets sharpened, security zones tightened, and budgets fluctuated. They acted as the project's genetic code, keeping the design coherent while allowing it to mutate.

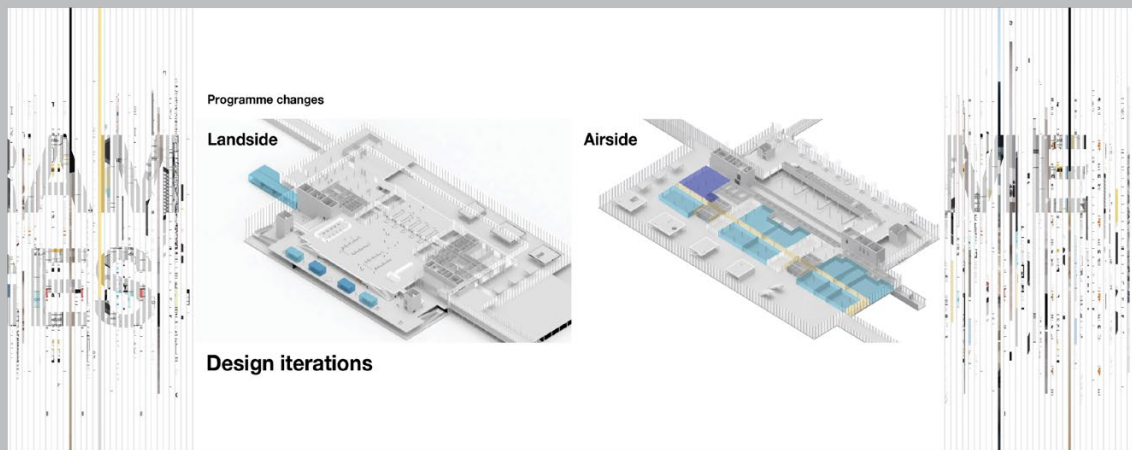
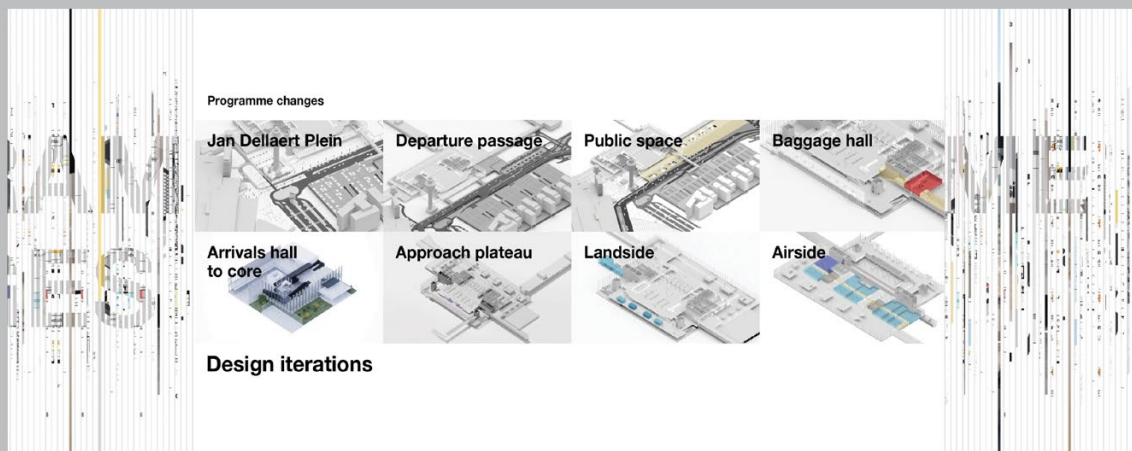
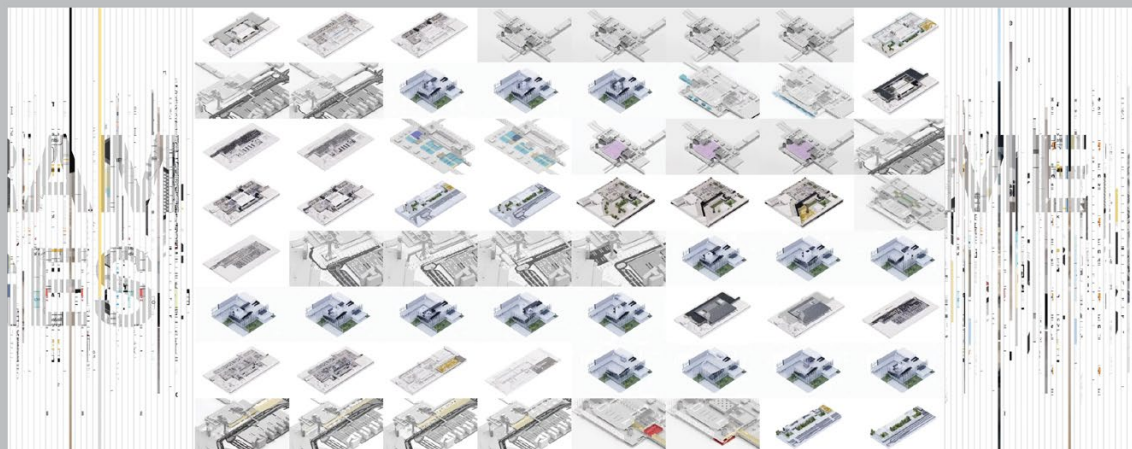
METHODOLOGY:

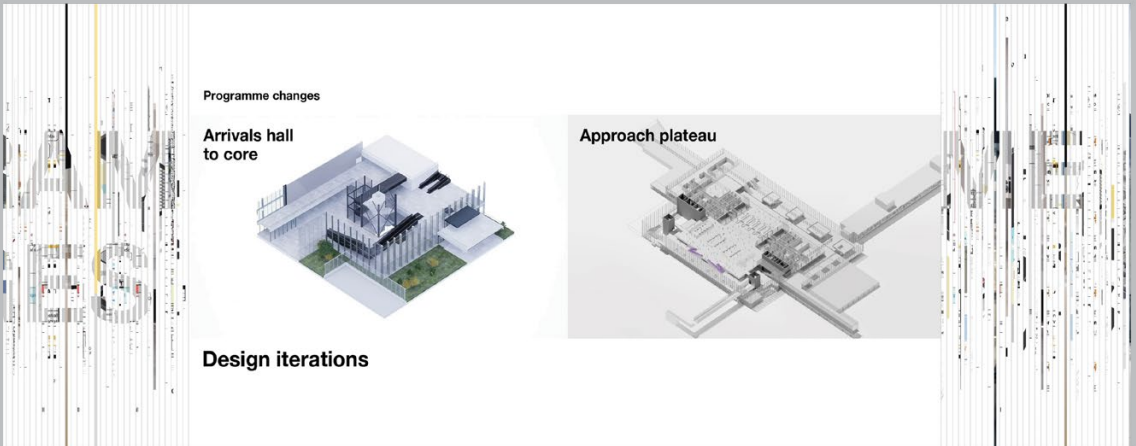
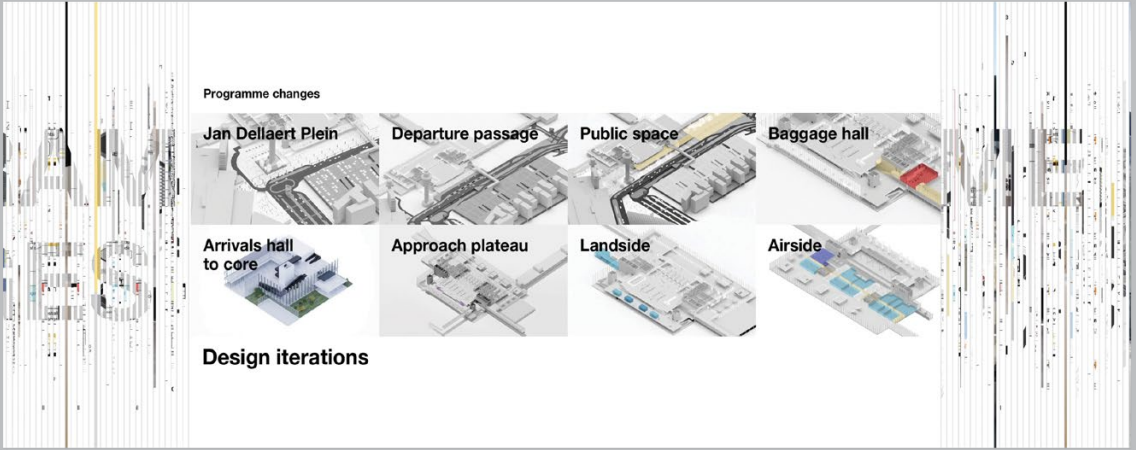
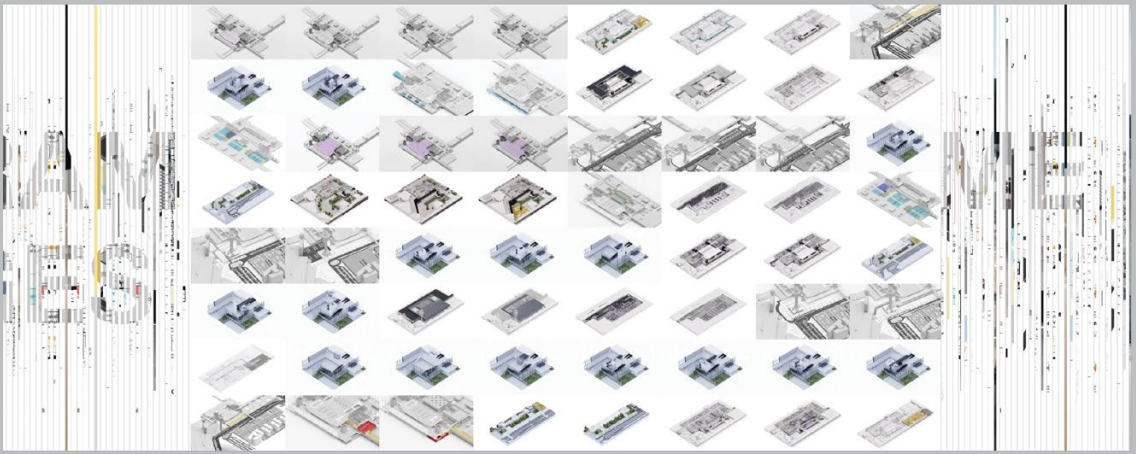
DESIGN AS ACTIVATION

The design process for Schiphol Terminal evolved under conditions of continuous change. Passenger forecasts fluctuated, new aviation safety rules appeared mid-phase, sustainability ambitions increased, and global disruptions such as COVID-19 forced repeated recalibration. Under these circumstances, a conventional sequence of concept, development, and execution would have fractured. Instead, the project adopted an iterative, activating methodology

→ Schiphol competition proposal axonometric view







capable of absorbing change as part of its design logic. At the core of this method was the process of optioneering, in which multiple design options were developed in parallel, tested, and then recombined. Each design topic – from the configuration of flows to the geometry of the Plateau or the integration of building systems – generated several variations, each pushing the initial proposal in a different direction. Rather than seeking the best solution immediately, the team tested how various possibilities performed under shifting requirements.

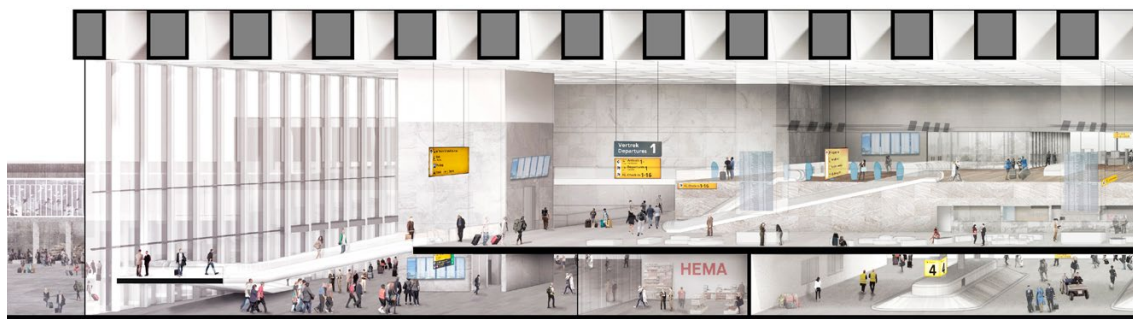
The design studies functioned as living hypotheses. They allowed the project to respond dynamically to new regulations, budgets, or technical discoveries without losing narrative coherence. When an option proved resilient under multiple scenarios, it was carried forward; others were archived but never discarded, forming an accumulated memory of the design process. This archive became the project's silent infrastructure; a map of tested ideas that could be reactivated when conditions changed.

The iterative process was not theoretical. Each design phase materially altered the building's scale and configuration. The terminal's footprint expanded from the Spatial Plan's 94,000 square metres to over 134,000 square metres during the Master Plan Development stages as new flows, retail programmes, and security zones were introduced. Later, through cost reviews

and spatial optimization, the design contracted again to around 113,000 square metres during the Definitive Design phase – almost the same size as the original plan, but far more efficient and integrated. Each expansion and reduction reflected a negotiation between ambition and feasibility, proving that architectural coherence could survive through change.

To manage this evolving field, the team relied on updates: concise, graphically clear documents summarizing progress, assumptions, and outcomes. Each update narrated a slice of the project's development, compressing complex studies into accessible visual sequences. Designed as visual summaries, these updates circulated weekly between the design team and the client, serving as both a record and a discussion platform. Through this system, design became the language of coordination. The architects' role involved producing drawings and maintaining coherence across hundreds of micro-decisions, ensuring that each participant – engineers, consultants, contractors, and client representatives – could situate their work within the same storyline. The project's narrative was never told just once; it was rewritten hundreds of times, each iteration refining collective understanding.

Given the scale of the terminal, the KLAIR team divided the project into smaller, self-contained topics. Each sub-team could develop its area independently, test alternatives, and report



↑ Perspective section of the competition proposal

← FLOWCITY: a new era for mobility | A project by KAAN Architecten for the 2019 Bi-City Biennale of Urbanism/Architecture (UABB) in Shenzhen, China



findings through updates. This distributed approach activated collaboration: rather than waiting for centralized approvals, teams could act, evaluate, and adjust in real time. Once tested, their results were reintegrated into the master narrative of the project.

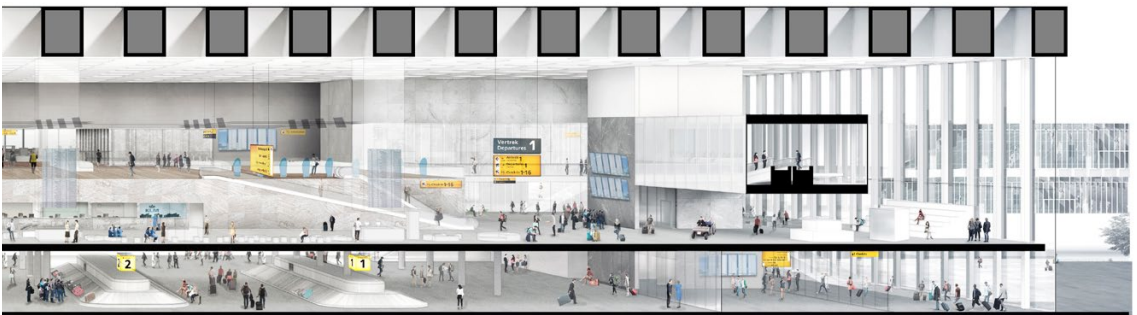
As the project advanced, the BIM became the technical backbone of this narrative method. While BIM is often understood as a database or 3D coordination tool, at Schiphol it served as the medium through which the design remained coherent amid constant change. Each discipline maintained its own aspect model, architecture, structure, mechanical systems, and so forth, and these were periodically merged and verified. These shared models allowed every participant to view the same building from their own perspective, making conflicts visible before they reached the construction phase.

Representation played an activating role throughout. Diagrams, exploded axonometries, and layered drawings were used less to illustrate final design choices than to expose relationships and invite critique. The act of visualizing became a tool of governance, a means of mediating between domains of expertise. Through images, disagreements can be made constructive, and new alignments can form.

INSTANCE: THE BIG ROOF

Among the many components of the new terminal, the roof stands out as the project's most complete synthesis of architecture, engineering, and atmosphere. This encapsulates the central theme of Design as Activation: a structure that continually mediates between changing requirements, technologies, and experiences while preserving a clear architectural identity. Spanning roughly 180 by 150 metres, the Big Roof unites the terminal's diverse elements under a single horizon. From the outside, the roof reads as a calm, floating plane that mirrors the horizontal expanse of the Dutch landscape. From within, it operates as a complex machine: a deep truss hosting skylights, services, photovoltaic panels, and maintenance routes. Its apparent simplicity conceals a choreography of systems in motion.

Throughout the project's successive design phases, the roof served as a testing ground for the activating methodology.



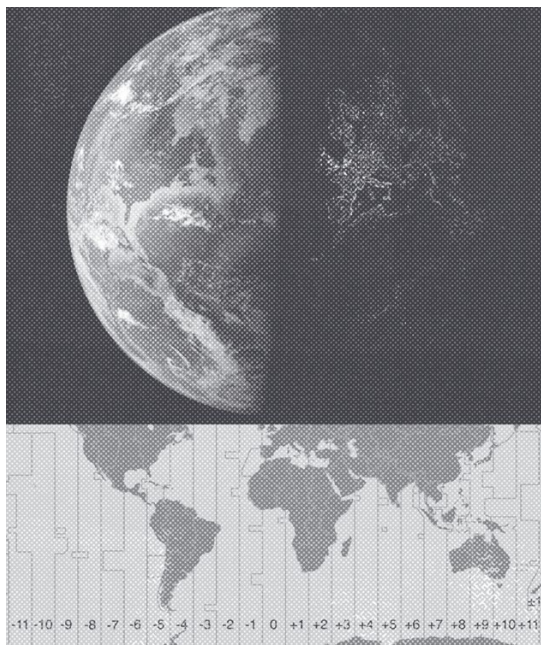
† Schiphol process booklet produced for internal documentation



Each round of refinement, whether triggered by new safety codes, energy targets, or maintenance requirements, was treated as an opportunity to strengthen coherence. Early models explored tapered skylight forms; later iterations redefined profiles to improve accessibility, integrate photovoltaic arrays, and simplify drainage. Every modification was evaluated not only for technical performance but for its capacity to maintain the spatial rhythm of the original concept.

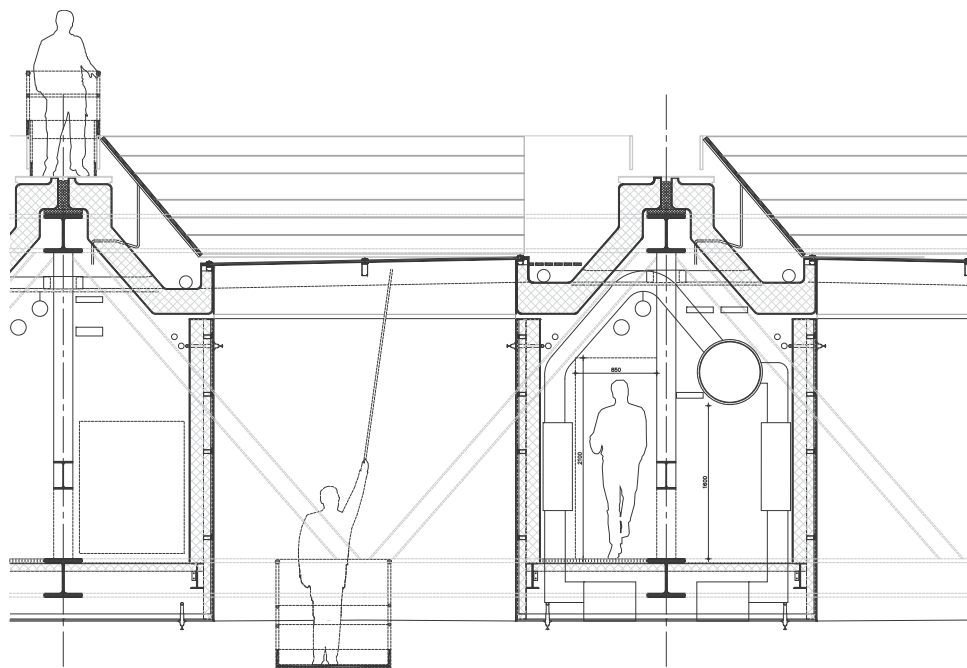
The final roof solution emerged from this sequence of tests, consolidating the lessons of the earlier studies into a single, integrated system. Its structure of interlocking trusses and secondary box girders creates a grid of square alcoves. Within these, skylights bring daylight deep into the terminal, producing a constantly shifting play of illumination. The geometry is disciplined yet dynamic; as clouds pass, patches of light travel across the interior, making time visible. Light here is not decoration, but data: it translates the movement of the sun, the

weather, and the day's rhythm into an experiential language. Working with artist Arnout Meijer, the team developed subtle chromatic variations so that each side of a skylight alcove reflects a slightly different hue. Depending on the traveller's position, the space appears warmer or cooler, brighter or softer; serving as a perceptual reminder that the airport operates across multiple time zones, where morning and night coexist. This collaboration with Meijer drew inspiration from the Dutch tradition of light, from the painterly skies of the seventeenth century to the measured glow of contemporary architecture, connecting atmosphere to cultural memory. Beyond its experiential dimension, the roof acts as a living interface between systems. It hosts the main distribution of mechanical and electrical networks, integrating air supply, lighting, fire safety, and drainage within its depth. Each layer of structure and service is organized to remain accessible for future maintenance and replacement – a technical embodiment of long-term adaptability. The roof applies the same discipline to air, light, and power. Primary



^ Competition proposal rendering: Beneath the roof

† Conceptual reference for Arnout Meijer's light design: an airport operating across multiple time zones. Adobe Stock, File #42079284, licensed by _virtual_



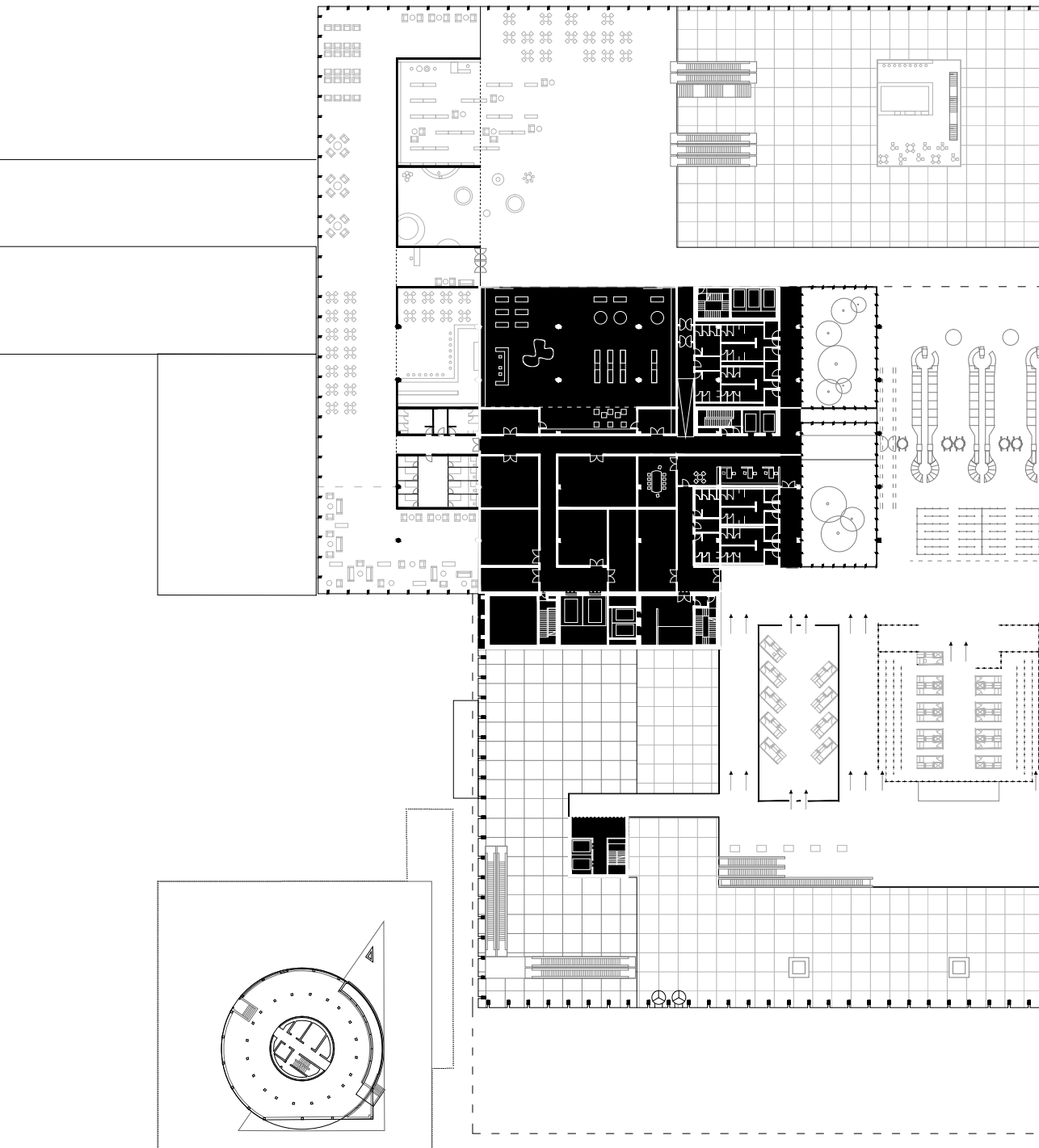
services run within the depth of trusses; secondary distributions drop only where grids align with the schedule of requirements. Access is continuous: catwalks and concealed steps allow safe inspection without interrupting operations. Photovoltaic fields are split across the southeast and southwest slopes to flatten peaks and avoid glare toward the tower. Drainage and smoke extraction are integrated into the same logic, allowing for performance changes to be made without reopening the envelope. The roof reads as quiet, but functions as a service landscape designed for replacement and upgrade, maintaining its capacity to evolve without rewriting the building. Beneath the roof's calm surface, a dense and varied life unfolds: travellers navigating across levels; systems humming in synchrony; light shifting with the weather. Yet what visitors perceive is a singular, continuous space; a clarity that belies its complexity. The roof's success lies in this paradox: it makes multiplicity legible. As a spatial figure, it unifies the

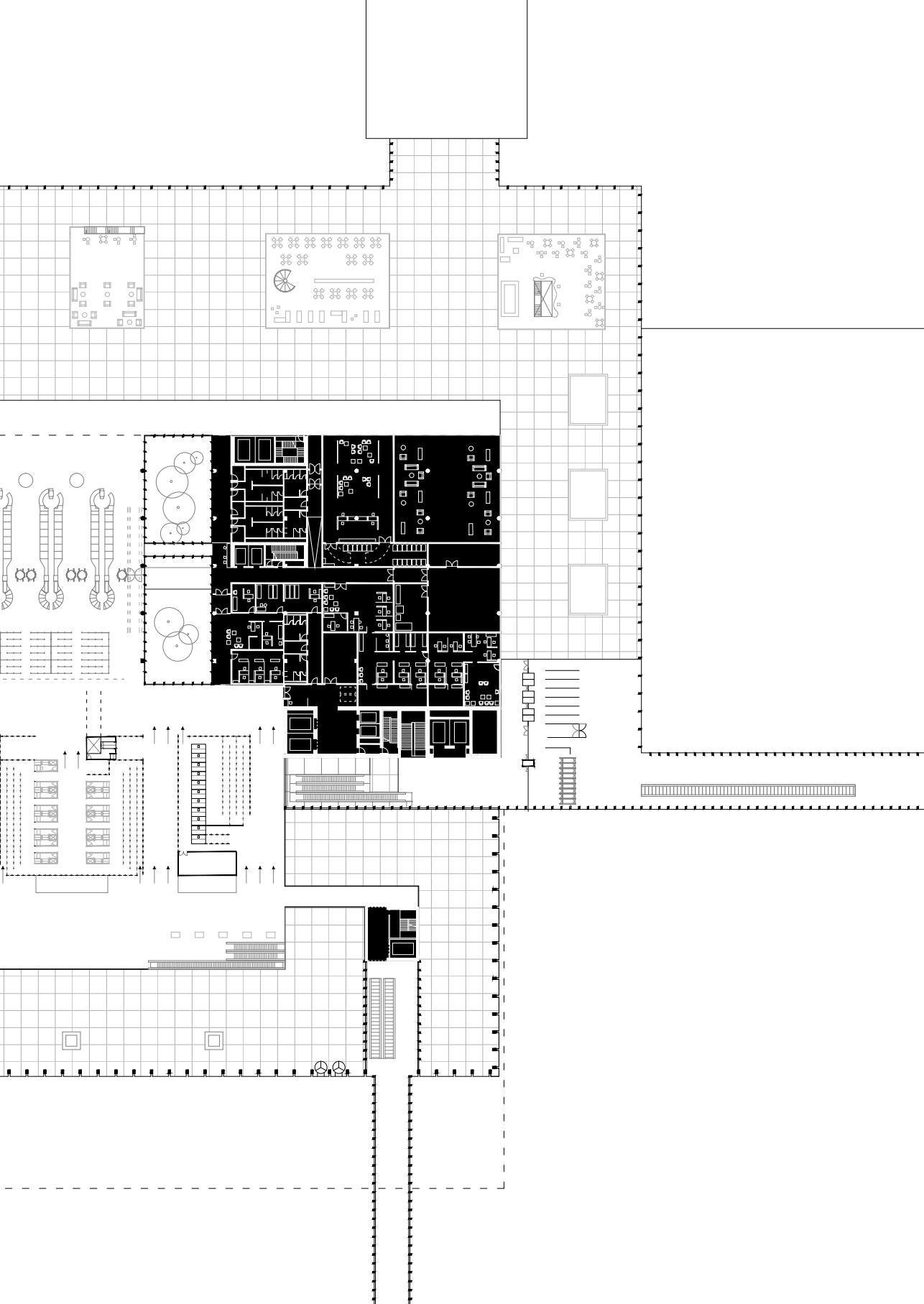
terminal's diverse worlds – landside and airside, public and secure, technological and civic – under one horizon. As a process, it embodies the very idea of activation: a design that stays alive by coordinating change.

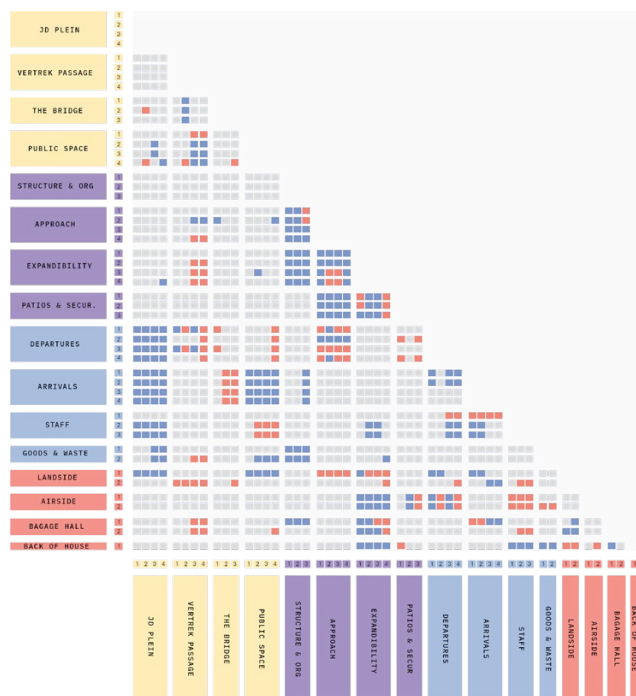
ACTIVATION AS CONTINUITY

The Schiphol Terminal project brings the trilogy of case studies to its most dynamic condition. Where SPOT unfolded as a negotiation of what to design within an open market framework, and NACH as an integration of fixed requirements within a formalized partnership structure, Schiphol operates in a field where neither the what nor the how remains stable. In this constantly shifting environment, design itself becomes the medium of continuity; the instrument that keeps the collective work coherent as everything around it changes. Design as Activation is not a metaphor for movement or growth. It describes the operational state in which architecture remains responsive, yet

↑ Detailed roof section
→ Competition proposal floor plan



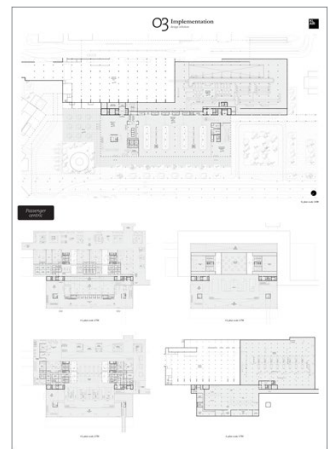
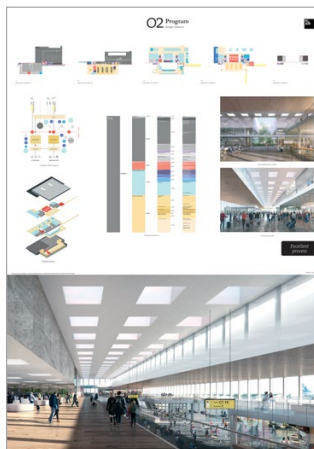
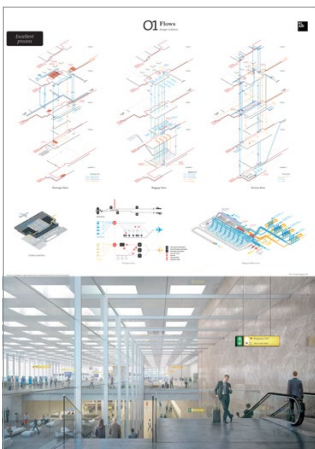
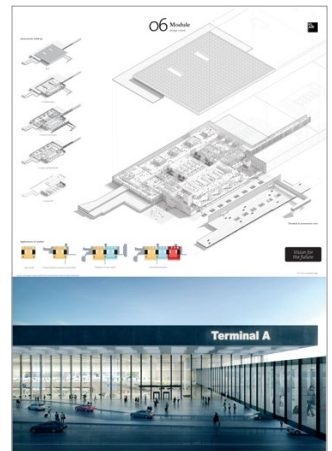
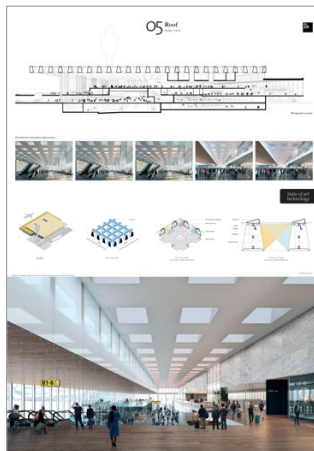
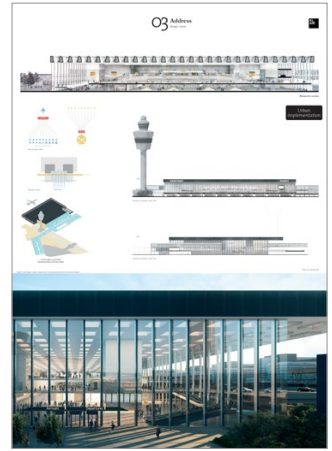
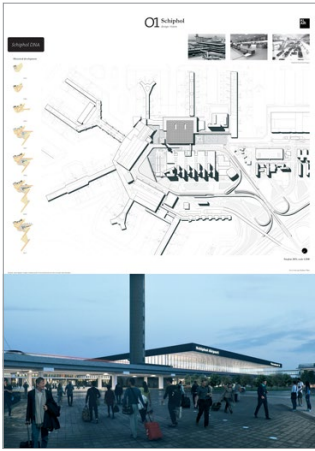




grounded. It is the ability to transform external disruptions, new data, revised regulations, changing budgets, or technological shifts into opportunities for realignment. The design activates each change, translating this into a new layer of coherence, rather than a loss of control. In practical terms, this activation unfolded through a working culture built on iteration and communication. The optioneering method, the continuous updates, and the shared BIM environment together formed a living framework in which design decisions could evolve transparently. Architects, engineers, and client teams were not simply exchanging information; they were sustaining a rhythm of mutual understanding. Each drawing, diagram, or model became a temporary state of agreement – a snapshot of collective reasoning in motion. This is design not as final statement, but as a sustained dialogue. Seen from the longer perspective of *Building*

Narratives, the Schiphol Terminal completes a trajectory. Across the three projects, the architect's role expands: from negotiator, mediating among interests (SPOT); to integrator, reconciling systems within fixed constraints (NACH); to activator, coordinating knowledge in conditions of flux (Schiphol). What connects these is the narrative: shared storylines that allow many actors to act together without losing orientation. In each case, design becomes the cognitive infrastructure of collaboration. The Schiphol Terminal stands as an example of architectural practice in the age of continuous transformation. It shows that coherence today is not the product of closure, but of sustained engagement; that design can hold together multiplicity, volatility, and collaboration. Activation is not an exception to design; it is design at its most vital, an architecture that thinks, adapts, and endures by remaining in conversation.

↑ Integral design options compatibility diagram

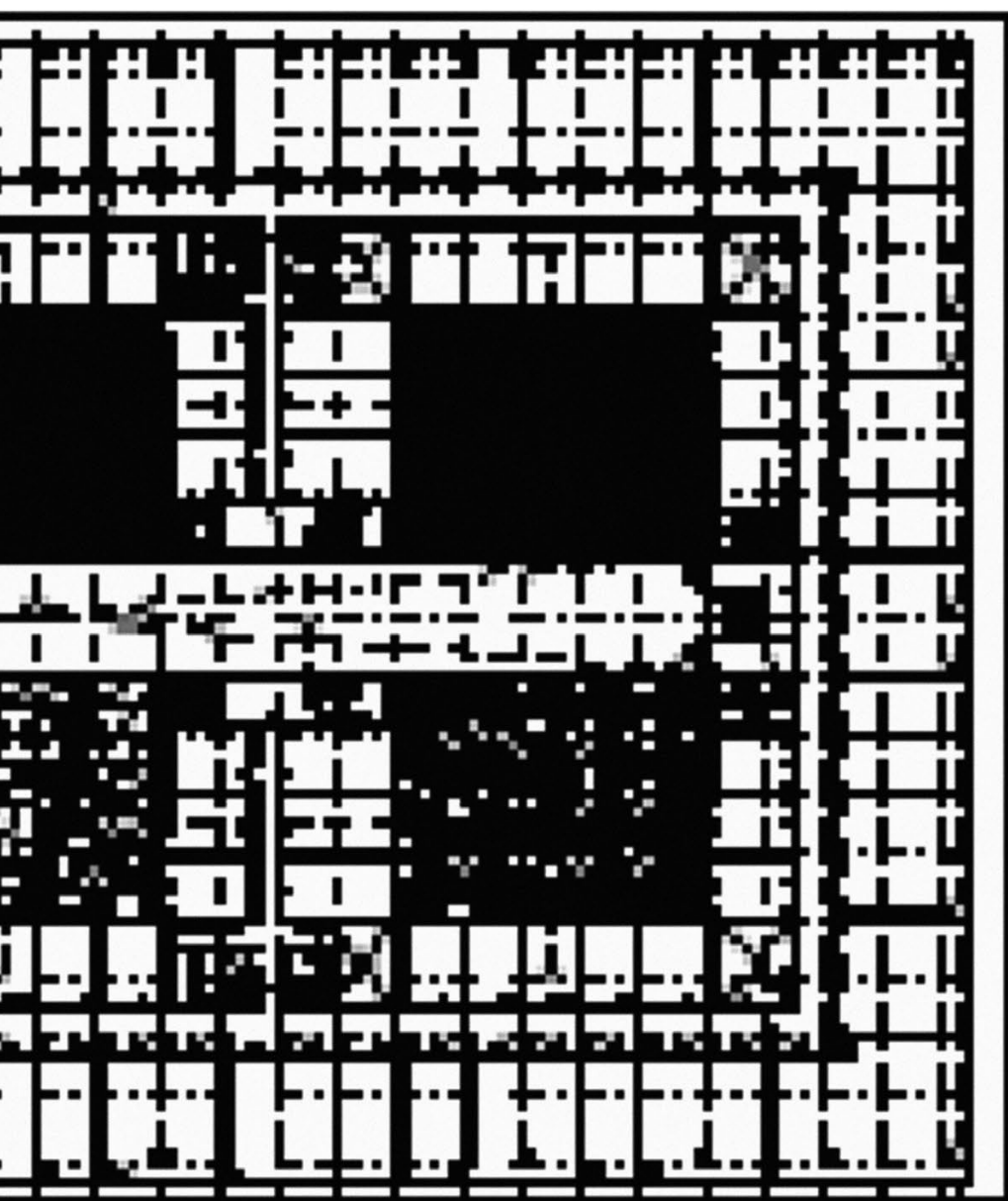


↑ Competition panels

DESIGN AS COLLECTIVE INTELLIGENCE

with Kees Kaan Georg Vrachliotis







Architecture constantly rebuilds the space in which it thinks. Every generation discovers new ways to draw, measure, and simulate the world; and so with each new generation, the field must re-establish what it knows. These new instruments are never neutral: they shape the architect's relationship to truth, to agreement, and to the practice itself. Through them, architecture learns to navigate the intersection between the physical and the social, the measurable and the debatable, the built and the imagined.

Today, this process extends into another medium. Artificial Intelligence is not simply adding new tools; it is transforming the cognition of design. Connecting vast fields of data, revealing patterns too complex to perceive, and in doing so mirroring something essential in architecture: the need to compose sense from multiplicity. The question is not whether machines can design, but how design changes when another kind of 'mind' begins to participate in the process.

TRUTH, AGREEMENT, AND THE PRACTICE

KEES KAAAN:

When we first spoke about truth and agreement, it was to describe how architecture operates. We never start from nothing; we move constantly between different kinds of knowledge. Truth is what pushes back: gravity, structure, daylight, the behaviour of materials. Agreement is what we build together: the brief, the rules, the budget, the expectations and shared values that orient these. And practice is what connects the two. The craft of translating what's there into what's needed. Architecture lives in that space in-between, where contradictions must be held long enough to take form.

GEORG VRACHLIOTIS:

Yes, and for me that little triangle – 'truth, agreement, and practice' – is a way of thinking about design knowledge itself. Every drawing or contract quietly says: 'this is how the world could be'. And the triangle keeps changing shape. When perspective was invented, when photography arrived, when digital machines came along; each time, architecture had to redefine who gets to speak about truth. Once modelling became digital, our drawings stopped being mere representations. They began to simulate and predict and, metaphorically speaking, to form opinions of their own. From that moment, the computer didn't just show reality; it began building a parallel one. So when our tools start creating their own truths, who keeps the story consistent, or decides which version deserves to become real?



KK:

Obviously the triangle is permanently in flux. Truth, agreement and practice change over time independently, but also in relation to each other. That's exactly what we face every day. So now we work with tools that predict, instead of describe, and start to suggest. They simulate cost, maintenance, performance, even atmosphere. Design still comes down to judgement, deciding which of those possibilities should actually exist, based on what you know at that moment. So you keep holding contradictions and still move forward. That's the real work – deciding with what you know.

In practice, this happens constantly. A technical issue – say, a façade detail – quickly turns into a question of value. You sense where efficiency ends, and where generosity – and with it – beauty appears. At that moment, the drawing becomes a negotiation, between ethics and economy, between what is possible and what feels right. And that negotiation, I think, is where architecture really takes place.

GV:

Today, every project is divided among many people and programmes: engineers, sustainability experts, algorithms, and cost models. It looks efficient, but something gets lost: the sense of the whole. And that is where the architect matters.

Design brings all these different realities into conversation: the technical, the political, the economic, and the human. It's like hosting a big dinner where everyone speaks a different language. Someone must ensure the conversation doesn't fall apart. Maintaining coherence is perhaps the most essential aspect of design today.

KK:

Exactly, I love the dinner metaphor. The visual language of the narrative helps keep the conversation focused and relevant. Every project redraws the triangle a little differently. It's never fixed – more like a living geometry that shifts as the project unfolds. That flexibility, the ability to adapt without losing sense, is what keeps architecture resilient.

GV:

Imagine shaking the triangle a little. Suddenly, one corner behaves differently. Computation used to assist practice: measuring, visualizing, testing. Now it begins to think along with us, joining the conversation and imitating both behaviour and human intent. That's unsettling, because it changes the rules.

Machines begin to produce a kind of truth of their own; one that looks objective, but rests on assumptions we have built into them. Computation becomes like a mirror that doesn't just reflect your face, but quietly redraws it. So, the question is: are we still defining what's true, or are our tools beginning to decide for us?

KK:

Yes, we feel that tension. Once tools begin to simulate instead of just record, they also start to suggest. They predict what might happen, and with that, they start to steer the process. So the question becomes: how do we keep the conversation open – not only between people, but between all the systems involved? The important thing is not to be defensive or to ignore the input. For me, that's where narrative is activated. We build stories that hold things together, that let more minds take part in the work. Narrative is how coherence survives complexity. If I tell someone to draw a line from A to B, I get their hand. If I ask them why that line matters, I get their mind – and that is what I need. That shift, from instruction to reasoning, is where design starts to think collectively.

GV:

Exactly. The substance of design is the story that holds it together. A project moves forward because people understand why decisions are made. That shared reasoning keeps everyone aligned. Explaining is part of design itself: every time you explain a choice, you clarify the logic that makes the project real. Maybe that is what makes design so human: it is thinking out loud, together.

KK:

Yes, and that's also how projects evolve, through showing, explaining, and trying again. We present, re-present, and adjust; not to convince others, but to clarify ideas. With each iteration, the resolution increases, clarity increases: drawings, models, and words refine a shared understanding.

KK:

That's true. AI amplifies what's already there. It broadens how we test, compare, and combine, but it also forces us to be clearer about what really matters. Design depends on judgment, knowing what to leave out, and making informed choices. Sometimes intelligence means omission, not mere accumulation.

GV:

That's where AI becomes revealing. It imitates our reasoning so well that it reflects our own habits back at us: how we decide, justify, and simplify. In a way, AI is a conversational technology that becomes a lens focused on design itself. It exposes what we take for granted: that every decision is a form of reasoning. And that exposure can be uncomfortable. It makes visible the values hidden in our tools. The question is, what kind of reasoning do we want our tools to learn from us?

GV:

In design, omission is often as meaningful as inclusion. Every plan or dataset filters reality. It highlights certain aspects and conceals others. Sometimes, what is left out tells the most interesting story. Staying aware of what's missing – and why – keeps design intelligent.

FROM NEGOTIATION TO ACTIVATION

KK:

When we talk about negotiation, integration, and activation, we're not describing a sequence but different ways in which design intelligence operates. Each will come to the fore depending on the situation. Together, they describe how architecture retains coherence under pressure. Negotiation keeps multiple realities in play – social, spatial, political – so architecture can speak across differences.

Integration pulls these conversations into systems; aligning materials, contracts, and processes without losing sense. Activation is when everything starts moving at once – systems, decisions, contexts – and design has to stay coherent within that motion.

Before we start designing a finished object, we design a framework that allows us to make informed decisions. In that sense, architecture becomes an infrastructure for reasoning.

KK:

Yes, that's the danger. It is absolutely not managerial; it is design, but shared with regards to obtaining input, consisting of facts, experience, and knowledge distributed across many minds and moments. The architect defines the frame of the project, not every move inside it. If the frame is clear, others know how to act, and the project remains cohesive. That's what keeps collective intelligence alive.

GV:

That, in a way, also redefines what it means to be an architect. When we speak of activation, it can sound managerial, as if design were just coordination. The challenge is to keep its role as a creative catalyst visible.

GV:

Activation then becomes a form of attention and a way of designing that stays aware of its own context and change. It's less about managing action, and more about noticing transformation.

KK:

Exactly. We design the rhythm of work, the tempo of decisions. A project that closes too soon stops learning. Activation means staying iterative and keeping that learning open, allowing design and construction to remain part of a continuous conversation. Of course, at some point decisions are made, and the results become an integral part of the shared model. The model of a possible future – in many cases a unique building that facilitates human needs.

KK:

Yes, to a certain extent, in architecture, it's less about improvisation but rather about curation. We do give up a degree of control, but not direction. Others contribute their knowledge, perspectives, and sometimes even contradictions. We must absorb that input, test it, and integrate it. That's the trade-off: opening the process to more voices while keeping its coherence intact. The architect defines the framework, but does so mostly through narrative, so intentions are self-evident, not based on authority. Narrative becomes the shared language that helps align the different contributions, making the project become more precise, not more fragmented. Responsibility is about maintaining direction within dialogue; keeping the project open enough to learn, yet focused enough to build.

GV:

This changes authorship, too. Design stops being the voice of one and becomes the outcome of many overlapping conversations between people, tools, and situations. Maybe authorship today is more about creating conditions where something unexpected can appear.



GV:

AI is now built into the tools we use every day. It doesn't think as we do. It perceives relationships, traces patterns, and tests combinations without needing to understand them. For architects, that difference is not a threat, but an opening.

These systems reveal new ways of sensing coherence, of finding links across scales and disciplines that we might overlook. The architect's task is no longer to defend meaning from the machine, but to work with it, to steer its associations toward relevance, to turn pattern into proposition, and data into direction.

KK:

AI can process everything and maybe even help to judge what matters. That's why narrative becomes even more important. When everyone brings their own algorithm; it's the shared narrative that keeps the project coherent. Computation isn't outside the narrative; it works within it. It becomes part of architectural reasoning, extending how designers think and decide.

GV:

Optimization isn't design. It's efficiency, and design begins where efficiency ends. It asks not only how something works, but why it should exist. As systems become more visible, though rarely transparent, design turns into translation. We are surrounded by data processes that used to stay hidden, but now constantly demand interpretation. The architect's role shifts: to help society make sense of what it sees; to give form to complexity so people can live with and question this.

KK:

That's a good point. It really pushes us back to (visual) language – to describe, to argue, to narrate. Every decision becomes visible; every choice needs to be explained. The implicit knowledge that once guided us silently now becomes explicit, recorded, and compared. And that adds to the complexity. But it also makes our work more deliberate.

GV:

And that visibility is transforming education too. More and more of the design process now leaves a trace: versions, parameters, simulations, and decision logs. Students can follow how ideas branch, fail, or return. That's a gift, but also a trap. The more the process is recorded, the harder it becomes to find one's own voice within it. Teaching today is less about transmitting knowledge and more about shaping judgment, helping students decide which reasoning deserves attention and which can be ignored. Education must now cultivate the courage to choose, to omit, to take responsibility. Perhaps the real learning no longer happens in the visible steps, but in the silent interval when a student decides what not to ask the machine.

Judgement doesn't disappear. It just becomes visible. Every dataset or model carries someone's decision about what matters. And I think that's a good thing. It reminds us that design is never neutral. The task is to make those judgments clear and legible enough that others can question and build on them. In a way, that's what education is becoming: a shared rehearsal of judgment, where students and teachers learn how to see, name, and refine the reasoning behind their choices.

KK:

This helps us articulate our own thinking – not to compete with AI, but to deepen what we already do. It shows us our own reasoning, so we can see it more clearly, explain it, and even improve it. In that sense, it strengthens the rational side of design over the intuitive one.

GV:

Traceability isn't transparency. AI can follow every step of a decision, but it still can't explain why it happened. And that's the interesting part: the gap where design begins to think about itself. Our reasoning becomes more visible, readable, and editable. Intuition turns into something we can watch unfold.

AI doesn't replace thought, of course, but exposes it. What used to be private – the silent logic of the designer – now enters the public domain of collective intelligence, where every trace can be questioned, compared, and refined through feedback; by data, but also by people.



GV:

In our *Atlas of Intelligence* research, we explore how different forms of intelligence can coexist, from biological and collective to mechanical and architectural. AI sits right on the hinge-point that has always defined architecture: between matter, agreement, and judgement. Its logic is predictive rather than interpretive; pushing us to reflect on how we explain, justify, and connect our choices. I like to think of this as part of spatial intelligence: the ability to think through relationships, and to build coherence across scales, and link different ways of knowing. Design becomes a dialogue between all intelligences, each shaping how we understand and make the world.

KK:

That's also how I see it. Every project becomes a negotiation between systems that don't naturally speak to each other. In practice, we're constantly curating different intelligences – human, digital, material. We build frameworks that enable these to work together. Practice enables those conversations. Spatial intelligence is what enables those realities to coexist without collapsing into a single logic. This coexistence is a fundamental requirement for a successful building.

GV:

That connects to the figure of the generalist. For me, this is someone who understands how things interrelate. In an age of fragmentation, that ability to weave things together becomes radical again, even political.

KK:

Even when many kinds of reasoning are present, someone – the specialized generalist, the architect – must still decide where they converge and be accountable for the outcome. At that point, the critical design space reveals itself. The overlap where truth, agreement, and practice find equilibrium. All the choices, negotiations, and interpretations condense into something self-evident; a form that carries its own logic. It's not the end of the process but its concentration, the moment when the work – after so many dialogues – can finally stand on its own and speak.

KK:

This is what defines architectural agency: taking responsibility for deliberate choices. In the end, we're still the ones who bring ideas into the physical world as buildings or other spatial interventions; where a room is still a room, and we stand by what we make.

KK:

Yes, and perhaps coherence itself is evolving. Architecture's task may no longer be to fix this, but to learn how it changes. Every new tool, including AI, reveals what was essential all along: the ability to stay coherent while everything shifts.

GV:

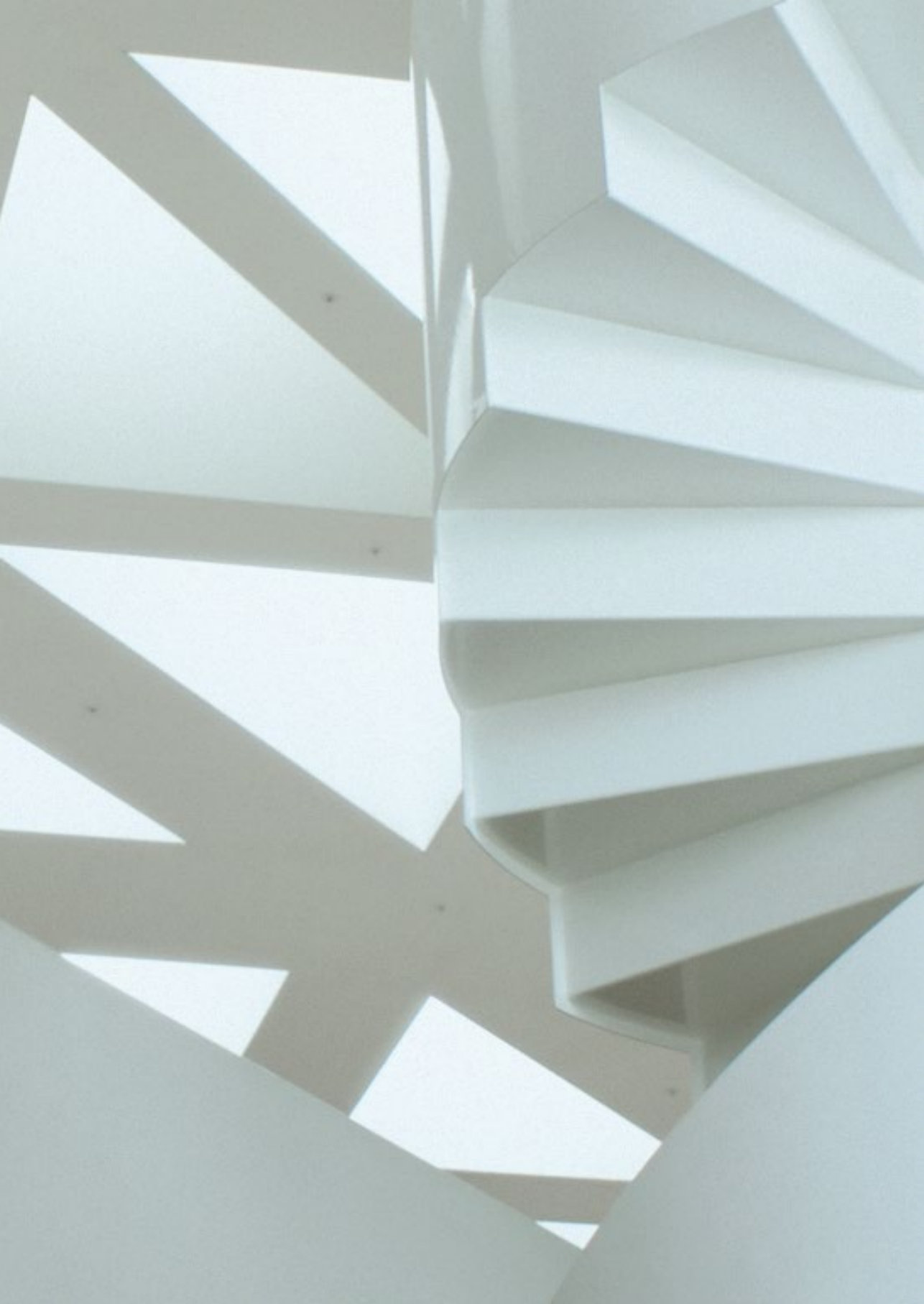
Accountability is consequence. Even in collective work, someone must stand behind design decisions that shape the world. But what does that mean, when decisions are made through systems that think with us? Where does authorship end, and accountability begin?

GV:

Maybe that's the continuity of practice: the ability to stay coherent while everything changes – to rebuild meaning every time the conditions shift.

In practice, narrative is largely visual: drawings, models and diagrams carry the argument, while words remain brief and instrumental, clarifying direction so the project can ultimately become a building.







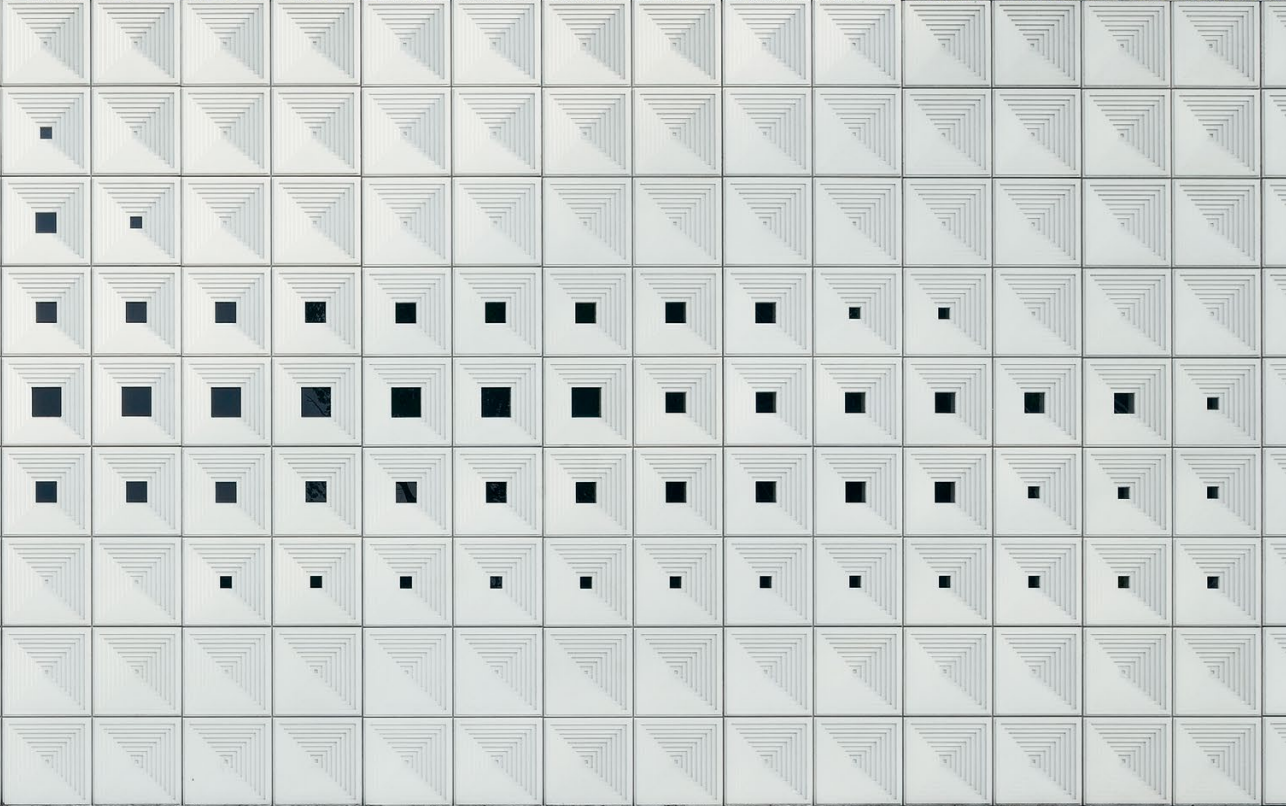


IN PRINCIPIO ERAT VERBUM





























ROADMAP

The roadmap brings together the visual, factual, and conceptual references that support the book. It presents image credits, project information, and the wider collaborative contexts behind the case studies, alongside glossary entries that clarify how key terms are used throughout Building Narratives.

PP 4 – 9

FOREWORD

CREDITS

08 Miguel Tavares

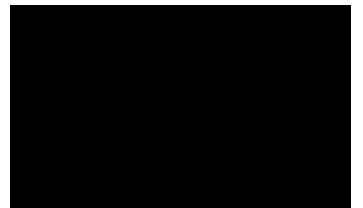
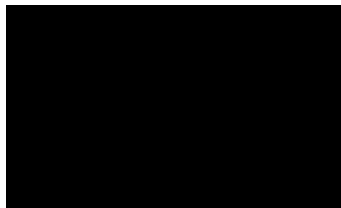
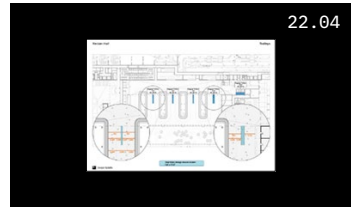
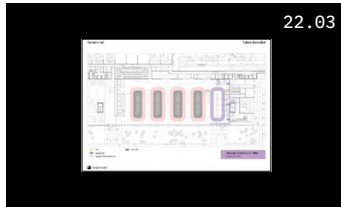
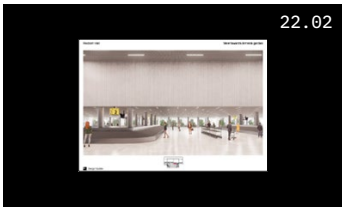
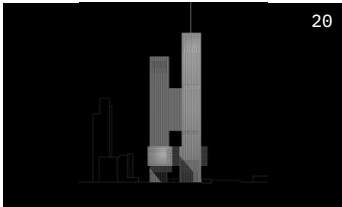
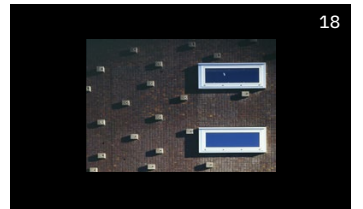
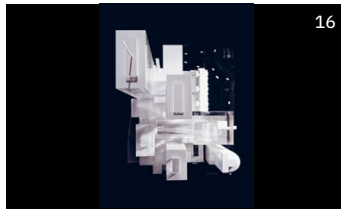
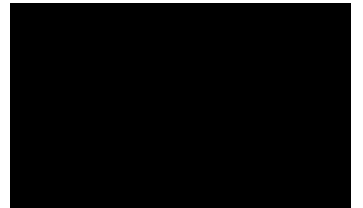
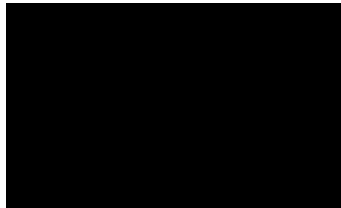
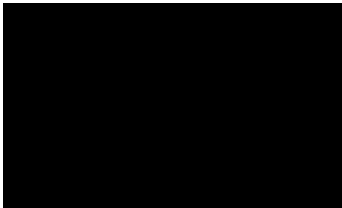
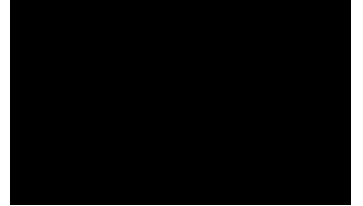
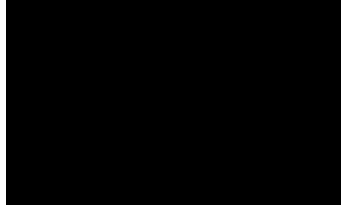
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FROM OBJECT TO PROCESS

INTRODUCTION

CREDITS

18 Luuk Kramer



CREDITS

34 Simon Menges

GLOSSARY

TRUTH
The domain of non-negotiable, objective realities that constrain architectural practice: the laws of physics, structural necessities, material behaviour, climate data, and the histories inscribed in a context. Truth is indifferent to opinion yet shapes everything we do. In the book’s framework, it stands in continuous tension with Agreement.

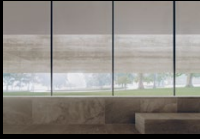
AGREEMENT
The domain of negotiated consensus in architectural practice: briefs, budgets, regulations, institutional mandates, timelines, and shared community values. Agreement is socially constructed and inherently malleable. In the book’s framework, it stands in continuous productive tension with Truth, mediated by practice.

CRITICAL DESIGN SPACE
The zone where Truth, Agreement, and practice intersect. It is where architects orchestrate contradictions – aligning physical constraints with negotiated social values – to produce coherent, buildable spatial propositions. Design here operates in the shifting relations between domains, rather than within any single one.

CREDITS

38	Fernando Guerra / FG+SG	50.01 – 50.02	Filippo Bolognese
40	Inga Powilleit	50.03 – 50.04	KAAN Architecten Archive
42	Luuk Kramer	52	Inga Powilleit
43.01 – 44.06	Claus & Kaan Archive	53	KAAN Architecten Archive
45.01 – 45.02	Michel Claus	54	Kees Kaan
45.03 – 48.01	KAAN Architecten Archive	55	Titia Hahne
48.02	Beauty & The Bit	56	KAAN Architecten Archive
48.03 – 49.03	KAAN Architecten Archive		
49.04	PF Visual		
49.05	KAAN Architecten Archive		

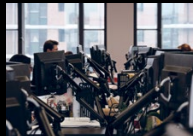
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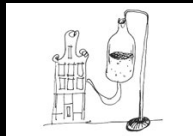
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BUILDING INFORMATION MODELLING (BIM)

A digital methodology embedding geometric, material, structural, and performance data into a shared three-dimensional model. Unlike CAD, which focuses on geometry and drafting, BIM allows diverse disciplines to work simultaneously, detecting clashes and simulating performance in real time. In the projects discussed here, BIM functions as a collaborative interface: the technical backbone through which a project's narrative remains coherent amid constant change.

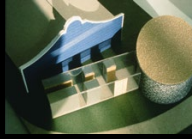
BUILDING NARRATIVES

The core methodology of this book. Rather than retrospective storytelling or mere rhetorical devices, building narratives are operational instruments and a spatial form of communication that organize collective intelligence. They keep the why (purpose), what (spatial proposition), and how (collaboration and delivery) of a project mutually readable across long timelines, varying disciplines, and shifting conditions. They are inherently visual, unfolding through drawings, diagrams, and models that evolve in tandem with the design.

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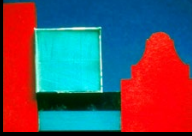
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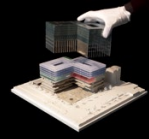
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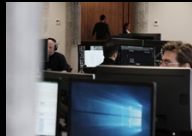
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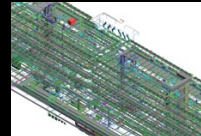
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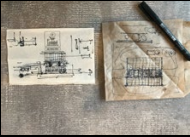
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CREDITS

60	Claus & Kaan Archive
62	Fernando Guerra / FG+SG
64 – 67	KAAN Architecten Archive
68	Sebastian van Damme
70 – 73	KAAN Architecten Archive
74.01 – 74.03	Stijn Drolenga

GLOSSARY

POLDER MODEL (POLDERMODEL)

A Dutch tradition of consensus-based decision-making, rooted in centuries of water management. The term derives from polder – land reclaimed from the sea – whose maintenance required communities to cooperate since the Middle Ages, as failure threatened all. Dutch water boards emerged from this necessity. In its modern political sense, the term appeared around 1990 and describes tripartite cooperation between employers, unions, and government, formalized in the Wassenaar Agreement (1982). In urban planning, it underpins the collaborative approach from which practices in this book – negotiation, integration, activation – have grown. Ref: Schreuder, Y. (2001). Bulletin of Science, Technology & Society, 21(4).

WICKED PROBLEMS

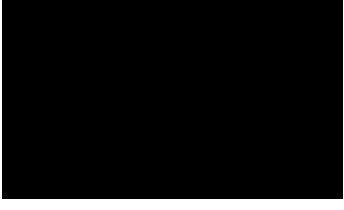
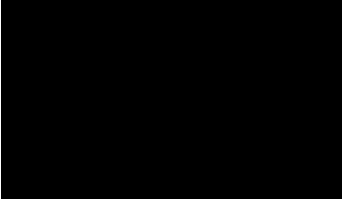
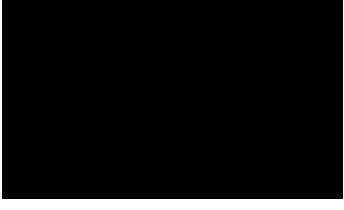
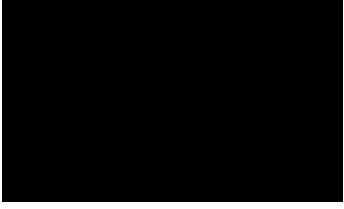
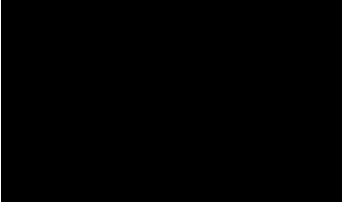
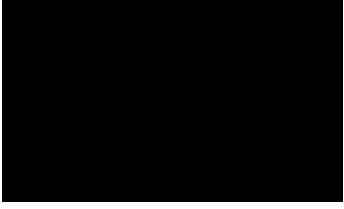
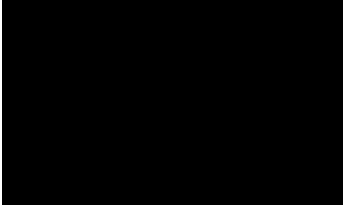
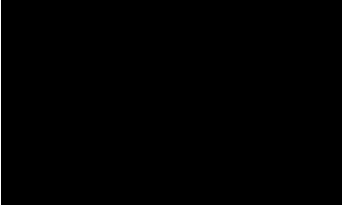
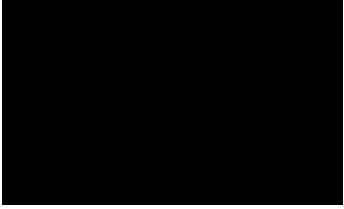
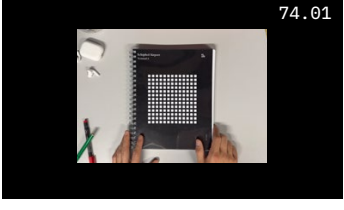
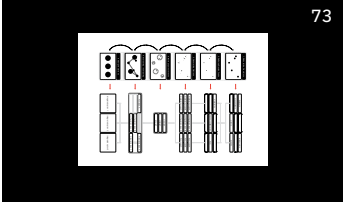
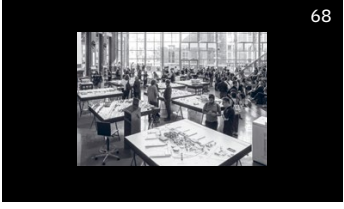
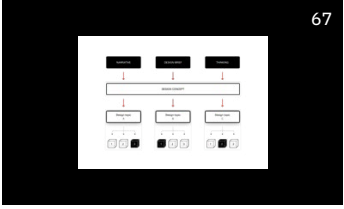
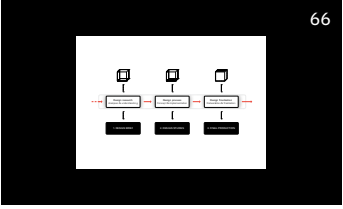
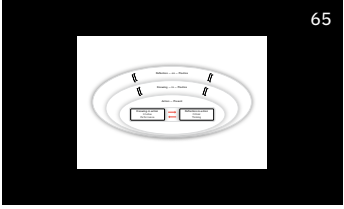
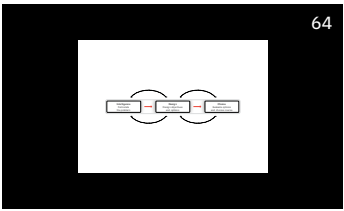
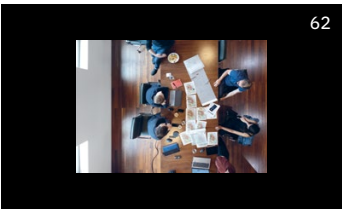
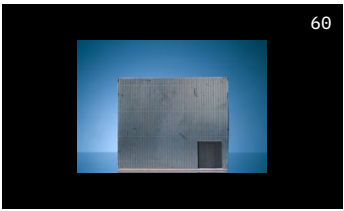
A class of problems identified by Horst Rittel and Melvin Webber in their 1973 article 'Dilemmas in a General Theory of Planning' (Policy Sciences, 4:2, P 155–169). Unlike the 'tame' problems of engineering or mathematics, wicked problems have no definitive formulation, no stopping rule, no true-or-false solutions, and every attempt at resolution is irreversible. Farrell and Hooker (2013) condensed Rittel and Webber's ten criteria into three: finitude, complexity, and normativity. Architectural projects, as explored in this book, are understood as navigating wicked conditions: solutions remain provisional, judged by how well they fit their moment.

AREA-DEVELOPMENT STRATEGIES (GEBIEDSONTWIKKELING)

A Dutch planning approach that shifted from prescriptive post-war master plans toward open, flexible frameworks for urban transformation. These strategies outline conditions rather than dictating outcomes, providing guidance that balances public policy goals with private initiative.

BOUNDED RATIONALITY

A concept introduced by Herbert A. Simon describing the inherent limits of human decision-making: cognitive constraints, incomplete information, and limited time prevent optimal solutions, leading decision-makers to satisfice – seeking solutions that are good enough rather than perfect. First developed in Administrative Behavior (1947) and elaborated in The Sciences of the Artificial (1969, 2nd ed. 1981, 3rd ed. 1996). In this book, bounded rationality is treated as one dimension of the design condition, complemented by Donald Schön's reflection-in-action. Together they describe the layered reality of practice: rational structure and reflective judgment operating simultaneously.

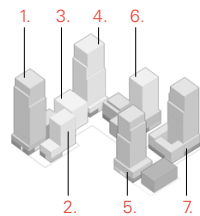


CREDITS

79	Stijn Drolenga using OSM	96.01	PF Visual
80	PF Visual	97.01 – 97.02	KAAN Architecten Archive
82	Sebastian van Damme	98	Sebastian van Damme
83	Stadsarchief Amsterdam		
84.01 – 89	KAAN Architecten Archive		
90 – 92	Kees Kaan		
93	PF Visual		
94.01 – 94.03	Kees Kaan		

FACTS

LOCATION Amsterdam, Hogehilweg 5-7	SIZE 45.000 sqm	LANDSCAPE Inside Outside
YEAR Design: 2018 – 2020 Construction: 2021 Delivery: 2026	CLIENT COD, Duqer	SUSTAINABILITY DGMR
	MANAGEMENT BOAG	CONTRACTOR Pleijssier Bouw



DESIGN PARTNERS
1. Crystal – KAAAN Architecten; 2. Dusk – KAAAN Architecten;
3. Coral – KAAAN Architecten; 4. Hazel – Klunder Architecten;
5. Scarlet – ZZDP Architecten; 6. Aurelia – DOOR Architecten (plinth), Moederscheim Moonen (tower), Klunder Architecten (execution); 7. Terra – Mei architects + Marc Koehler Architects

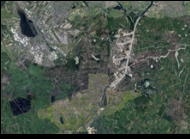
PROJECTTEAM
Allard Assies, Beatrice Bagnara, Santiago Brignardelli, Sebastiaan Buitenhuis, Marten Dashorst, Stijn Drolenga, Kees Kaan, Katarzyna Ephraim, Paolo Faleschini, Cristina Gonzalo Cuairán, Michele Guidobaldi, Narcisa Ionita, Elmira Jafari, Carlos Jacquet, Lianne Klitsie, Wouter Langeveld, Edoardo Mancini, Laura Ospina, Vincent Panhuysen, Dikkie Scipio, Aldo Trim, Yiannis Tsoskounoglou, Luk Vermeulen

GLOSSARY

AMSTERDAM LAYER (AMSTERDAMSE LAAG)
A conceptual and architectural base layer developed within the SPOT project to mediate between traditional Amsterdam urban proportions and contemporary high-density development. Operating at street and podium level, it establishes human scale, active ground-floor programmes, and a shared materials vocabulary, enabling different architects to contribute to a coherent whole across phases.

DESIGN AS NEGOTIATION
A mode of practice in fragmented, market-driven contexts where what to build is initially undefined. Design acts as a mediator, using spatial instruments (diagrams, massing studies, phasing visualizations) to balance public ambitions with private initiatives and to align shifting stakeholder constellations. The SPOT project exemplifies this mode.

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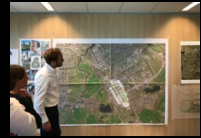
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PLOT PASSPORTS (KAVELPASPOORTEN)
A Dutch regulatory instrument specifying the buildable envelope, programmatic requirements, and design parameters for individual land parcels. Emerging in the 2010s as part of a shift toward performance-based planning, plot passports mediate between strategic urban visions and the design of individual sites. Since the Omgevingswet (Environment and Planning Act, 2024), they function within the broader framework of omgevingsplannen. In the SPOT project, plot passports reversed the conventional Amsterdam sequence: market-driven design established parameters that were subsequently formalized into regulation.

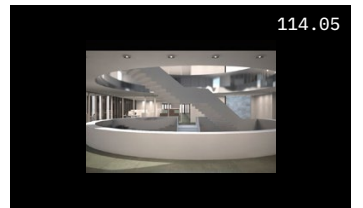
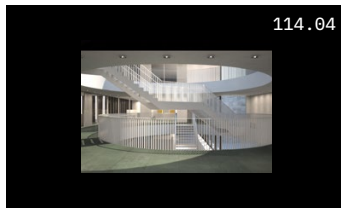
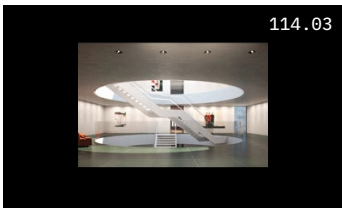
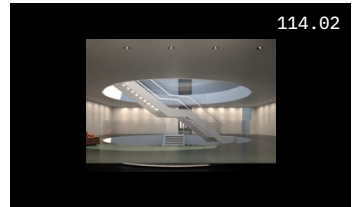
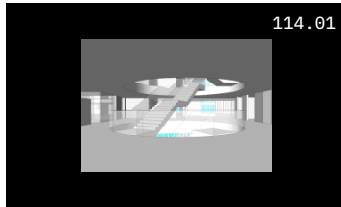
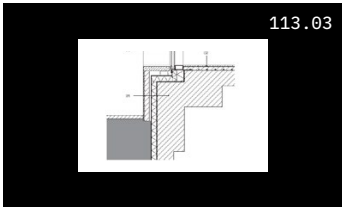
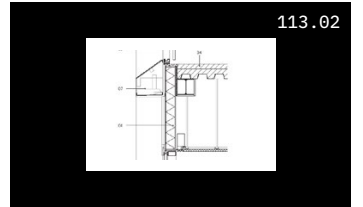
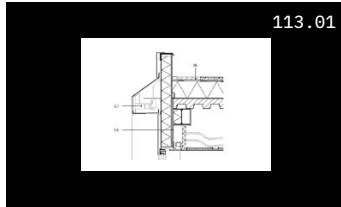
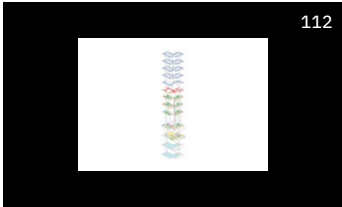
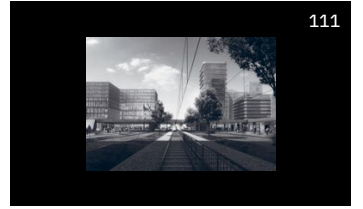
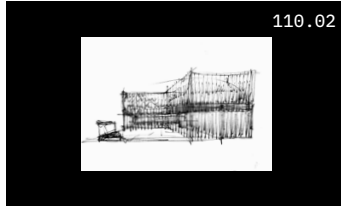
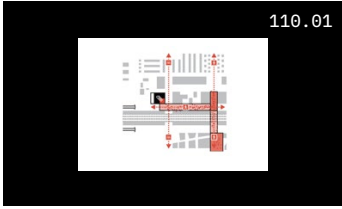
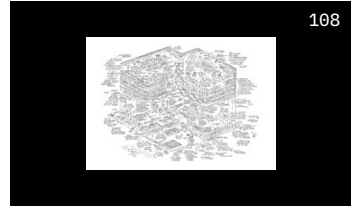
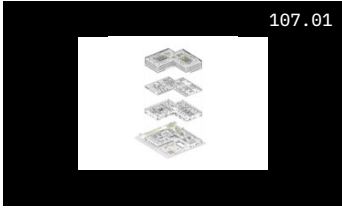
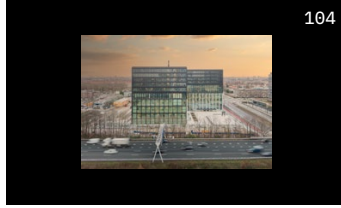
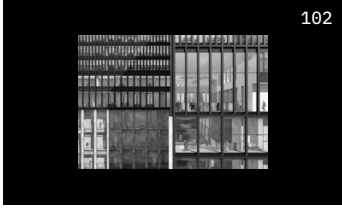
CREDITS	102	Beauty & The Bit	116	Beauty & The Bit
	104	Fernando Guerra / FG+SG	117	KAAN Architecten Archive
	106	Dominique Panhuysen	118	Sebastian van Damme
	107.01	KAAN Architecten Archive	119.01	Beauty & The Bit
	107.02	Stadarchief Amsterdam	119.02 – 121	KAAN Architecten Archive
	108	Jan Rothuizen	122	Inga Powilleit
	112 – 114.06	KAAN Architecten Archive		

FACTS	LOCATION	SIZE
	Amsterdam, Parnassusweg 220	60.000 sqm
	YEAR	CLIENT
	Competition: 2014 – 2016	Rijksvastgoedbedrijf
	Design: 2016 – 2020	
	Construction: 2017	CONTRACTOR
	Delivery: 2020	Consortium NACH

CONSORTIUM NACH
Investor – Macquarie Capital; Engineering – ABT; Management – DVP; Architect,
Interior Architect – KAAN Architecten; General contractor – Heijmans;
Maintenance and operation – Facilicom

PROJECTTEAM
Ana Rivero Esteban, Antony Laurijsen, Beatrice Bagnara, Cecilia Dobos, Claudio Zampaglione,
Dennis Bruijn, Dikkie Scipio, Jana Culek, Jasmijn Kok, Johandry Martina, Julian O’Neale, Kees
Kaan, Kevin Park, Koen Bosman, Laura Ospina, Lianne Klitsie, Lisa Goes, Luuk Dietz, Marco
Lanna, Marija Mateljan, Marlon Jonkers, Marten Dashorst, Marten Dashorst, Martijn Schuil
(EGM), Martina Margini, Martine Huijsmans, Michael Baas, Michael Geensen, Moritz Kuhl,
Narine Gyulkhasyan, Paolo Faleschini, Raluca Firicel, Robin Cals, Sebastiaan Buitenhuis, Sebastian
van Damme, Siebe Besseling (ABT), Sjoerd Boomars, Teun van Dooren (ABT), Thomas Hayat,
Vincent Panhuysen, Yinghao Lin

GLOSSARY
DBFMO (DESIGN, BUILD, FINANCE, MAINTAIN, OPERATE)
A public-private partnership contract binding a consortium to design, build, finance, maintain, and
operate a public building over a long period, typically 25–30 years. The government pays a peri-
odic availability fee rather than a lump sum. Introduced to the Dutch market in the late 1990s,
modelled partly on the UK’s Private Finance Initiative. In the Netherlands, DBFM contracts apply
to infrastructure (Rijkswaterstaat); DBFMO contracts, adding the Operate component, apply to
public buildings (Rijksvastgoedbedrijf). The model shifts evaluation from immediate delivery to
total life-cycle performance. The NACH Courthouse exemplifies this.



COMPETITIVE DIALOGUE

A structured EU procurement procedure used for complex contracts where the contracting authority cannot define the technical means or legal and financial arrangements in advance. Shortlisted consortia engage in successive rounds of discussion with the client to develop and refine their proposals before submitting final bids. In the Netherlands, competitive dialogue is the standard procedure for tendering DBFMO projects. During the NACH Courthouse procurement, dialogue sessions between the Rijksvastgoedbedrijf and bidding consortia allowed the teams to test design strategies against requirements, shaping both the architectural concept and the contractual terms through iterative exchange.

CAPEX AND OPEX (CAPITAL AND OPERATIONAL EXPENDITURE)

CAPEX is the upfront investment to design, construct, and deliver a building. OPEX covers recurring costs over its lifetime, including energy, cleaning, repairs, replacement cycles, staffing, and facility management. Conventional procurement often optimizes CAPEX alone, favouring lower initial cost. In life-cycle approaches like DBFMO contracts, CAPEX and OPEX are treated as one: the consortium that builds also operates the facility. Higher investment in durable materials, energy-efficient systems, or flexible layouts can reduce operational costs. Design decisions – materials, façade, lighting, spatial flexibility – are evaluated for immediate and long-term impact. This trade-off recurs in NACH and Schiphol cases.

PUBLIC-PRIVATE PARTNERSHIP (PPP) (PUBLIEK-PRIVATE SAMENWERKING, PPS)

A governance structure in which public authorities and private consortia share responsibility for delivering and operating infrastructure or public buildings. In the Netherlands, PPP is policy-based: there is no comprehensive PPP law, but agencies apply it when a public-private comparator demonstrates added value. PPP structures bind design, construction, financing, and long-term operation into a single contractual relationship, creating shared incentives for life-cycle performance. DBFMO is the specific contract form most used in Dutch PP

STRATEGIC URBAN PROJECTS

Flexible, hybrid urban interventions that emerged across Europe from the 1980s onward, replacing post-war comprehensive master plans. They advance through negotiation, iteration, and phased implementation, typically in former industrial or railway areas where public and private interests converge. In the Netherlands, the Nieuwe Sleutelprojecten (New Key Projects, 1994) linked national transport investment to local urban renewal in station areas. See the Introduction. Ref: Carmona, M. et al. (Eds.) (2009). Planning Through Projects. Techne Press.

DESIGN AS INTEGRATION

A mode of practice for highly structured environments with fixed requirements. It involves translating vast specifications and aligning seemingly contradictory demands – such as security versus openness – into mutually reinforcing architectural strategies. Rather than resolving tensions through compromise, integration transforms competing requirements into spatial solutions that enhance all objectives simultaneously. The NACH Courthouse exemplifies this mode.

PP 124 – 147

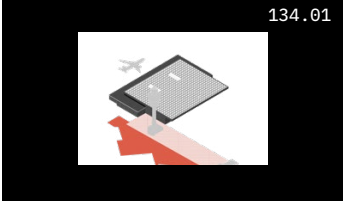
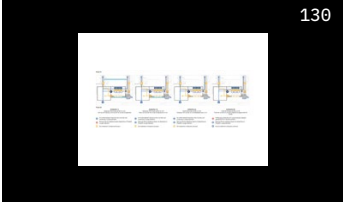
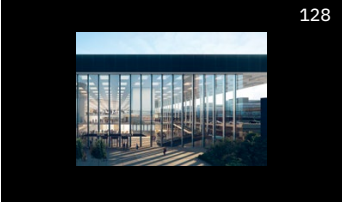
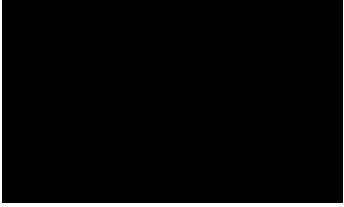
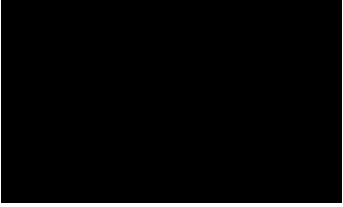
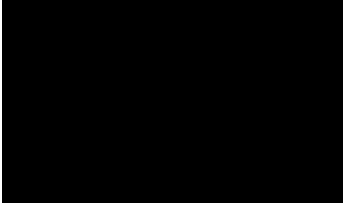
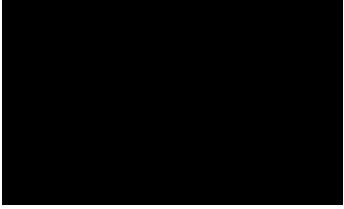
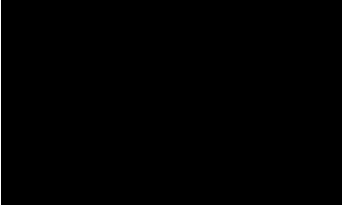
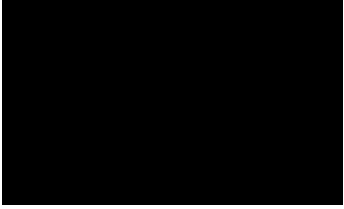
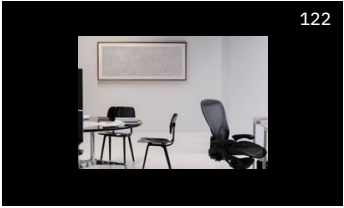
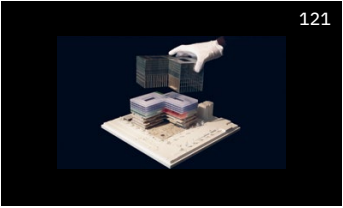
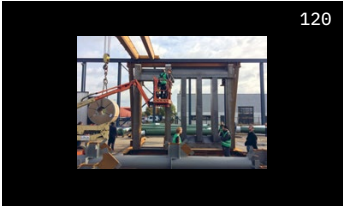
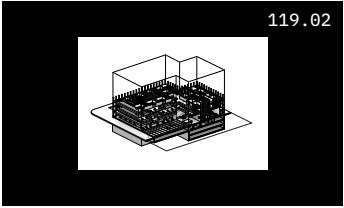
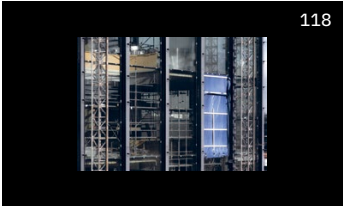
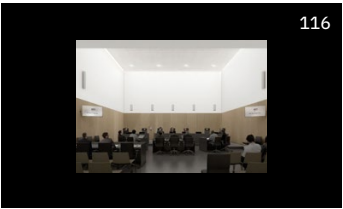
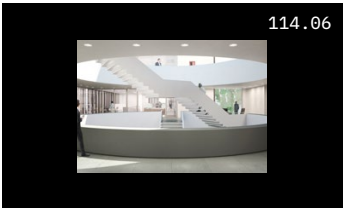
SCHIPHOL – ACTIVATION

TERMINAL

CASE STUDY

CREDITS

126	Stijn Drolenga using OSM
128	Beauty & The Bit
130 – 140	KAAN Architecten Archive
141	Stijn Drolenga
142.01	Beauty & The Bit
142.02	Adobe Stock, File #42079284, licensed by _virtual_
142.03 – 147.09	KAAN Architecten Archive



LOCATION	SIZE
Amsterdam	100.000 sqm
YEAR	CLIENT
Competition: 2017	SNBV (Schiphol Nederland B.V.)
	DESIGN TEAM
	KLAIR

KLAIR TEAM
ABT, Arnout Meijer Studio, DGMR, Estudio Lamela, Ineco, KAAAN Architecten, Planeground

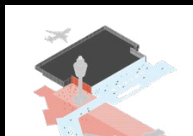
KLAIR ARCHITECTURAL PROJECT TEAM – COMPETITION
Andreas Alevras, Paul Beck, Paul van Bergen, Miguel de Bernardo Atienza, Roberto Calonge, Maicol Cardelli, Alice Colombo, Jana Culek, Sebastian van Damme, Marta Dyjaczynska, Paolo Faleschini, Di Fang, Ernesto de la Fuente, María García, Jesper Goorden, Jesus Hernandez, José Julián Horcajo, Cristina Jurado López, Kees Kaan, Carlos Lamela, Carlos Lobato, Rodrigo López Agudo, Arnout Meijer, Endri Metaj, Hana Mohar, Alberto Ortiz Quevedo, Vincent Panhuysen, Marco van der Ploeg, Roland Reemaa, Julio Resino, José Alberto Sánchez, Dikkie Scipio, Roberto Serrano, Christian Sluijmer, Hrvoje Smidihen, Walter Spangenberg, Johan Steenvoorden, Claudia Vermeulen, Mieke Vink, Jaap Wiedenhoff

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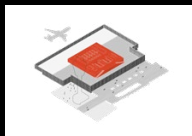
ACTIVATING DESIGN / DESIGN AS ACTIVATION
A mode of practice under conditions of systematic uncertainty and continuous change. Design functions as a dynamic process that keeps complex systems coordinated while parameters evolve. Activation describes the capacity to transform external disruptions into opportunities for realignment. The Schiphol Terminal project exemplifies this mode.

OPTIONEERING
An iterative design methodology in which multiple options are developed, tested, and evaluated in parallel against shifting requirements. Rather than seeking a single solution, the team tests how possibilities perform under different scenarios. Resilient options are carried forward; others are archived as a cumulative memory that can be reactivated when conditions change. Developed within the Schiphol Terminal project.

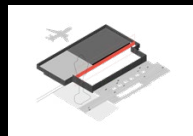
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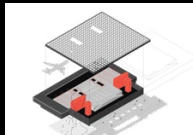
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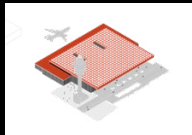
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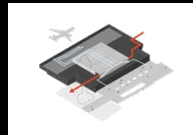
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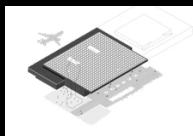
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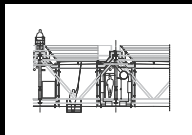
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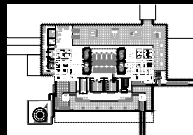
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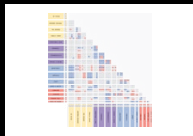
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CREDITS

150	KAAN Architecten Archive
152	Simone Bossi
154 – 162	Magdalena Wierzbicka
166	Victor Vroegindeweij
168	Fernando Guerra / FG+SG
170	Christian Richters
172	Stijn Bollaert
174	Marco Cappelletti
176 – 178	Fernando Guerra / FG+SG
180 – 182	Simone Bossi

GLOSSARY

SPATIAL INTELLIGENCE
A mode of reasoning that operates through space to connect disparate forms of knowledge – material, social, institutional, technical, cultural – into coherent propositions. Beyond the skill of an individual designer, spatial intelligence describes architecture’s broader capacity to think through relationships: between scales, disciplines, and competing logics. The architect, as a specialized generalist, builds frameworks that allow multiple kinds of reasoning to coexist without collapsing into a single logic. See the conversation between Georg Vrachliotis and Kees Kaan.

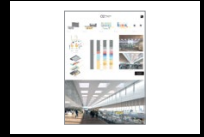
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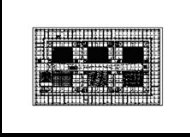
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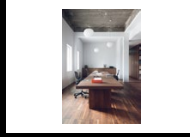
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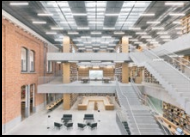
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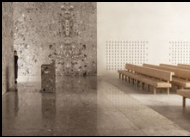
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APPENDIX

ACKNOWLEDGEMENTS

This book is itself an instance of the dialogue it describes. It emerged from sustained collaboration between architects and researchers, between practice and academia, and across the many conversations that shaped how we understand design as a form of collective intelligence. The deeper acknowledgment belongs to everyone who engaged with these ideas and helped make them real.

This book emerged from sustained collaboration between KAAN Architecten and the academic group Complex Projects at Delft University of Technology.

We thank the Department of Architecture at TU Delft, under the leadership of Georg Vrachliotis, for institutional support of this research. We are grateful to all colleagues in the Complex Projects group from 2012 to 2026 and the broader educational community at TU Delft who sustained the intellectual environment in which this work developed.

We thank the partners and colleagues at KAAN Architecten for sustaining the intellectual environment and providing continuous support throughout this research.

Besides Kees Kaan, we thank the project leaders and co-authors who shaped the case study chapters. Vincent Panhuysen and Marco Lanna for NACH, Hrvoje Smidihen for the Schiphol Terminal, as well as special thanks to Giulia Rapizza on the Schiphol Terminal and Aldo Trim on SPOT. We are grateful to the clients and collaborating teams who opened their processes to our research.

We are grateful to Stijn Drolenga for his visual intelligence and sharp eye, and for his extensive contribution to the timeline in the "A Room Is Still a Room" chapter.

For a complete list of collaborating organizations and teams, please see the Roadmap.

We acknowledge the peer reviewers Hans de Boer, Stefano Corbo, Marija Mateljan, and Georg Vrachliotis for their rigorous feedback. Beyond the formal review process, May Kaan and Vincent Panhuysen provided continuous support and critical feedback. Special thanks to Felix Claus, with whom Kees Kaan began his professional practice in 1987 and with whom the exploration of architectural narratives first took shape.

This publication was funded by the Dutch Sector Plan for Design Engineering Sciences through the Activating Design project, led by Kees Kaan and Manuela Triggianese, and it was also supported by the TU Delft Deltas, Infrastructures & Mobility Initiative, led by Marcel Hertogh and coordinated by Hans de Boer, and the Dutch Research Council (NWO).

We acknowledge nai010 publishers and TU Delft OPEN Publishing for their commitment to bringing this book to publication, with particular thanks to Marcel Witvoet and Sara Duisters from nai010 and Just de Leeuwe and Rixt Tuinstra from TU Delft OPEN Publishing.

Finally, we are grateful to all our friends, family and collaborators for their support and contribution throughout this work.

BIOGRAPHIES

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KAAN ARCHITECTEN, THE NETHERLANDS

Alice Colombo is a graphic designer and art director. She holds a Master's degree in Architecture from the Politecnico di Milano and, after gaining experience in architectural offices in Milan, Switzerland, and Rotterdam, joined KAAN Architecten. At KAAN, working closely with the partners, she leads the office's research, editorial, and visual communication activities as Head of Research & Reflection, translating architectural thinking into coherent visual and textual formats across books, essays, exhibitions, presentations, and digital platforms. Operating at the intersection of graphic design, research, and curation, she develops the overarching narratives of projects and of the office as a whole. Alice co-authored the office monograph *Portraits* (Park Books, 2022) with Kees Kaan and is the editor and graphic designer of *Bridging Time* (nai010, 2022) and *The Courthouse: Architecture of the Public Good* (nai010, 2023).

STIJN DROLENGA

KAAN ARCHITECTEN, THE NETHERLANDS

Stijn Drolenga is an architect and designer. He studied at Delft University of Technology and Aalto University in Finland, where he obtained his Master's degree in Architecture. He began his professional career at Koen van Velsen architecten in Hilversum and E2A – Piet Eckert and Wim Eckert Architekten in Zurich before joining KAAN Architecten, where he has contributed to the design and development of several large-scale projects. His portfolio includes the

redevelopment of Groningen Railway Station, the new terminal at Amsterdam Airport Schiphol, and the winning competition proposal for The Hub Berlin. Stijn's work is driven by a strong interest in contemporary design and technical precision. Alongside architecture, he undertakes select furniture and graphic design projects, including the M2 Collection: A Sidetable and the Building Narratives book.

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Kees Kaan is an architect with nearly forty years of experience in practice – first as a founding partner of Claus en Kaan Architecten (1987–2014), and today as cofounder of KAAN Architecten since 2014. In 2006 he was appointed professor of Architectural Design at TU Delft, where he served as Head of the Department of Architecture from 2019 to 2025. He frames design as the architect's curation of possibilities – a position articulated in the publication *The Choice* (2008). In 2012 he initiated the Group of Complex Projects on large-scale architecture and civic ambition. He lectures internationally and serves on juries and boards worldwide. In 2024, he was inducted into the Académie d'Architecture in Paris. Practice and academia are tightly linked in his work, grounded in analytical precision and a belief in architecture's cultural role. His portfolio is

extensive and includes buildings such as the Netherlands Forensic Institute, the Supreme Court of the Netherlands, the New Amsterdam Courthouse, and the transformation of the Royal Museum of Fine Arts in Antwerp (KMSKA). Currently he works on the new terminal at Amsterdam Airport Schiphol, the renovation of the Paul-Henri Spaak building at the European Parliament in Brussels, the refurbishment of the National Bank of Belgium, and laboratory buildings for CERN in Geneva and EPFL in Lausanne. In April 2026 he was appointed Lead Architect for the overall renovation of Schiphol Airport over the coming ten years.

MARCO LANNA

KAAN ARCHITECTEN, THE NETHERLANDS

Marco Lanna is an Associate Partner at KAArchitecten, with over fifteen years of experience, focusing on design development and architectural coordination. Combining strong analytical skills with design sensibility, he plays a key role in refining the office's design approach and has, through design lead and coordination roles on multiple projects, contributed to the development of its methodology. Marco's portfolio includes the PPP projects of the Amsterdam Courthouse and the Supreme Court of the Netherlands, the Amsterdam Airport Schiphol Terminal, the Nancy Courthouse, the Advanced Science Building at EPFL and Building 140 at CERN. In addition to his project work, he curated *The Courthouse: Architecture for the Public Good* (2023) publication and co-authored the *ImpaKt* methodology. Marco joined KAArchitecten in 2010 and holds a PhD in Architecture and Urbanism from the University of Rome.

VINCENT PANHUYSEN

KAAN ARCHITECTEN, THE NETHERLANDS

Vincent Panhuysen is a founding partner of KAArchitecten, established in 2014, having joined the predecessor practice Claus en Kaan Architecten in 1997. Trained in woodcraft, the

arts, and architecture, he brings a precise understanding of material, proportion, and the full arc from concept to construction to his work. At KAArchitecten, he leads projects with a focus on spatial quality, calm organisation, and the continuity between idea and built form. A visiting professor at Delft University of Technology, he lectures internationally on design process, contextual sensitivity, and dialogue with context. His portfolio includes the Netherlands American Cemetery Visitor Center, Utopia Library and Academy for Performing Arts, the New Amsterdam Courthouse, Crematorium Siesegem, the Education Centre for the University of Groningen, and Matchbox. In 2015, he was awarded the *Commissarispenning* by the Commissioner of the King.

GIULIA RAPIZZA

STUDIO MOTOR, ITALY

Giulia Rapizza is an architect graduated from the Accademia di Architettura in Mendrisio, and holds a postgraduate degree in Neuroscience Applied to Architectural Design from IUAV in Venice. After her bachelor's degree she worked at Ensemble Studio in Madrid and, during her master's studies, was selected for the WISH international workshop on social housing at the Tokyo Institute of Technology. She joined KAArchitecten in Rotterdam, working within the KLAIR joint venture for the New Schiphol Terminal, where she continues to collaborate. Through this experience she has contributed to the analysis of design processes within large and complex projects, where design operates as a tool for communication and coordination. She has lectured at Delft University of Technology, IUAV Venice, and ISI Florence. In 2022 she co-founded studio MOTOR, a research-based practice combining analytical skills with design sensibility.

HRVOJE ŠMIDIHEN

KAAN ARCHITECTEN, THE NETHERLANDS — DEPARTMENT OF ARCHITECTURE,

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THE NETHERLANDS

Hrvoje Smidihen is an Associate Partner at KAAN Architecten, where he focuses on large-scale, complex public and infrastructural projects. He plays a key role in the concept and competition phases, as well as in coordinating multidisciplinary design teams. He has contributed to the development of the office's optioneering methodology. After leading the winning team for the Amsterdam Airport Schiphol Terminal competition in 2017, he continued as architecture and functionality lead for the project. He is also the design manager for the renovation of the European Parliament's SPAAK Building in Brussels. As a regular lecturer at TU Delft, Hrvoje leads the architecture graduation studio in the Group of Complex Projects. He joined KAAN Architecten in 2015, following the completion of a Master's degree in Architecture and Urban Planning, with distinction, from TU Delft.

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Yağız Söylev is an architect and researcher. He holds an MSc degree with honours in Architecture from TU Delft, where he is now a PhD candidate and teaches within the Building Knowledge section and the group of Complex Projects, coordinating several MSc design studios. His research focuses on design thinking in architectural practice and learning environments. He has taught as a guest lecturer at the Academy of Architecture in Amsterdam and at Università Iuav di Venezia. His work has been exhibited internationally, including at the 16th Venice Architecture Biennale, where he

served as associate curator of Vardiya – The Shift. In 2024, he joined the Stimuleringsfonds Creatieve Industrie as an advisor. Yagiz practiced as an architect at KAAN Architecten, NEXT architects in the Netherlands, and kpm architecture studio in Turkey.

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Manuela Triggianese is an Associate Professor in the Group of Complex Projects at the Faculty of Architecture and the Built Environment at TU Delft. She develops and teaches MSc courses, supervises PhD design research, and promotes practice-based inquiry. Trained as an architect in Italy and the Netherlands at KAAN Architecten, she holds a PhD from IUAV University of Venice and has postdoctoral experience at Beijing University of Technology and the Amsterdam Institute for Advanced Metropolitan Solutions. Her work examines the role of design(ers) in complex, multi-stakeholder contexts and advances transdisciplinary approaches. Using mobility as a testbed, she positions architects as mediators between diverse actors and contributes to the Vision Team Mobility Futures at TUDelft. She leads NWO-funded projects with practitioners and local stakeholders, strengthening the societal impact of architecture and academia.

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Georg Vrachliotis is Head of the Department of Architecture and Professor for Theory of

Architecture and Digital Culture at TU Delft, where he leads the Design, Data and Society (DDS) Group. He brings a broad understanding of the cultural and technological shifts shaping the 21st century to architectural history and theory. His work examines the intersections of architecture and the societal impacts of emerging technologies, fostering critical dialogue between design, technology, and culture. He is also Editor-in-Chief of *The New Open*, a magazine on architecture and data literacy. Previously, Vrachliotis served as Dean at the Karlsruhe Institute of Technology (KIT) and held academic positions at ETH Zurich. His publications include *The New Technological Condition* (2022), *Frei Otto. Thinking by Modeling* (2017), and *Fritz Haller. Architekt und Forscher* (2016), and *Code. Between Operation And Narration* (2010) among others. His curatorial work has been presented at the Venice Architecture Biennale, ZKM Center for Art and Media Karlsruhe, the Swiss Architecture Museum, and the Yale School of Architecture. He serves internationally on the advisory boards of ARCH+ and the Jaap Bakema Study Centre, and as External Examiner at The Bartlett, UCL.

COMPLEX PROJECTS

Complex Projects is an academic group at the Department of Architecture, Faculty of Architecture and the Built Environment, Delft University of Technology, founded in 2012. The group explores an architecture of dialogue- dialectical, inclusive, and relational- that addresses the complexity of contemporary architectural practice across scales and typologies. Its vision positions architecture and academia as active mediators of societal change, emphasizing a strong, reciprocal connection with professional practice. The group believes in collaborative work among colleagues and students within the educational environment, where teaching and research are deeply intertwined. Through a Research-by-Design approach, it fosters collaborative research, experimentation,

and shared knowledge production. Its work spans design education, practice-based research, and international exchange, with projects such as *Activating Design*, *Walk-In Co-creation*, and *Stations of the Future*. Publications, including *Amsterdam 2050: Complex Projects* and *OverHolland* series, are open access, supporting the free dissemination of knowledge.

KAAN ARCHITECTEN

KAAN Architecten is an international architectural practice based in Rotterdam, with additional offices in Paris and São Paulo. The practice continues nearly forty years of work begun under Claus en Kaan Architecten, operating across a broad range of scales and typologies in both the private and public sectors. Besides the projects investigated in this book, the oeuvre of the office includes large-scale civic and institutional buildings such as the Netherlands Forensic Institute and the transformation of the Royal Museum of Fine Arts in Antwerp (KMSKA), alongside more intimate works such as *Crematorium Siesegem* and the *Loenen Pavilion*. Recently completed projects include the Education Centre for the University of Groningen and JUMP, a large-scale mixed-use building in Aubervilliers, Paris. Ongoing work includes the refurbishment of the National Bank of Belgium in Brussels, a 155-metre tower in central Rotterdam, a laboratory and office building at CERN in Geneva, and the renovation of the Paul-Henri Spaak building at the European Parliament in Brussels. The office's work has received numerous international awards and has been widely featured in publications and exhibitions, including the 2022 monograph *Portraits*, which presents fifteen major built works as distinct yet related characters. Research and education are integral to this approach, with partners and team members teaching and contributing to academic exchange, sustaining a continuous dialogue between practice and research..

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