

MASTER

In answer to Versailles
a wary manifesto for empirical architecture

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A Wary Manifesto for Empirical Architecture

IN ANSWER
TO VERSAILLES

A Wary Manifesto for Empirical Architecture

JESPER BALTUSSEN

EINDHOVEN UNIVERSITY OF TECHNOLOGY

2017

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Graduation Project
'The Hague, Seat of Government'

led by:

prof. dr. B.J.F. (Bernard) Colenbrander
J.J.P.M (Sjef) van Hoof (arch AvB)
ir. A. (Askon) Eden

*Graduation report by Jesper Baltussen - 0769416,
graduating on the 3rd February, 2017*

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Urban Design and Engineering*

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TU/e

Marie-Antoinette at Versailles

1. De Botton, A. (2013). *De Architectuur van het Geluk* (2nd ed.). (J. Noorman, Trans.) Amsterdam: Olympus.

2. The Queen's Hamlet - Palace of Versailles. (n.d.). Retrieved 12 06, 2016, from chateauversailles.fr: <http://en.chateauversailles.fr/discover-the-estate/le-domaine-de-marie-antoinette/the-queen-hamlet/the-queens-hamlet>

In order to explain and thoroughly illustrate the theme that will be discussed in this book, we will start with a short anecdote concerning the French palace of Versailles.

Versailles is constituted from meticulous order, absolute geometry and infinite hierarchy. The palace leaves no room for multiplicity and ambiguity. It is totalitarianism in built form. This, surely, must have been the stage where many of those fine French citizens wanted to spend their days. And yet, Marie-Antoinette – queen of France and the very person that *did* spend her days there – decided to escape its oppressive order. She ordered the construction of a small hamlet in the gardens.¹ The impregnability of Versailles' architecture did perhaps not fully accommodate her complex monarchical reality.

Marie Antoinette regularly visited the hamlet. It was named *Hameau de la Reine*, and comprised a varied ensemble of farms, mills and houses, idyllically shaped to serve the needs and desires of the queen's and farmer's activities carried out here.² The queen must have sought a certain quality and delight in the *empirical* reality there.

This delight, or quality, is precisely the crux of the argument in this book: the importance of *empirical* form whose concrete appearance is established by the needs and activities that a certain building is ought to accommodate, instead of it being composed by all kinds of formal rules, compositional regulations or other comprehensive architectural concepts and trends that so strongly determine the more *conceptual* architecture of buildings like Versailles.

The real question, however, is whether Marie-Antoinette's hamlet truly fulfilled her needs. As a parallel, the English Landscape Garden movement, for instance, tried to re-embrace untouched nature, but in this

attempt perhaps became, in a way, more artificial – with all its consuming and devastating landscape articulations – than the industrial city it tried to compensate.³ Very much alike, the hamlet gets caught up in the middle: it neither fully satisfies the need for an ordinary peripheral life nor relates to the astonishing abstraction of Versailles. The architecture of the hamlet is perhaps even far more regulated and restricted than Versailles itself, since every single element must have been deliberately irregularly shaped, with meticulous precision. The hamlet – which consequently constitutes a kind of ‘Disneyland’ *avant la lettre* – thus seems more subject to rules and restrictions than Versailles itself. The French revolutionists must have considered it to be far more decadent than the palace.

The fundamental problem here, is that empirical form – such as a peripheral farm – mostly springs from a certain *unspoiledness*: the farmer just builds what he needs without either adhering to, or rebelling against a certain architectural thing. *He just wants to build a farm*. The resulting form of such a basic impulse is hardly ever reached by architecture.

Turnovsky – whom we will later discuss more elaborately – even states that this basic kind of building form is fundamentally un-architectural.⁴

The anecdote of the hamlet and the statement by Turnovsky poignantly illustrate the deficiency of architecture to (re-)connect with the natural course of the empirical creation of things. Instead of an *a posteriori* accommodation of empirical conditions, architecture *a priori* abstracts and conceptualizes real concrete conditions. How can we then reach an ordinary building form in the highly intellectualized discipline of architecture? This all relates to the paradox around empirical architecture, the very core of this book.

3. See: Rutgers, R. (2011). *Stedebouwkundig Ontwerpen* (8 ed.). Eindhoven: Eindhoven University of Technology. pp. 342

4. Turnovsky, J. ([1985]2009). *The Poetics of a Wall Projection*. (B. Steele, Ed., & K. Kleinman, Trans.) London: Architectural Association. pp. 23

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Definitions

Ambulatory

A pathway that goes around and encircles the choir.

Binnenhof

Medieval stronghold in The Hague that functions as the seat of governance, and has done so for nearly 800 years. See: (Alberts, J., Smit, D. E., & Habben-Janssen, E. M., 2013).

Boschian

Revealing a certain similarity to the deformed depictions in Hieronymus Bosch' paintings.

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Bricolage

Composition or assemblage of '*whatever is at hand*' or the process that precedes it. See: (Rowe & Koetter, 1979).

Chevet

The combination of apse, ambulatory and radiating chapels. See: (Watkin, 2001, pp. 123).

Comic Scene (also see: 'tragic scene')

Theatrical scene by Serlio. '*Street for the ordinary life of shopkeepers and merchants*' (Kostof, [1991]2009, pp. 222).

Conceptual (also see: 'empirical')

'*Architecture [that] follows an abstract concept, [and] is defined by a categorical, compositional will-to-order.*' (Turnovsky, [1985]2009, pp. 21)

Contingency

A future possible thing or finding that cannot be predicted with certainty. See: dictionary.cambridge.org

Cosmic (also see: 'organic')

Refers to the normative '*Holy*' city model conceived by Kevin Lynch in *Good City Form* (1981) and is generalized and interpreted as a more general architectural phenomenon in our context. It '*takes the plan to be an interpretation of the universe and of the gods*' (Kostof, [1991]2009, pp. 15).

Eerste Kamer

Literally: '*First Chamber*'. This First Chamber constitutes the *Senate* of the bicameral *States General* (the Dutch Parliament). The other, Second Chamber (Tweede Kamer), establishes the House of Representatives.
See: Eerstekamer.nl

Empirical (also see: 'conceptual')

'An architecture that is committed to concrete existing conditions related to construction, use or site' (Turnovsky, [1985]2009, pp. 21).

Fox (also see: 'hedgehog')

Berlinian metaphor for someone who delights in multiplicity and contradiction instead of unity and congruity. See: (Berlin, [1953]2013).

Hedgehog (also see: 'fox')

Berlinian metaphor for someone who delights in unity and congruity instead of multiplicity and contradiction. See: (Berlin, [1953]2013).

Himmelsburg

A heavenly stronghold. See: (Sedlmayr, 1950, pp. 120-124).

Narthex

An antechamber preceding the nave of the church.

Organic (also see: 'cosmic')

Refers to the normative 'Biological' city model conceived by Kevin Lynch in *Good City Form* (1981) and is generalized and interpreted as a more general architectural phenomenon in our context. It '*sees the city as a living thing ...*' (Kostof, [1991]2009, pp. 15).

Palimpsest

Refers to the traces of former things that remain discernible in the reused or altered form of that thing. It more literally refers to a piece of writing which was effaced and imposed with new writing, thus still revealing traces of the former writing. See: oxforddictionaries.com. (2016).

Promenade Architecturale

Corbusian term that refers to the beholder his pathway through a built environment. See: (Samuel, 2010).

Quattrocento

The (Italian) 15th Century, especially relating to Renaissance culture.

Spolia

Incorporation of building components from former or older buildings.
See: (Langereis, 2010, pp. 39)

Stadtholder

Dutch provincial executive officer with national influence – sometimes even head of state – during the Dutch Republic. See: Britannica.com

Staten-Generaal (States General)

15th – 18th century: Council of delegates representing the United Provinces of the Netherlands

19th century – Present: Bicameral Parliament of the Netherlands
See: Britannica.com

Staten van Holland (States of Holland)

15th – 18th century body of (city-)representatives of the Province of Holland.

See: Van Pelt, R., & Tiethoff-Spliethoff, M. (1984).

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Tabula Rasa

A clean slate; a blank page. In architectural sense often used to indicate an architecture that disregards any context; instead such an architecture is designed as if one starts with a clean slate.

Tragic Scene

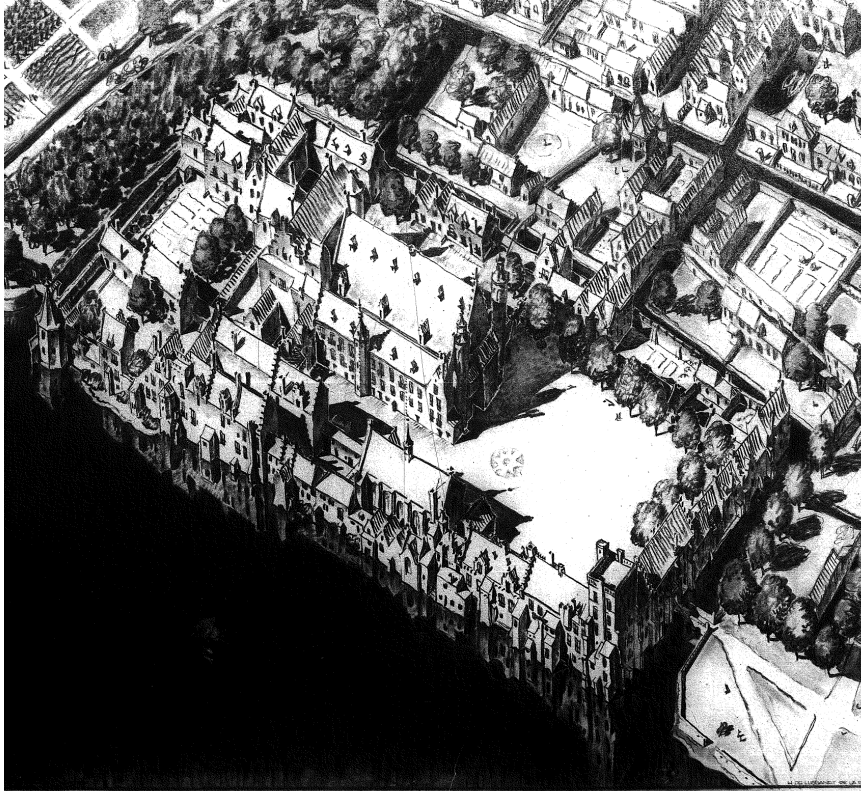
Theatrical scene by Serlio '*Street*' in the classical style for the high life of kings and nobles' (Kostof, [1991]2009, pp. 222).

Transept

A transverse longitudinal section that intersects the nave of the church.

Utopia

An ideal (unattainable) place; a paradise



0. Introduction: Opposing Tendencies

0.1 Architecture of the state at the Binnenhof

1. This preliminary research can be found in: Baltussen, J., & Van Schaik, M. (2016). *Architectuur van de Staat*. Unpublished.

2. Alberts, J., Smit, D. E., & Habben-Janssen, E. M. (2013). *Het Haagse Binnenhof: acht eeuwen centrum van de macht*. Den Haag: ProDemos.

3. For a more elaborate explanation of the historical development of Dutch political powers, see: Baltussen, J., & Van Schaik, M. (2016); Van Pelt, R. & Tiethoff-Splithoff, M. (1984) or Smit, D. (2015).

< Image 1.1

Aerial sketch of the Binnenhof in 1600 by H. de Lussanet de Ia Sablonière

This book was established within a graduation project, entitled: ‘*The Hague, Seat of Government*’. The main theme of this book – empirical architecture – was derived from the preliminary research that constituted the base of this graduation project. We will firstly shortly summarize some of its contents that are considered relevant here.¹

The Binnenhof is a historical stronghold in the city centre of The Hague. It can be considered as the cradle to Dutch governmental practice. The place has been subject to many alterations throughout several regimes, and, although the castle was initially founded by Floris IV in the early thirteenth century, it slowly grew throughout the years.² When Willem II, Floris’ son, saw an opportunity to become *Holy Roman Emperor*, he even started erecting a great hall. This great hall was connected to the living chambers which together established – and still establish – the very core of the ensemble. Although Willem’s imperial ambitions faltered as he perished in battle, his son, Floris V, managed to complete the great hall. The enclosing walls of the stronghold were later gradually turned into buildings, and the aggregation slowly gave rise to a village, called *The Hague*, throughout the following centuries (see image 1.1).

When (Spanish) feudal reign was later brought down during the *Dutch Revolt* in the 16th century, the place henceforth functioned as home to multiple powers that governed the *Dutch Republic*.³ These included, amongst others, the *Staten-Generaal*, *Staten van Holland* and *Stadtholder*. This small Republic became a power with great global influence. After two centuries however, the Republic came to an end as well, and was followed



INTRODUCTION

4. See: Baltussen, J., & Van Schaik, M. (2016). *Architectuur van de Staat*. Unpublished. pp. 58-129

5. The *building by Post* and the *Mauritstoren*, for example, were both partial rearrangements of the Binnenhof conglomerate. Still, the staircase in Post's building reveals that the building is a perfect fitting piece rather than a fundamental alteration of the existing structure.

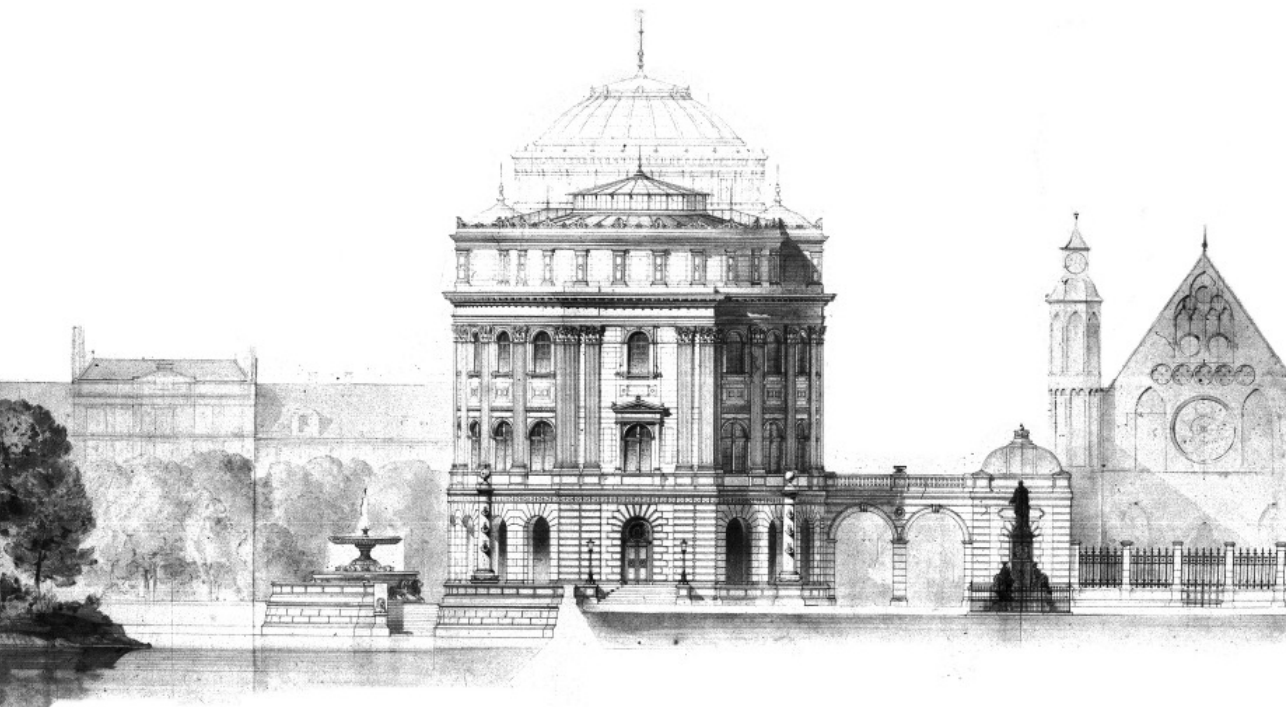
by the Batavian-French period. The Binnenhof was only definitely re-established as the seat of government after this interim period, that comprised about two decades.

From 1815 on, the Binnenhof functions as seat to the current political system. This includes the *current* – bicameral – Staten-Generaal and other governmental institutions such as *ministries* and *counsels*. Until 1988 it even housed the *supreme court*, thus initially accommodating all three Montesquieuan powers. Ultimately, the Binnenhof plays a primary role in both physical – as central core of the city of The Hague – and political sense – as home to some of the most important political bodies.⁴ The architectural form of the Binnenhof has consequently proven to be extraordinary. It has provided a home to all kinds of governance for nearly 800 years. The architectural form hence reveals a most chaotic, aggregated, disorderly and labyrinthine character (see image 1.2). This disorderly character, however, is but one aspect of its architecture. The other lies in the orderly architectural fictions that have been continuously produced over the centuries, in order to completely or partly renew the architectural structure of the Binnenhof.

0.2 From Muddling to Ordering

The Binnenhof was established as a castle in a natural environment. Over time, however, it developed into a city within a larger city. Through centuries of accretive building, the castle developed into a small city in its own right with a chapel, towers, dwellings and shops. Its structure was typified by all sorts of small additions, extensions, renovations and restorations. At times, parts were even renewed. In such occasions, the aggregation was always *partly* restructured. Such rearrangements, however, revealed a certain contextual awareness as they were designed to precisely accommodate the existing conglomerate.⁵ The

< *Image 1.2*
View on the Binnenhof from the pond in 1621: a vivid illustration of the muddled appearance. Engraving by N. Visscher (1621)



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6. Bolten, M. (2014). *Huis van de Senaat - De Rijke Historie van Binnenhof* 22. Den Haag: Eerste Kamer der Staten Generaal. pp. 27-28

7. Van Pelt, R., & Tiethoff-Splithoff, M. (1984). *Het Binnenhof - van Grafelijke Residentie tot Regeringscentrum*. Dieren: De Bataafsche Leeuw. pp. 137-152

8. Smit, D. (2015). *Het belang van het Binnenhof: twee eeuwen Haagse politiek, huisvesting en herinnering*. Amsterdam: Bert Bakker. pp. 107-160

9. See: Baltussen, J., & van Schaik, M. (2016)

< *Image 1.3*
Elevation of a competition entry for a Staten-Generaal palace, by Emil Lange, 1864

overall structure thus remained intricate and disorderly.

Yet, the existing appearance was more and more criticized by increasing initiatives to completely rearrange the muddled agglomeration. Already in 1615, a Florentine architect was commissioned by stadtholder Maurits to design a great Renaissance palace at the Binnenhof.⁶ More than a century later, around 1749, stadtholder Willem IV appointed Pieter de Swart to design another ‘paper’ palace.⁷ Especially the first design by De Swart reveals a totalitarian architecture that introduced a very clear classical – instead of an intricate medieval – architecture at the western flank of the Binnenhof. As is the case for many absolute plans conceived for the Binnenhof, a repeatedly adapted and far more simple and contextual variant was eventually built by Gunckel (De Swart’s former assistant).

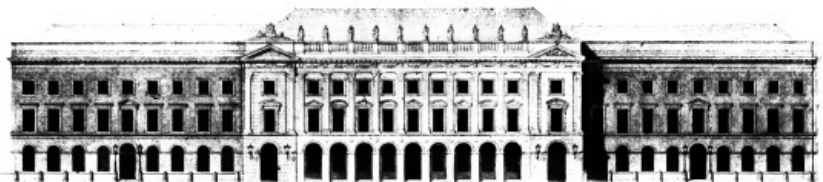
Other initiatives came from the expansion of ministries and the constitutional reform.⁸ Architect Craner – and later Rose – was asked to develop plans for a new unified building (respectively bottom and top elevation of image 1.4). When Rose was later appointed *Chief Government Architect* he even developed a plan that was ought to systematically replace the *entire* Binnenhof.

Another impulse to the ambition of a ‘*Binnenhof Palace*’ was provided later, by the liberal statesman Thorbecke in 1865. Naturally, this was to be a palace of democracy: a palace of the *Staten-Generaal* (see image 1.3 and 1.4). However, none of the 27 competition entries or any compromise that was drafted afterwards made it: another batch of paper buildings was produced.

The historical consciousness grew with all the failures, and instead of a careful renovation, a quasi-historical neo-Gothic plan came into vogue, driven by Victor de Stuers. He had even drawn up a sketch for a completely ‘*Gothicized*’ Binnenhof.⁹ In 1920, another design competition



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10. See: Fiederer, L. (2016, april 22). *AD Classics: Dutch Parliament Extension/OMA*.

11. See: Smit, D. (2015). Some have argued the importance of the building, but this was mostly argued from *historical* rather than *architectural* arguments.

– this time for a new *Tweede Kamer* building – was launched. Here again, we notice the strong tendency to completely reinvent the Binnenhof by imposing it with a unified total architecture (see image 1.5 and 1.6).

The latest plans for the Binnenhof date from the design competition of 1978. This competition, opposed to that of 1865 and 1920, indeed eventually led to a *building*. This, however, was again preceded by a long process which led to a significant alteration and softening of the original intentions of the plan. Furthermore, it must be said that this latest competition was far less absolute, since a certain prudence was already rooted in the assignment itself, which preserved much of the existing structure. Still, the *parts* that many entries – except perhaps the ‘*accretive*’ design by OMA – restructured, were again *imposed* with a new architectural logic (see image 1.7).¹⁰

< *Image 1.4*

A small selection of the many absolutist designs conceived: At the top, (supposedly) Rose’s initial design for Ministries and the Supreme Court(1858); Craner’s design for a Staten-Generaal palace (1865, beneath Rose’s); Gugel’s design for a Staten-Generaal palace (1870) and finally Craner’s design for Ministries and the Supreme Court(1848) at the bottom.

0.3 From Ordering to Architectural Muddling

The development mentioned above is the very *opposite* to our anecdote of Versailles. Whereas Versailles was *absolute order* that was slightly complemented with *architectural jumble*, it is exactly this latter characteristic that typifies our main subject, the Binnenhof. And at the Binnenhof, it was precisely the coherent unity of Versailles that had been unceasingly desired. The building has, namely, largely been loathingly dismissed for its intricate features. Its complex structure has therein *barely* been considered – let alone understood – as a fundamental architectural quality.¹¹

Although a continuous stream of absolutist plans has been projected onto the historic stronghold throughout the centuries, not one of these *tabula rasa* plans has effectively succeeded. At best, some fragments of the intended *palaces* have been built, but never has such a plan proved able to be realized. I would consequently like to propose



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a *continuation of the existing architectural form* instead of continuing the aforementioned little rewarding practice of absolute tabula rasa reconfiguration. Instead of either continuing to *muddle* or *order*, and I admit I slightly dramatize here, the inherent principles that led to the current appearance could be architecturally propagated. Instead of uselessly striving for an overall coherence, we could argue in favour of empirical qualities, which have enabled the Binnenhof to be adapted to ever changing conditions throughout so many centuries. We will thus aim to, firstly, *examine* the architecture and, secondly, to *employ* it. What kind of phenomenon can we precisely distinguish in this architectural form? Is it part of a greater architectural tendency? What is the relevance of such a form? *Can* we ever desire or strive for such an architecture?

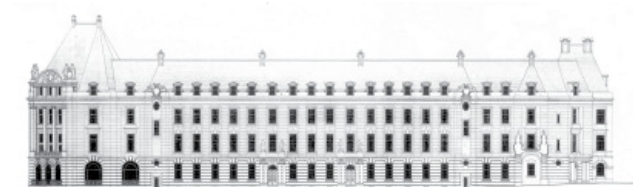
0.4 Problem Statement

Theories that deal with the architectural theme described above are rather rare. Sik & Imhof's *Architektur der Empirischen Form* is one of the only books that primarily deals with the phenomenon. In it, a short description and extensive body of cases is discussed, wherein empirical form plays a part. And, whereas their theory elucidates the *opposite* of an orderly architecture – *that which we are trying to grasp in this book* – a more comprehensive amount of literature can be found that discusses *both sides* of the aforementioned antithesis between order and disorder. This more general theme is discussed in some relevant Postmodern theories. Apart from the manifesto on *Complexity and Contradiction* by Robert Venturi and *Collage City* by Colin Rowe and Fred Koetter, this includes *The Poetics of a Wall Projection* by Jan Turnovsky.

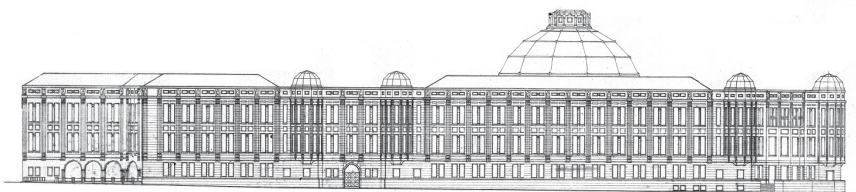
Complexity and Contradiction strongly advocates the need of multiplicity instead of unity: '*less is a bore*'. And, whereas *Collage City* again argues the importance of multiplicity instead of unity, that argues

< *Image 1.5*

Design by D.E.C. Knuttel for a new governmental building, as a preparation for the 1920 design competition.
For more info about the design competitions of 1865, 1920 and 1976, see: Baltussen, J., & van Schaik, M. (2016) and the 4.RGD and 4.WCA sections in the national archives and the Het Nieuwe Instituut collection.



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for a clash of characters rather than a unitary whole, the third book – *The Poetics of a Wall Projection* – more directly relates to our fundamental architectural opposition by denoting it – the *conceptual* as an abstract order and the *empirical* as a concrete condition – from a small wall extrusion in the Wittgenstein house.

In these last three books, however, the mentioned antithesis remains mostly implicit as a metaphor. Let alone that the latter – the empirical – is elaborately explained or defined. In order to provide an answer to the Binnenhof-problem we will need to more exactly know what this second part of the antithesis comprises. We will therefore, while further building upon the distinction by Turnovsky – *conceptual* for that which is meticulously ordered and *empirical* for that which is intricate and multivalent – try to more clearly define what this latter part of the opposition means. Whether it can be put to use. And how it can be put to use. The resulting research question, then, is:

Can empirical architecture – as defined by Turnovsky – be employed as an architectural instrument, and, if so, how?

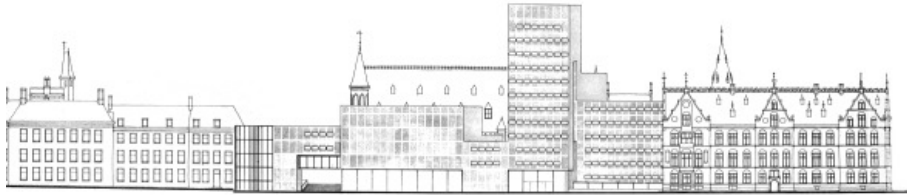
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0.5 Contents

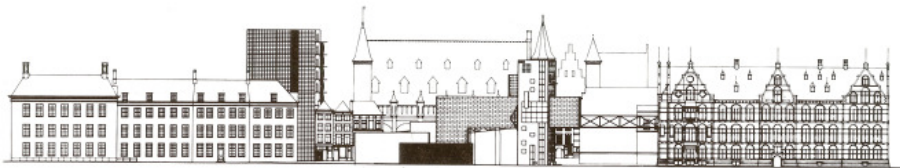
By means of three successive subquestions the research question will be answered. The first question concerns an exploration of the phenomenon: *What is Empirical Architecture?* By means of, firstly, a theoretical and historical essay, and, secondly, an architectural analysis of the Binnenhof, a more elaborate definition of the genesis, history and concrete appearance of empirical form will be sought.

The second question is: *How can empirical architecture be deliberately employed?* Here, an analysis of three – seemingly – empirically conceived architectural works will aim for a reconstruction of the process

< *Image 1.6*
Elevations from the 1920 design competition: preparatory design by Knuttel(1920); design by Stuyt(1920); design by de Bazel(1920) and design by Limburg(1920).



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that enabled other architects to arrive at empirical form. We have to find a way to handle the inherent paradox that troubles empirical architecture.

Finally, we will have to test and verify the complications of such a process by employing it with a specific design case, which quite naturally leads us back to the Binnenhof. The final sub-question thus is: *(How) can empirical architecture be employed at the Binnenhof?*

0.6 Methodology and materials

The essay will function as a first exploration of the subject and will aim to elucidate the genesis, potential and features of empirical architecture in order to arrive at a workable definition. It is based on literature in books, papers, journals and articles. The knowledge obtained in the essay will function as a basis to determine an analytical framework that will in turn establish the structure of the analysis. The analysis will then examine the concrete appearance of empirical architecture (at the Binnenhof) by means of drawings, engravings, historical information in books, pictures, sketches and through experience (site visits).

The knowledge obtained from the essay and analysis are of primary importance to critically and consciously choose and discuss the empirical references. The references will be analyzed visually – by experience (site visit), images, sketches and drawings – and textually, by means of literature research. We will aim to *judge* these references on their ‘empiricality’ in order to compose a way to deal with the empirical paradox. In the final design assignment all gathered knowledge will be tested and critically discussed. A more elaborate description of the precise structure and aim of every part will be provided once we have arrived there, as this research is structured accumulatively.

< *Image 1.7*
Elevations from
the 1978 design
competition:
Top: initial design
by Pi de Bruijn
(1978)
Bottom: design by
OMA (1978)
Pi de Bruijn later
designed the even-
tual building.



Part 1
*What is Empirical
Architecture?*

Part 1.1
Essay



1.1 An Intangible Utopia

About the Definition and Paradox of Empirical Architecture

1. von Meiss, P.
([1990]2011).
Elements of
Architecture -
From form to
place. Abingdon:
Routledge. pp. 31

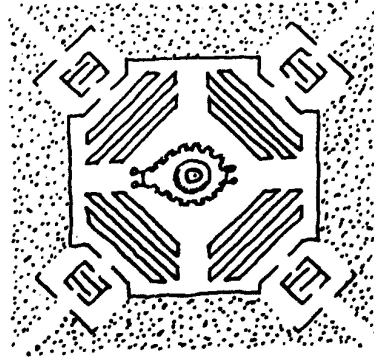
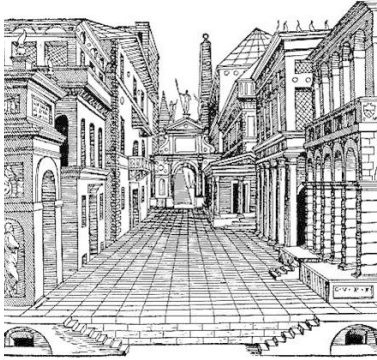
2. Roodbeen (eds),
M. (2005). Griekse
en Romeinse
Mythen en Sagen.
Soest: Uitgeverij
Verba. pp. 11

3. von Meiss, P.
([1990]2011).
pp. 31

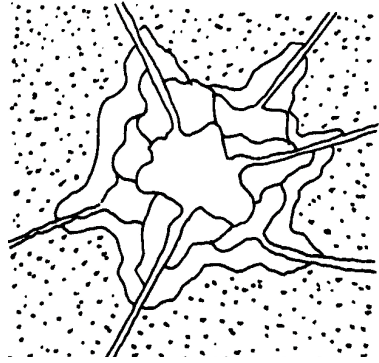
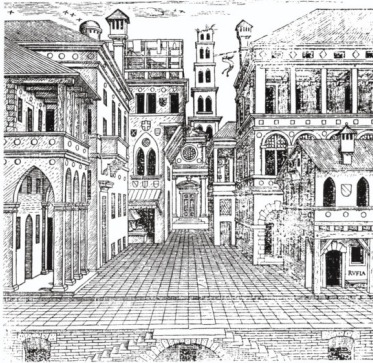
< **Image 1.8**
Detail of the
northern facade of
the Binnenhof that
reveals its accretive
character.

There is order and there is disorder. Like so many terms, they are partly described by one another. Their interdependence is already clearly legible from the simple observation that order relates to disorder in a *dis-*, a negative, way. This negative prefix in some way epitomizes our theme whereas, so far, the inquiry into the architectural identity of the Binnenhof has mostly resulted in a contrast between opposites. Like the Hamlet, which was defined by its *dis-* relation towards Versailles, the Binnenhof is most illustratively described by its *dis-* relation to all the fictional plans that were conceived throughout its history. Precisely the antithesis of *order and disorder* so far proves most elucidative in describing our phenomenon. We will therefore continue on this path.

One cannot help but to make this essential distinction between that which is *ordered* on the one hand, and that which is *not* on the other. We consider something to be ordered when the underlying order is comprehensible and can thus be *identified*.¹ That which is not ordered – and can be considered disorder or even chaos – includes that of which the order is *not identified*. Chaos, in this distinction – like disorder – is the very antithesis of order. In Greek mythology, the Greek God Chaos embodied the formless mass before the creation: Chaos ruled *before anything was ordered*.² Order and chaos therefore, are defined by one another as well. As Von Meiss notes, ‘*Order only has meaning in relation to disorder and chaos*’.³ Therefore, this opposition will function as a basic theme here, even though we are mostly interested in the latter. Some terms



34



4. See *definitions* on pp. 12-15 and Kostof, S. ([1991]2009). *The City Shaped - Urban Patterns and Meanings Through History*. London: Thames and Hudson. pp. 15-16

are perhaps best defined by what they are *not*.

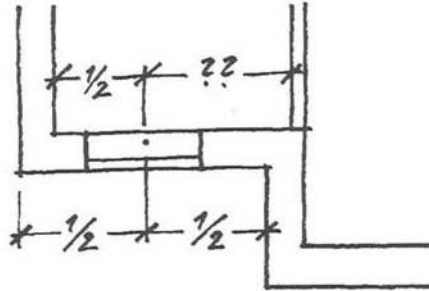
As we have seen, there have been tendencies that reveal a strong desire for order in the history of the Binnenhof. Although the stronghold had grown into a variety of buildings throughout the centuries, repeated attempts have been made to tame this variety into a unitary whole. All these attempts have failed in their absolute obstinacy, and the *organic* – instead of the *cosmic* – characterizes the place (see image 1.9).⁴ It is even true that the ordering attempts have *contributed* to the disorder that characterizes the typology: Classic, Neo-Renaissance and Postmodern buildings have been added to the conglomerate. All of these, however, are mere remnants of the initial cosmic plans. And although these cosmic plans were initially intended to replace the existing typology, their remnants now constitute a compromise between existing reality and imposed fiction. The – initially medieval – gates, towers, halls, courts and galleries, consequently, still determine the very structure of the building, and, instead of continuing the practice of imposing another cosmic and universal architecture, we have argued for a more pluralist approach; one that answers to the character of the place.

< *Image 1.9*
 Apparent parallels to the opposition that so far defines our understanding of the empirical.
 Left: Tragic(top) and Comic(bottom) scene by Serlio.
 Right: Cosmic(top) and Organic(bottom) city model by Kevin Lynch.
 Interestingly, both types are duos from a trinity.

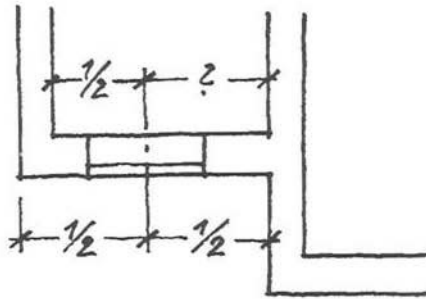
There are plenty examples of all-encompassing, universal architectural orders: that of *light* and *verticality* in the Gothic, that of *geometry* and *composition* in the Renaissance, that of *symmetry* in the Classic and that of *functionality* in the Modern. The question remains what, if so, an architecture without these cosmic orders would mean. How can we reach a more plural architecture? What is the *true* antithesis to the palace of Versailles?

In his idiosyncratic analysis of the Wittgenstein house, Jan Turnovsky distinguishes two fundamental architectural positions. On the one hand, he states, there are those which argue a systematic, rational,

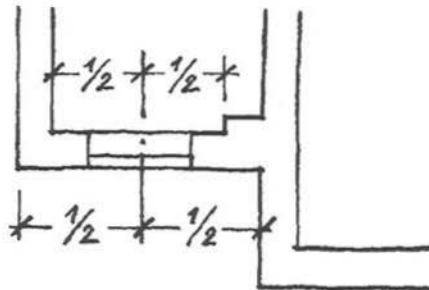
THE POETICS OF A WALL PROJECTION



This doesn't work



This still doesn't Work



Wall Projection

5. Turnovsky, J. ([1985]2009). *The Poetics of a Wall Projection*. (B. Steele, Ed., & K. Kleinman, Trans.) London: Architectural Association.

6. Berlin, I. ([1953]2013). *The Hedgehog and the Fox* (2nd ed.). (H. Hardy, Ed.) London: Weidenfeld & Nicolson. pp. 2

logical and *conceptual* architecture.⁵ On the other, there are those who support a more plural, *empirical* architecture. Both of these are wielded by Wittgenstein, and correspond to his early and late philosophies. Turnovsky insinuates that the act of designing and building a house, testing the universal principles of monist philosophies on the resistant and concrete building mass, *might have* caused Wittgenstein to change his philosophy from a logic and universal one into a more plural variety of philosophies. All this blends together at the phenomenon of the *Wall Projection*, a wall extrusion drawn by Wittgenstein that Turnovsky believes was ought to solve his problem of a centered window on both the in- and outside of the exterior wall (see image 1.10). The distinction Turnovsky makes, is consequently not merely architectural, it also applies to philosophy and possibly even more: it separates the monists from the pluralists.⁶

‘For there exists a great chasm between those, on one side, who relate everything to a single central vision, one system, less or more coherent or articulate, in terms of which they understand, think and feel – a single, universal, organising principle in terms of which alone all that they are and say has significance – and, on the other side, those who pursue many ends, often unrelated and even contradictory, connected, if at all, only in some de facto way, for some psychological cause, related to no moral or aesthetic principle ... The first kind of intellectual and artistic personality belongs to the hedgehogs, the second to the foxes’ (Berlin, 1953, pp. 2)

< **Image 1.10**
Sketches by Turnovsky to illustrate the problem that Wittgenstein encountered. The *Wall Projection* was a very ‘empirical’ solution to the problem. The projection - sort of - solved the problem (bottom).

This rather banal metaphor, which Berlin acknowledges it to be, describes the exact distinction we have earlier acknowledged. Its banality again illustrates our opposition and very strongly generalizes it into an

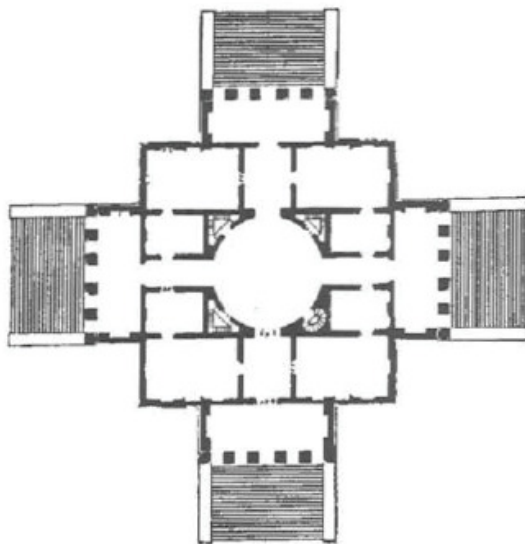




Image 1.11

Plans by Turnovsky of the Villa Rotonda and of an English house to architecturally generalize the problem that Wittgenstein encountered.

existential theme. Berlin's simplification of two fundamental positions into *fox* and *hedgehog* elucidates the extensive implications of our architectural polarity.

But let us return to architecture. The polarity, namely, is illustrated in architectural sense by Turnovsky, through contrasting the plans of the Villa Rotonda and an English house (see image 1.11). One conceived from an absolute imposition of reductive concepts, the other acknowledging the complex and concrete conditions of reality. One being the architectural equivalent of Kevin Lynch's cosmic model, the other that of his organic model.⁷ One relating to Serlio's tragic, the other to his comic scene (see image 1.9). One glorifying universal and divine principles, the other celebrating multiplicity and the complex nature of the ordinary.

So what is the origin or genesis of this dichotomy? In elucidating their theory about the destructive power of modernism, Koetter and Rowe describe the *classicist utopia*, which has guided the architectural discourse, up until the Enlightenment. The classicist utopia argued for a total, unitarian architecture for '*Utopia has never offered options*'.⁸ This utopia consequently imposed a cosmic universality on architecture, but, still functioned as a *detached* reference in the everyday chaos at the time. Although some works were stately manifestations of this classicist utopia, their dominance must have been comparable to mere needles in a haystack. During modernism, however, this balance heavily altered and even seemed to disappear into pure order in the 'total architecture' that modernism posed. Instead of an '*implicit object of contemplation*' utopia became an '*instrument of social change*'. Such is the argument of Rowe and Koetter.

But let us return to this classicist utopia. It is obvious that Versailles is an articulation, a powerful – yet detached – reference of this

7. Kostof, S. ([1991]2009). pp. 15-16

8. Rowe, C., & Koetter, F. (1979). *Collage City*. London: MIT Press. pp. 87

9. Imhof, L., & Sik, M. (2009). *Architektur der Empirischen Form: 1890-1950* (4th ed.). Zürich: ETH Zürich.

aforementioned *classicist utopia*. As are the Villa Rotonda, the Pitti Palace and the Piazza del Popolo. But what is the history of the *anti-total* and the *anti-cosmic*? Where does it start?

In *Architektur der Empirischen Form*, Miroslav Sik and Lukas Imhof try to get a grip on the genesis of empirical Architecture:

‘Sucht man nach Vorläufern der ... empirischen Architekturen, stellt man fest, dass solche oft im Profanen und Gewöhnlichen, etwa in der bäuerlichen Architektur oder in Zweckbauten zu finden sind. Vor allem mit der Entdeckung dieser Architektur, dem Hinwenden zum Gewöhnlichen und Ursprünglichen fanden empirische Formen Eingang in die gehobene Kunst und Architektur. Zum ersten Mal fand das Alltägliche Eingang in der Kunst in der Renaissancemalerei, etwa in Bildern von Pieter Bruegel dem Älteren oder seinem Sohn, Jan Bruegel dem Älteren, der in seinen Bildern Szenen des bäuerischen Lebens in Flandern darstellte. (Sik & Imhof, 2006, pp. 4)

Sik and Imhof later consider the English Landscape Movement to be the first real expression of *empirical architecture*.⁹ The landscape garden, with its irregularly situated trees, its curved paths and its picturesque follies contained a form that – according to their reasoning – was empirically designed.

Empirical architecture however, is one half of the crucial distinction between creating the *universal and divine* or building upon the *present realness of the real*. As Turnovsky notes, the positions of a conceptual and an empirical architecture more probably find their origin in the dichotomy between the *Greek temple* and the *cave*. Surely, there are periods that long for a more unitary or a more ambiguous architecture, but this distinction is no *invention*, it is *never introduced* as it is primary to

the practice of architecture and – as will be shown – to the medium of art.

In *Empathy and Abstraction*, Wilhelm Worringer distinguishes two poles of artistic aesthetic perception. One, *empathy*, is related to the naturalist point of view – that which is based upon the multiplicity and experience of the organic nature of the *real* – the other is based on that which *limits and orders* the real, indeed abstracts its multiplicity: *abstraction*.¹⁰

‘Recollection of the lifeless form of a pyramid or of the suppression of life that is manifested, for instance, in Byzantine mosaics tells us at once that here the need for empathy, which for obvious reasons always tends toward the organic, cannot possibly have determined artistic volition. Indeed, the idea forces itself upon us that here we have an impulse directly opposed to the empathy impulse, which seeks to suppress precisely that in which the need for empathy finds its satisfaction. This counter-pole to the need for empathy appears to us to be the urge to abstraction.’ (Worringer, 1908, pp. 14)

42

Apart from abstracting the entire discipline of art into merely two directions – which is in itself quite a hedgehog’s deed – Worringer goes as far as to conclude that in many eras, the desire for the one came from an *abundance of its opposite*. That which a society lacked, was desired.¹¹ One that drowned in chaos would consequently desire the clearness of symmetry, order and hierarchy while a completely constrained and limited civilization would desire a chaotic, plural and realistic environment full of color, detail and contradictions.

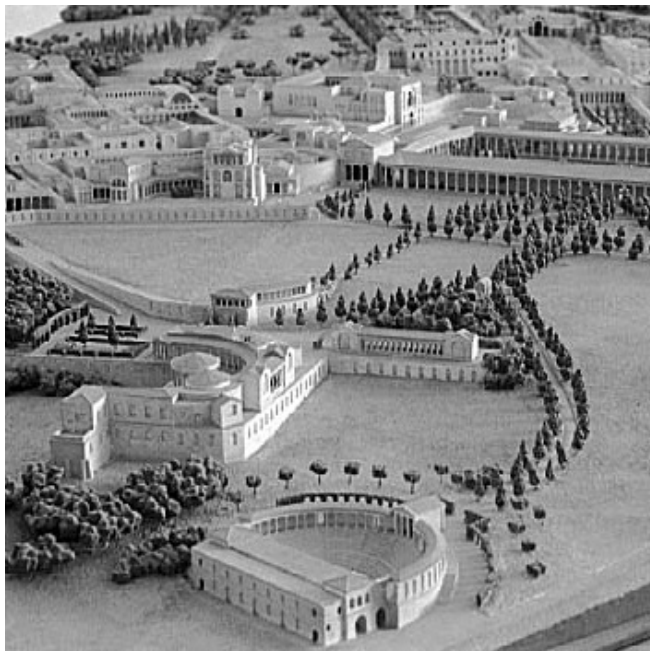
Those who lived in the naturalistic chaos of everyday nature would subsequently desire the regulated properties of – for instance – a temple. They would celebrate the comprehensible artificial space

10. Worringer, W. ([1908]1997). *Abstraction and Empathy - A Contribution to the Psychology of Style*. (M. Bullock, Trans.) Chicago: Ivan R. Dee.

11. Worringer, W. ([1908]1997) & de Botton, A. (2013). *De Architectuur van het Geluk* (2nd ed.). (J. Noorman, Trans.) Amsterdam: Olympus.

Image 1.12 >
Painting by Pierre Patel of the Palace of Versailles in 1668





12. Rowe, C., &
Koetter, F. (1979).
pp. 88-91

that provided them some rest. The industrial society however, with its prevailing and imposing machine-driven rhythms of regulated nature, would then desire the liberating and incomprehensible chaos of nature. Note that Marie Antoinette's desire for a Hamlet is another vivid illustration of this phenomenon.

This reasoning, that divides the discipline of art into a fundamental opposition – much like Turnovsky does with architecture – reveals a strong relation to our opposition. The urge for *abstraction* seems to match our idea of conceptuality and that of *empathy* that of empiricism. The symmetrical and square disposition of spaces in the earlier mentioned Villa Rotonda can be considered an *abstraction* of the dwelling-landscape reality whereas the English House is an *empathic* substantialization of the complexity that characterizes a dwelling in a surrounding landscape.

The history of empiricism would, following Worringer's theory of art, indeed start at the moment aesthetic perception started. And, according to specific cultural conditions, one would henceforth be favored over the other as empathy and abstraction are '*mutually exclusive*'. The beginning of empirical architecture may thus indeed lie in the inhabitation of the cave, the adoption and embrace of the characteristics and qualities of the *real*.

The polarity between the *empiricist or empathic* and the *conceptual or abstract* is illustratively exemplified by the juxtaposition of Hadrian's and Louis XIV's intentions.¹² Hadrian's villa – the curious and ambiguous fascination of a plural Roman emperor – opposed to Versailles, a built manifesto of Louis XIV for the divinely obtained power of monarchy (see image 1.12 and 1.13):

< *Image 1.13*
*Reconstruction
model that displays
the different entities
of Hadrian's Villa.*

‘There is unambiguous, unabashed Versailles. The moral is declared to the world and the advertisement, like so many things French, can scarcely be refused. This is total control and the glaring illumination of it. It is the triumph of generality, the prevalence of the overwhelming idea and the refusal of the exception. And then, compared with this single minded performance of Louis XIV, we have the curiosity of Hadrian – Hadrian who is, apparently, so disorganized and casual, who proposes the reverse of any totality, who seems to need only an accumulation of disparate ideal fragments and whose criticism of Imperial Rome (configurationally much like his own house) is rather an endorsement than any protest.’ (Rowe and Koetter, 1979, pp. 90)

46

The example of Hadrian’s villa again illustrates that empirical architecture is not necessarily bound to a certain time as this work of empiricism was conceived long before the Arcadian dreams of the Landscape Garden Movement. The empirical has – as the architecture employed by Hadrian proves – deep roots in architectural history and therefore has a far longer history than Sik and Imhof acknowledge. What they probably mean however – and they consequently uncover a significant distinction – is that there is an essential difference: the empirical can both be *result* – something that has slowly grown without a conscious architectural intention – and *Utopia*, something consciously and deliberately desired. The first *prevalent* western architectural desire for the empirical may indeed have been expressed by the Landscape Garden Movement. Especially if we consider the growing industrial circumstances that enabled this desire – again following Worringer’s reasoning – to grow.

Before the post-Enlightenment total planning of architecture and the city, namely, there could hardly have been any longing for the empirical, since empiricism was omnipresent. Once more following

***Image 1.14** >
Picture of Villa Savoye by Le Corbusier. Although the elevation can be considered unitary and absolute, the combination with the interiors can hardly be considered completely conceptual.*





13. Rowe, C., & Koetter, F. (1979). pp. 45 & de Botton, A. (2013) pp. 180

14. Rutgers, R. (2011). *Stedebouwkundig Ontwerpen* (8 ed.). Eindhoven: Eindhoven University of Technology.

Worringer's theory, it is arguable that in a predominantly disorderly state, the orderly is desired. The classic utopia therefore, in all its forms, has prevailed until 'absolute order' became *reality* instead of *fiction*. At a certain point however, the city and its architecture indeed became subject to total planning and the Enlightened society sought its desires elsewhere, outside the classical utopia of order and rule. Here, we might think of the Parisian tours through the sewers or the aforementioned hamlet that was built behind the castle of Versailles.¹³ Later, the urban theories and principles of, for instance, Camillo Sitte, who in *Der Städtebau nach seinen künstlerischen Grundsätzen* actively conveys the image of the disorderly medieval city, can be considered a later result of this shift too.¹⁴

Empiricism *as utopia* could therefore, as Sik argues, have *prevalently* started with the paintings by Brueghel (with its first architectural equivalent in the Landscape Garden Movement), that means, for this 'wave' or era, for – and especially from Worringer's point of view – it is hard to imagine that Breughel was the first individual ever to portray and idealize the natural and empirical. The case of Hadrian's villa demonstrates that the empirical as utopia has existed long before Breughel started painting the *ordinary* instead of the *divine* (see image 1.15). The empirical would consequently not know an absolute beginning or end. It is a crucial human feature. The empirical was consequently conceived, the moment people started with aesthetic perception, which is probably, when Adam first opened his eyes and beheld that astonishing untamedness, naturalness and realism that was provided by the Garden of Eden.

< **Image 1.15**
Painting of a Farmyard by Jan Brueghel, 1620.

Sense in empirical architecture

In *The English House* (1888), Robert Dohme describes the attributes of the English house we have earlier seen to be Turnovsky's embodiment of the empirical. Dohme, German by origin, visited England and noticed the tendency of the English to focus on comfort and functionality instead of monumentality, symmetry and aesthetic appearance.¹⁵ These were all subordinate to practicality, modesty and the skillful grouping of spaces. He noticed the trend in England to prefer the small and simple cottage over the '*badly disposed palace*'. The academically correct Classical and monumental palaces that were still being built in Germany, were not to be found in the late 19th century England anymore, England was moving *forward* instead of *backward*. Dohme even goes as far as to mark in this English architecture the equivalent of modern vehicles and boats, and thus distinguishes a form of functionality within this empirical form that has connotations with – but is fundamentally different from – the raped kind that was later employed by the early modernists.¹⁶

Dohme's essay about the English house, employs us with a valuable view on empirical architecture. This more pluralist kind of architecture, which allows architecture to be shaped in ways that cannot be achieved when limited and restrained by strong architectural principles such as symmetry, monumentality and proportion – thus indeed empirically designed – provides this architecture with a functionality and practicality that is hardly ever reached by a more conceptual kind.

In contrasting the elevation of the Villa Savoye (see image 1.14) with that of a traditional German house, John Olie comes to a similar conclusion. He acknowledges the German house to be more resilient for the German house, with its irregular shape, leaves room for change. It is thus able to *survive* renovation, extension or even partial demolition.¹⁷

15. Dohme, R. (1888). *The English House*. In H. F. Mallgrave, & C. Contandriopoulos, *Architectural Theory Volume II: An Anthology from 1871-2005* (7th ed., pp. 28-29). Oxford: Blackwell Publishing.

16. The comparison to Le Corbusier's *Vers une Architecture* is almost too easily made, see images of modern vehicles in: Le Corbusier, ([1923]2013). *Towards a New Architecture*. New York: Dover Publications.

17. Olie, J. (2014, May 14). Lecture Series: Duurzaam Bouwen - 4A. (J. Olie, Performer) University of Technology Eindhoven, Eindhoven.

18. Venturi, R. ([1966]2011). Complexity and Contradiction in Architecture. New York: The Museum of Modern Art. pp. 42
19. Venturi, R. ([1966]2011) pp. 16
20. Venturi, R. ([1966]2011) pp. 16
- Its quality extends that of a mere divine image and leaves space for the complexity, irregularity and change that is crucial to the activity of dwelling. A building should consequently be able to withstand laundry hanging from the windows and garbage next to the entrance. Vulgar things and practices will not go away; '*Our buildings must survive the cigarette machine*'.¹⁸ It is this exact practicality that Dohme seems to refer to, when he discusses the English house. It is provided with an architecture that is not restrained by aesthetic principles, that does not limit itself to function as a mere beacon, a built message of prophecy, truth or power. This plural architecture instead is subordinate – devoid of unabashed moral or power – and is determined by what *is* instead of *what ought to be*.

'I Like complexity and contradiction in architecture. I do not like the incoherence or arbitrariness of incompetent architecture nor the precious intricacies of picturesqueness or expressionism. Instead I speak of a complex and contradictory architecture based on the richness and ambiguity of modern experience' (Venturi, 1966, pp. 16)

Venturi enriches our understanding of empirical architecture with the aspect of *complexity and contradiction*, an important quality of empirical form. He argues that complexity is embedded in the discipline of architecture and states that architects '*can no longer afford to be intimidated by the puritanically moral language of orthodox Modern architecture*'.¹⁹ Instead he prefers a more ambiguous, compromising and accommodating architecture: '*I am for messy vitality over obvious unity ... [Architecture] must embody the difficult unity of inclusion rather than the easy unity of exclusion. More is not less*'.²⁰



He then illustrates contradiction and complexity in the compositions of facades, between facades and interiors, and in interiors themselves. In it, he finds a vitality, a legitimate richness which illustrates what architecture, like other arts, should be about: contradiction and complexity in architectural form.

Towards a definition?

So, to summarize, the empirical is historically ever-present (following Worringer's theory) and seems to have gained momentum during the growing 'domestication' and 'totalitariansation' of the urban and architectural landscape. There are fundamental reasons to desire the empirical over the conceptual and yet, the latter is the only thing that really defines the first so far. We have discussed both the *when* and *why*, but the *what* remains merely defined by the opposition we started with. As the Greek God Chaos, which is determined by what he is not – *formless, orderless* – the empirical has so far mostly been described with its antithesis: it is the non-orderly, that which cannot be reduced to a single principle, it is pluralist instead of monist, multiplicity instead of simplicity. It proves very hard to define the undefinable, given that the very crux of the meaning of the empirical lies in its indefinableness, in its lack of a universal, all-encompassing truth.

It even appears as if the empirical is fundamentally un-architectural and the architectural is fundamentally un-empirical. Sirk and Imhof considered the profane and ordinary buildings of peasants as *Vorläufer*, not *embodiments*, of empirical architecture. This indicates they are not really considered architecture. They only became so, when the empirical was idealized and intellectualized in the *gehobene Kunst* by the Landscape Garden Movement. And it is Turnovsky that states that the

< **Image 1.16**

Photo of Jackson Pollock working on a drip-painting, by Martha Holmes, 1949

empirical is simply ‘*not architecture*’.²¹ Rowe and Koetter pose a similar statement when they compare the relation between architecture and building to the relation between literature and speech.²² Apparently, the empirical (which remains when one subtracts architecture from building) *can only become architecture once it is utopianized* – like nature was by the Landscape Garden Movement. Hence Sik and Imhof’s dating of Empirical architecture.

Here, I firstly want to elaborate on the contradiction that appeared earlier: *empirical architecture as a utopia*. Yet, there is no room for ambiguity and loose ends in utopia. As Koetter and Rowe argued, ‘*utopia does not offer options*’. Is it, therefore, possible to purposefully wield or idealize empirical architecture, whose very characteristics are ambiguity and loose ends? Does empirical architecture not, at the very moment it is used intentionally, lose these characteristics? Is Sitte’s urban strategy, which was earlier considered empirical for its glorification of medieval city-form – like the Garden City Movement and all those other picturesque or traditional movements – not the most monist and obstinate architecture of all?

‘An architecture of complexity and contradiction, however, does not mean picturesqueness or subjective expressionism. A false complexity has recently countered the false simplicity of an earlier Modern architecture.’(Venturi, 1966, pp. 18)

‘Traditionalistische [kann]nicht mit empirischer Architektur gleichgesetzt werden, oft ist sie das genaue Gegenteil.’ (Sik and Imhof, 2006)

21. Turnovsky, J. ([1985]2009). pp. 23

22. Rowe, C., & Koetter, F. (1979). pp. 101

23. en.oxforddictionaries.com. (2016, December 31). aleatory - definition of aleatory in English. Retrieved 2016, from en.oxforddictionaries.com: <https://en.oxforddictionaries.com/definition/aleatory>

24. Worby, R. (2009, August 6). Turn on, tune in: John Cage's symphony for 12 radios. Retrieved September 4, 2016, from theguardian.com: <https://www.theguardian.com/music/2009/aug/06/john-cage-symphony-for-radios>

25. Ibid

This paradox proves that a definition of empirical architecture is highly difficult, or rather, impossible. The paradox essentially prevents the irregular and disorderly from being idealized, described or defined. The intrinsic features of the empirical get contradicted once they become Utopian. Empirical architecture is fundamentally anti-Utopian and thereby, apparently, anti-architectural. This problem – regulating the irregular, idealizing the unideal – has served as a source of inspiration in art, that has acquired a name in *aleatory art*. We could therefore find a parallel for our paradox here.

Aleatory art explores the possibility to purposefully idealize and create the irregular and disorderly.²³ It exploits chance and random choice for its composition or process and is often driven by a desire to make neutral art, devoid of tradition and taste, an art that particularly prevailed in the 1950's.²⁴ With a live performance called *Imaginary Landscape no. 4*, John Cage conducted musicians which were sliding between radio stations on their portable radios, producing noisy sounds with fragments of songs.²⁵ Through orchestrating his 'musicians', he controlled both the number of radio's and the actions performed by the musicians. Yet the random signals – and thus sounds – were an important basic pattern that Cage could not control. This random element inside the hierarchy of the orchestra – 24 musicians, 2 musicians per radio, one conductor that instructs and controls the orchestra – is randomized by the disorder inherent to the act of sliding on the transistor radio. Although this is not complete randomness, for the noise and songs are limited, it is at least, in some way, random. No rule is able to control the composition. A totalitarian piece of music is made impossible.

Similar elements of randomness can be found in the folded magazine texts by William Burroughs and the paintings of Jackson

Pollock. By dripping paint from his brush on a canvas, Pollock made paintings which were shaped by chance (see image 1.16).²⁶ This does not mean, that his paintings embody pure randomness: firstly there is the color, thickness, and quantity of the paint, then there is the type, speed and position of the brush, the number of paint layers and finally the texture of the canvas – which are all deliberately chosen by Pollock. Nonetheless the small element of chance, the fact that the brush does not touch the canvas but instead drips on it, adds chance to the work of art, ‘frees’ the artist of total control. Firstly because of the speed and rhythm of the dripping paint, then the place where the paint hits the canvas and finally the way the paint spreads across the canvas. They all prohibit Pollock from gaining full control. In a similar way Burroughs – who folds poems from magazines²⁷ – is dependent of the words in the magazines he cuts up, an aspect of his art which again prevents the artist from getting totalitarian. By adding such uncontrolled elements, a sense of randomness is established, and thus the irregularity can be regulated in some way.

But can we grasp the empirical with pure randomness? Surely, randomness vouches for the qualities of practicality, since there is no order and thus nothing to limit the options of usage; the building *does* survive the cigarette machine. It is however, hard to believe, that a random building calculator could ever arrive at the shape of an English house. But what, then, *is* empirical architecture? Turnovsky provides us with a short explanation of what he means with empirical:

‘The [empirical] approach produces an architecture that is committed to concrete existing conditions ... [it] is a casual pragmatism, an almost ad hoc, incidental accommodation of anomalous and unique conditions’ (Turnovsky, [1985]2009, pp. 21)

26. [tate.org.uk](http://www.tate.org.uk/art/artworks/pollock-number-23-t00384). (2016). ‘Number 23’, Jackson Pollock, 1948. Retrieved September 4, 2016, from [tate.org.uk: http://www.tate.org.uk/art/artworks/pollock-number-23-t00384](http://www.tate.org.uk/art/artworks/pollock-number-23-t00384)

27. Worby, R. (2009, August 6).

28. Harper, D. (2016). Online Etymology Dictionary. Retrieved September 4, 2016, from etymonline.com: http://www.etymonline.com/index.php?allowed_in_e=0&search=empirical

As the definition of Turnovsky above shows, words like pragmatism and accommodation typify the definition of the empirical, for empirical form, as can be seen in the English house, is determined by anything but randomness. Randomness plays a part, but alone falls short in explaining empirical form. It is the experience of days, weeks, months, years, decades and centuries of usage, concentrated in single works of architecture that allows them to be so intrinsically accommodative to the complexities that trouble the practice of architecture. The etymological ground for empirical lies exactly in this aspect of *experience*. The word empirical is rooted in the Latin *Empiricus* and the Greek *Empeirikos*, meaning *by experience* instead of theory, proven by *use* and *trial*.²⁸

It may be stated here that the antithesis of the *conceptual* and the *empirical*, as handed by Turnovsky, indeed seems appropriate. The term *conceptual*, which contains and relates to the word concept, has proven to be useful in describing the order-side of our opposition. Versailles, the fictional plans for the Binnenhof and the Villa Rotonda are clear embodiments of concepts; concepts of symmetry, hierarchy and of universal geometry. A concept, here, is an abstract idea that guides the design. It is exactly that which prohibits the architect from making too many separate choices and instead provides him with a reason to ignore the puzzling complexity of building, in order to create something coherent and unitary; something comprehensible and divine. The opposing term, *empirical*, relates to the side we are interested in here. Indeed this side has a lot to do with experience instead of theory: whereas the fictional plans conceived for the Binnenhof are clearly products of theories or concepts, the existing conglomerate can only be explained from an accumulation of experience. The same applies to the aforementioned English house, the organic city or the farm. These are shaped by experience. From experience

a rich and complex variety of impulses is derived which cannot be reduced to a simple concept. Venturi refers to the importance of basing architecture on 'modern experience'. It is therefore, that we can further draw upon the meaning of the word *empirical*, as it indeed relates to the theme, and is not just an arbitrary denotation.

This aspect of empirical form – that of spaces and forms that can be changed or designed by *experience* – is further described by Herman Hertzberger in his *Homework for More Hospitable Form*.²⁹ He employs the notion of a *Musée imaginaire*, a reservoir of shared form-experience.³⁰ He argues for a continuous 'overpainting' of existing layers, a dialectical process which puts from a rich variety of forms and is always incomplete and thus changeable. For Hertzberger, forms should consequently be established more through experience than through order, and design should stimulate the act of change by experience.

Miroslav Sik denotes this exact aspect of experience with 'Erfahrung' in his definition of empirical architecture:

'[Architektur der Empirischen form] entsteht durch geduldiges, die richtige Form, den richtigen Raum, die richtige Öffnung suchendes Entwerfen, wobei dazu die vom Architekten selbst und die von anderen vor ihm gemachten Erfahrungen um die Wirkung der architektonischen Elemente, der Anordnung der Räume, der Fenestrierung usw. architektonischen Regelwerken und Konzepten vorgezogen werden.' (Sik & Imhof, 2006)

Empirical Architecture is, ultimately, not comparable to randomness. It is *seeming* randomness that originates from a '*suchendes Entwerfen*', from experience. Yet, perhaps, aleatory art has still indicated an important direction. In the cases of Cage, Burroughs and

29. Hertzberger, H. (1973). *Homework for more Hospitable Form*. In H. F. Mallgrave, & C. Contandriopoulos, *Architectural Theory Volume II: An Anthology from 1871-2005* (7th ed., pp. 440-442). Oxford: Blackwell Publishing.

30. *Ibid.*

31. Stalder, L. (2014). *Architecture in Switzerland: A Natural History*. In E. G. Hadad, & D. Rifkind, *A Critical History of Contemporary Architecture: 1960-2010* (pp. 239-254). Farnham: Ashgate. pp. 244-247

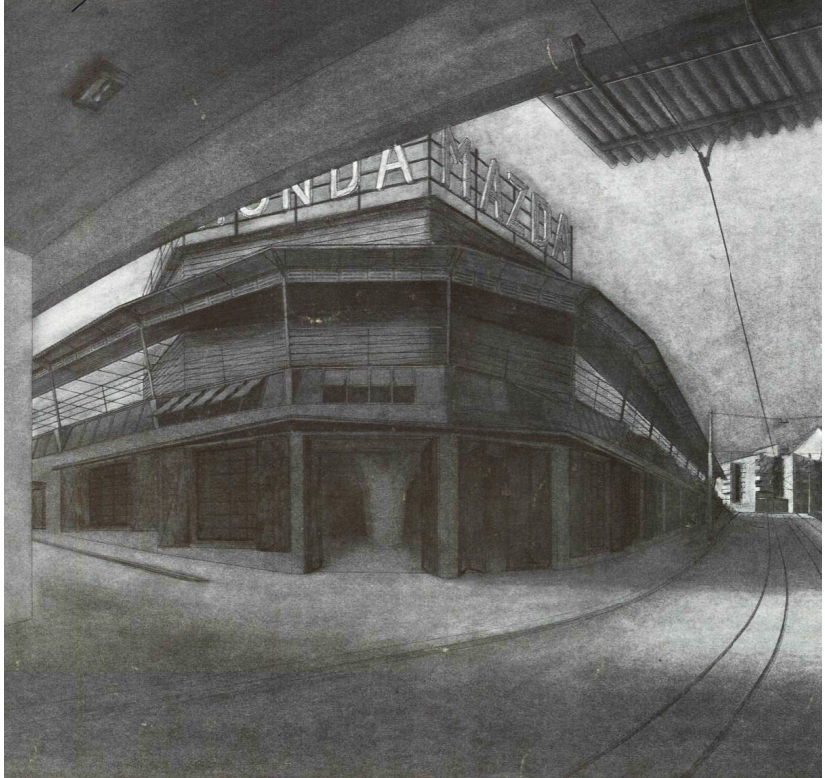
32. Caruso, A. (2009). Whatever Happened to Analogue Architecture. *AA Files*(59), 74-75.

33. Sik, M., & Reinhart, F. (1988). *Analogue Architektur - Venturi Europäisiert*. Werk, Bauen + Wohnen, 5, 21-22.

Pollock, namely, there is a strong emphasis on the process. Whereas Burroughs limits himself to the vocabulary of a magazine and Pollock changes the relation between paint and canvas, Cage – finally – uses secondhand music. All three change the *process* instead of the *concrete form* of their works. Like Sik and Imhof affirm in the quotation above, the aforementioned paradox can perhaps be escaped by a *careful reconstruction of the process* that has led to empirical form, rather than an *imitation or description of the form itself*. The manner Sik and Imhof describe reconsiders the priority of concepts in the establishment of an architectural form. Instead of a concept like symmetry, for instance, an empirical attitude towards the placement of a window is taken. A far less regulated and limited understanding of empirical form is thus reached, which perhaps allows us to get around the pitfall of falling into either traditionalism or picturesqueness. We will return to this in part three.

Here, we will more elaborately consider the work of Miroslav Sik, who has been rather important in our argument so far. Miroslav Sik, namely, signifies a long tradition in Swiss architecture, around an architecture based on spatial experience which concerns *Erfahrung*, *Stimmung* and *Atmosphäre*.³¹ According to Laurent Stalder and Adam Caruso, Swiss architecture was heavily influenced by the Italian Rationalism of Aldo Rossi, who lectured as a guest professor at the ETH Zürich in the 1970's.³² The Rossian term '*ambiente*' however, was better understood than his term '*tipo*' and thus the German '*Atmosphäre*' and '*Stimmung*' came to define Swiss architecture: an everyday material logic of experience substituted Rossi's abstract typological logic.

Miroslav Sik's exhibition *Analogue Architektur* (1987) was influential in this debate. It advocated a poetic realism.³³ It aimed for the popular and ordinary – das volkstümliche – and 'cited' local forms.



34. Van der Heijden, H. (2008). *The Context of Traditionalism*. OASE 76, 47-58.

35. Zumthor, P. ([2006]2015). *Atmospheres*. Basel: Birkhäuser.

36. Zumthor, P. ([2006]2015). pp. 70-71

The *real, ordinary* and *experience* play a major part in Sik's manifesto. Great attention is given to a truthful depiction of the context: gray skies, dust, drain covers and transmission towers establish the perspective drawings.³⁴ This act of drawing, functions as an analytical practice and is considered a basic skill: it analyses the properties of the location in order to *blend in*. Instead of large theoretical texts or large amounts of drawings, the *Ausstellungskatalog* of the exhibition mostly displays all kinds of perspectives that elucidate both the experience of the site and – subsequently – that of the design (see image 1.17).

Apart from Miroslav Sik, others have been influenced by these modified Rossian notions too. In *Atmospheres*, Peter Zumthor tries to comprehend what *moves him* with the notion of Atmosphere: experiencing light, color, sound, object, material and form.³⁵ And – although Zumthor can at best be considered a hedgehog in fox's clothes – his method of design has potential to arrive at empirical form. His 'lamps' of architecture all concern experience: the sound of a space, the way space is lit, the articulation of the materials used, the movement across spaces and the view through the window. But, so he states, if the form does not express the *beauty* he wants it to – and here the hedgehog's spine pierces the fox' pelt – Zumthor would start all over again.³⁶ It is, evidently, not so easy as an architect to abandon all concepts, trends and aesthetic preferences in order to truly answer to the complexities that building reality poses.

< *Image 1.17*
Design sketch by
a student of Sik –
Andrea Deplazes
– that is included
in the *Analoge*
Architektur Ausstel-
lungskatalog, 1987

'Ambiguity and tension are everywhere in an architecture of complexity and contradiction. Architecture is form and substance – abstract and concrete – and its meaning derives from its interior characteristics and its particular context. An architectural element is perceived as form and

structure, texture and material. These oscillating relationships, complex and contradictory, are the source of the ambiguity and tension characteristic to the medium of architecture.' (Venturi, 1966)

37. Turnovsky, J. ([1985]2009). pp. 25

38. Venturi, R. ([1966]2011) pp. 16

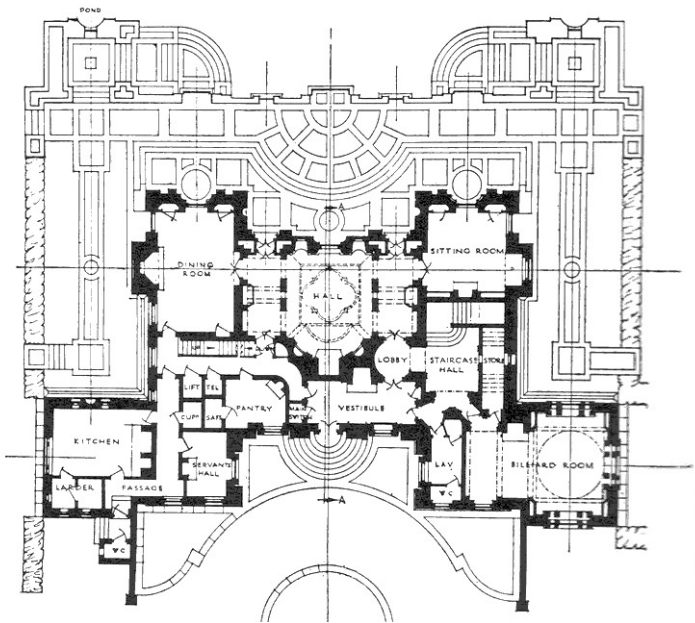
Ambiguity – apart from experience and irregularity – can be considered the final aspect to arrive at empirical form. Venturi has argued before that complexity and contradiction form the genesis of art. And – indeed – in exploiting the complex characteristics, aspects and elements of a building, lies a potential, especially when the empirical is desired and thus designed: '*... there is always the artistic option: expose all those complications, interpret them formally, share the experience*'.³⁷ In exploiting the empirical potential, in being aware of the ambiguity inherent to architectural components, some of the richness lost in the idealization of the empirical can perhaps be won in articulating ambiguities. This ambiguity also separates the *indifferent and careless* works of architecture from the *intended* ones. An articulated ambiguity rules out '*the incoherence or arbitrariness of incompetent architecture*'.³⁸ Whereas the empirical is apparently not considered architecture, this 'artistic option' might bridge the difference.

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We could even go as far as to say that totalitarian architectural *elements*, those that are absolute in their order and hierarchy – facades, chambers, interiors etc. – have to be included in this empirical architecture in order to expose and reveal the inherent contradictions that are ignored by such abstractions. Think of the facade of the Villa Savoye – which served as an example of absolutist architecture earlier – which radiates a false simplicity. The ambiguity is experienced upon entering the building, in its curved and diagonal planes and complex sequence. Similar ambiguities can be found in the houses of Lutyens or Soane. The

Image 1.18 >
Plan of Lutyens'
Heathcote in 1906

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symmetrical facades of Lutyens' *Heathcote* for example, convey a most absolute image of the building. The genesis of its absoluteness lies at the gate, which is placed perfectly in line with the entrance, and is amplified by the meticulous symmetry articulated in facades, garden and chimneys. But, upon entering, the symmetry becomes dynamic, it shifts from vertical to diagonal in the vestibule, to horizontal in the lobby, in order to eventually clash with the initial axis of symmetry in the great hall.³⁹ The plan is – opposed to what the facade expresses – not symmetrical in any sense: the servants occupy the front left, which results in a variety of poky little rooms, while the right is occupied by stately spaces such as the billiard room and the staircase hall (see image 1.18). Apart from this mis-balance, the described sequence deliberately debunks the symmetrical myth displayed on the facade. Lutyens thus not only masters the classical style but masters it to such a degree that he is able to play with its grammar without becoming kitsch. And there lies the richness of his architecture. A similar attitude can be found at Soane's museum, which will be elaborately discussed later. It is their exact definition, crystallization and articulation of order that allows them to break with it. Without it, there is only indifferent chaos, there is nothing to contradict with, no fertile ground for the ambiguous.

Moller House by Adolf Loos displays a similar ambivalence. Although the facade of the Villa Moller conveys symmetry and horizontality, the Raumplan behind belligerently clashes with the simplicity of the elevation.⁴⁰ The windows function completely independent from the irregular *Raumplan* behind (see image 1.19). The spaces wrapped inside the unitary coat, seem to answer exactly to the empirical. They are not designed in levels – as usually – but by *experience* of 'Raum'. What is the size of a pleasant sitting room? How do I want to

39. Turnovsky, J. ([1985]2009). pp. 114-116

40. See: Sarnitz, A. (2010). Loos - Architect, Cultuur-criticus, Dandy. Köln: Taschen. pp. 66-69

41. Boga, T. (1983).
Die Architektur
von Rudolf Ol-
giati (3rd ed.).
Zürich: Organi-
sationsstelle für
Architekturauss-
tellungen an der
Eidgenössischen
Technischen Hoch-
schule Zürich.

enter such a room? How can two rooms be pleasantly related? Ambiguity arises at the junction: at the front door, windows and stairs. It is even so, that – analogous to the sequence of Lutyens' Heathcote – the sequence almost seems to mock the idea of symmetry. The axis, which in classical compositions often orders the most impressive spaces, ends in a murky storage room.

The contrary is also possible: a disorderly facade that houses a rather simple organization of spaces. The *Las Caglias* house of Rudolf Olgiati, seems to be designed from without (see image 1.19). Slight external form-alterations later manipulate the interior. The fairly simple plan thus becomes complex, but still far less complex than its skin. An extruded staircase, several kinks in the perimeter and an endless variety of window types result in a varied elevation-appearance that matches the architectural grammar of the traditional Bündnerhaus type.⁴¹ In his architecture, the *Mauerschale* receives meticulous precision, every window is precisely placed and shaped in such a way – small windows more randomly placed and larger ones with an arched-top – that the volumetric appearance is not disturbed. The ambiguity between this *Mauerschale* and the interior is crucial to Olgiati's architecture:

‘Ein Grundelement [Olgiati's] Architektur ist die umgrenzende Mauerschale, die das Innere als besonderen Bereich vom aussen abtrennt, schützend umschliesst und durch Bergen wertvoll macht ... Durch den Gegensatz zwischen Innen und Aussen, dem Gehüteten und dem Preisgegebenen, schafft Olgiati eine Dimension, die in der Heutigen Architektur durch die Manie der Transparenz weitgehend verloren gegangen ist.’ (Boga, 1983)

The junction of outside wall and space thus articulates the contradiction

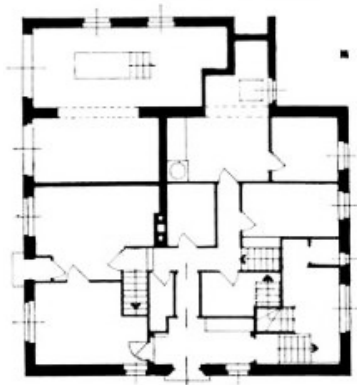
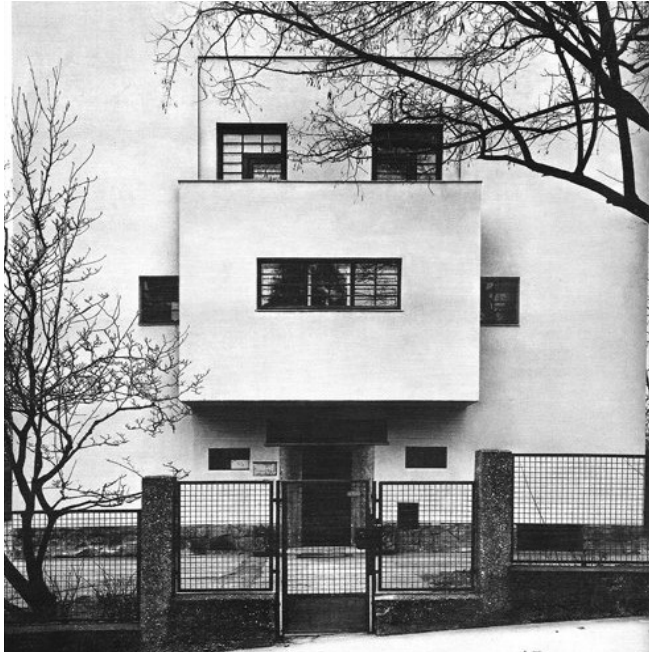


Image 1.19
Moller House, Photograph(top) and
plan of the ground
floor(bottom).



67



Image 1.20

*Las Caglias house,
Photograph(top)
and plan of the
ground floor(bot-
tom).*

between interior and exterior. The window voids in the shell bridge the polarity in size between inside and outside and thus articulate the contradiction that is inherent to the duality that Olgiati designs. Apart from ambiguity, the aspects of *experience* and *randomness* – or disorder – are also illustrated by the mentioned examples. The ceilings, stairs and rooms in House Moller seem to have been empirically designed. The symmetry disappears behind the facade. Here disorder prevails, one that is derived from a careful consideration of the size, boundaries, height and level of the designed spaces. This disorder is pulled outwards by Olgiati, who uses the composition of interior spaces to match the external facades of *Bündnerhäuser*.

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To idealize and convey a truly empirical architecture has proved to be impossible. Even if we could rid ourselves of all problems that arise when the empirical becomes utopia – the undefinable becomes defined – the concrete mass of architecture, structure, material and building process, still resist the purely empirical. For the practice of architecture, its genesis, lies in order. Order in workers (carpenter, mason and roofer), tools (hammer, chisel and saw), building components (brick, beam and tile), spatial units (Meter, Millimeter) and time-frames (hour, week, year). Without this order, Babylonian confusion would arise. Absolute empiricism does not exist. We also have to keep in mind here, that the opposition which we so forcibly keep up, is itself an abstraction. It concerns two extremes whereas most buildings will neither be completely empirical nor completely unitary. The opposition is merely maintained to further elucidate the meaning and implications of the one side, that of empirical architecture. What we have tried, is to *describe* empirical form; that which displays such a rich variety of orders that the underlying

overall order of its form can hardly be grasped.

Empirical architecture, finally, is most illustratively described by its antithesis. Examples as the palace of Versailles and the Villa Rotonda have embodied precisely what empirical architecture is *not*: It is not an abstraction of the complex reality, but an illustration, it is not defined by one concept but by an aggregation of concepts, it is organic instead of cosmic, multiplicity instead of unity and pluralist instead of monist. Its disorder and irregularity stem from the complex nature of reality itself. It is by *experience* that this complex reality is translated into an irregular architectural form. This irregularity does certainly not stem from randomness as the very strength of empirical architecture lies in its usability. By experience – hence the word empirical – the irregular becomes useful in a way, becomes resilient and practical. And the exploitation of these elements, the juxtaposition of irregularity and experience, contains the source for ambiguity.

69

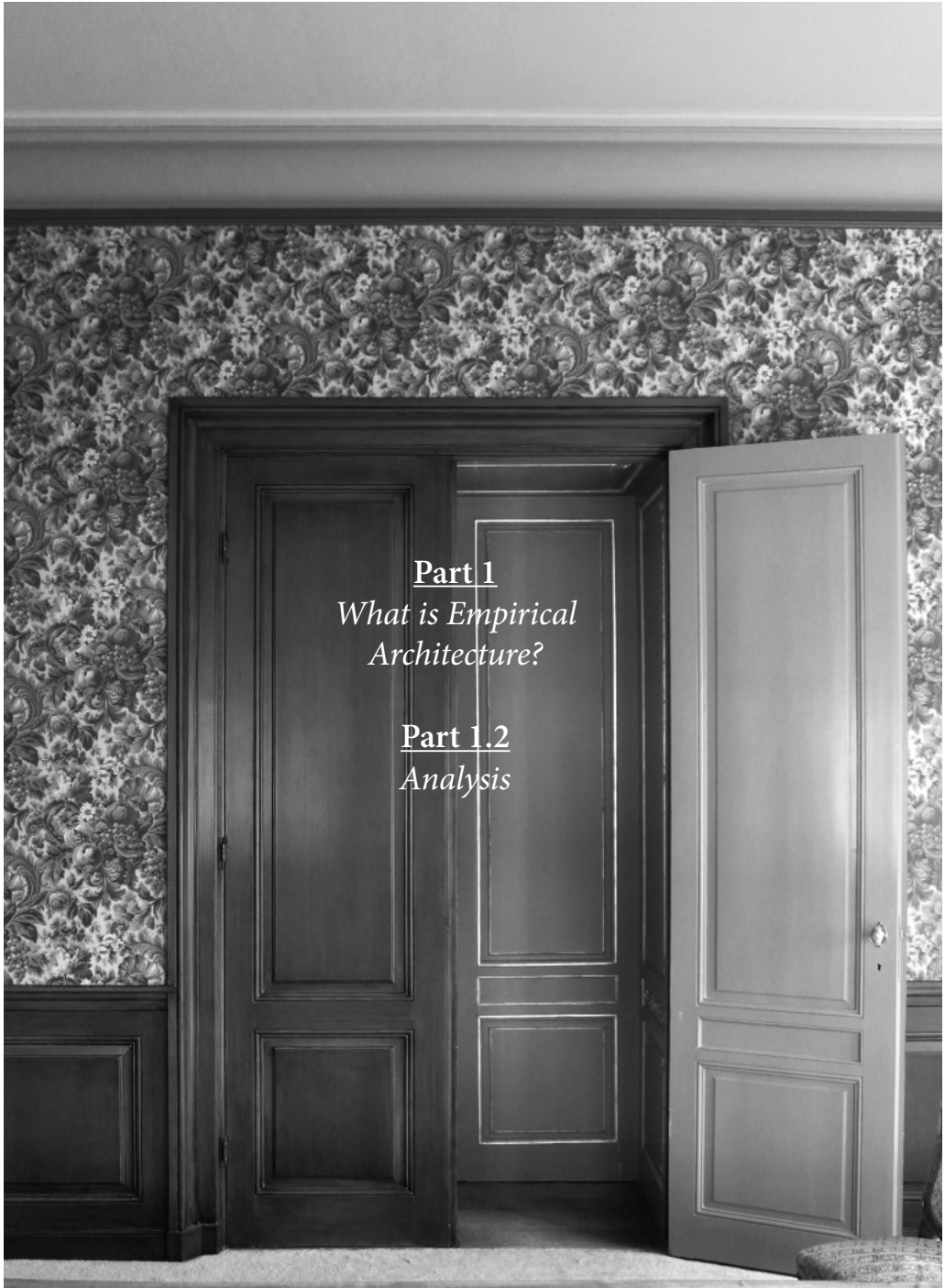
Empirical architecture is consequently neither total order nor total disorder. It lies in between. It has to contain order, in order to break with it – to build a basis for ambiguity and contradiction – but must never prove able to be reduced to one mere concept or design principle. This means the architect must behave subordinate, must let go of his obstinate aesthetic preferences, his desire to win RIBA medals, his habit to think conceptually and his legitimization through styles. He must be able to answer to all the stimuli and complexities that trouble a certain project. He must be humble enough to *listen* instead of *speak*. The position of a wall or door should then not be determined according to the elegant look of a plan or a section, but instead from a perspective sketch or model – as the practices of Miroslav Sik have illustrated.

In the end, it is three aspects – irregularity, experience and

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contradiction – I consider to be important. This is not absolute however, it is no holy trinity. And, following the very essence of what this essay is about, it could never be. The definition of the empirical may concern these aspects. It may also not. We might want to remember Berlin – and the italics are my accentuation – saying:

I am *probably a fox*, I'm *not a hedgehog* (Isaiah Berlin, 1993)



Part 1

*What is Empirical
Architecture?*

Part 1.2

Analysis



1.2 The Concrete Form of Empirical Architecture

1.2.1 An analysis of the 'Eerste Kamer der Staten-Generaal'

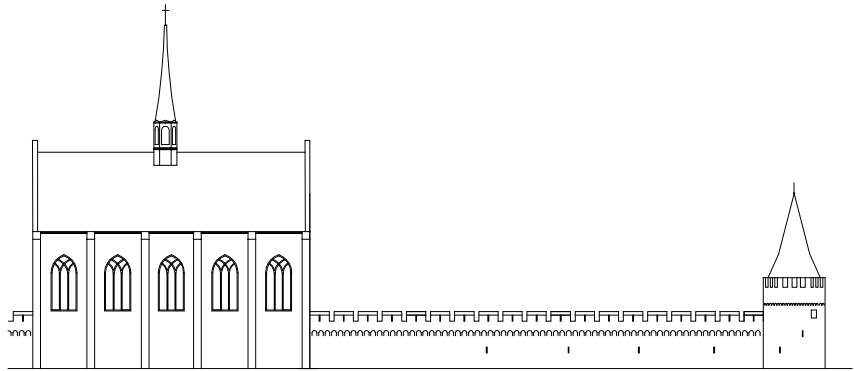
Having obtained a general theoretical idea of the *entity* of empirical architecture, we will now try to discover its concrete characteristics, for, in the end, our inquiry aims for a certain denotation of empirical form. We will therefore examine the concrete expression of empirical form by returning to our main subject, The Binnenhof.

In order to do so, we will look at only a small *section* of the totality: the buildings associated with the 'Eerste Kamer der Staten-Generaal' (see image 1.21). The analysis will firstly look at the *historical process* of the establishment of the current agglomeration.

Since we have ascertained before that empirical architecture – in all its undefinability – is at least *not* conceptual, and thus needs to consist of multiple orders, principles and concepts, we will adjust our research framework to this mere certainty. Therefore, we will try to uncover this multiplicity by decomposing its architecture. We will have to look for changes of orders or concepts from the smallest perceptual level – that of a *room* or a *facade* and everything that it encloses (chairs and lamps etc.) – to the largest, that of the complete aggregation of *rooms* and *facades*, in order to uncover where the concrete empiricity can be found. The shift of one order to another can either appear within a room or a facade – the door differs from the room or the chairs propagate another concept than the lamp – between a room and the facade (like we have seen in the Moller House) or between facade(s) and/or room(s). Therefore the second part – that follows the first historical part – consists of four chapters : 1. Space, 2. Spaces, 3. Facade(and facades) and 4. Space(s) and Facade(s).

< Image 1.21

Map of the historic city centre of The Hague in 2016, with the Binnenhof near the Hofvijver in the middle. The analysed part of the Eerste Kamer is highlighted in black. At the far right, the Central Station and Koekamp are situated.



1250

76

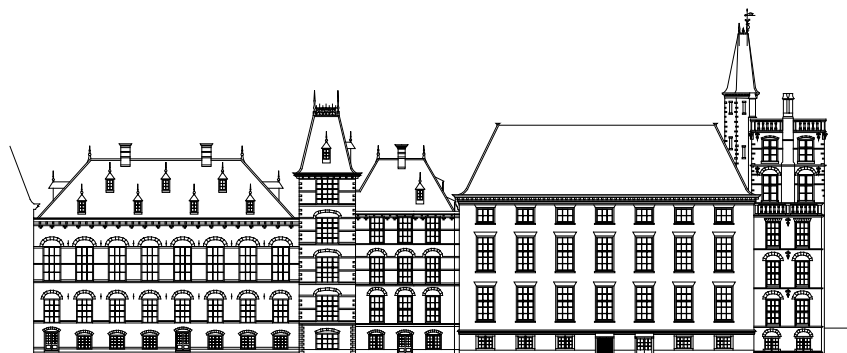


1600

***Image 1.22**
Outer Elevations
of the Northwest
corner of The
Binnenhof.
Based on the
reconstruction by
C. Peters (1891),*

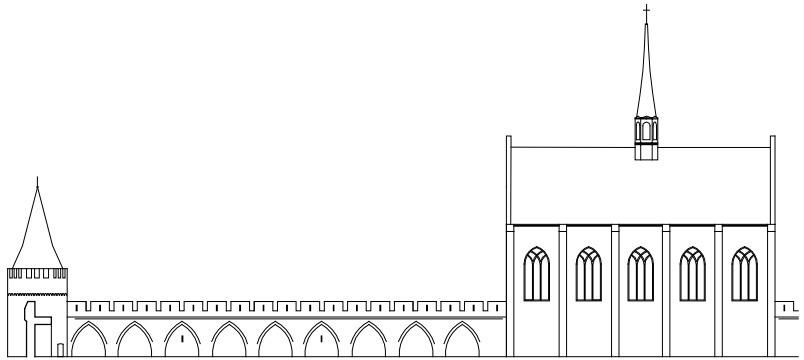


1850



2016

*engravings by Claes
Jansz. Visscher
(1598, 1621) and
pictures (Haags
Gemeentearchief,
1870, 1879)
Scale 1:800*



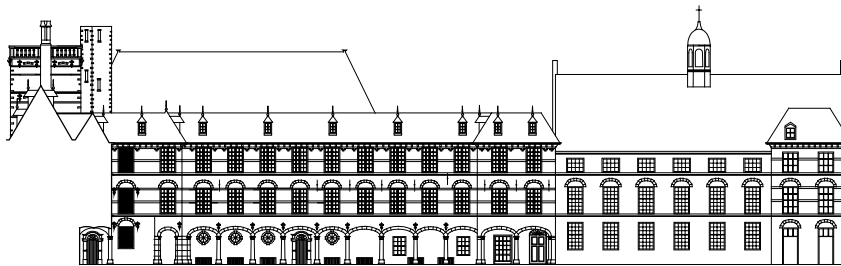
1250

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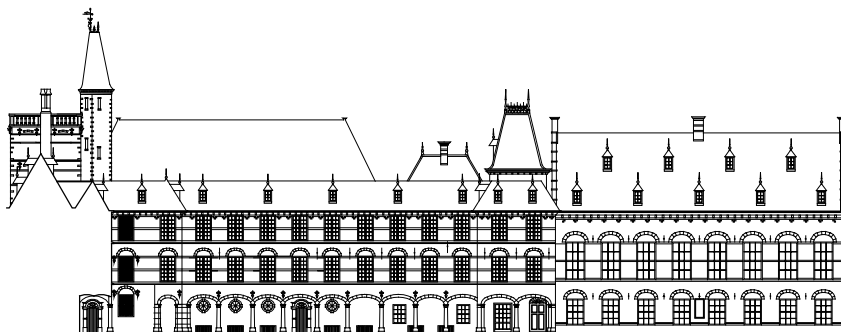


1600

***Image 1.23**
Inner Elevations
of the Northwest
corner of The
Binnenhof.
Based on the
reconstruction by
C. Peters (1891),*



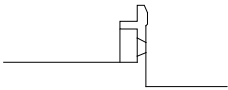
1850



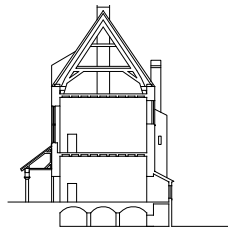
2016

engravings by
Claes Jansz.
Visscher (1619) and
pictures (Haags
Gemeentearchief,
1870, 1879)
Scale 1:800

80



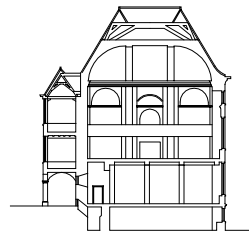
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1600



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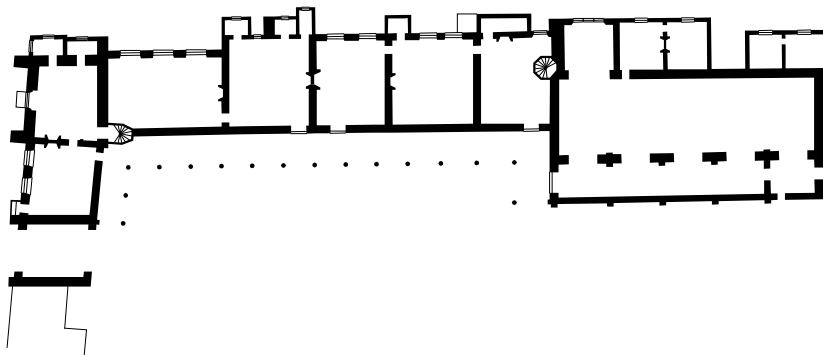
2016

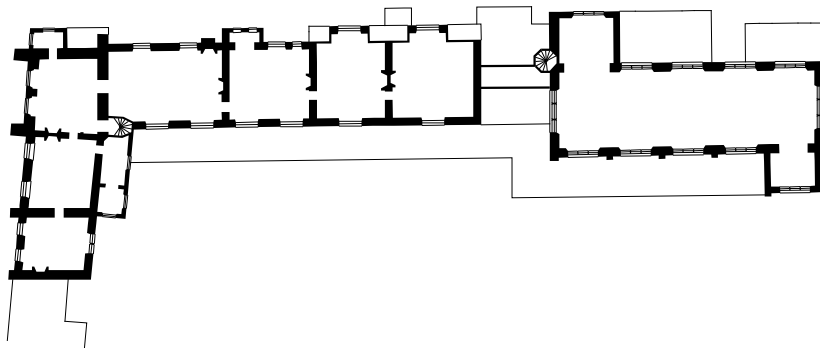
Image 1.24

(Speculative)

*Sections at the
Statenzaal/Eerste
Kamer, based on
van den Ende &
Franken (2000)*

*and engravings by
Claes Jansz., (1598,
1619 & 1621) and
the reconstruction
by C. Peters, (1891)
Scale 1:800*



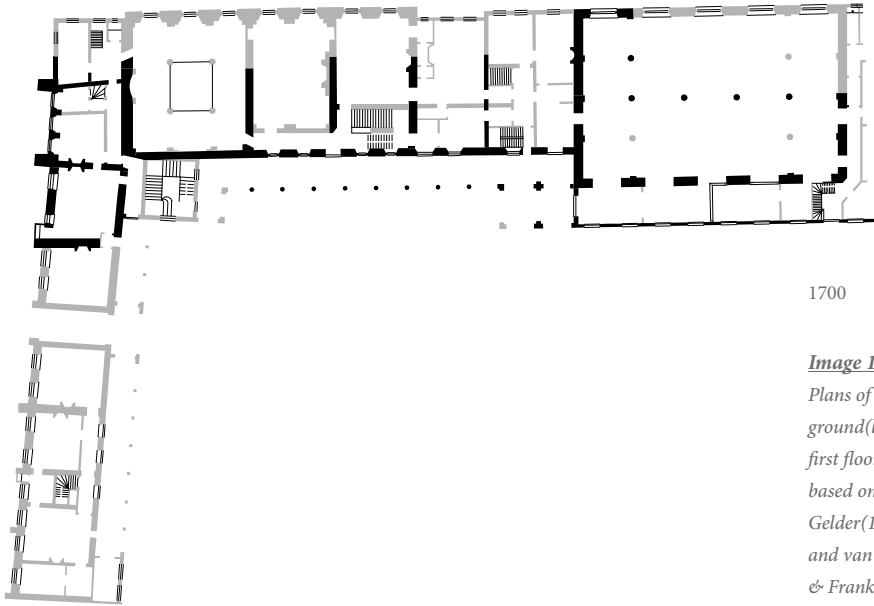


1600

Image 1.25

*Speculative plans of
1600 of ground(left)
and first floor(right),
based on: van den Ende
& Franken (2000),
Heijenbrok, J., &
Steenmeijer, G. (2011),
Riener, J. d. (1730)
pp.152-155 , Pelt &
Tiethoff-Spliethoff
(1984).*

Scale 1:800

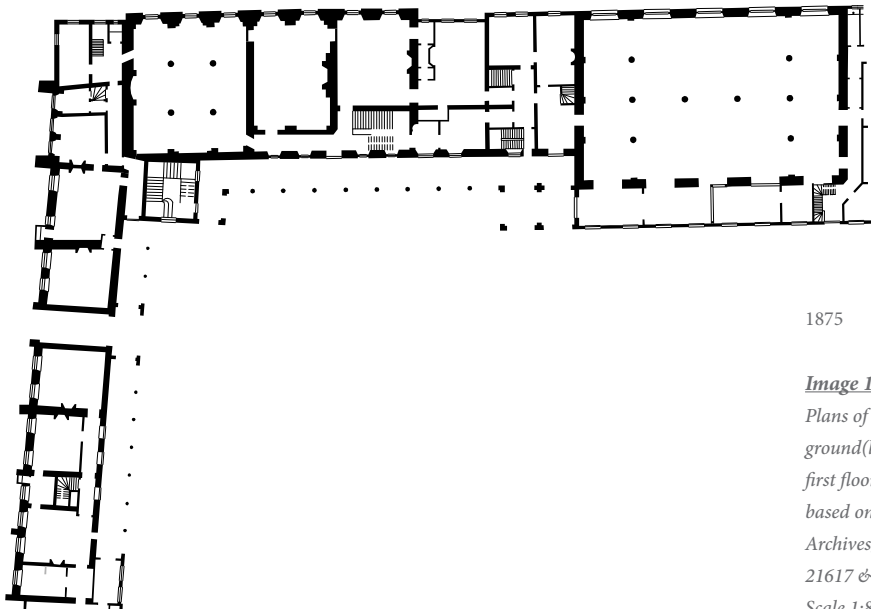


1700

Image 1.26

Plans of 1700 of ground(left) and first floor(right), based on: van Gelder(1912) pp. 16 and van den Ende & Franken (2000) pp. 53&60 Scale 1:800

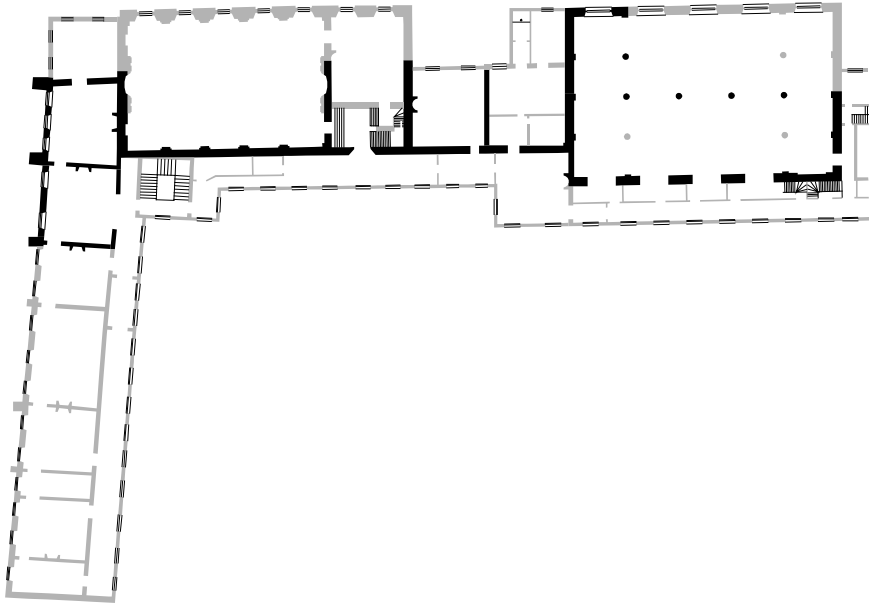
84



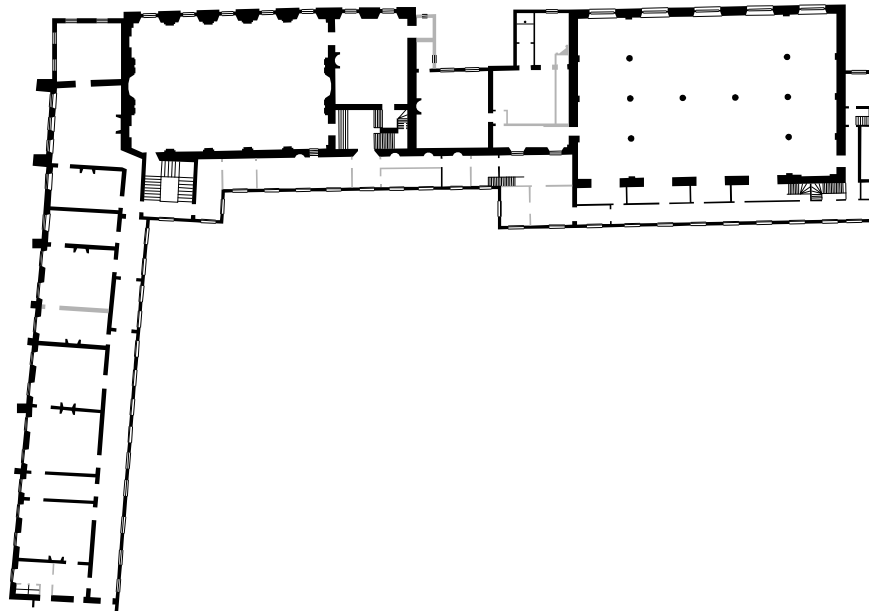
1875

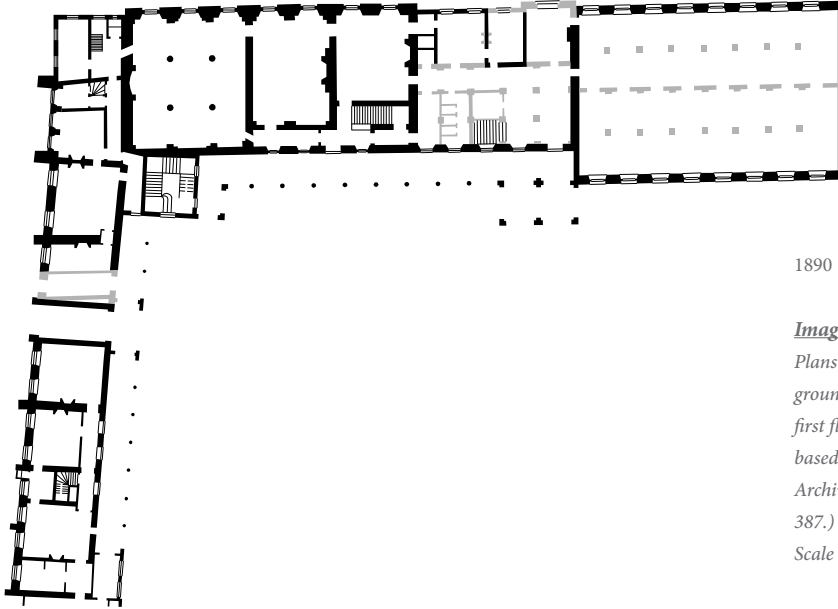
Image 1.27

Plans of 1875 of ground(left) and first floor(right), based on: (National Archives, 4.WCA: 21617 & 21196) Scale 1:800



85





1890

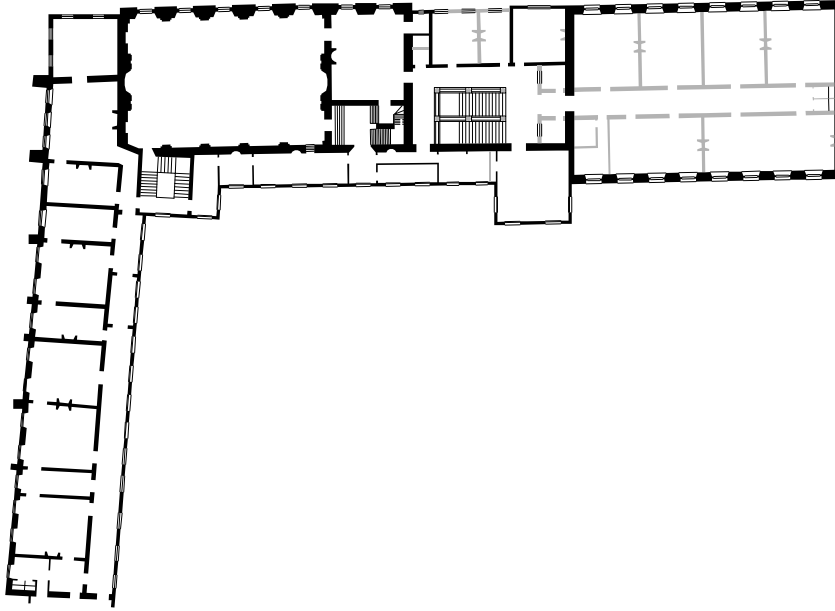
Image 1.28
*Plans of 1890 of
 ground(left) and
 first floor(right),
 based on: (National
 Archives, 4.RGD:
 387.)
 Scale 1:800*

86

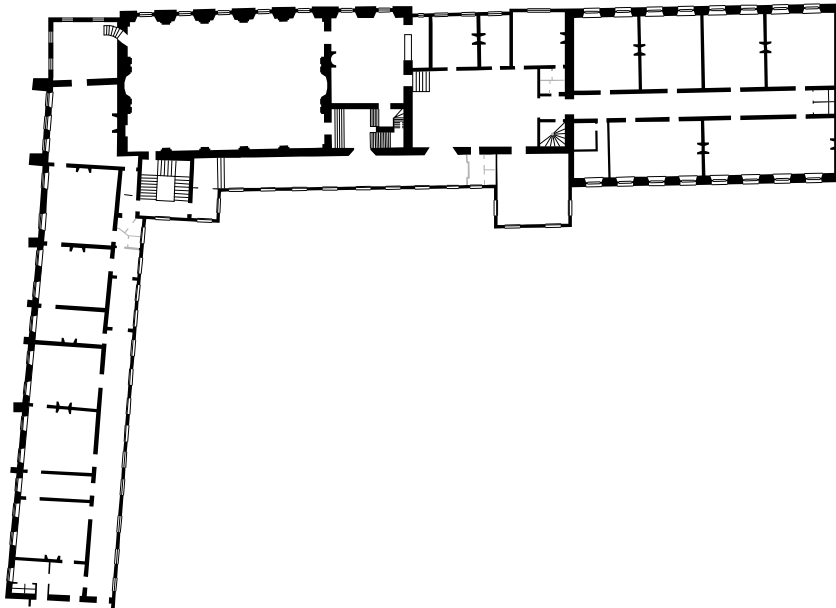


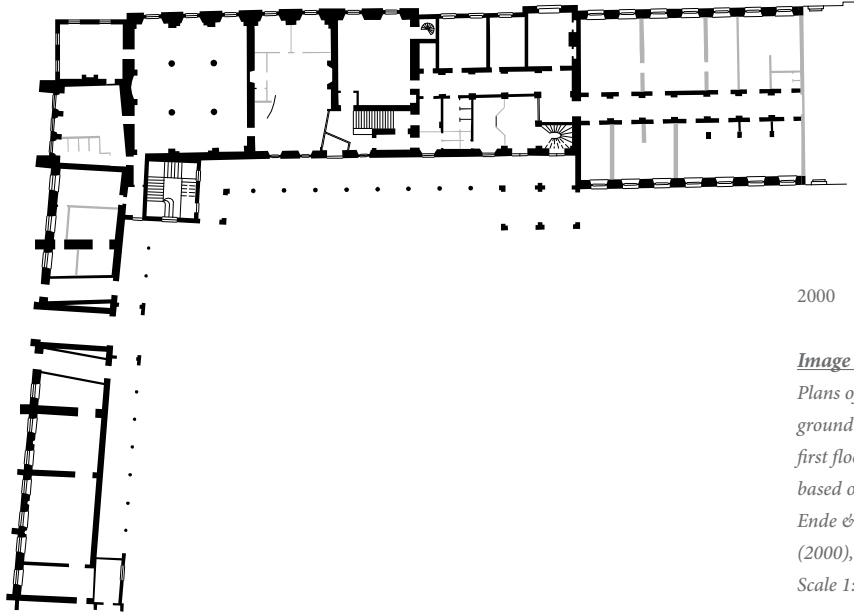
1944

Image 1.29
*Plans of 1944 of
 ground(left) and
 first floor(right),
 based on: (National
 Archives, 4.RGD:
 447)
 Scale 1:800*



87





2000

Image 1.30
 Plans of 2000 of
 ground (left) and
 first floor(right),
 based on: van den
 Ende & Franken
 (2000),
 Scale 1:800

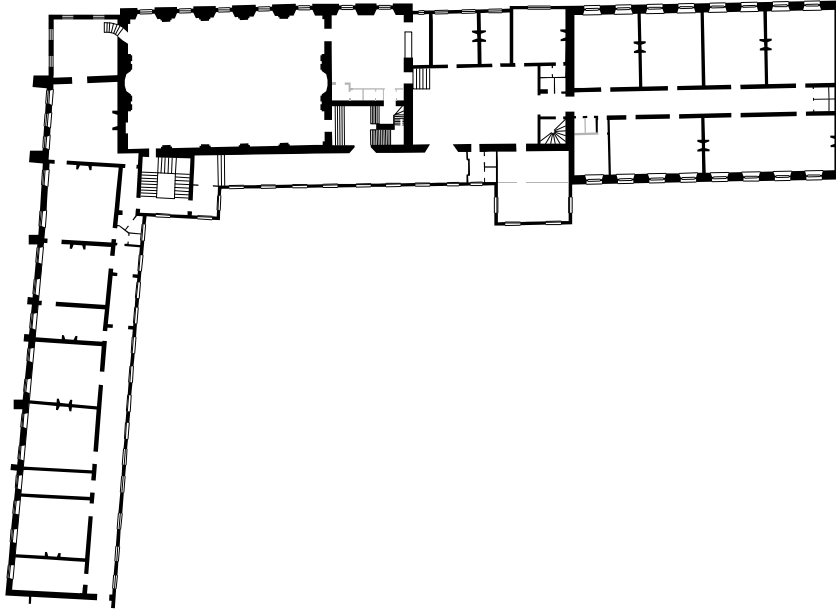
88



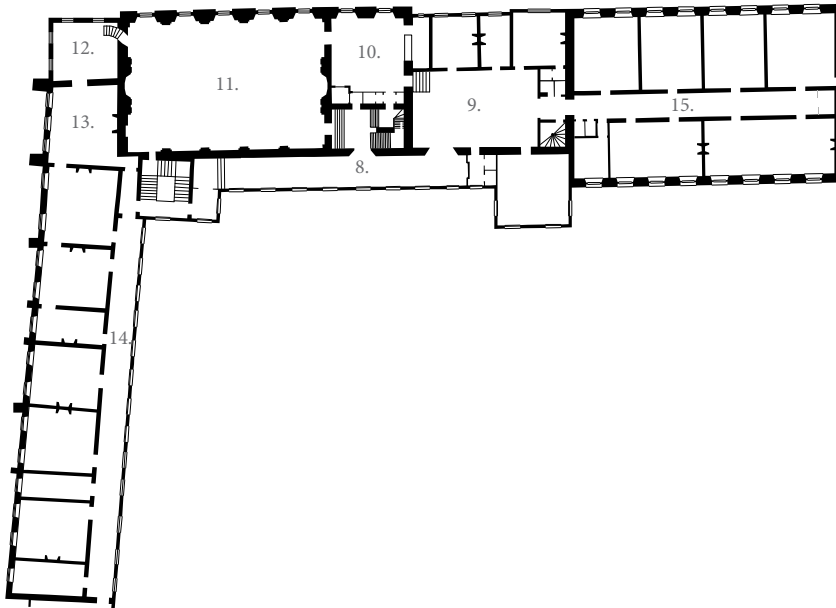
2016

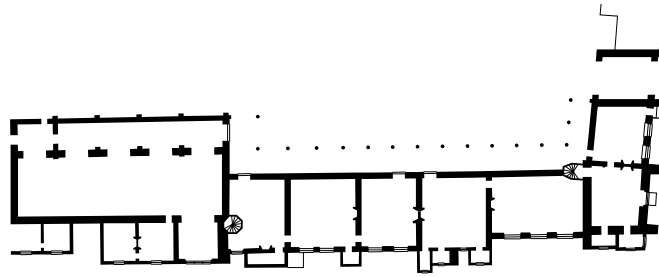
Image 1.31
 Plans of 2016 of
 ground (left) and
 first floor(right).
 Scale 1:800

1. Entrance Hall	7. Corridor + offices
2. Wardrobe	8. Wandelgang
3. Central Staircase	9. Centrale Hal
4. De Witt-kamer	10. Koffiekamer
5. West Staircase	11. Statenzaal/ Eerste Kamer
6. Noenzaal	12. Hoekkamer
	13. Ministerskamer
	14. Fractiekamers
	15. Fractiekamers



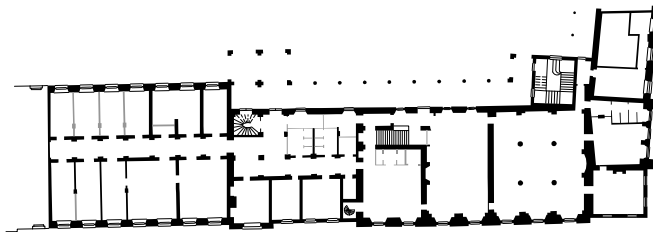
89





1600

90



2016

1.2.2 Historical Development

A Medieval ‘Fiction’

1: Alberts, J., Smit, D. E., & Habben-Janssen, E. M. (2013). *Het Haagse Binnenhof: acht eeuwen centrum van de macht*. Den Haag: ProDemos.

2. Baltussen, J., & Van Schaik, M. (2016).

3. Van Pelt, R. & Tiethoff-Splithoff, M. (1984). pp. 60-65 & de Riemer, J. (1730).

The Binnenhof was established as a stronghold. The structure of the complex, therefore, initially comprised a residence with a great hall, a chapel, walls, towers and stables (see image 1.22 and 1.23).¹ The village *The Hague* – which much later became a city – slowly arose around this stronghold.

When the political system of The Netherlands was drastically altered – from feudal to republican – by the revolt against the Spanish monarch around the turn of the century, *The Binnenhof* became more of a continuation of the urban space than a separate feudal entity. The variety of functions that was accommodated by the former stronghold included shops, a church, a residence for the stadtholder, a number of chambers for the ‘Staten van Holland’ and a number of rooms for the States-General, the main political body of the Dutch Republic.² The late medieval appearance of the castle perhaps best illustrates the complex political arrangement in the Netherlands. The former perimeter wall, furthermore, had slowly grown into an ensemble of buildings, which concentrated all inferior activities at the pond (see image 1.22, 1.23 & 1.32). The tower at the far right was established around 1600 as an extension to the Stadtholder’s chambers, which were mainly situated on the first floor, above the chambers of the ‘Staten van Holland’.³

The three large windows at the pond elevation (outer side) *might* indicate the presence of the Hall of the Staten van Holland here, for they had a residence on the ground floor which was enclosed by a gallery – which barely lets light through – on the other side (see top of image 1.32).

< *Image 1.32*

A comparison of the plan and elevation from 1600 with that of 2016 reveals both the similarity between the plans, and the difference between the elevations. Consequently, a great chasm exists between plan and elevation in 2016.

Light thus must have been provided from the outer side and these three windows indicate the largest room on the ground floor. Furthermore, the main wall rhythm of the current plan, whose transverse structural walls correspond to that of 1600⁴, reveals a greater distance between the walls here, that would have allowed for a larger chamber (see image 1.25).

From the elevations we can furthermore speculate about the position of the Stadholder's bedroom, which could have been situated behind one of the two decorated dormers (see top of image 1.32). A sketch of Adriaen van de Venne of Maurits' bedroom could namely only have been situated here, given the width of the room and the fact that it was lit by only one window.⁵ The large windows besides the tower at the inner elevation could then indicate a sequence of stately antechambers.⁶ This sequence of rooms must have constituted the body of Maurits' apartment before the tower-extension was built around 1600.

At the far left, finally, the elevation of the church can be distinguished, flanked by a building that supposedly served as a kitchen for Maurits' household (see top of image 1.32).⁷

The inner elevation clearly illustrates the introvert orientation of the complex. All serving areas – such as toilets – have been concentrated at the pond in order to free the plan of disruptive elements and to provide the square with a formal elevation. The gallery – which connects all individual buildings – further accommodates this side (see image 1.23).

The most radical changes take place during the *Golden Age* (see image 1.26). Architect Pieter Post finally revitalises the intensely despised conglomerate.⁸ The chambers of the Stadholder were moved south and an impressive new building – or actually facade since it ingeniously retained parts of the old internal structure – with astonishing chambers was erected. Also the church was doubled in size, a new wing was added

4. See the wall-datings by: Heijenbrok, J., & Steenmeijer, G. (2011) and the chimney reconstruction in: Van den Ende & Franken (2000): both confirm that the facade by Pieter Post was completely rebuilt, but the walls could have been reused. This was the basis for the speculation plan of 1600. This can also be argued from positions of chimneys and walls in the elevations..

5. See: van den Ende & Franken (2000) pp. 7

6. This corresponds to the sequence of the *older Stadholders' rooms* as described in: van Pelt, R. & Tiethoff-Splithoff, M. (1984) pp. 63

7. This is confirmed by a spatial explanation in: de Riemer, J. (1730) pp.152

8. An old Dutch poem by Mr. van Velden illustrates the disdain of citizens towards the early 17th century state of the residence of the Staten van Holland: *‘Wat ziet gy na het dak, ten zuiden opgerezen? Ter plaetse daer wel eer een oud bouwvallig wezen zich toonde; dat daer stond en schudde ginsch en weer: En dreigde met een flag van zelfs te vallen neer’*

From: de Riemer, J. (1730).

9. In the National Archives detailed sketches of such embellishments have been found. See: National Archives, 4.RGD: 441

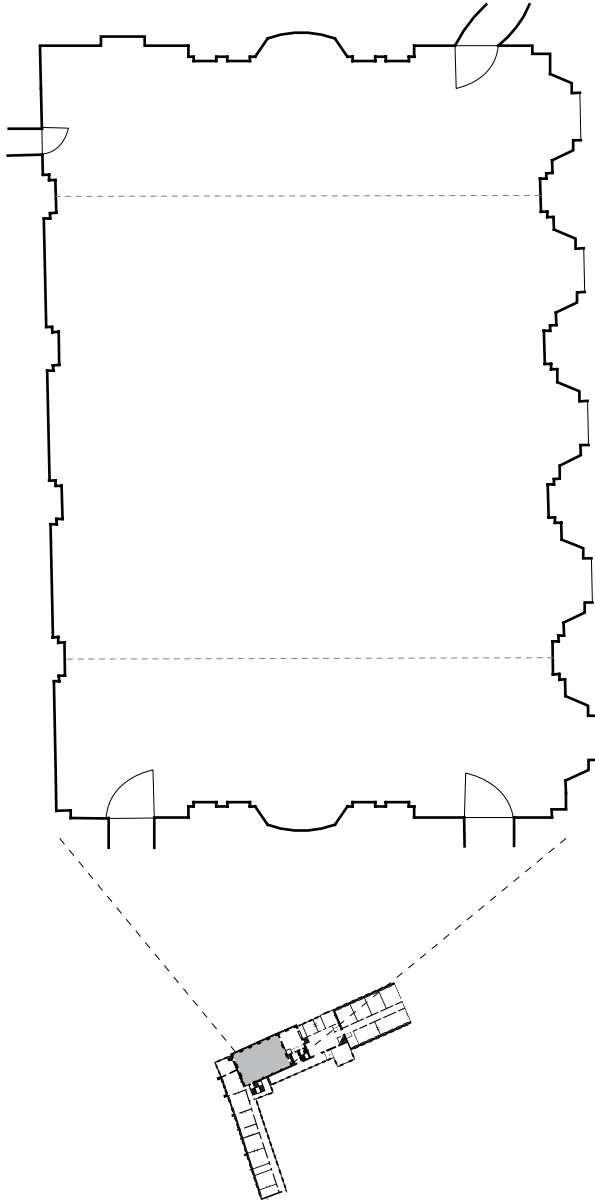
10. Rossi, A. (2009). *De Architectuur van de Stad* (2nd ed.). (H. Hoeks, & E. Kurpershoek, Trans.) Nijmegen: SUN.

(to compensate for the Stadtholders loss of space) and the gallery was encased.

Because of the dramatic overall increase in depth, the building needed both sides in order to obtain a decent amount of light and air and the inferior activities were moved to the inside of the building (see image 1.24 & 1.26). Around 1900 a further formalisation of both inner and outer facade was carried out by Nieuwenhuis. He renovated the former church and the former apartment of Mary Stuart, and although the inner structure once again remained largely the same, the outer one was heavily embellished with ‘medievalizing’ elements that still characterize the elevation today (see image 1.22, 1.23 and 1.32).⁹

All in all, the disorder that typified the medieval appearance seems to have been systematically eliminated and obscured throughout the ages. The appearance partly became a projection of a *supposed past*. The medieval value of the current shape is therefore mainly fictional. We can therefore argue two legitimate continuations: one continuing the formalization – or perhaps abstraction – of the current appearance and the other reversing the formalization, thus essentially connecting to the medieval way of building. By this reversal I do not mean restoration of the former appearance. That would be another act of historicism. By reversal I mean that the intrinsic attitude returns to the more empirical one, *such* is our argument. This would definitely restore some of the *impressive ordinariness* of the governmental seat that so typified Dutch wealth.

Finally, like Aldo Rossi argues in his ‘Architecture and the City’, a monument can only withstand time if it is allowed the freedom to be changed and is thus saved from an obstinate preservation.¹⁰ A permanent ‘lockdown’ will eventually most certainly invigorate the deterioration of the Binnenhof complex, which would be highly regrettable.



1.2.3 Space – An analysis of (main) individual Spaces

11: Bolten, M. (2011). *Interieur van betekenis, betekenis van interieur: De Decoratieprogramma's aan de noordzijde van het Binnenhof*. In H. te Velde, & D. Smit, Van Torentje tot Trêveszaal: De Geschiedenis van de Noordzijde van het Binnenhof (pp. 95-154). Den Haag: Uitgeverij De Nieuwe Haagsche.

12: Rijksgebouwendienst. (1995). *Eerste Kamer - Reflecties over de Vergaderzaal van de 'Chambre de Réflexion'*. 's-Gravenhage: Sdu Uitgeverij.

< **Image 1.33**
Schematic plan of the Statenzaal(top), 1:200, and the exact placement within the conglomerate (bottom).

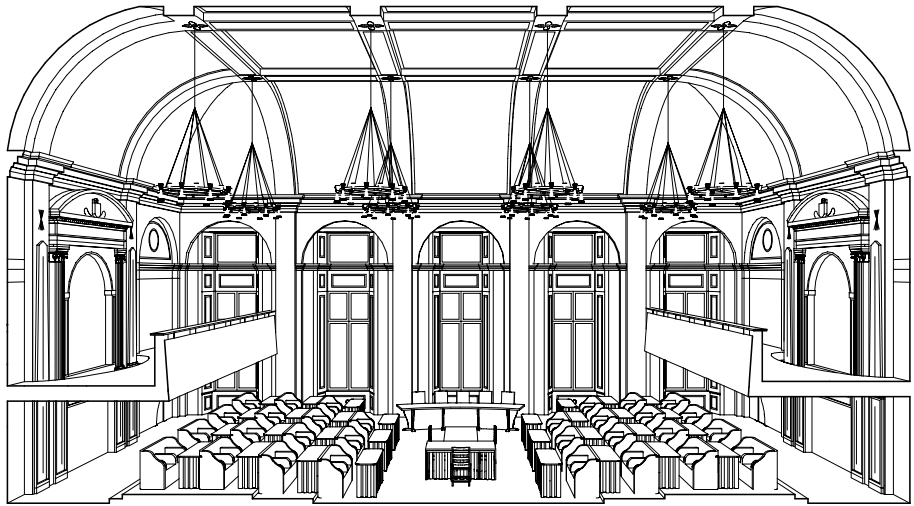
*In the following pages, we will firstly discuss the individual spaces of the Eerste Kamer building. There exists a basic format to analyse each space: on the first pages, a **basic plan** is provided, **three perspective sections** then illustrate the totality of all elements, orders and concepts. Then, a more **specific element** will be displayed and thereafter we further zoom in on specific features of the room: **furniture, lamp** and eventually **materials**.*

De Statenzaal (Hall of the States)

The *Statenzaal* (see nr. 11 in image 1.31) was a part of the building-assignment appointed to the Dutch architect Pieter Post. By ingeniously handling the former structure he established a seemingly new building from both in- and outside which contained a most majestic space: the Statenzaal. It measured approximately 21 meters in length and 14 meters in width. It was built for the Staten van Holland (States of Holland) as a meeting room. It was later adopted by its current inhabitant, the Eerste Kamer (First Chamber).

The ceiling is constituted by fifteen planes. Nine of these are embellished with splendid trompe-l'oeil paintings that portray people with several nationalities, curiously looking down in order to see what the States are discussing.¹¹ The chimneys establish another important feature of the new hall. One of them portrays the *Allegorie op de Vrede* and the other displays an *Allegorie op de Oorlog* (*Allegories on War and Peace*).

The flanking steel balconies were mounted against the short sides of the hall in 1881 and were further furnished in the restoration and renovation of 1995.¹² The room is articulated by a strong overall unity, because of all its features, and reveals a great coherence.



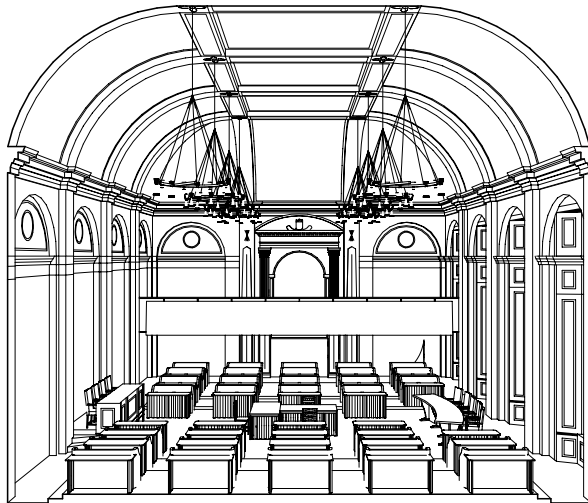
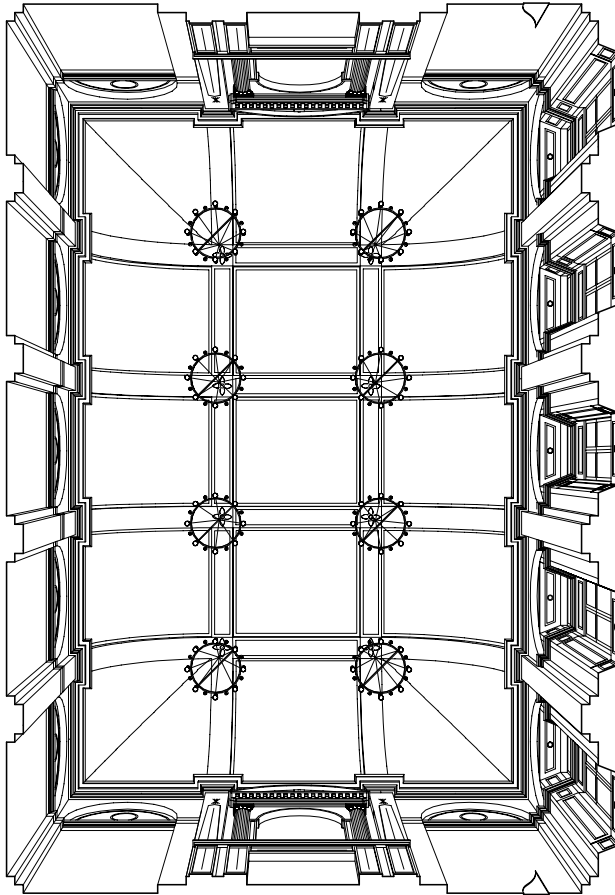


Image 1.34

*Perspective sections
of the Statenzaal*



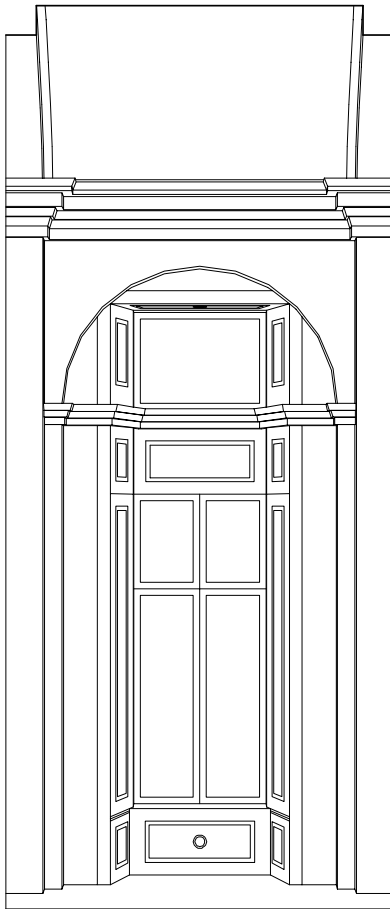


Image 1.35 & 1.36
Horizontal perspective-section(left)
and detail of the window(right)

100

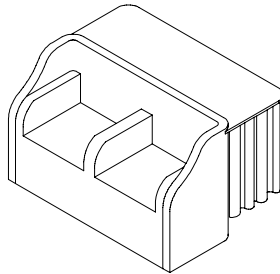
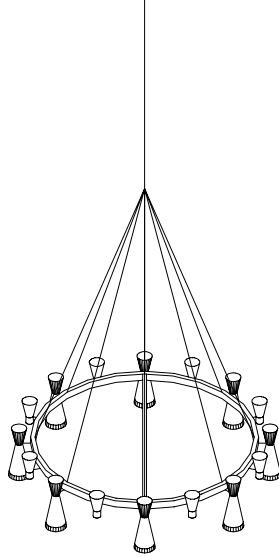
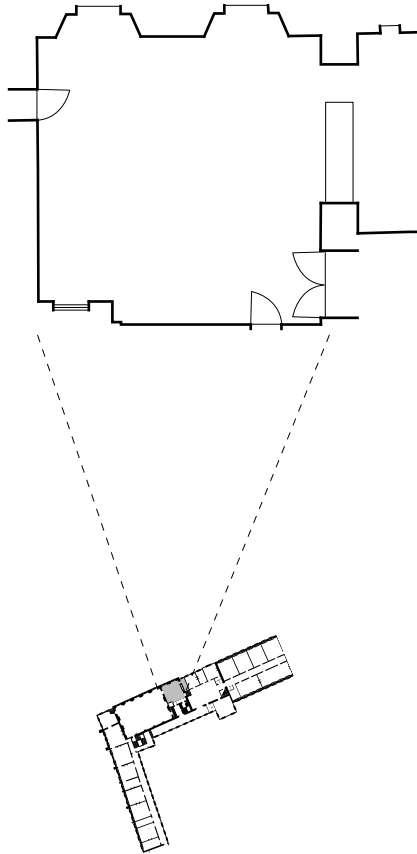




Image 1.37 & 1.38
Furniture and lamps in the chamber(left) and photographic detail of the paneling(right).

102



De Koffiekamer (The Coffee Chamber)

13. Bolten, M.
(2014).

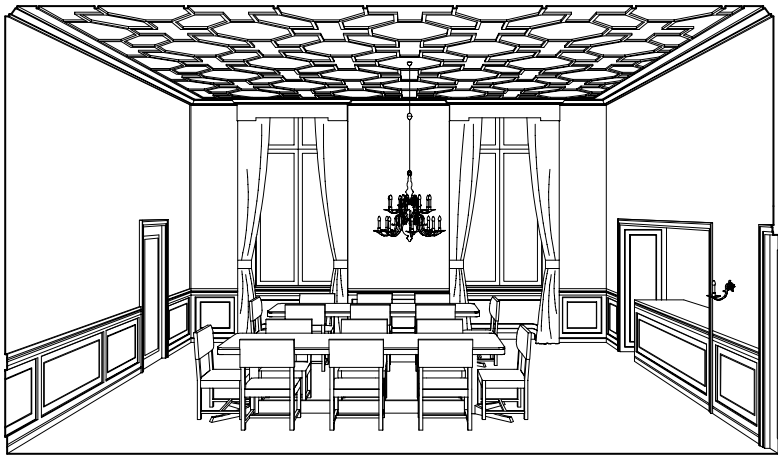
The *Koffiekamer* functions as an *Antichambre* to the *Eerste Kamer* (see nr. 10 in image 1.31). The room is topped by a Neo-Gothic English stuccoed ceiling.¹³ Both panelling and ceiling stem from 1935. The walls are covered with a fabric designed by William Morris in 1999.

14. Van den Ende &
Franken (2000)

This *Koffiekamer* is one of the few rooms that can be accessed by an elevator, which was added in 1950 (see bottom-left of the plan).¹⁴ By piercing through the structural wall, space from another building was added (far right). This space – that formerly housed toilets – accommodates a small kitchen nowadays.

< **Image 1.39**
Schematic plan of
the *Koffiekamer*
(top), 1:200, and
the exact placement
within the conglom-
erate (bottom).

The overall unity of the room is slightly ‘disturbed’ as a result of its connection to the *Eerste Kamer* – the left door which is not placed symmetrically in the wall – and because of the connection with the elevator, kitchen and *Centrale Hal* (see image 1.39).



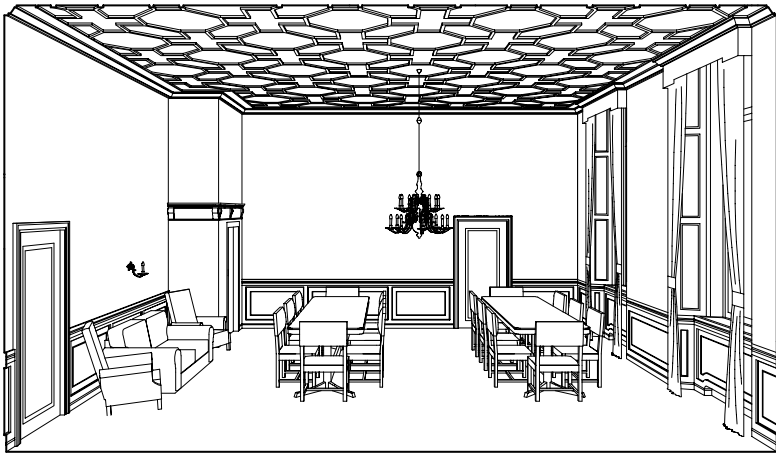
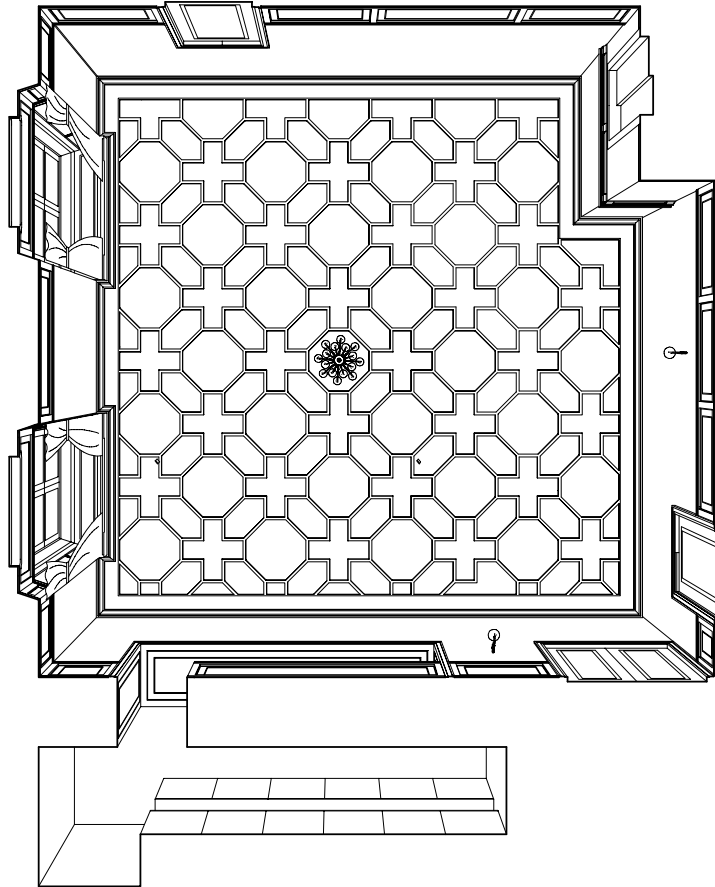


Image 1.40
Vertical perspective sections of the Koffiekamer

106



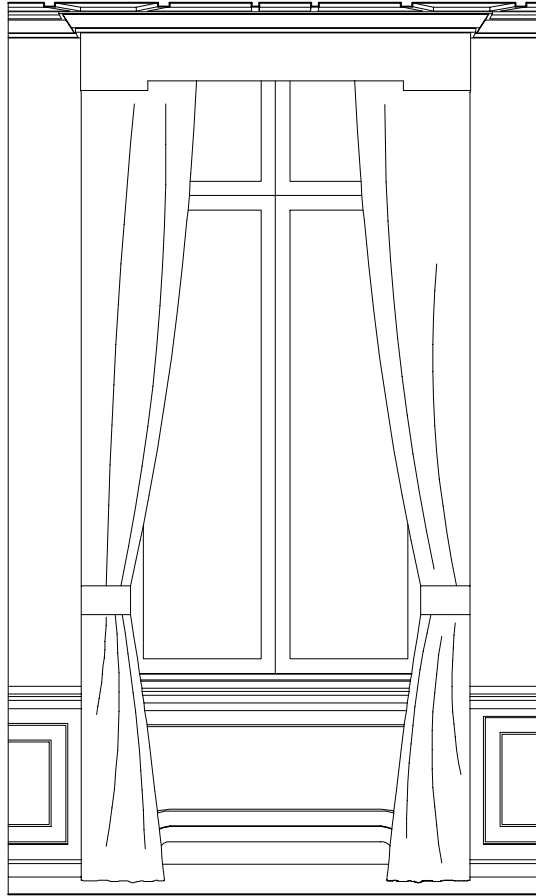
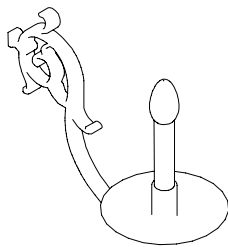
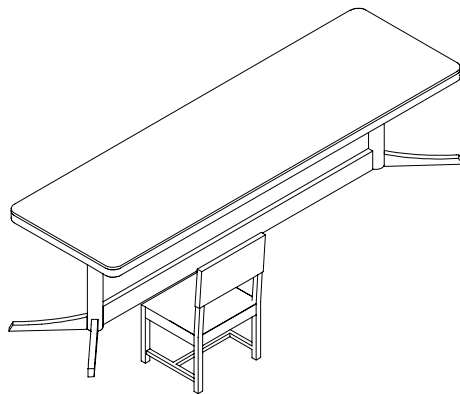


Image 1.41 & 1.42
Horizontal perspective-section(left)
and detail of the
window(right).



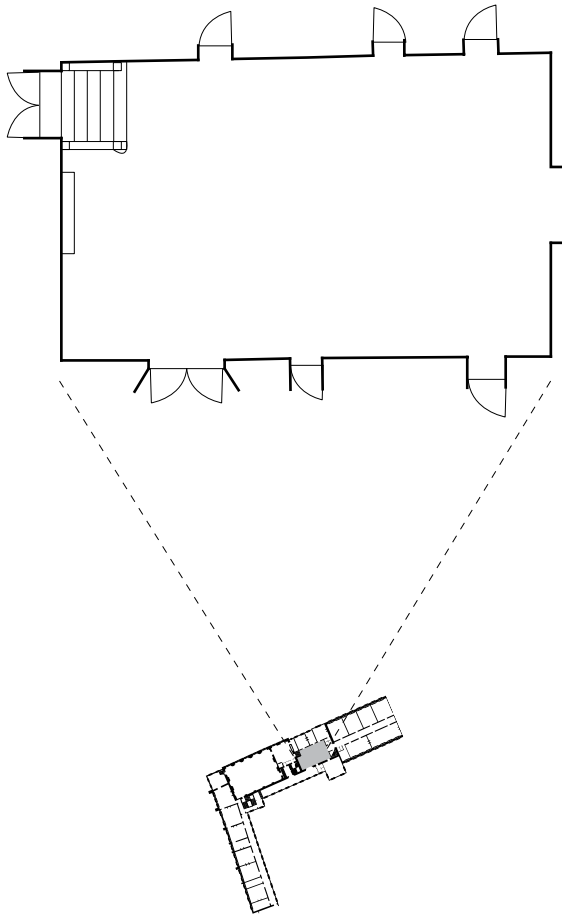
108





*Image 1.43 & 1.44
Furniture and
lamp in the
Koffiekamer(left)
and photographic
detail displaying the
fabric, carpentry,
subtle lock, handle
and a double socket
(right).*

110



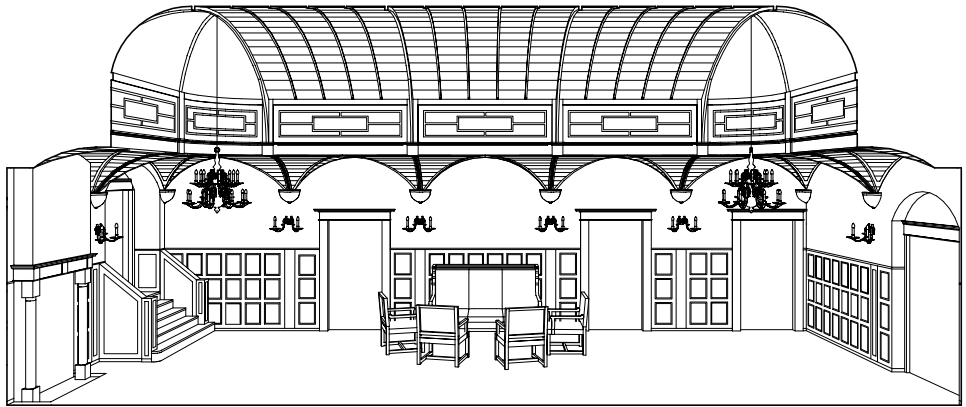
De Centrale Hal (The Central Lobby)

15. Bolten, M.
(2014).

The *Centrale Hal* was designed by D.E.C. Knuttel in 1913 (see nr. 9 in image 1.31). It replaced the staircase that was built by F.J. Nieuwenhuis in 1880 (see image 1.28 and 1.29).¹⁵ It measures about 13 by 8 meters. The hall is mainly defined by its boat-shaped and elaborate ceiling. The lobby is softly lit by a large stained glass plane that crowns the ceiling. All kinds of symbols and coats of arms are displayed on the beautifully carpentry of the oak ceiling. The hall functions as a meeting place for the members of the *Eerste Kamer* and houses a collection of stadtholder paintings.

< Image 1.45
Schematic plan of
the Centrale Hal
(top), 1:200, and
the exact placement
within the conglom-
erate (bottom).

Although the dimensions of the room are strongly articulated in units by the panelling and ceiling, the connections to other rooms clearly contradict the order, whereas the irregular placement of these connections reveals the disorderly arrangement of the building.



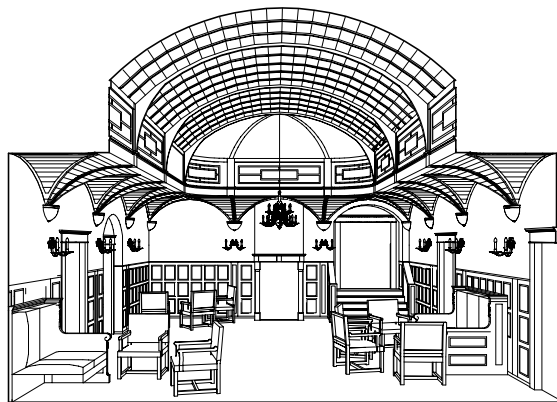
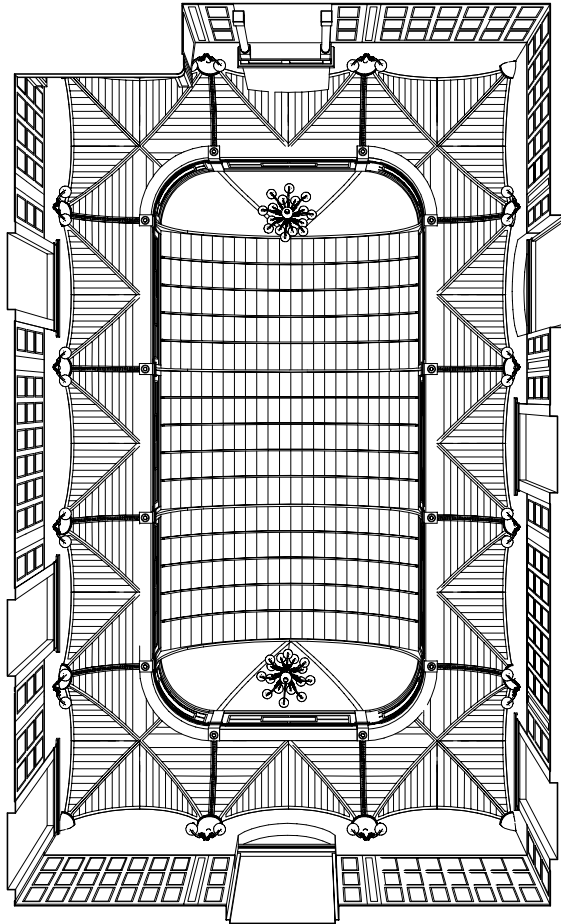


Image 1.46
Perspective sections
of the Centrale Hal



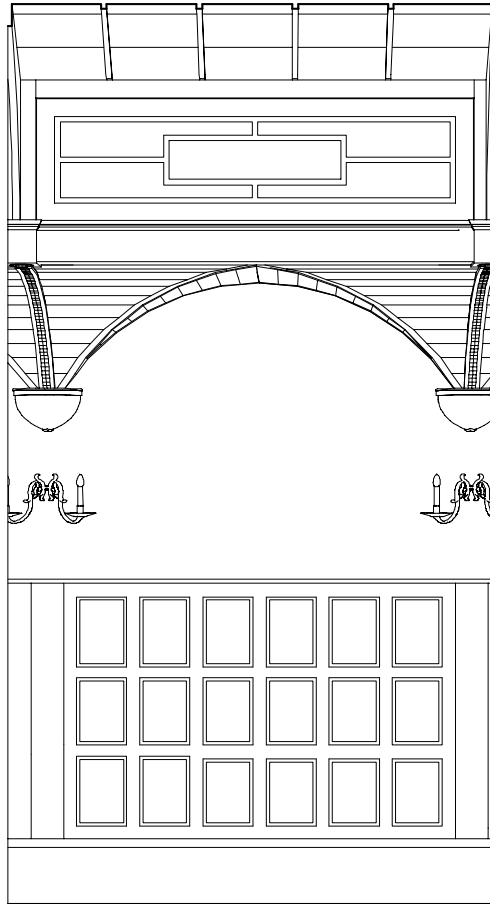
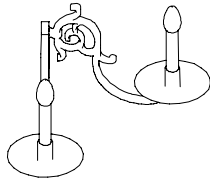


Image 1.47 & 1.48
Horizontal perspective-section(left)
and detail of the
wall(right)



116

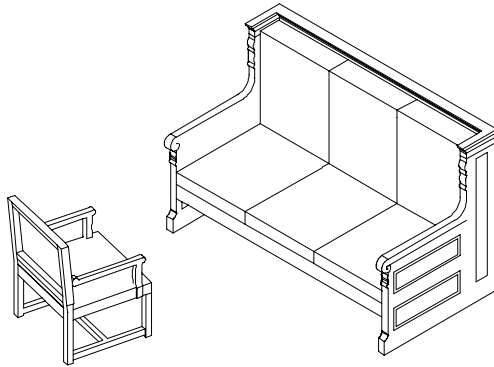
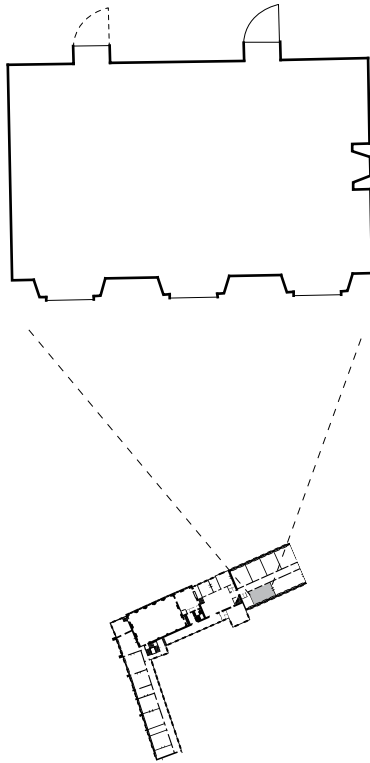




Image 1.49 & 1.50
Furniture and lamp
in the lobby(left)
and photographic
detail displaying
the soft light,
carpentry and the
coat of Arms of
Utrecht(right).

118



16. Bolten, M.
(2014).

< **Image 1.51**
Schematic plan of
the *Fractiekamer*
(top), 1:200, and
the exact placement
within the conglomerate
(bottom).

Fractiekamer

The *Fractiekamers* house the members of the *Eerste Kamer*.

There are about a dozen of such rooms, but the most alluring must be the former library (see room south of nr. 15 in image 1.31). This library was designed by Nieuwenhuis in the 19th century.¹⁶ The edge of the room is still articulated by an embracing sequence of cabinets. Only one of the doors can be opened. Light is provided by three large windows.

Since the space is situated on the corridor, its strong character, conceptual form and arrangement can be maintained: there is no room next to it with a different order, that forces limitations on the arrangement of transitions such as doors and windows (see image 1.51).

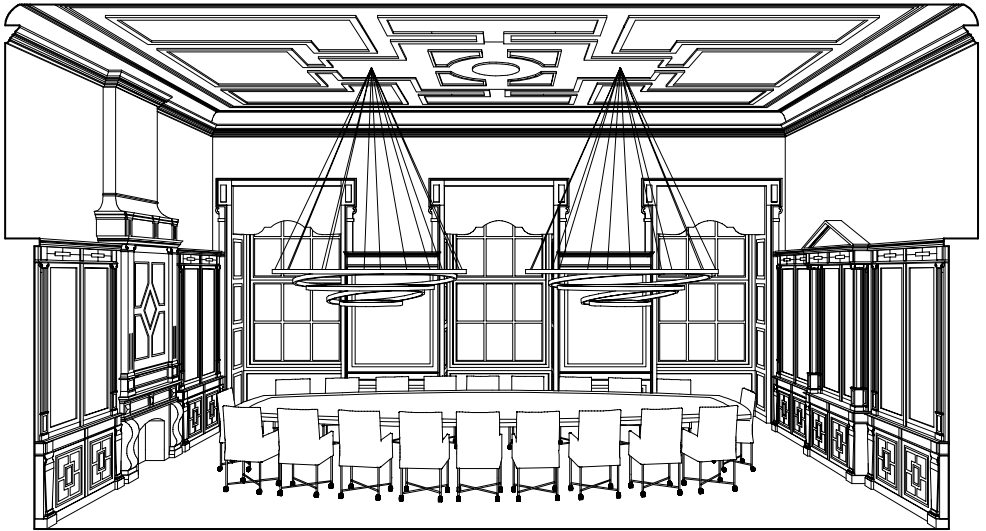
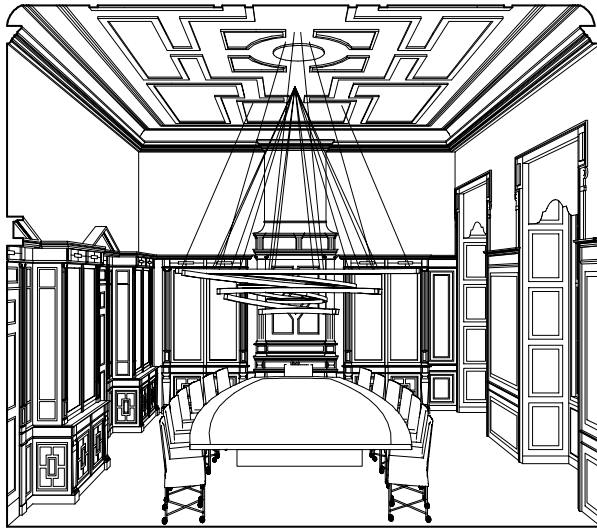
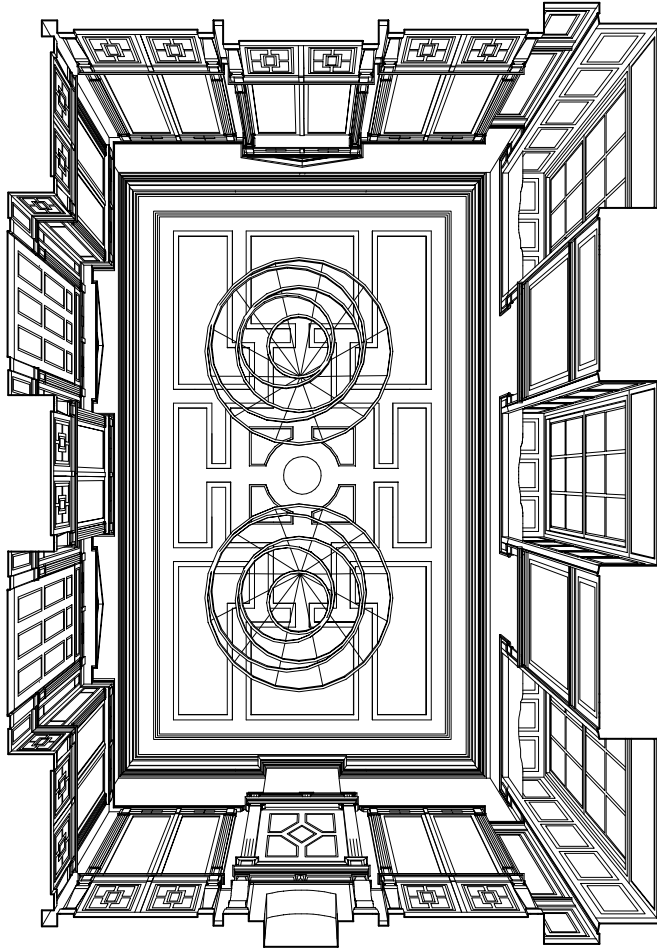


Image 1.52
Vertical perspective sections of the
Fractiekamer





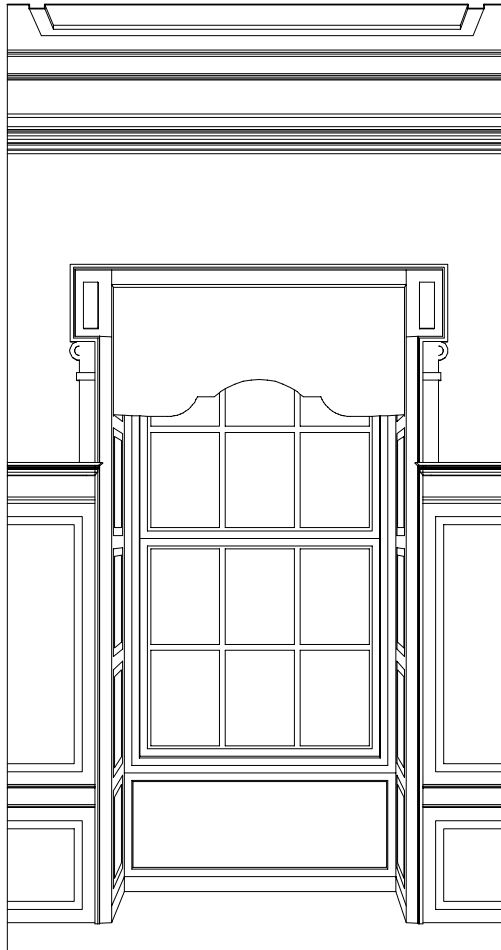
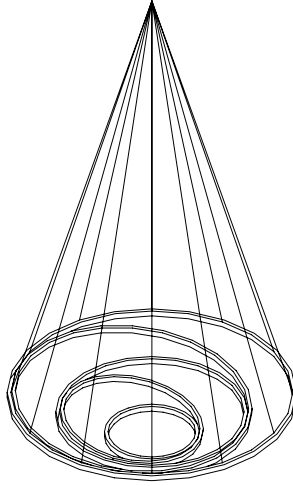


Image 1.53 & 1.54
Horizontal perspective-section(left)
and detail of the
window(right)



124

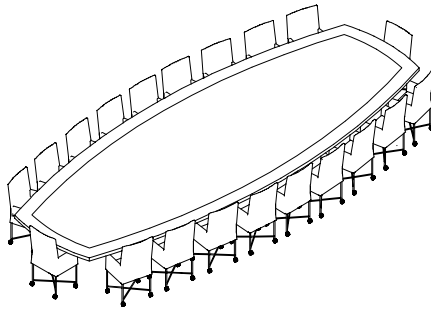
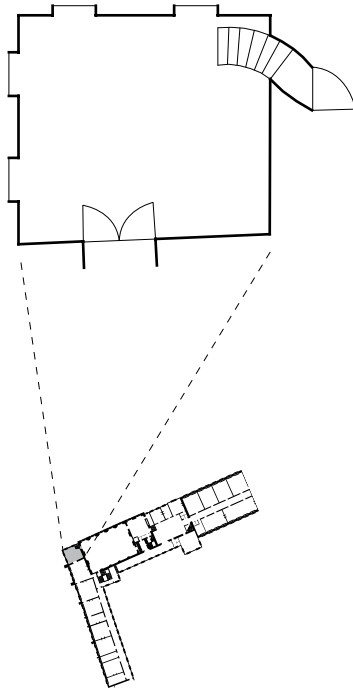




Image 1.55& 1.56
Furniture and
lamp in the
Fractiekamer(left)
and photographic
detail displaying the
soft light, carpentry
and books(right)

126



De Hoekkamer (The Corner Chamber)

17. Bolten, M.
(2014).

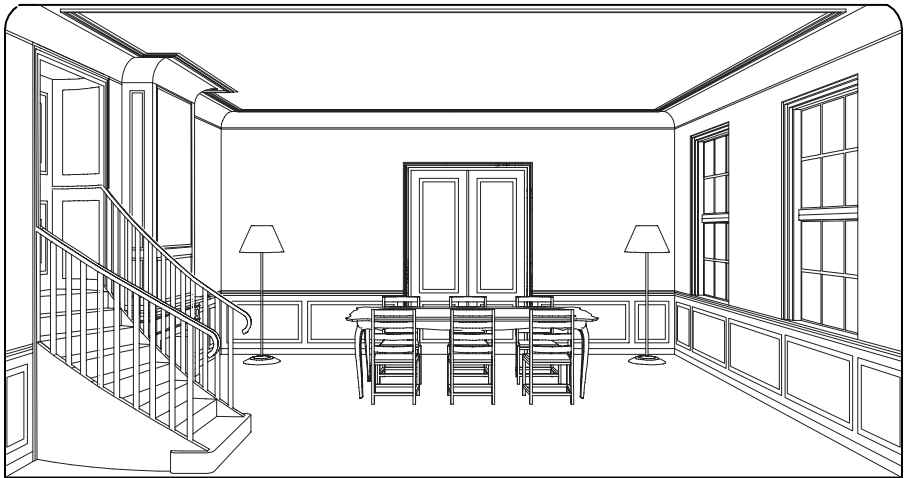
18. Van den Ende &
Franken (2000)

The *Hoekkamer* also functions as an *Antichambre* to the *Eerste Kamer*, but from the other side (see nr. 12 in image 1.31). It is situated in the *Hoektoren* (corner tower), which was erected in 1632 for Frederik Hendrik and Amalia van Solms.¹⁷ Because its floor is not levelled to that of the *Eerste Kamer*, a stairs is needed in order to reach the latter. The chamber constitutes an important connection between the *Ministerskamer* and the *Eerste Kamer*. The original interior was dismantled by Louis Napoleon and the sober current one thus dates from the 19th century.¹⁸

< Image 1.57
Schematic plan of
the *Hoekkamer*
(top), 1:200, and
the exact placement
within the conglomerate (bottom).

Contrary to the other rooms we have discussed so far, this particular chamber does not reveal a general axis of symmetry. It is, however, strongly articulated by its colour, wall fabric and vertical segmentation.

128



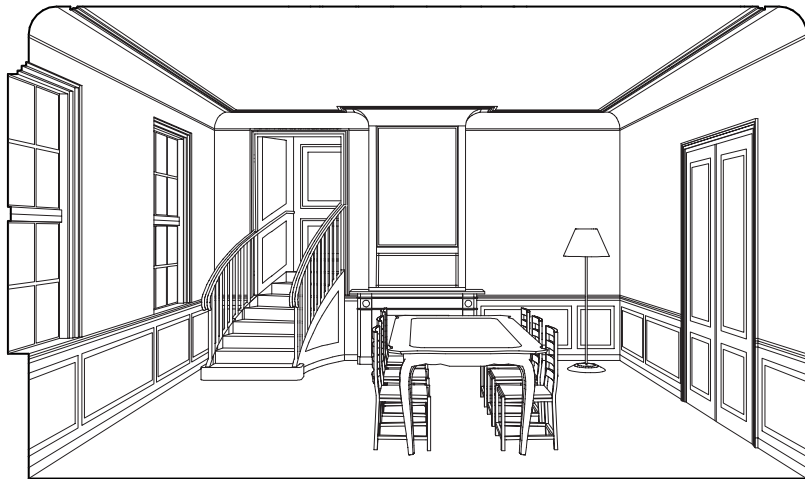
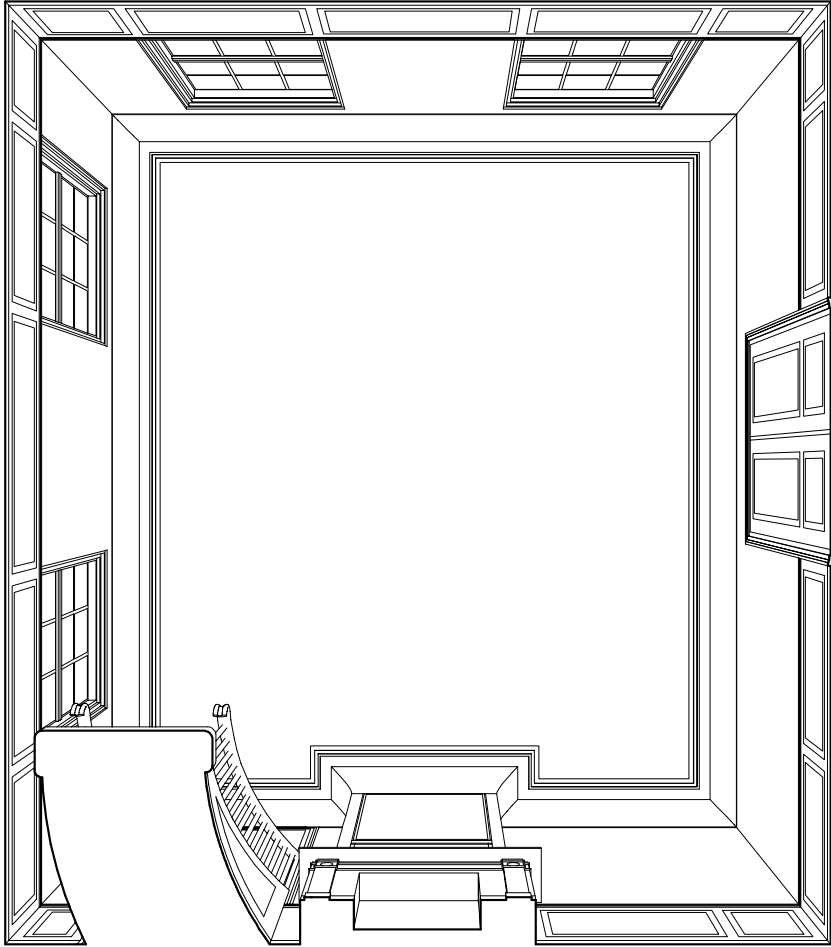


Image 1.58
Vertical Perspective
sections of the
Hoekkamer



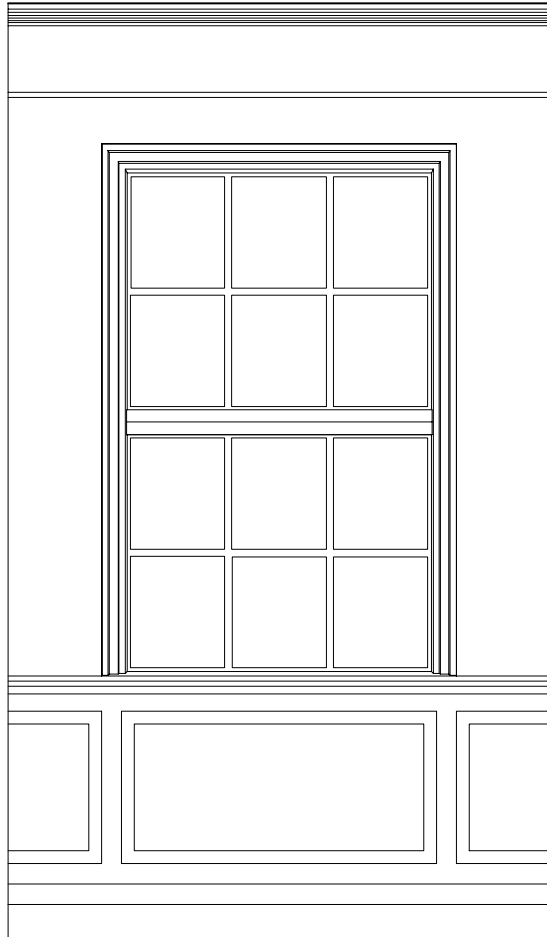


Image 1.59 & 1.60
*Horizontal
perspective-
section(left) and
detail of the
window(right)*



132

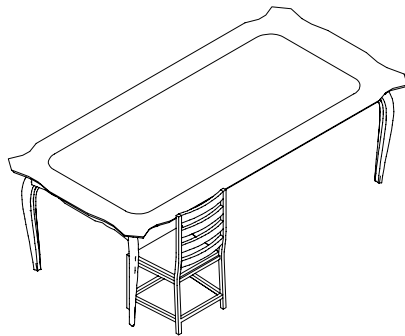
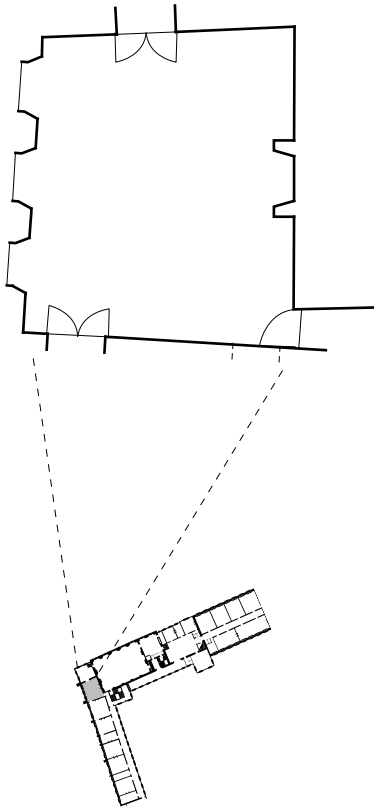




Image 1.61 & 1.62
Furniture and
lamp in the
Hoekkamer(left)
and photographic
detail displaying
the fabric,
carpentry, door and
hinges(right).

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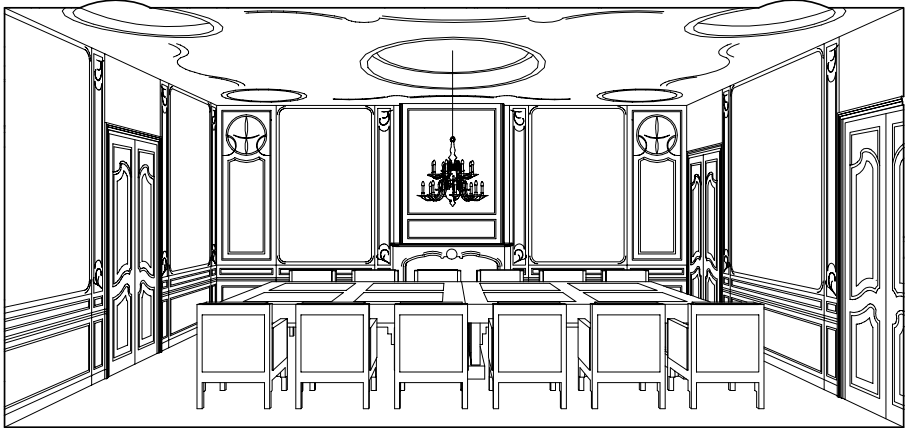
De Ministerskamer (The Ministers' Chamber)

19. Bolten, M.
(2014).

The *Ministerskamer* was established for Willem V, as a dining room (see nr. 13 in image 1.31).¹⁹ The space is decorated with a stucco ceiling and painted oak panelling, and further embellished with elaborate golden woodcarvings. The chamber nowadays accommodates preparatory activities of Ministers. Because of an axial symmetry, it contains a 'false' door and is lit by three large windows.

< *Image 1.63*
*Schematic plan of
the Ministerskamer
(top), 1:200, and
the exact placement
within the conglom-
erate (bottom).*

The axial symmetry very much dominates the conceptual unity of the space. The small door in the bottom-right corner (see image 1.63) can hardly be noticed, as it is covered with the carpentry and fabric that cover the walls of the space: no concessions are made towards the conceptual unity of the room.



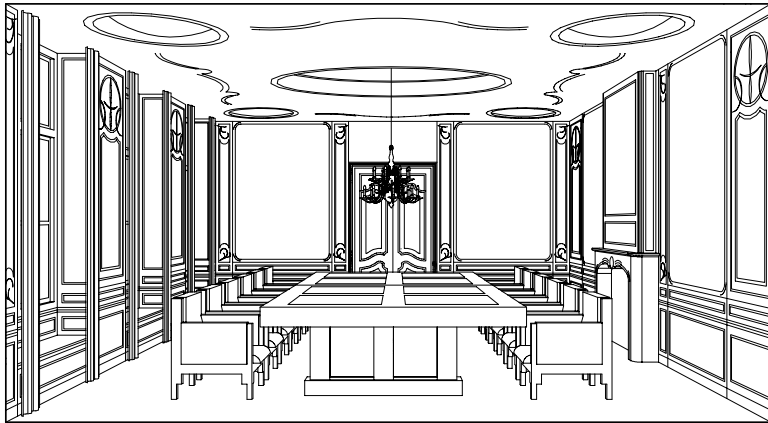
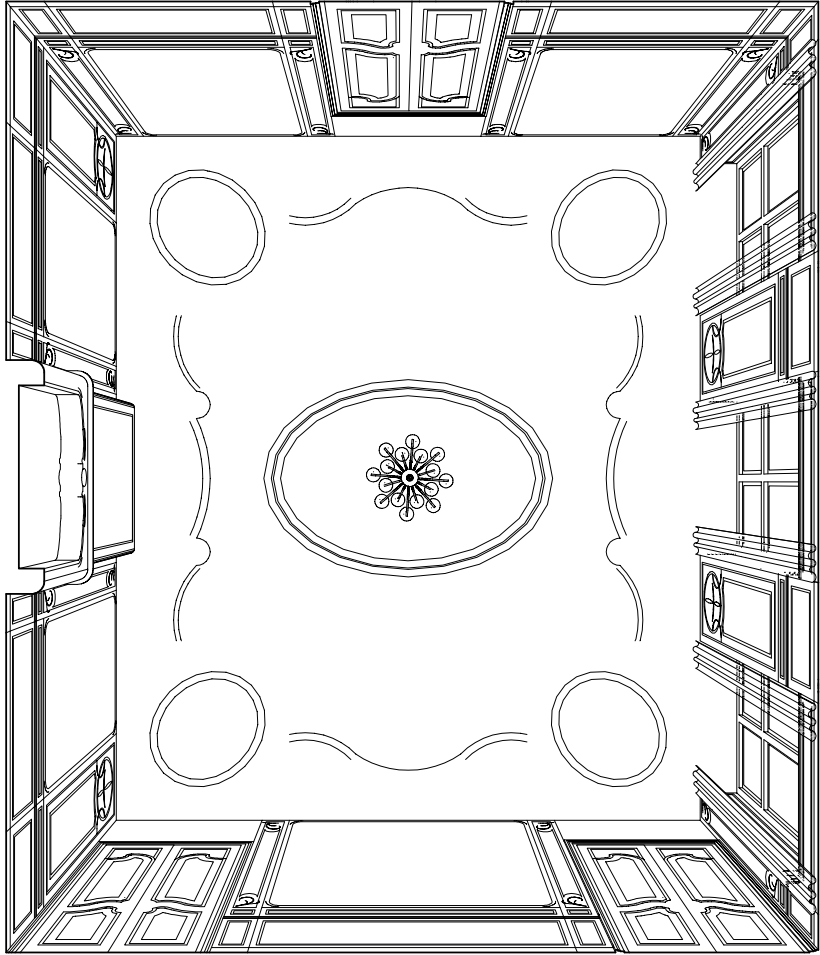


Image 1.64
Vertical perspective
sections of the
Ministerskamer



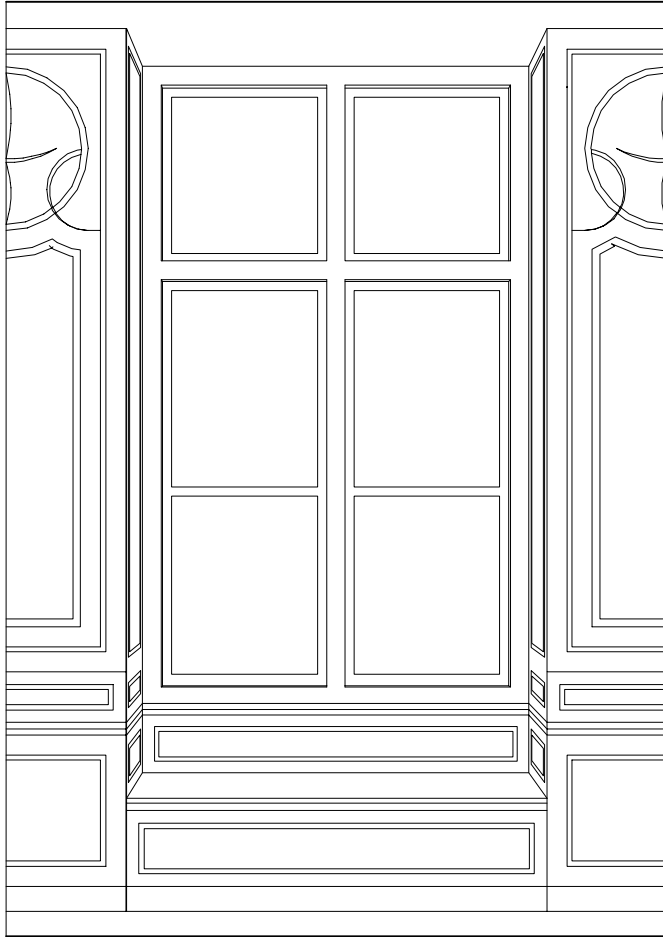
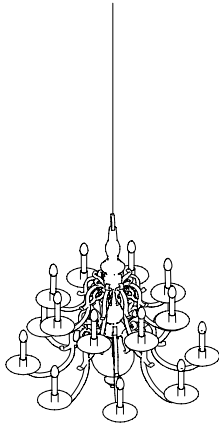


Image 1.65 & 1.66
*Horizontal
perspective-
section(left) and
detail of the
window(right).*



140

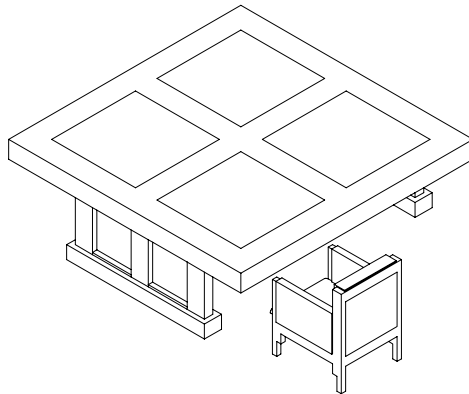
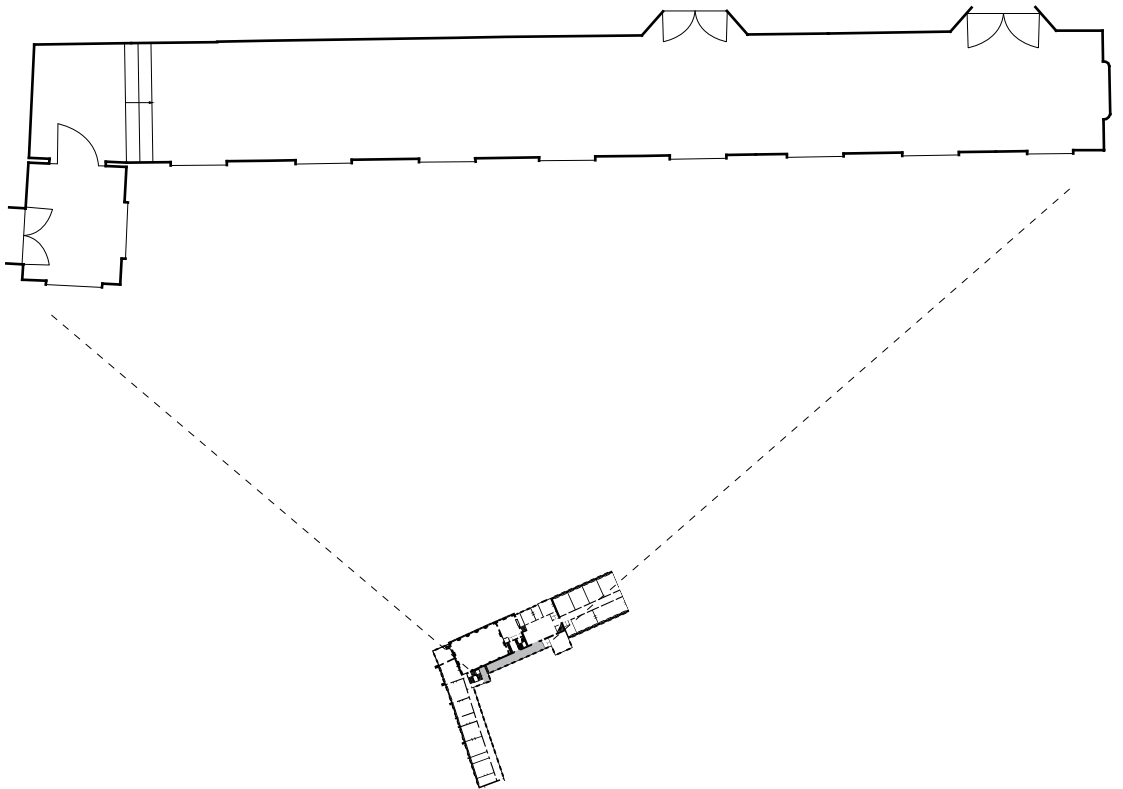




Image 1.67 & 1.68
Furniture and
lamp in the
Ministerskamer
(left) and
photographic detail
(right).

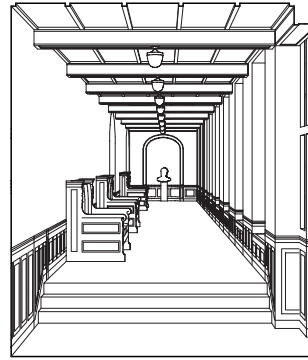


The Wandelgang (The Long Gallery)

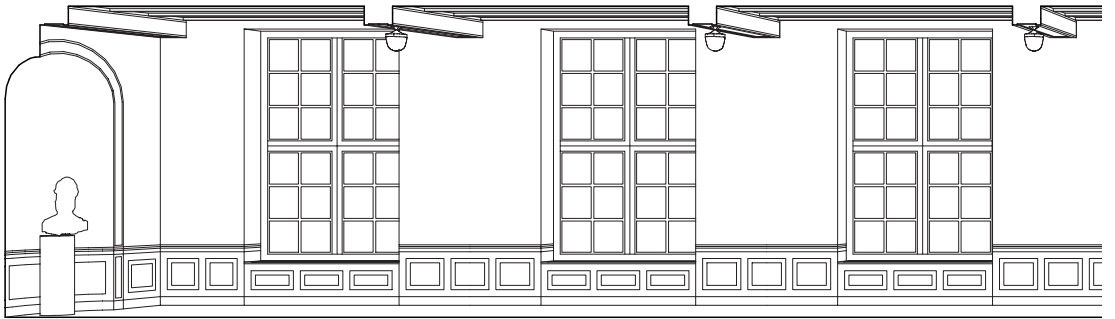
20. Bolten, M.
(2014).

The *Wandelgang* is an encased equivalent of the arcade beneath (see nr. 8 in image 1.31). It was established – together with another one on the second floor – for Frederik Hendrik and Amalia van Solms as a space to store their collection of paintings, in the 17th century.²⁰ The long gallery measures about 30 by 3 meters and connects the *Westelijke Trappenhuis* (Western staircase) with the *Central Staircase* and the *Centrale Hal*. It is lit by numerous windows that provide the beholder with a view of the inner courtyard. The conceptual unity of the space is mainly articulated by the vertical segmentation – plinth, panelling, wall and ceiling – as the space itself has a rather irregular shape. Through the repetition of square units that correspond to the rhythm of the windows, however, a strong unity is established.

< **Image 1.69**
Schematic plan of
the Wandelgang
(top), 1:200, and
the exact placement
within the conglom-
erate (bottom).



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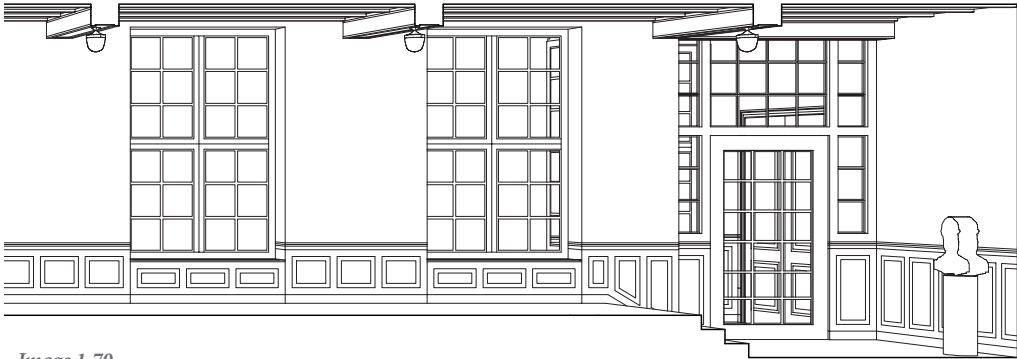
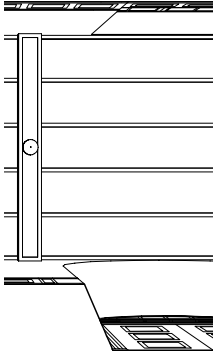
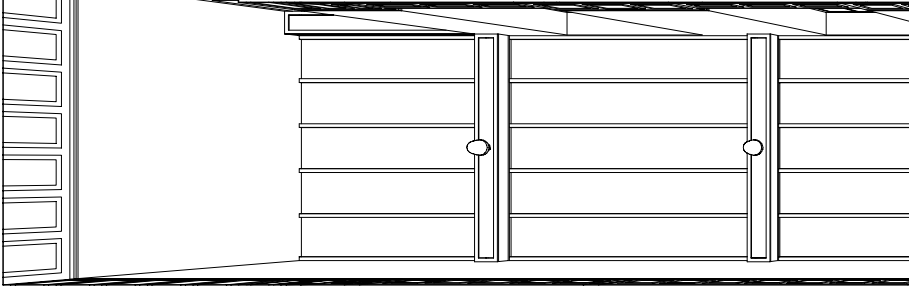
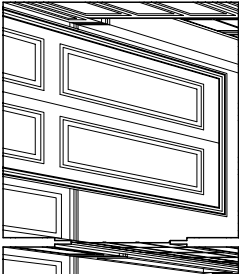


Image 1.70
Vertical perspective
sections of the
Wandelgang



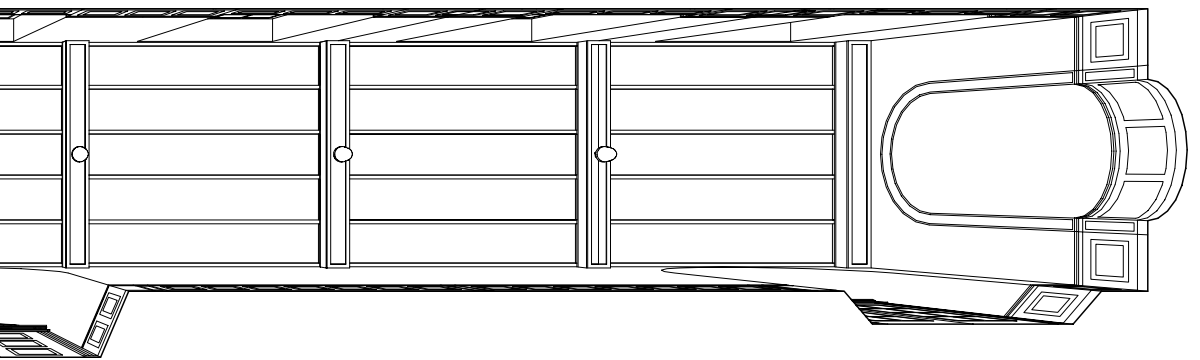
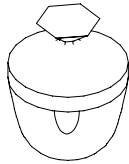


Image 1.71

Horizontal

perspective-section



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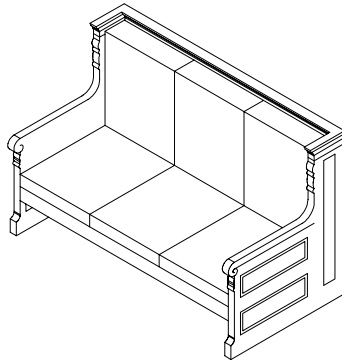
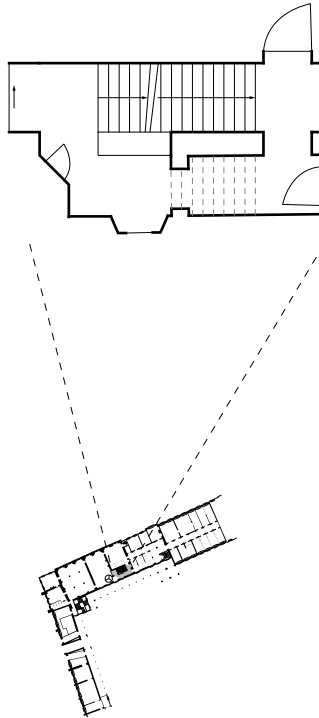




Image 1.72 & 1.73
*Furniture and
lamp in the
Wandelgang(left)
and photographic
detail of the small
stairs(right).*

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The Central Staircase

21. Bolten, M.
(2014).

The *central staircase* was designed by Pieter Post in order to access the *Statenzaal*.²¹ It is a very practical solution given that he had to work in a complicated existing conglomerate (see nr.3 in image 1.31). The stairs is ornamented with woodcarvings. It not only allows a stately access to the *Eerste Kamer* (which is articulated by a grand and flat wooden door), but also links with the *Wandelgang*, *Koffiekamer*, *Amalia-van-Solms-Galerij* and several spaces in the attic. It is lit by a subtle lantern which cannot be seen from the outside.

< **Image 1.74**
Schematic plan
of the Central
Staircase (top),
1:200, and the exact
placement within
the conglomerate
(bottom).

The character of the space – although constituting a fitting piece – is still strongly articulated by the woodcarvings, panelling and ceiling. An certain balance can even be observed in the short direction of the space (see image 1.75, right).

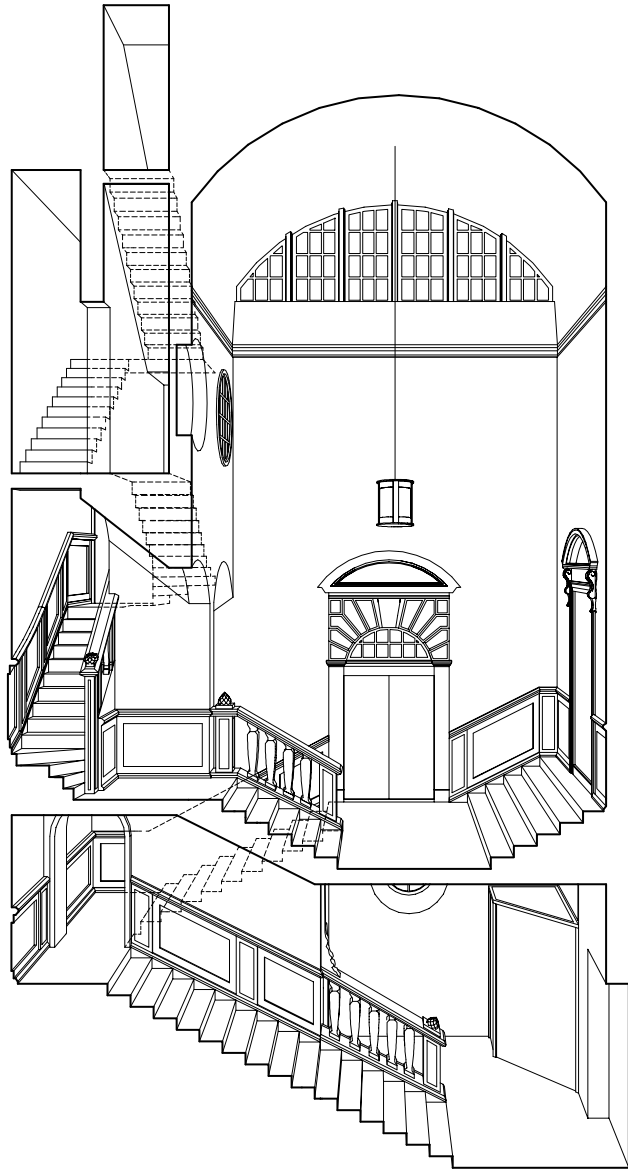
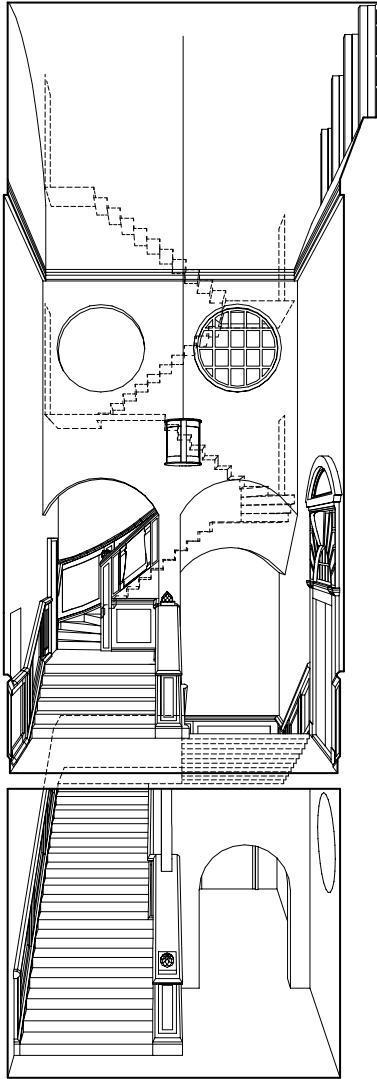
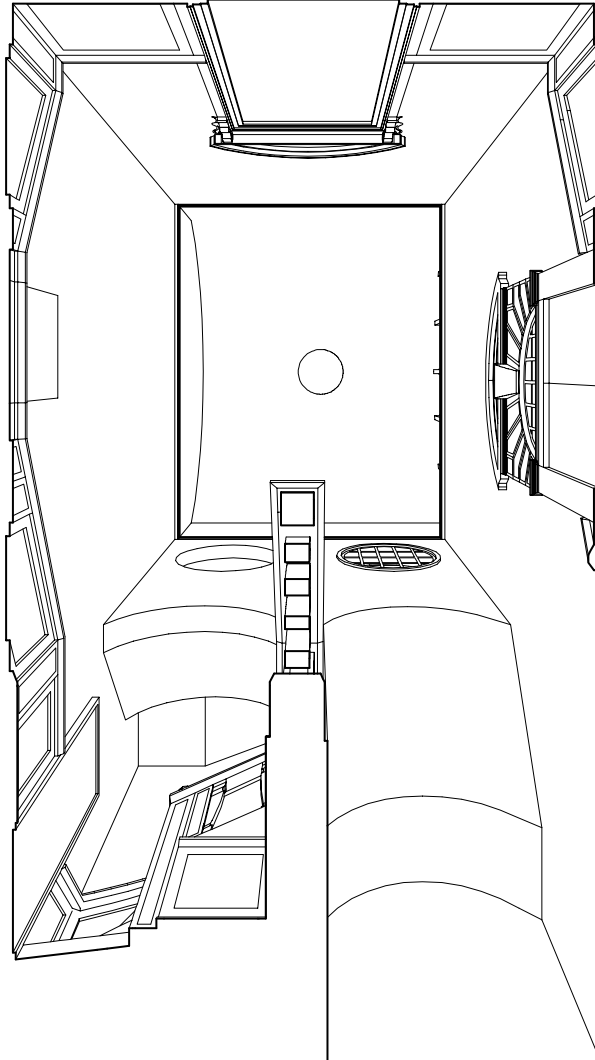


Image 1.75
Vertical perspective
sections of the
Central Staircase





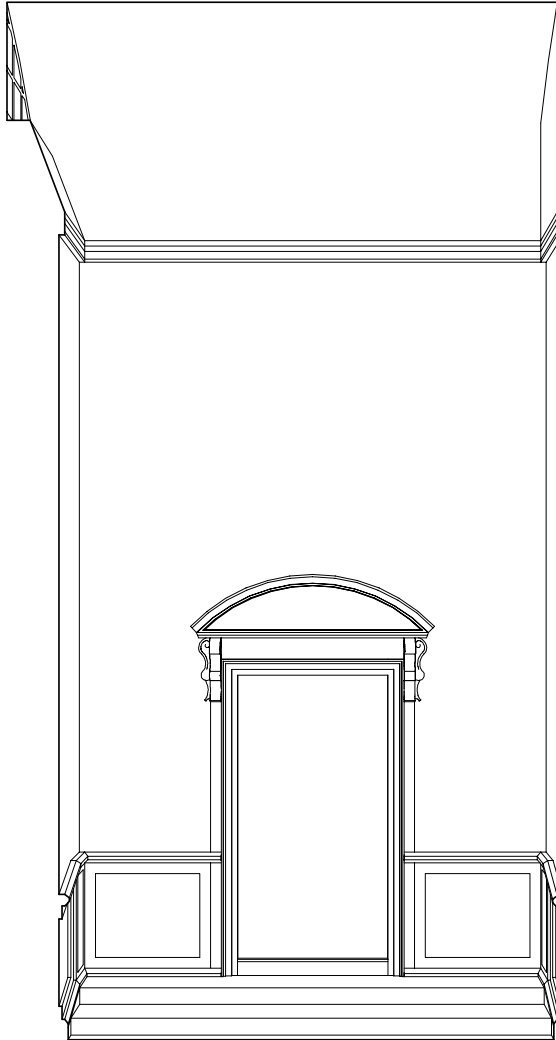


Image 1.76 & 1.77
*Horizontal
perspective-
section(left) and
detail of the door
that provides
access to the Eerste
Kamer(right)*

156

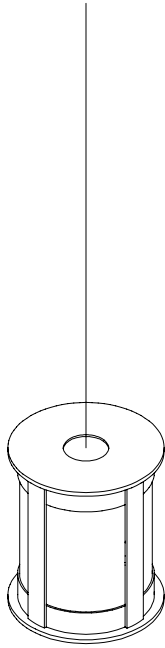
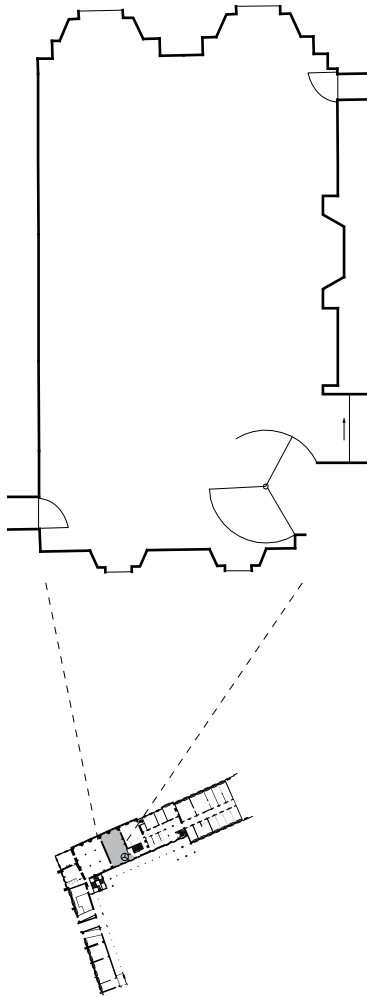




Image 1.78 & 1.79

*Lamp in the
staircase(left) and
photographic detail
displaying a hidden
door with a subtle
handle(right).*

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22. See: Van den Ende & Franken (2000)

The Aankomsthal (Entrance Hall)

The *Aankomsthal* originally functioned as a chamber along the pond (see nr. 1 in image 1.31). When the number of visitors increased, a historic wall was breached in order to establish an entrance hall.²² Later on, the revolving door was added (see image 1.80). From the entrance hall, a transparent sliding door provides access to the central staircase. A small door near the windows leads to a wardrobe with lockers and toilets. The small door at the bottom, finally, links the entrance hall to the *Noenzaal*. A desk against the left wall is staffed by receptionists.

< *Image 1.80*
Schematic plan of
the *Aankomsthal*
(top), 1:200, and
the exact placement
within the conglomerate (bottom).

The hall can be interpreted as a room with a more modern character. It lacks a historic theme and is instead filled with modern pieces of art, such as Mies van der Rohe's Barcelona chair. Desk and tapestry are also rather modern, and the space is largely painted white.

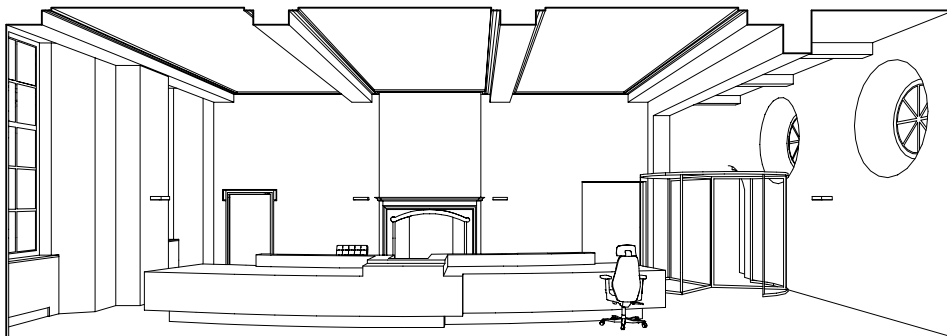
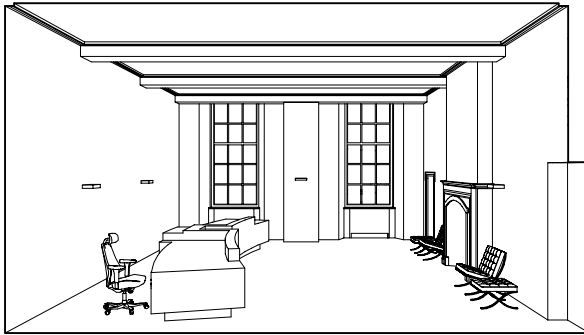
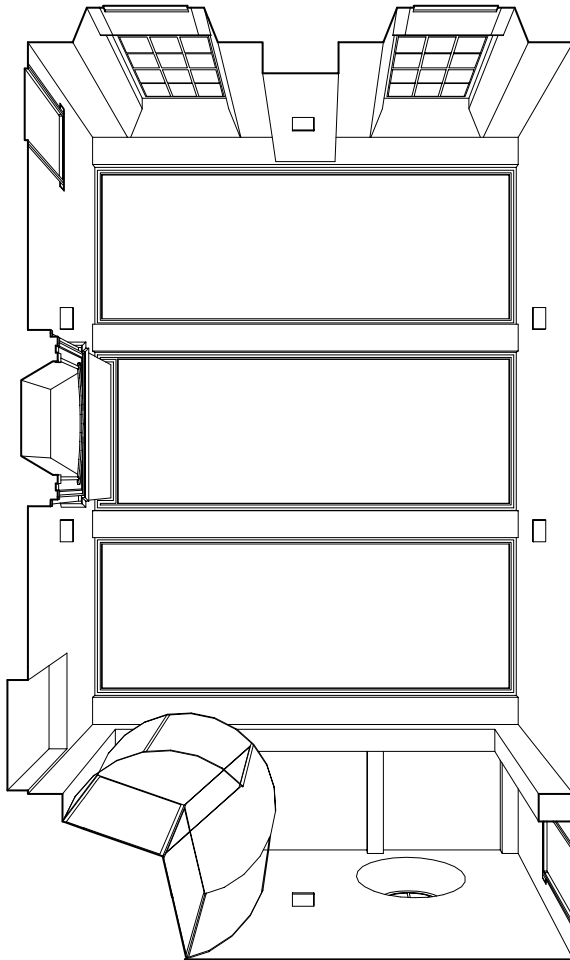


Image 1.81

*Vertical Perspective
sections of the
Aankomsthal*





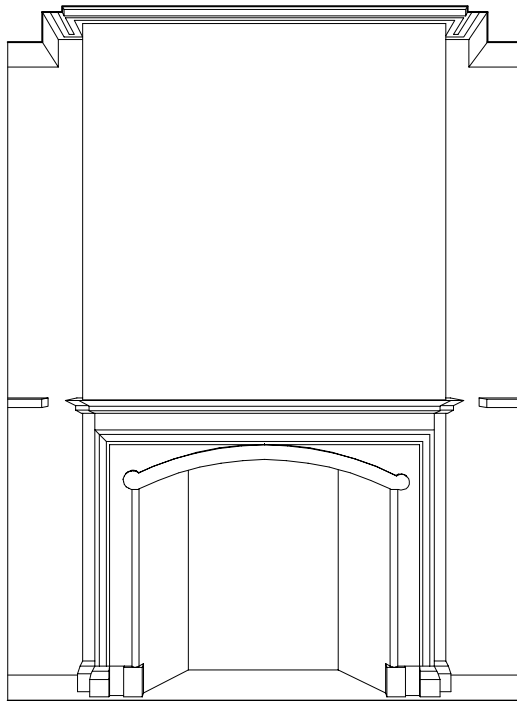
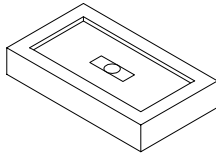


Image 1.82
*Horizontal
perspective-
section(left) and
detail of the
chimney(right)*



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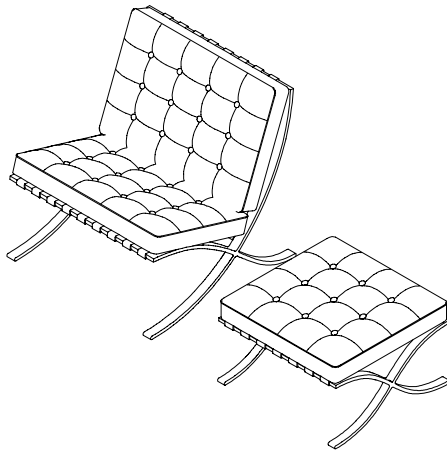




Image 1.83

Lamp and (Mies' Barcelona) chair in the Aankomsthal(left) and photographic detail(right).

Other Spaces

Apart from the spaces we have covered, there are several more major spaces such as the *Noenzaal*, *Johan de Witt-kamer*, *Handelingskamer*, *Amalia van Solms-galerij*, *Mary Stuart-kabinet*, *Kamer van de Voorzitter*, *Kamer van de Griffier* and *Westelijk Trappenhuis*.

Because of the vast number of such important chambers, I have not been able to cover all of them. I have chosen however to focus on the sequence between entrance, *Fractiekamer* and *Eerste Kamer*. Most of the spaces mentioned above are not in this sequence and are used less as a consequence. More information about these rooms can be found in: Bolten, M. (2014) or: van den Ende & Franken (2000)

1.2.4 Analysis of spaces in relation to other spaces

*In the following pages, we will discuss the transitions and relations between spaces in the Eerste Kamer building. Again, a basic format is used: firstly, a number of different **transitions** (doors) will be discussed. An isometric drawing, plan and two elevations will reveal how each transition is shaped: whether the transition constitutes an alteration of orders and concepts. Thereafter, a **spatial sequence** will be drawn that contains a multitude of these transitions and spaces. We will subsequently try to locate whether the 'empiricalness' is in the aggregation of rooms.*

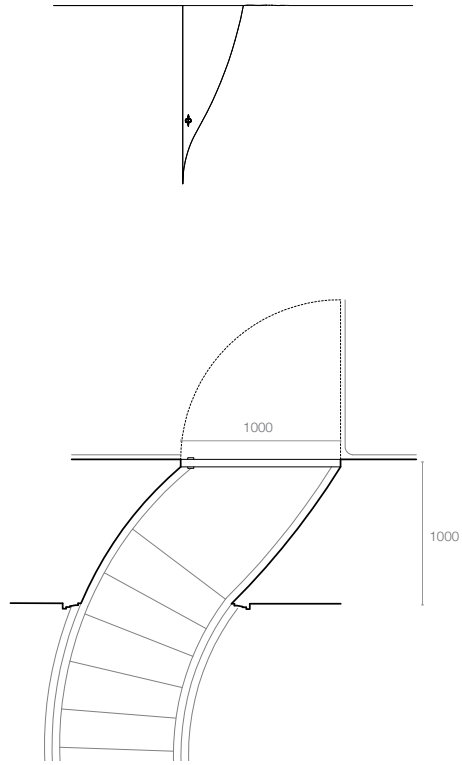
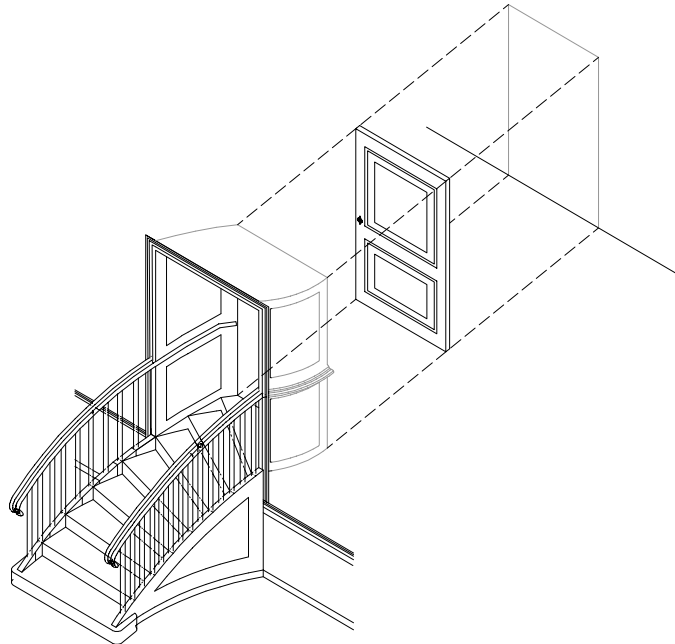


Image 1.84
Plan detail of the door (middle), 1:50, and elevations on either side (top and bottom).



Stairs and one single door – Door between Hoekkamer and Eerste Kamer

Image 1.85

Axonometric drawing of the transition and its components: stairs and recess, door and drapery.

The door between the *Hoekkamer* and *Eerste Kamer* is recessed (see image 1.31). The difference in height, furthermore, is bridged inside the *Hoekkamer*, thus allowing the other side of the door to be hidden behind the drapery of the *Eerste Kamer* (see image 1.84 & 1.85).

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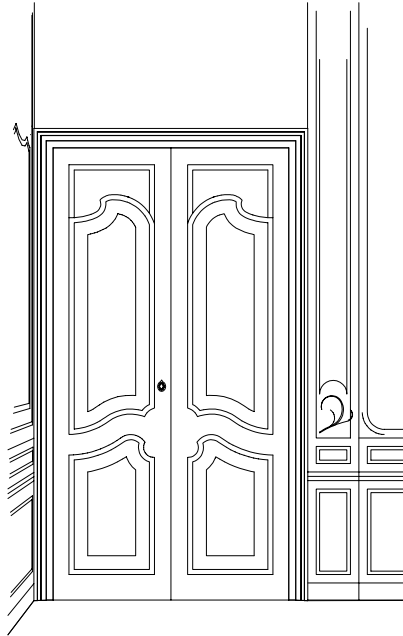
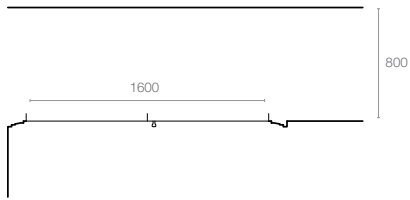
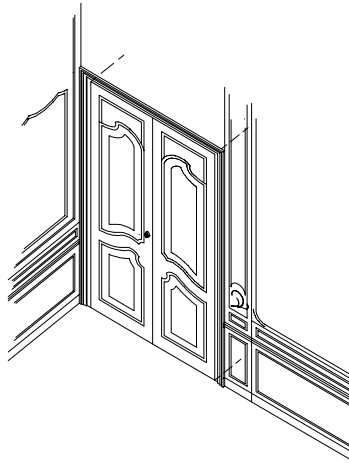


Image 1.86
Plan detail of the
door (top), 1:50,
and elevation
(bottom).



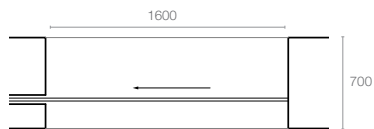
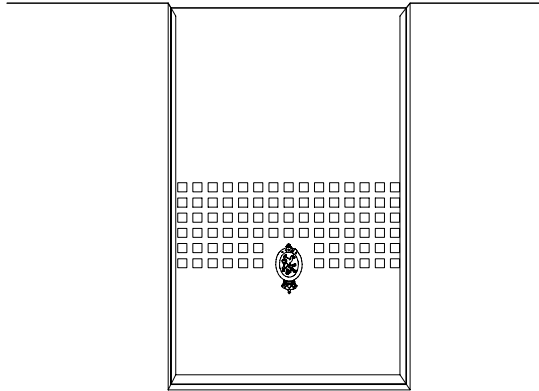
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False door – Door in Ministerskamer

Image 1.87

Axonometric drawing of the false door.

The door inside the *Ministerskamer* is a false door that is needed to constitute an axial symmetry across the room (see image 1.31). The door cannot be opened and is invisible from the other side of the wall (see image 1.86 & 1.87).



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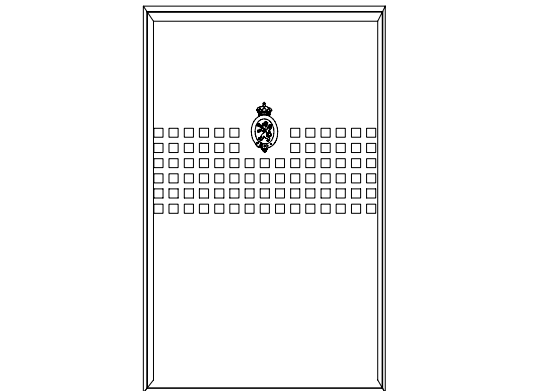
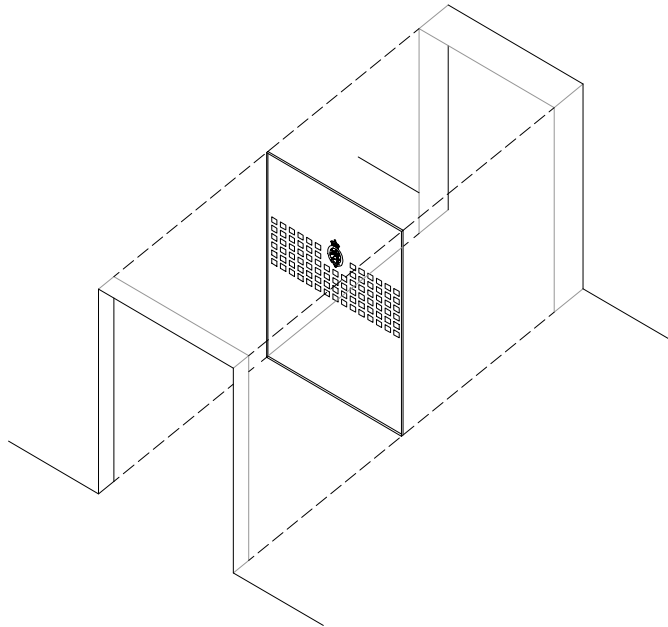


Image 1.88
Plan detail of the door (middle), 1:50, and elevations on either side (top and bottom).



Sliding door – Door between Entrance Hall and Central Staircase

Image 1.89

Axonometric drawing of the transition and its components: recess, glass door and recess.

A glass secured door separates the *Entrance Hall* and *Central Staircase* (see image 1.31). The door can be opened with a pass. Because it is made of glass, the transition is far less articulated than other transitions, causing the staircase to be visually connected to the entrance hall.

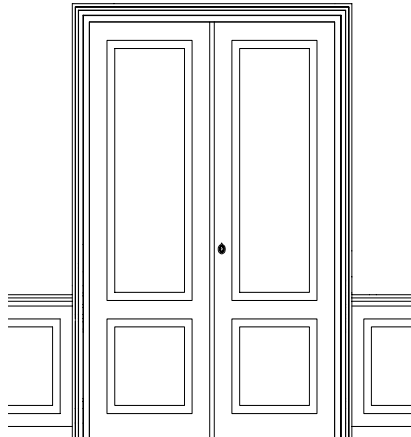
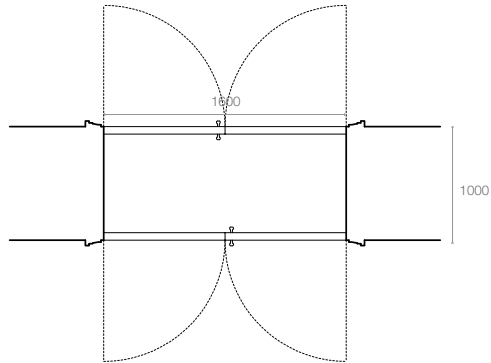
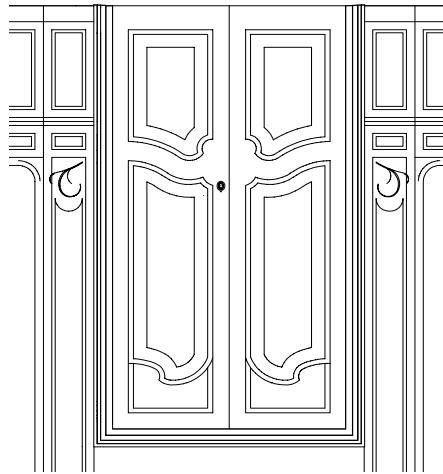
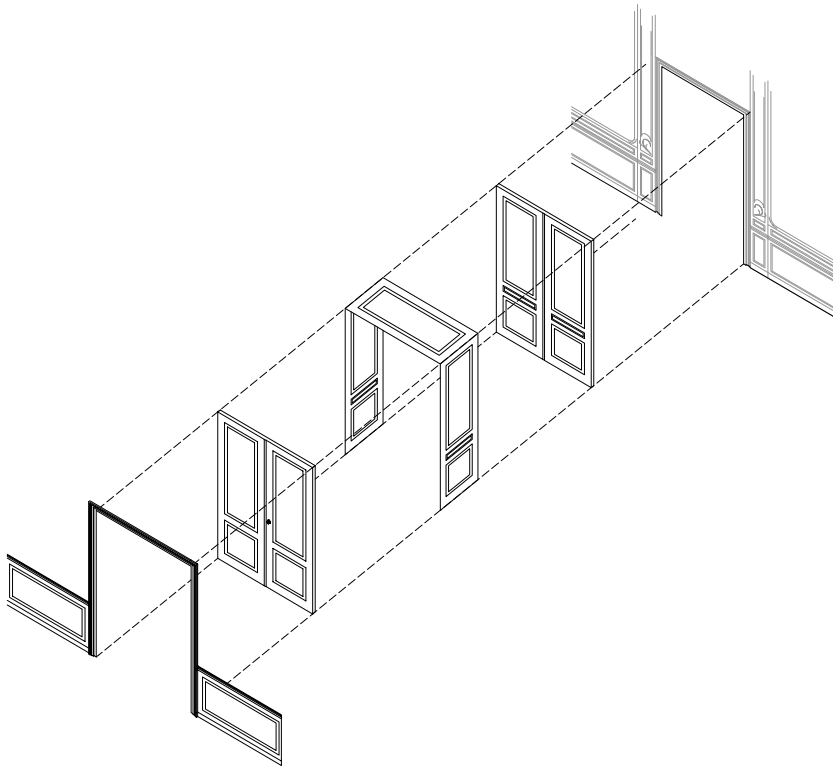


Image 1.90
Plan detail of the door (middle), 1:50, and elevations on either side (top and bottom).

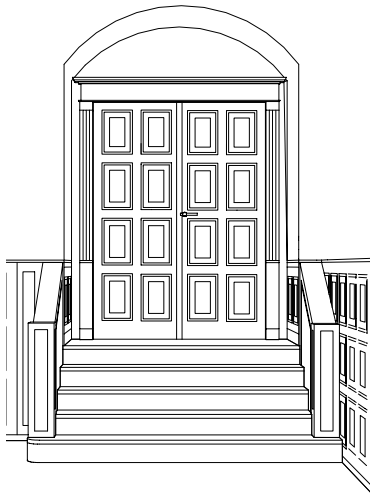
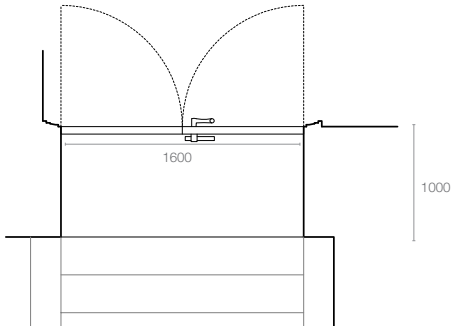
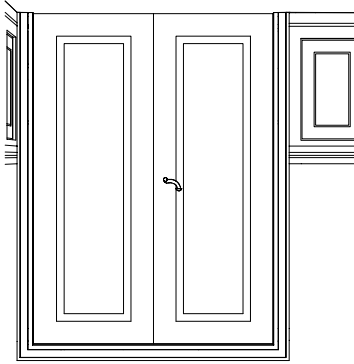


Two double doors – Door between *Ministerskamer* and *Hoekkamer*

Two double doors separate the *Hoekkamer* and *Ministerskamer* (see image 1.31). Interestingly, the doors on the *Ministerskamer*-side, are freely shaped and baroque on the one, and rather plainly articulated on the other side (see top of image 1.90 and 1.91). The same single door answers to two characters! It is this transition that is displayed on the introductory page of each part of this book.

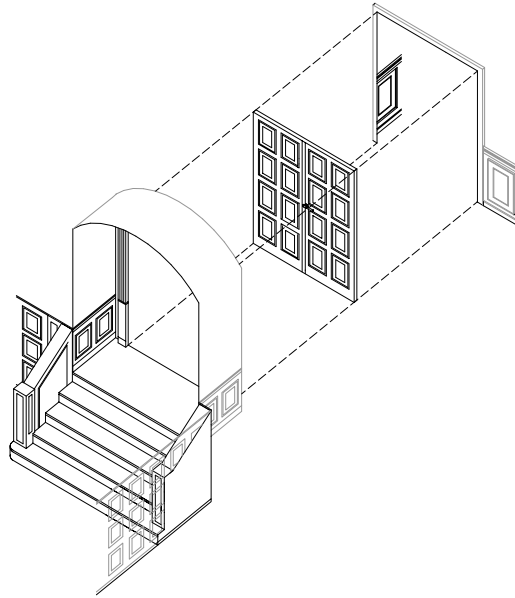
Image 1.91

Axonometric drawing of the transition and its components: double door, recess and double door.



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Image 1.92
Plan detail of the door (middle), 1:50, and elevations on either side (top and bottom).



Stairs and one double door – Door between *Centrale Hal* and *Koffiekamer*

Image 1.93

Axonometric drawing of the transition and its components: stairs, recess and double door.

A stairs and a double door separate the *Centrale Hal* and *Koffiekamer* (see image 1.31). Interestingly, one side of the door is tectonically seen fundamentally different from the other (see top and bottom of image 1.92). Even the door-handle on the one side differs from the handle one on the other (see image 1.92).

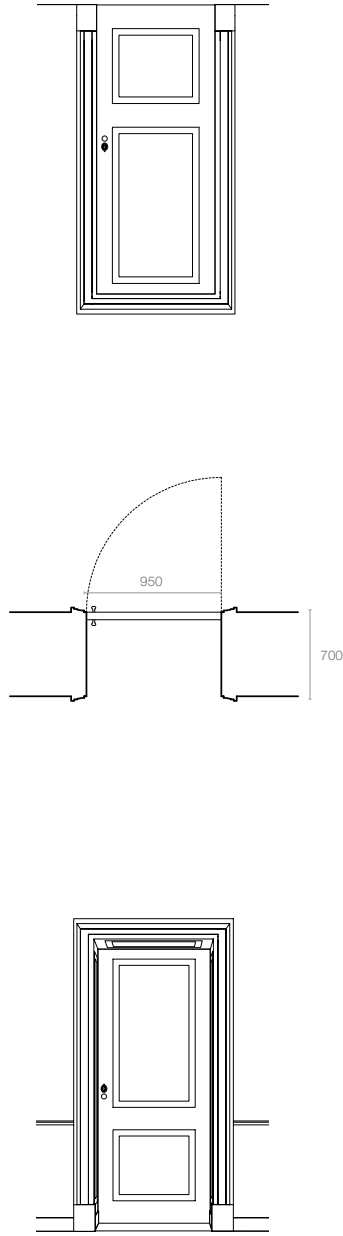
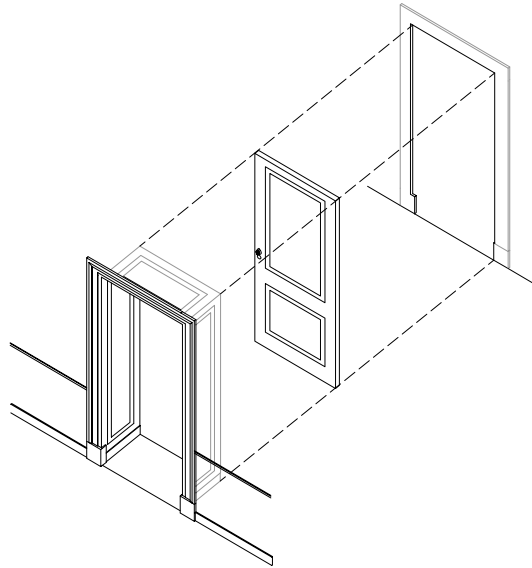


Image 1.94
Plan detail of the door (middle), 1:50, and elevations on either side (top and bottom).



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One single door – Door between *Fractiekamer* and long gallery

Image 1.95

Axonometric drawing of the transition and its components: recess and door.

A single door separates the *Fractiekamer* and long gallery in the western wing (see image 1.31, nr. 14). The door is set back in the wall and a recess thus adds to the amount of space in the long gallery. From the *Fractiekamer*, however, the door is placed in line with the wall.

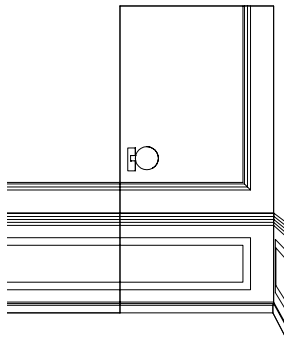
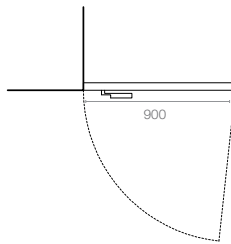
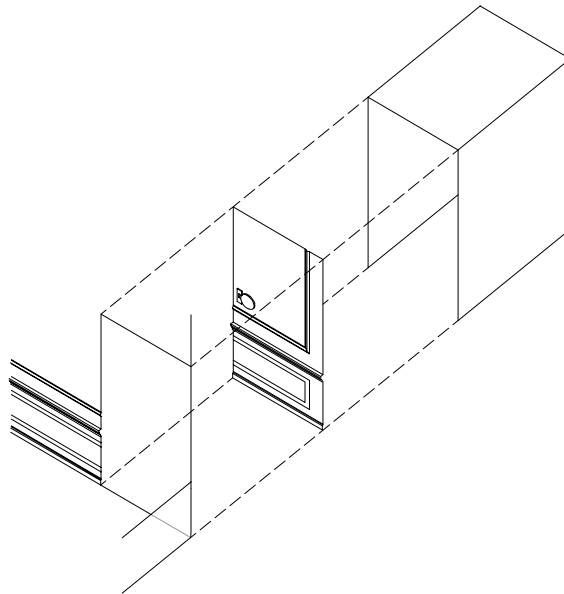


Image 1.96
Plan detail of the door (top), 1:50, and elevation (bottom).



Hidden door – Door in Fractiekamer

Image 1.97

Axonometric drawing of the transition and its components: door, recess and corridor.

A single hidden door in the top right *Fractiekamer* constitutes a ‘secret’ escape from the building (see image 1.31, top right). The door is placed in line with the wall and the carpentry continues on the surface of the door (see image 1.96).

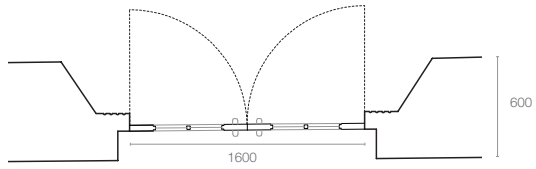
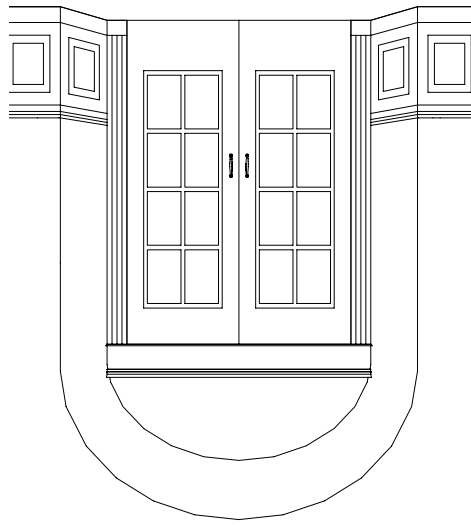
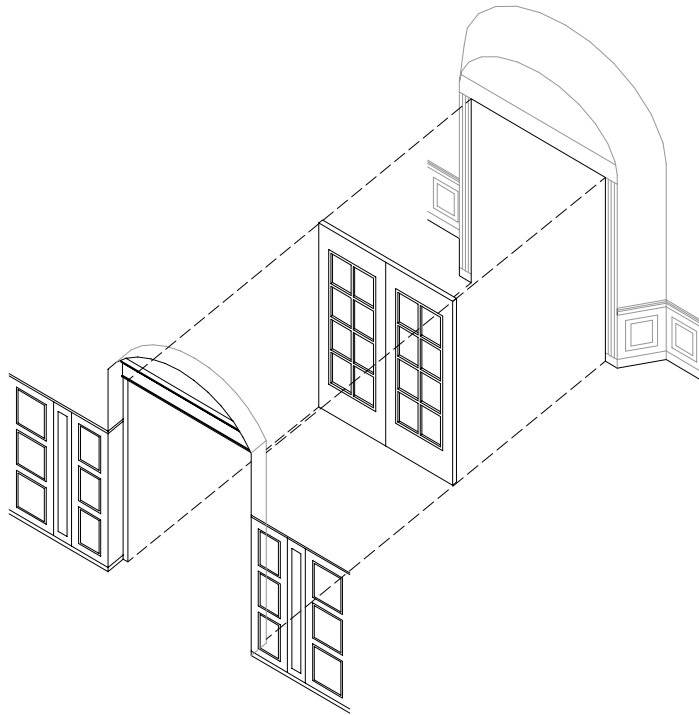


Image 1.98
Plan detail of the door (middle), 1:50, and elevations on either side (top and bottom).



One double transparent door – Door between Centrale Hal and Wandelgang

Image 1.99

Axonometric drawing of the transition and its components: small recess, double door and recess.

A double door separates the *Centrale Hal* and *Wandelgang* (see image 1.31). The door is set back in the wall from both sides. The door contains panels of glass and therefore visually connects the two spaces. A soft border between the spaces is thus established.

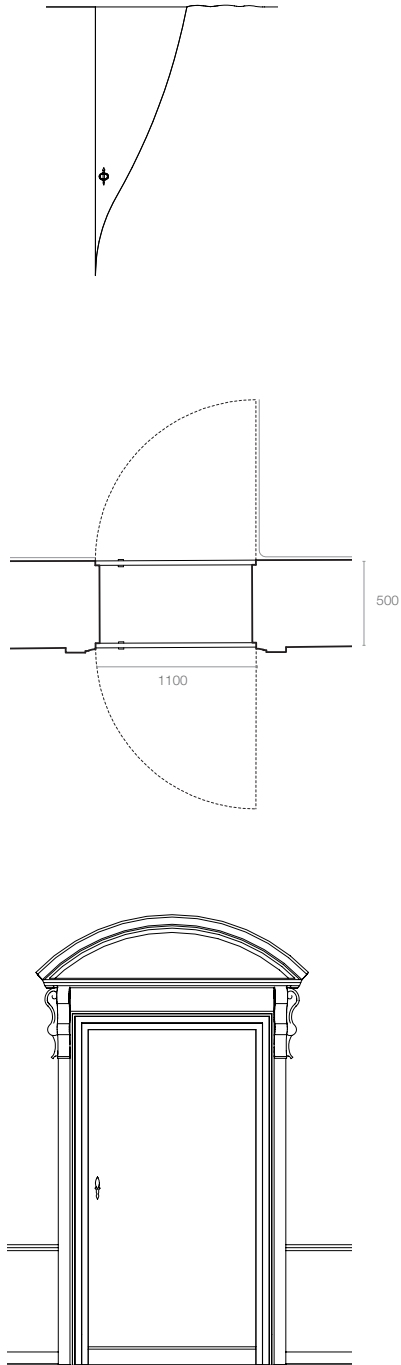
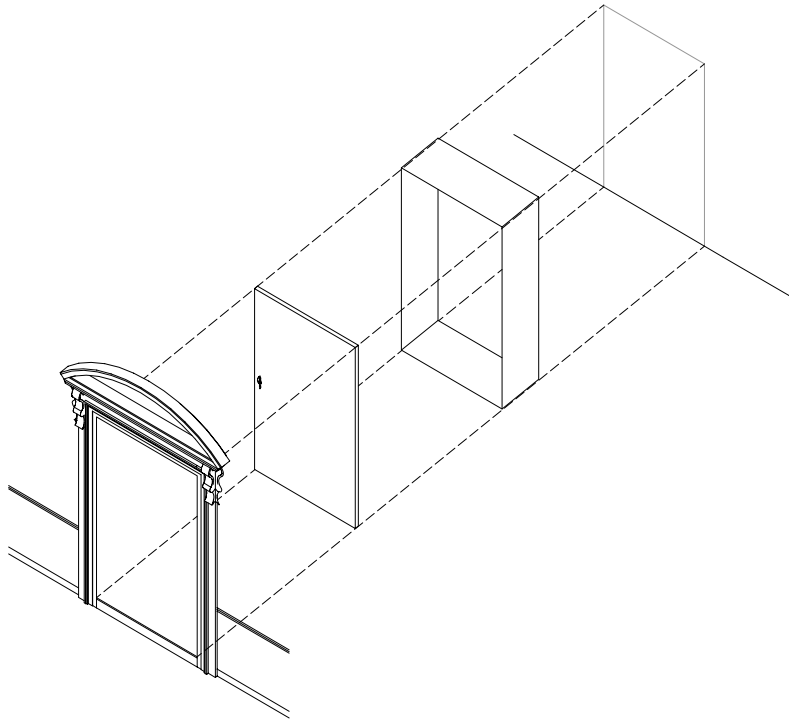


Image 1.100
Plan detail of the door (middle), 1:50, and elevations on either side (top and bottom).

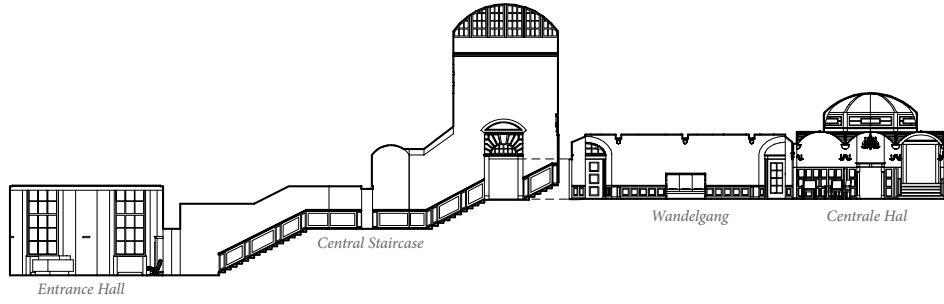


Two single doors – Door between Staircase and Eerste Kamer

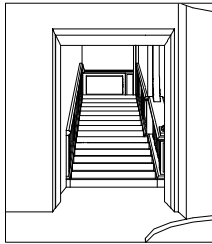
Image 1.101

Axonometric drawing of the transition and its components: door, recess and door.

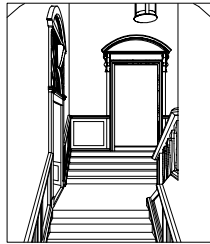
A double single door separates the *Staircase* and *Eerste Kamer* (see image 1.31). The door is completely flat and is preceded by a small stairs. The door is strongly articulated by the carpentry around. A small space is then created between the doors. The door is hidden behind the drapery on the side of the *Eerste Kamer*.



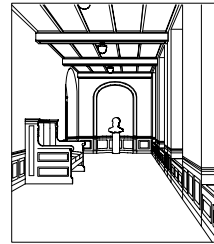
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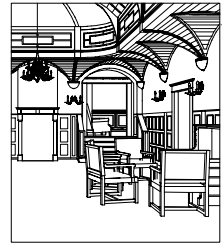
Entrance Hall



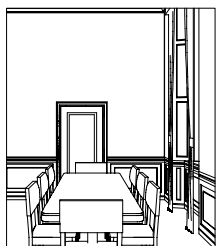
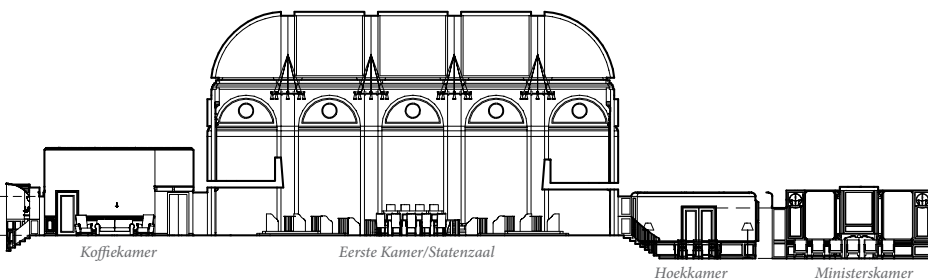
Central Staircase



Wandengang



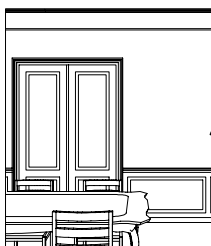
Centrale Hal



Koffiekamer



Eerste Kamer/Statenzaal



Hoekkamer



Ministerskamer

Image 1.102

*Top: Sectional
sequence starting at
the Entrance Hall
and ending at the
Ministerskamer (see
image 1.31).*

Scale 1:400

*Bottom: views along
the route.*

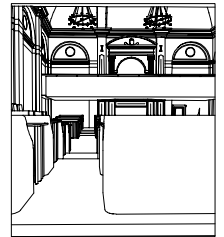
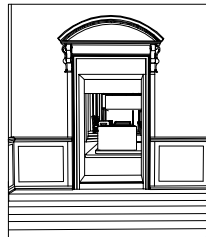
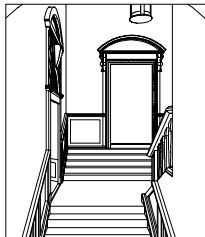
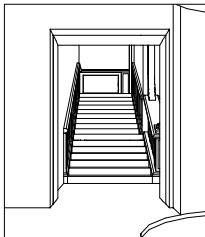
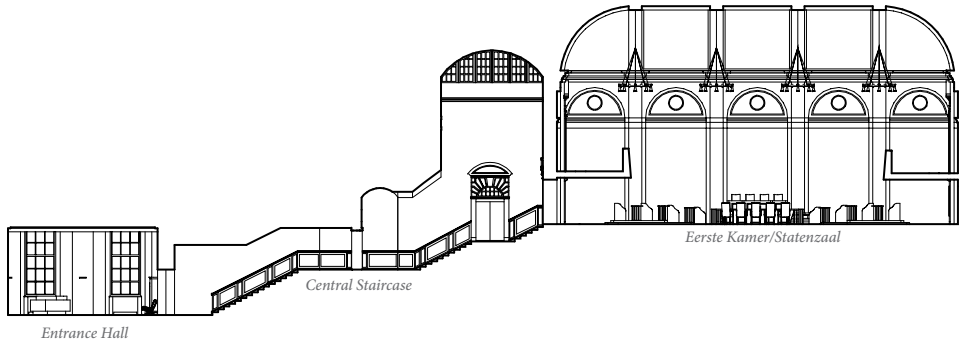
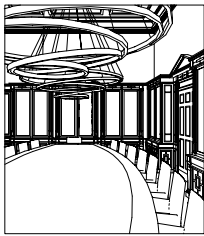
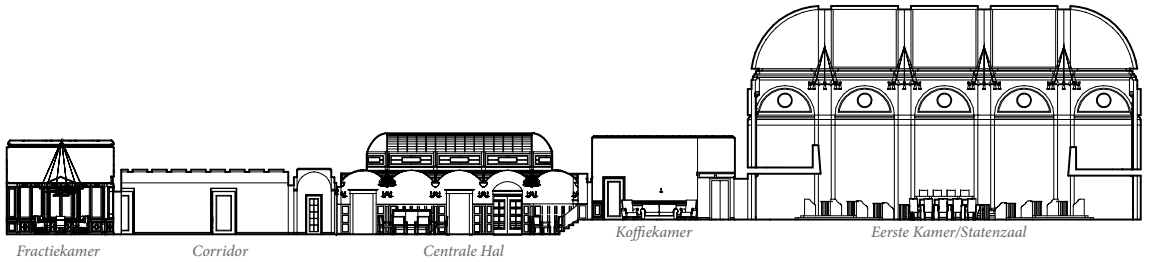
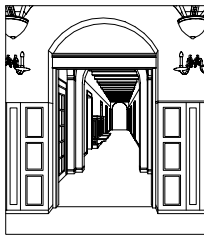


Image 1.103

*Top: Sectional sequence starting at the Entrance Hall and ending in the Statenzaal or Eerste Kamer (see image 1.31). Scale 1:400
Bottom: views along the route.*



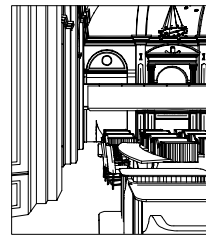
Fractiekamer



Centrale Hal



Koffiekamer

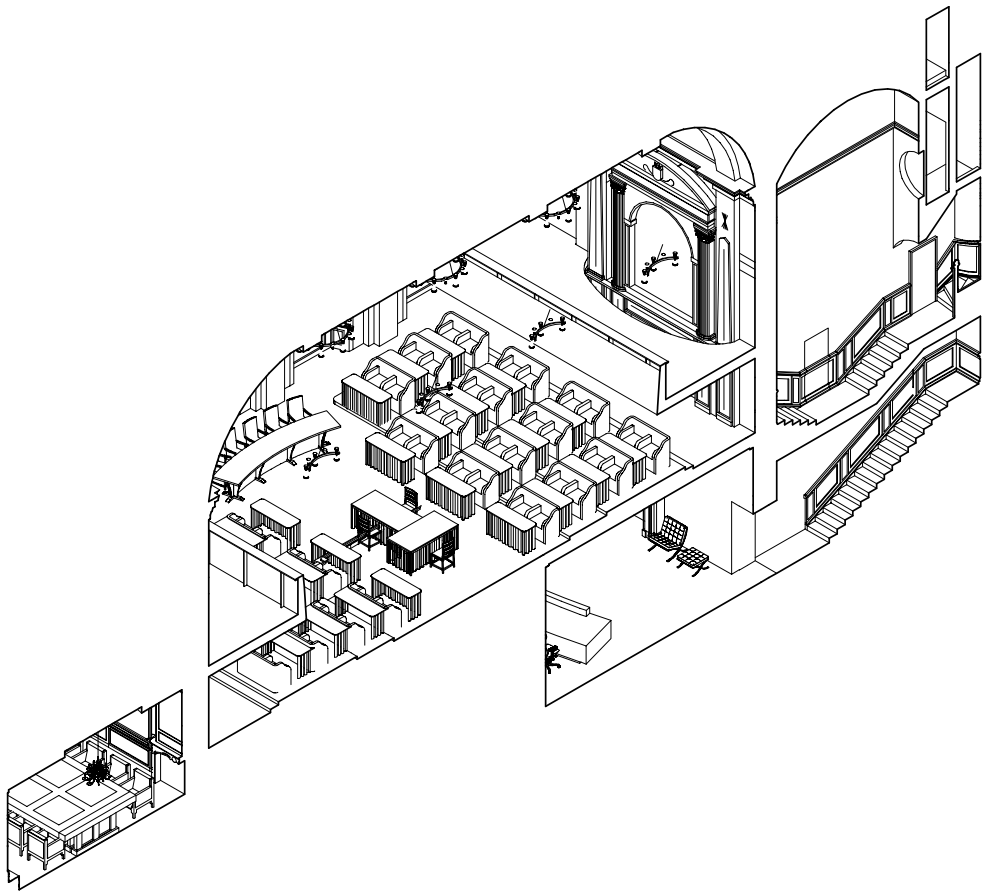


Eerste Kamer/Statenzaal

Image 1.104

Top: Sectional sequence starting at the Fractiekamer and ending in the Statenzaal or Eerste Kamer (see image 1.31). Scale 1:400

Bottom: views along the route.



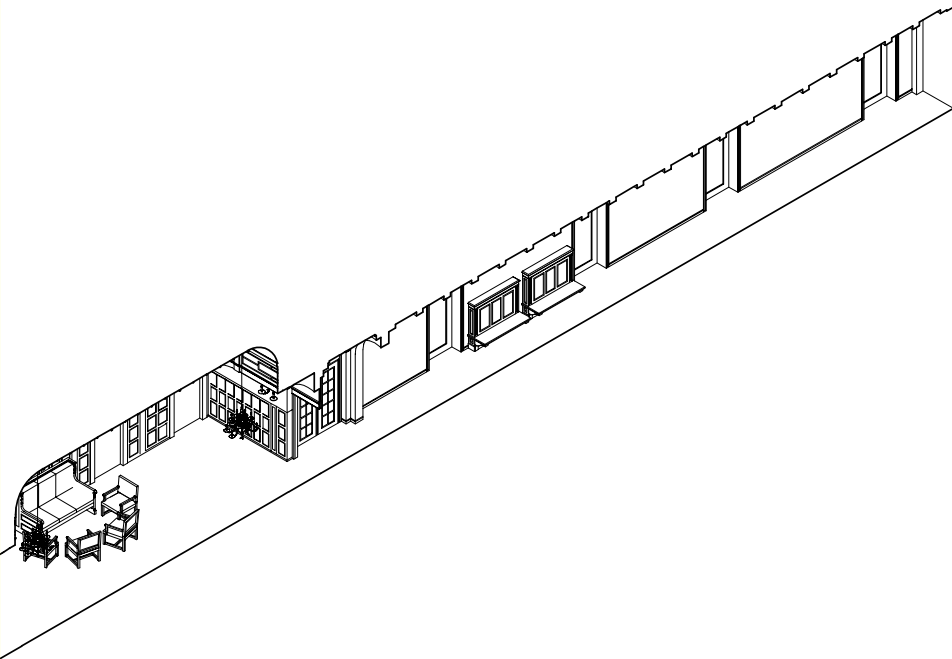
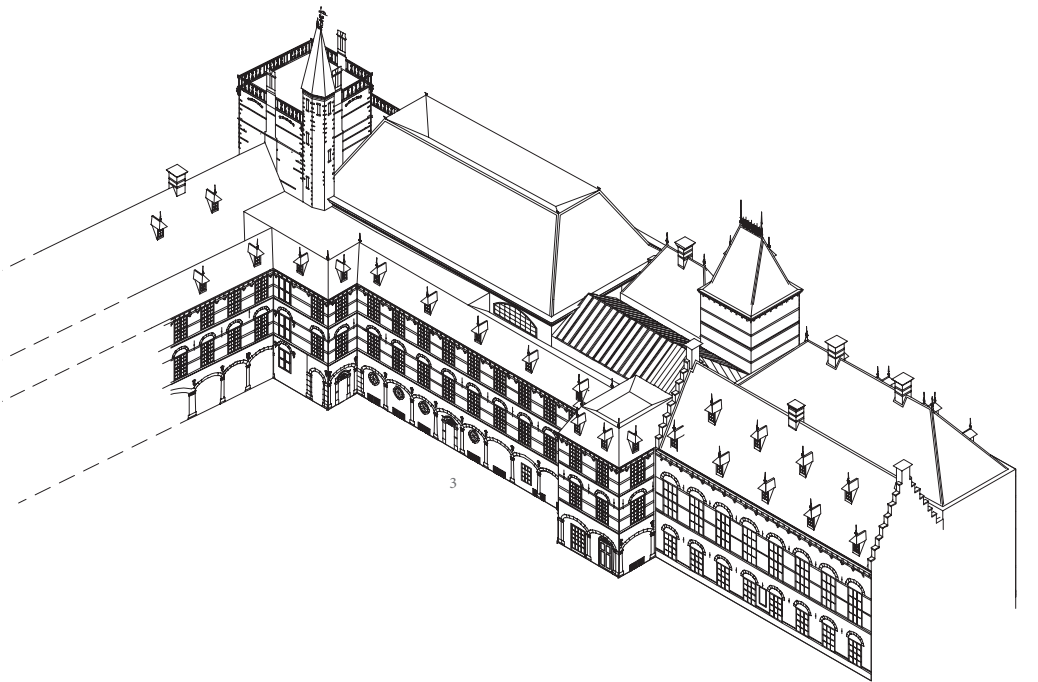
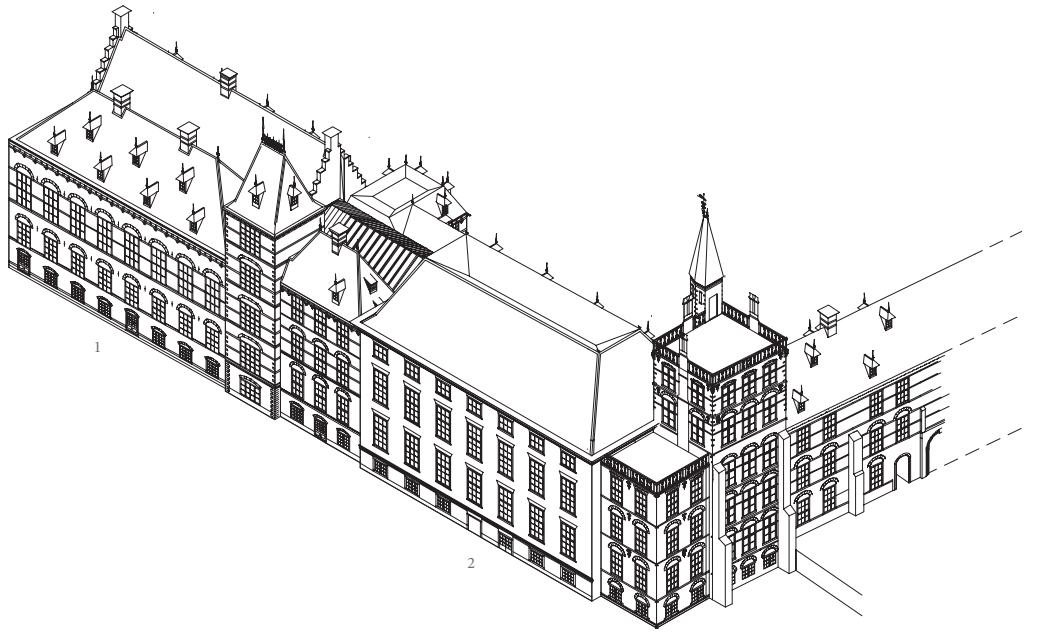


Image 1.105

Axonometric drawing of the position of the spaces in relation to each other (see image 1.31): Ministerskamer (bottom left), Statenzaal, Entrance Hall, Central Staircase, Centrale Hal and corridor (top right).



1.2.5 Facade(s)

*In the following pages, we will discuss the façades of the Eerste Kamer conglomerate. The interior already proved quite varied and complex. On the surface, this seems to be reflected in the façades. And that is exactly what we will discuss here, purely the outer appearance of the facade. In the following pages we will further focus on **smaller elements** of this facade.*

Inner and Outer facade

In *image 1.106*, all façades of the complex are displayed. The composition of façades is very much compound. The exact alignment, height, width and depth differ greatly. This causes a great differentiation in windows and roofs. Some elements, however, such as the dormers, largely correspond to each other. This may be a result of the ‘medievalization’ mentioned before.

The two sidedness, furthermore, is illustratively displayed in the axonometric drawing, as the depth of the perimeter is always spanned by two roof constructions or more.

We will more closely examine three of the façades, that of *Nieuwenhuis* (1), *Post* (2) and that of the *Long Gallery* (3). These will be analysed in detail on the following pages.

< *Image 1.106*
Axonometric drawings of the facades of the building (top: outer facade; bottom: inner facade). The numbers correspond to the facades that will be examined more in detail on the following pages.

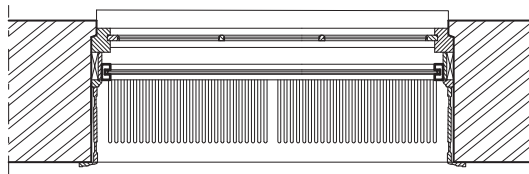
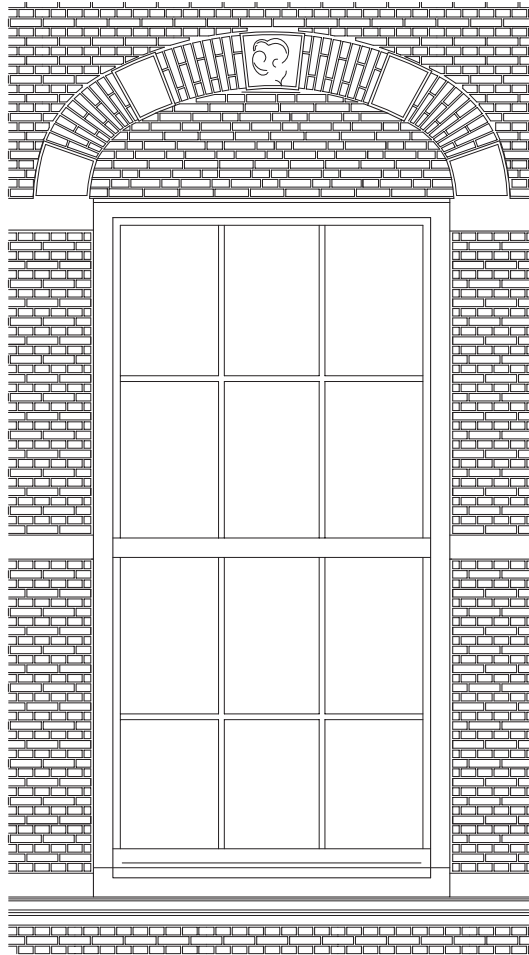
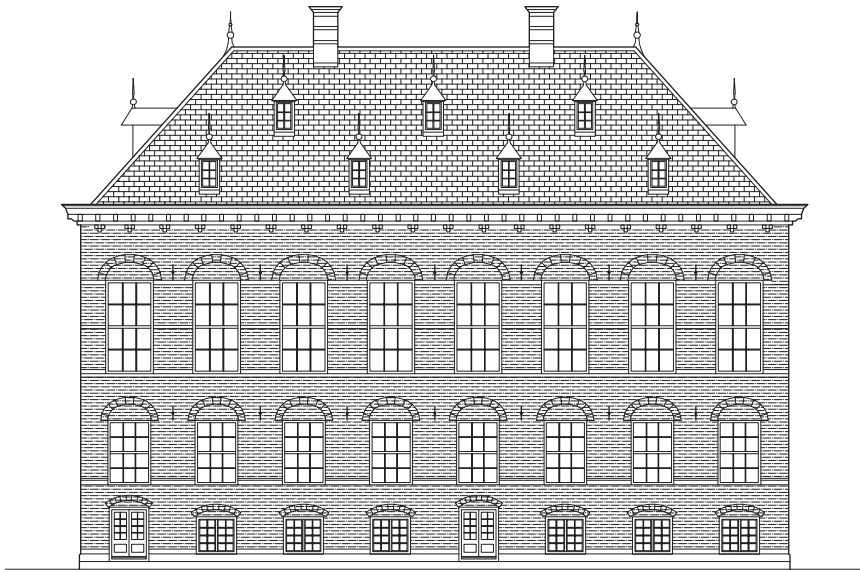


Image 1.107
Detail of the facade,
and a horizontal
section of the
window below.
Scale 1:40



Facade by Nieuwenhuis (1)

Image 1.108

*Elevation by
Nieuwenhuis.
Scale 1:300*

The Neo-Renaissance facade by Nieuwenhuis was established around 1880. The building assignment, however, was more of a renovation since the façades and part of the roof structure were reused. Still, the current composition of windows and spaces was introduced by Nieuwenhuis. The facade is very ordered and axes of symmetry determine the facade composition. This symmetry is not only decisive for the very shape of the facade, but also for that of smaller elements such as windows, muntins and heating slits in the sill.

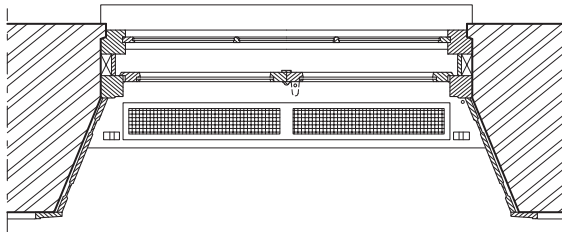
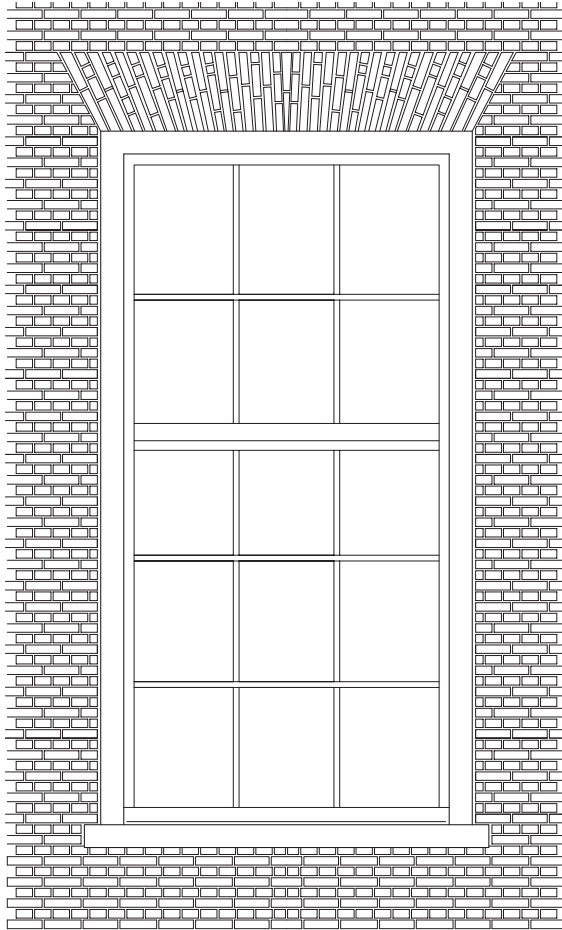
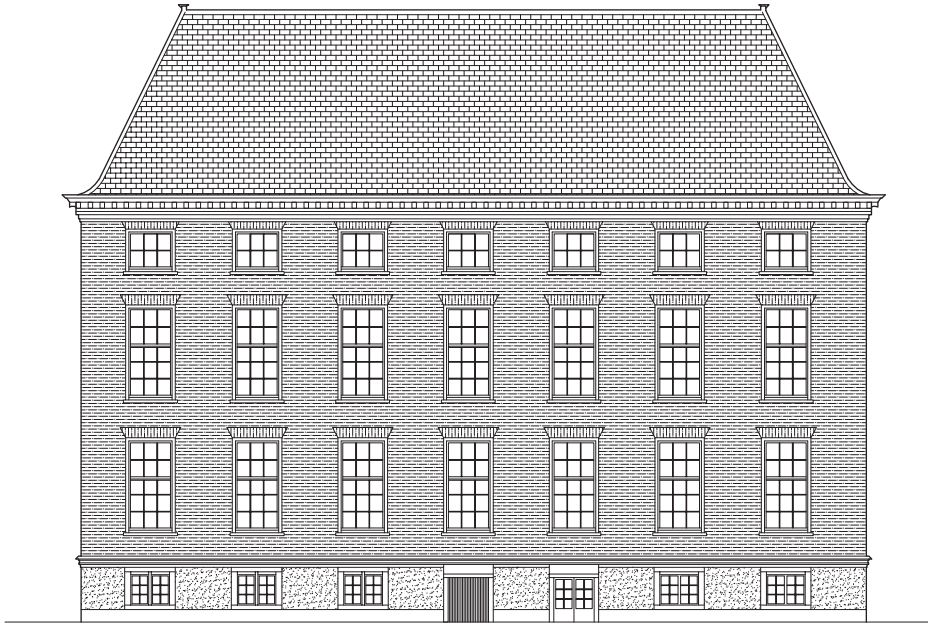


Image 1.109
Detail of the facade,
and a horizontal
section of the
window below.
Scale 1:40



Facade by Post (2)

Image 1.110
Elevation by Post
Scale 1:300

The Classical facade by Post was erected around the year 1651. The facade was completely rebuilt. It was a rather sober facade, given that it was built for the *Staten van Holland*. Here again, this individually considered part of the facade articulates a quite coherent concept in itself. The axis of symmetry seems to order the elements of the facade. This symmetry is, like that in the elevation of Nieuwenhuis, hierarchically carried through on other levels, such as that of windows and doors.

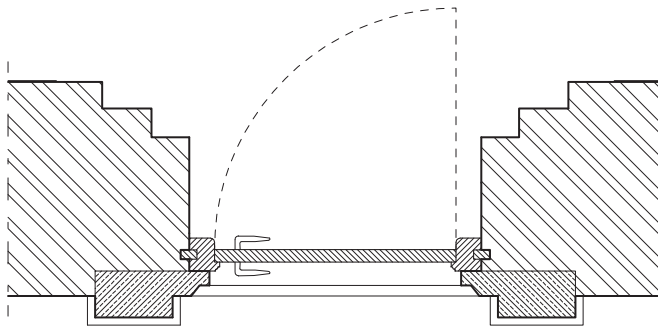
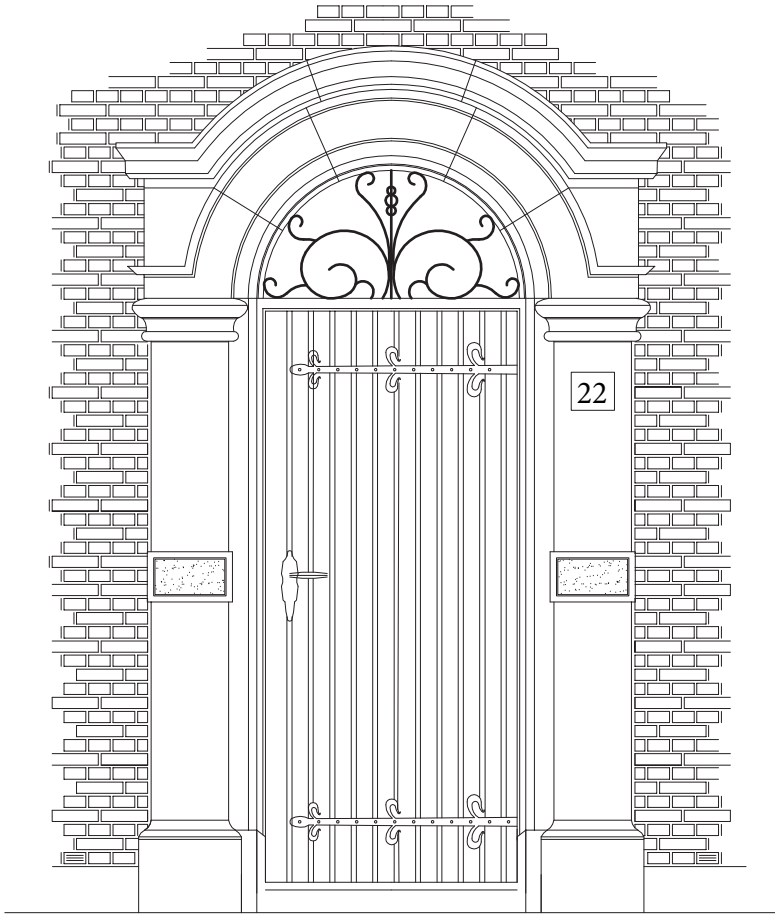
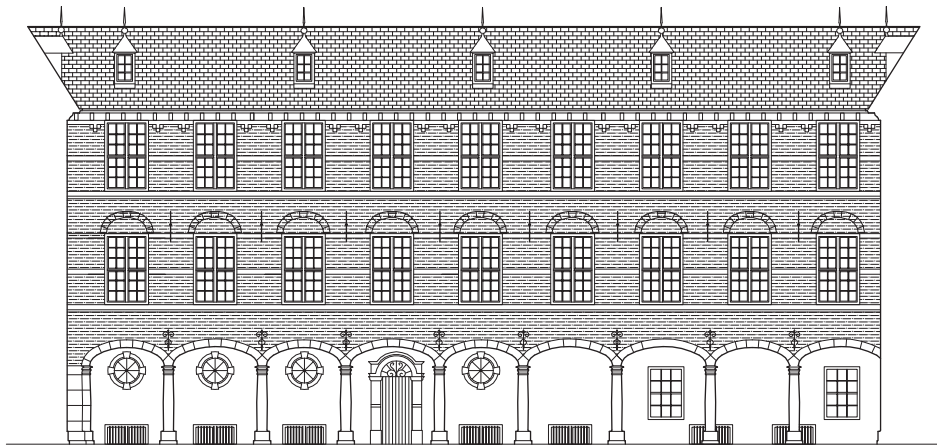


Image 1.111
Detail of the facade,
and a horizontal
section below.
Scale 1:30

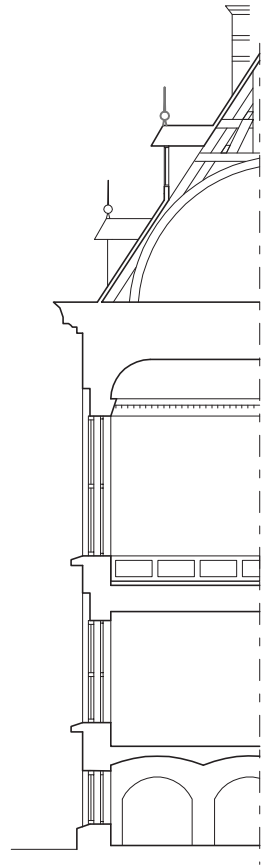
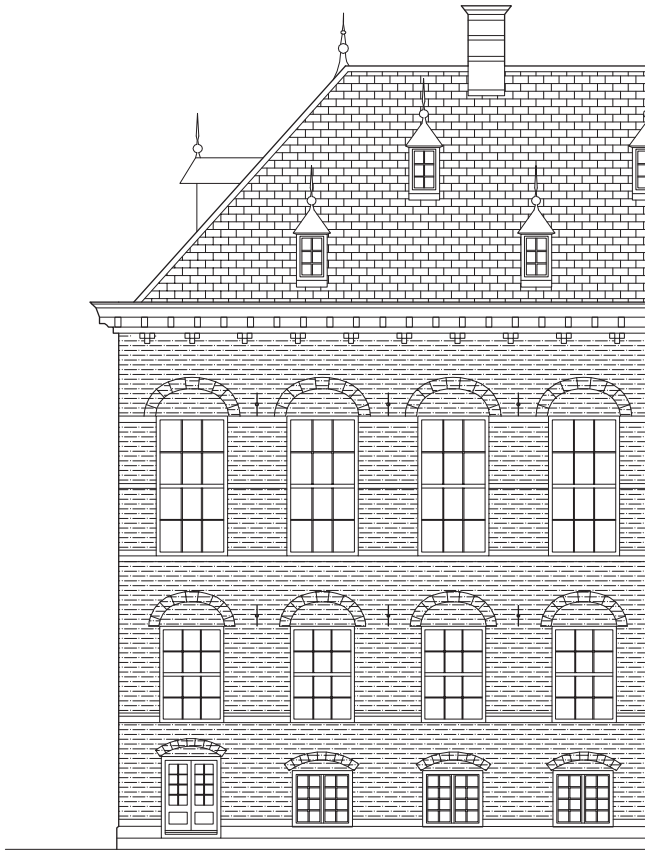


Facade of the Long Gallery (3)

Image 1.112
Elevation of the
long gallery
Scale 1:300

The facade of the long gallery was erected around the year 1640. This building was completely new-built, and replaced the former wooden gallery that only counted one storey. The rhythm of this gallery typifies a large part of the inner facade of the Binnenhof as it continues beyond the part that is displayed above.

Although the upper part of the facade is again very symmetrically and hierarchically arranged, the plinth reveals some rather asymmetrical characteristics.



1.2.6 Facade(s) in relation to space(s)

*In the following pages, we will discuss the final chapter of the analysis, where we will discuss the façades of the Eerste Kamer conglomerate in relation to the spaces behind. It is this final step of the analysis that we are able to distinguish the final transitions, contradictions or ambiguities in the multiplicity of orders, concepts and styles, that so strongly typify empirical architecture and therewith the Binnenhof. We will again focus on the three façades that were discussed earlier. By means of a **facade drawing**, a **vertical and horizontal section**, a **comparison of external to internal facade** and, finally, a **contextual section**, the relation between space and facade is examined.*

Facade and spaces by Nieuwenhuis

The reconfiguration of the former chapel to the current office wing by Nieuwenhuis resulted in a building with a central corridor and rooms on either side (see image 1.31, nr. 15). The structure of the plan already indicates that this building is less historical than it initially seems: both in plan and details the modernity behind this quasi-historical facade can be uncovered. On the level of ventilation and the free composition of walls – due to the columns in the plan – this building internally more resembles a modern office building.

The facade elements – which grow taller towards the cornice – do, however, correspond to the spaces behind (see image 1.113, 1.114 and 1.115). Only on the ground floor plan, a certain variety between facade and spaces can be noticed, due to the changeable layout of the plan (see image 1.31, left).

< **Image 1.113**
Elevation and
vertical section of
Nieuwenhuis' facade
juxtaposed.
Scale 1:200

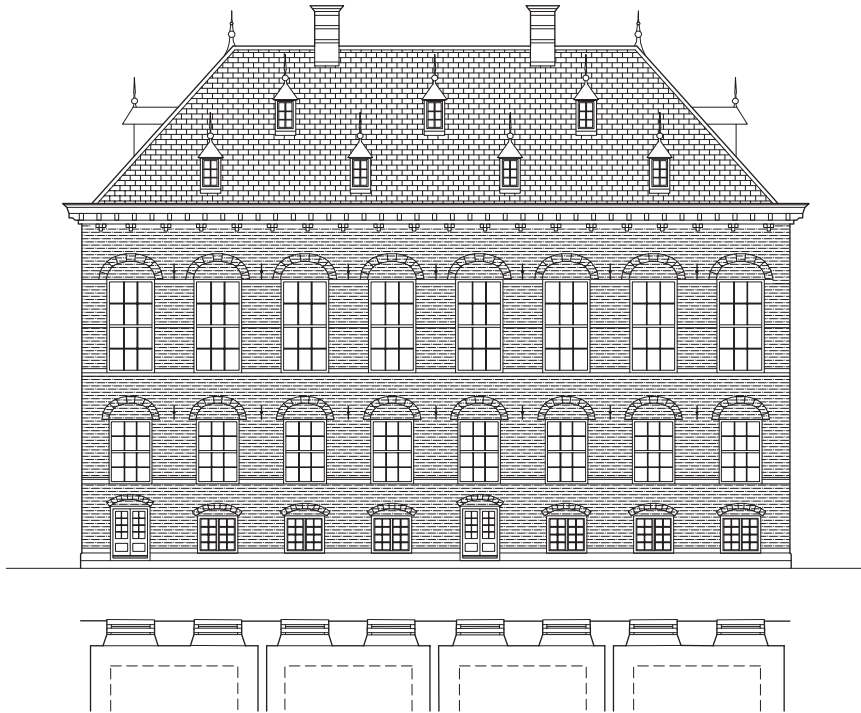


Image 1.114
Elevation with
horizontal section
beneath.
Scale 1:300



203

Image 1.115

*Internal elevation
of the facade, which
reveals the tectonic
relation between
facade and spaces,
which is quite
congruent here.
Scale 1:300*

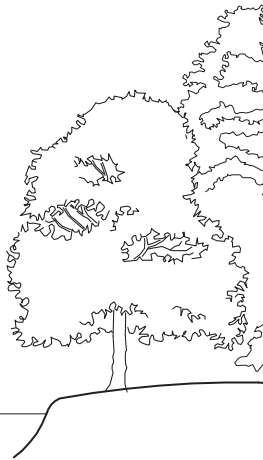
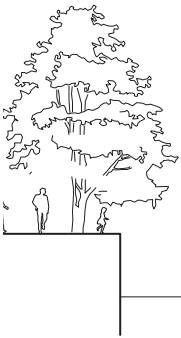
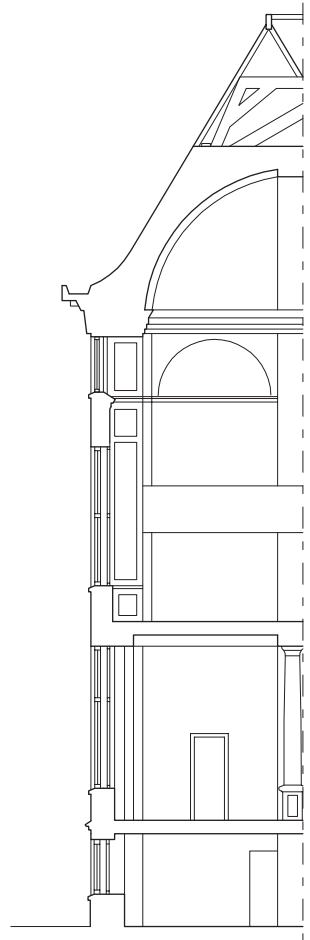
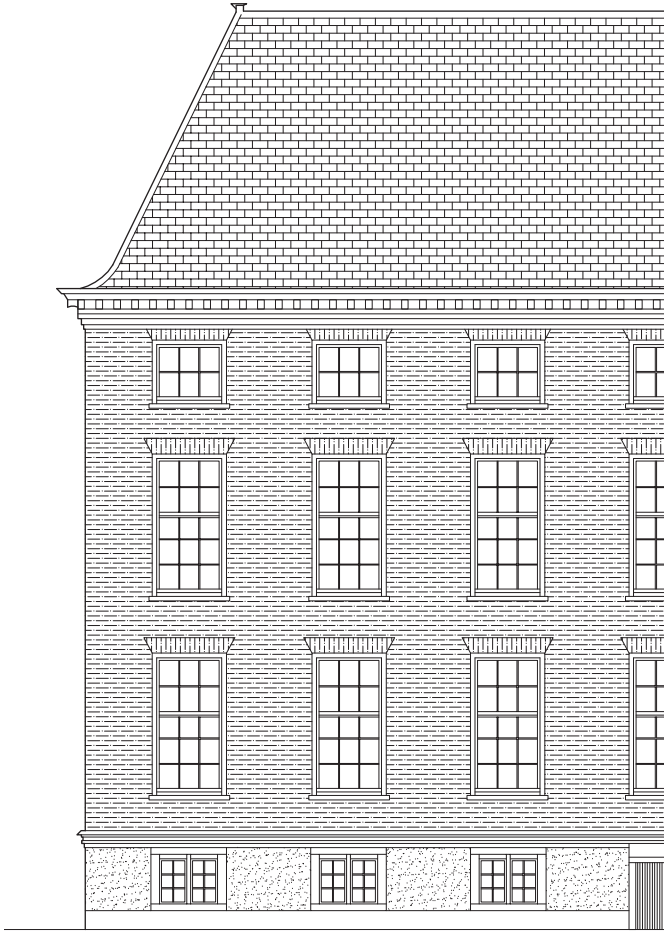




Image 1.116

Section illustrating the relation between external space and internal space. The visibility of the one through the facade on the other is also revealed here: although senators can see everything outside, citizens can barely see the senators because of the distance. Scale 1:300



Facade and spaces by Post

23. More on this can be found in the chapter 'historical development'.

Although the facade by Post was probably built from scratch since the building was extended towards the pond (the *Hofvijver*), there have been several indications that the structure lying behind largely corresponds to the former structure.²³ Post, as a classicist, must have been endlessly puttering around to fit his classical facade exactly to the, let's say, 'less classical' structure behind. A hint of this difference can already be observed from *image 1.117*: the small top windows and cornice would logically indicate a number of tiny spaces and an attic on top of the large spaces that are indicated by the enormous windows beneath. The section, however, reveals that a huge space occupies the space between the ground floor and roof ridge. This can even be better understood from *image 1.118 and 1.119*. The symmetry as posed by the facade completely disappears behind it. And, the composition of spaces has more in common with the disposition in a Mondriaan painting than with the articulation of the facade that is linked to it. This insinuates that the structure behind the facade is even more muddled than the facade composition itself, and, apart from the incongruence of the conglomerate of spaces, there are additional incongruences between the façades and spaces.

< *Image 1.117*
Elevation and
vertical section
of Post's facade
juxtaposed.
Scale 1:200

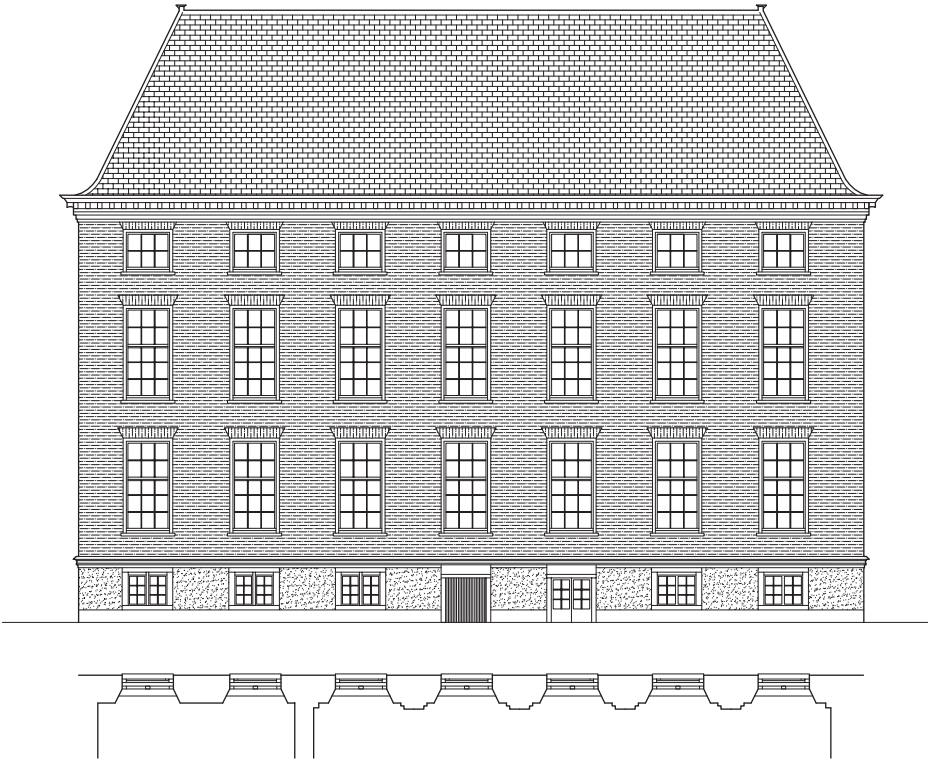
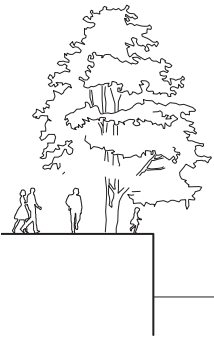


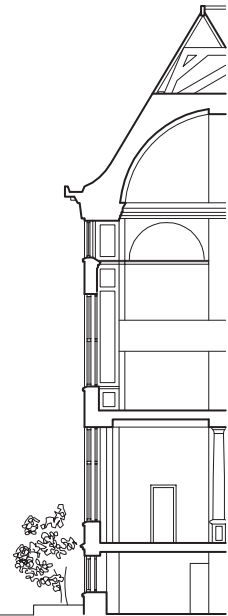
Image 1.118
Elevation with
horizontal section
beneath.
Scale 1:300



Image 1.119

*Internal elevation
of the facade, which
reveals the tectonic
relation between
facade and spaces,
which is rather
incongruent here.
Scale 1:300*





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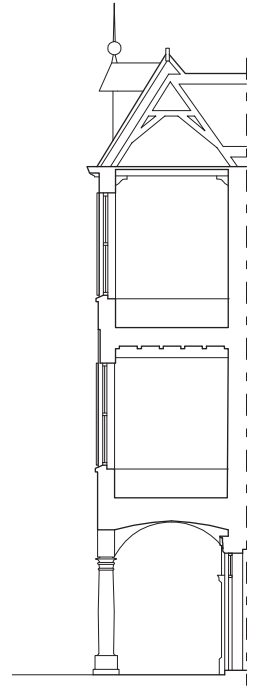
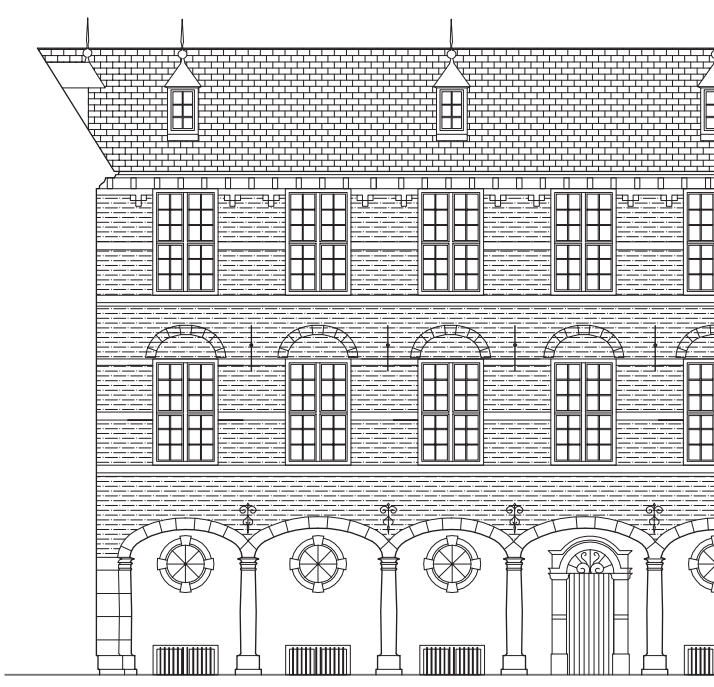
Image 1.120

Section illustrating the relation between external space and internal space.

The pond, 'Hofvijver', creates a natural distance between viewer and viewed, between citizen and senator. The

latter is in a more powerful position as he stands close to the window and sees much, whereas the citizen does not.

Scale 1:300



Facade and spaces in the Long Gallery

In the previous chapter of this analysis we have already denoted the incongruence between the bottom and top of this facade. That is, of course, because the bottom part of the facade constitutes an arcade, and the doors and windows of this bottom part, therefore, correspond with the spaces that lie behind the plane of spaces of the upper facade (see section in image 1.121). In this case, that means, that the bottom corresponds with the spaces of another building, namely that of Post (see roof structures in image 1.106 and image 1.24). Although the top part consequently corresponds to the long galleries on the first and second floor, the bottom one corresponds to the spaces beyond, such as the *Entrance Hall* and *Noenzaal* (see image 1.31). The variety in the facade is more illustratively explained in *image 1.123*.

The arcade, finally, creates a natural distance between the spaces used by members of the *Eerste Kamer – senators* – one the one hand, and *citizens* on the other, by the height difference and the set-back plinth. One can only catch a glimpse of the spaces by looking from a great distance, which matches the situation on the other side, at the Hofvijver, as described earlier (see image 1.124 and 1.120).

It is the paved square in image 1.124, which is characterized by the view on the *Ridderzaal*, that provided the complex with the name *Binnenhof* (Inner court).

< *Image 1.121*
Elevation and
vertical section of
the long gallery
facade juxtaposed.
Scale 1:200

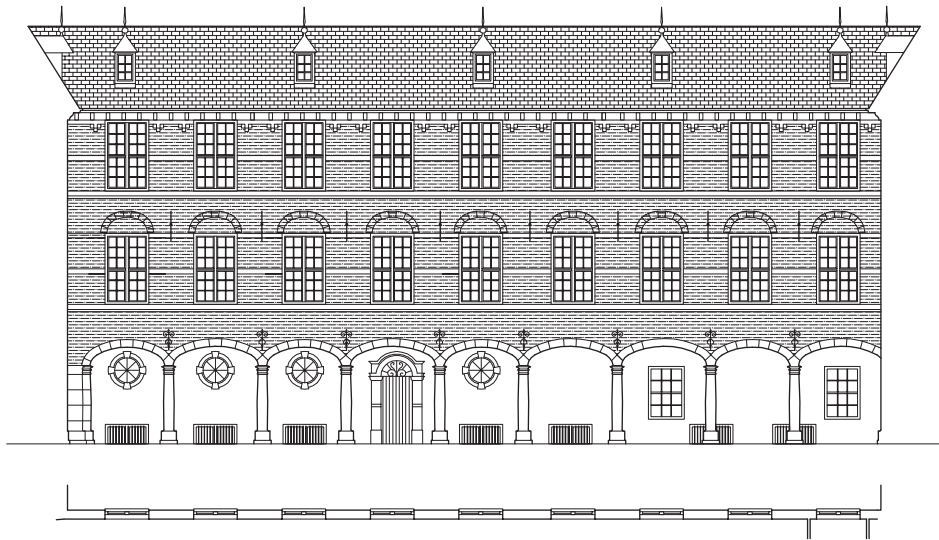
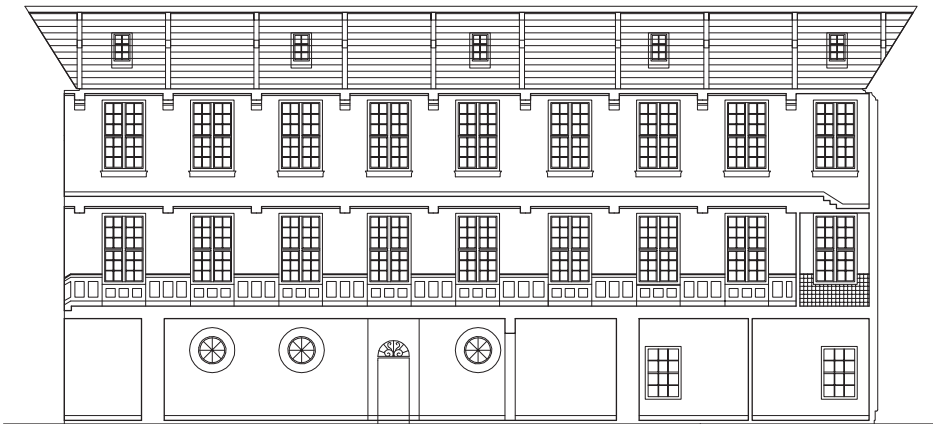


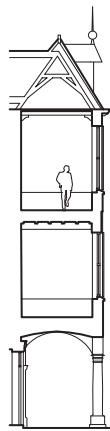
Image 1.122
Elevation with
horizontal section.
Scale 1:300



215

Image 1.123

*Internal elevation
of the facade, which
reveals the tectonic
relation between
facade and spaces,
which is only con-
gruent at the top.
Scale 1:300*





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Image 1.124

Section illustrating the relation between external space and internal space. Like the Hofvijver, which creates a natural distance between senator and citizen, a certain distance is established here as well, by the arcade. Scale 1:300

1.3 Conclusion I

Empirical Architecture as a matter of level

Now that we have analysed the several levels of possible orders and concepts in the last four chapters – and I do not pretend to have covered anything *néar* everything – we have an *idea* of the astonishing volume of multiplicity in the architecture of the Binnenhof. The number of different spaces, doors, routes, windows and façades, we have so far distinguished, is overwhelming, and yet still but a fraction of the totality.

In the first chapter, *space*, a number of individual spaces has been discussed. From the drawings, it is obvious that these spaces have been designed at the level of that space since every space has a particular tectonic articulation or division into ever smaller elements, that all relate to this tectonic articulation. Firstly, the ceiling divides the space in several units. These units are then reflected on the wall by the columns and panellings. Inside these units, doors and windows are – usually symmetrically – placed. Inside these doors and windows, in turn, the height of the wainscoting is reflected. And so on. Via an overall order, every element of the space is shaped according to this order, from ceiling to door handle. Every chamber, thus, distinguishes itself from others with a certain character: a certain kind of ceiling, wallpaper, panelling, woodcarving, colour, lamp, chair, table, window and door. The choice for the ‘level’ that is designed as a whole, thus lies on that of a room. The next room, then, has a different size, articulation and materialisation.

The *multiplicity*, then, manifests itself where these rooms – and thus orders or concepts – come together, between the layers of paint or in door- and window openings.

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It was therefore in the second chapter, *spaces in relation to other spaces*, that we saw the transition of concepts: a door that was baroque on the one and classical on the other, a door handle that was curved on the one and perfectly straight on the other side.

The stairs, false doors, hidden doors and elevators that ‘bridged’ the transition between individual rooms, however, were already empirical manifestations *inside the rooms*. When two connected rooms, for example, are *both* symmetrical, but are unequal in width, the door has to be placed out of symmetry in either of both. Such ambiguity, for instance, arose between the *Eerste Kamer* and the *Hoekkamer*. A symmetrical position of the door in the *Eerste Kamer*, however, was considered more important and the difference was overcome in the *Hoekkamer*, where the door was placed quite randomly on the wall and even had to be preceded with a stairs in order to overcome the height difference as well. Examples of these ‘outflows’ of the difference in character can also be found in the balconies of the *Eerste Kamer*, the stairs and unevenly placed doors in the *Centrale Hal* or the false door in the *Ministerskamer* (see image 1.33, 1.34, 1.45, 1.46, 1.57 & 1.58). These are all results of the fact that every room is designed as a separate entity, but still needs to connect to other entities, and thus needs to either *accommodate* – by partly letting go of its character – or *ignore*, in some way. Naturally, the *Wall Projection* discussed before is a vivid illustration of this: there, the facade ignored the difference and the room behind thus had to accommodate the difference with a small wall extrusion.

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The sectional sequences established another method to reveal the empirical character. By combining the rooms into a spatial sequence – a depiction of the experience of walking through the building – the several characters and their transitions could be denoted (see image 1.102-1.104).

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Here again, it is clear that every room in itself is a conceptually designed entity – a small Versailles – but the aggregation of a multitude of these individually designed entities, plus the contradictions that accompany the assembly of all these entities (stairs, asymmetrically placed doors, hidden doors, false doors) establish the very opposite of Versailles.

Other varieties, finally, are found in chapters three and four – *facade(s)*, and *facade(s) in relation to space(s)*. Firstly, the facade consists of an aggregation of smaller façades, that are each designed from a certain concept. Between the several parts of this aggregation, therefore, exist changes of order. But, within some of these separately considered façades, one finds additional inconsistencies, as was the case for the long gallery. Sometimes – as revealed in the final step of the analysis – there even exists an inconsistency between the spatial structure that the facade articulates, and the structure of the spaces that it houses. This phenomenon is perhaps best illustrated by the difference between the external and internal facade of *Post* (see image 1.118 and 1.119). The variation and ambiguity that typify the aggregation of spaces is consequently complemented with that of the *façades*, and that *between façades and spaces*.

An important conclusion that we need to draw here, is that in this case, that which is *designed as a whole*, lies on the level of the room, or individual facade. The *complete building*, that consists of several rooms with several characters, is therefore *empirical*. But, if one only considers the facade of Nieuwenhuis, however, or the *Eerste Kamer* by Post, one must conclude that these are, on themselves, rather *conceptual*. The fact whether something is empirical thus depends, firstly, on the *level that is considered as a whole* by the analyzer or beholder – in our case the complex of the *Eerste Kamer* – and secondly *the level that is designed as a whole* by the designer(s), in our case the level of a room.

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If we, for instance, consider Versailles as part of the city Versailles and analyse the city, the part occupied by the palace is merely one of the many urban fabrics. The *city* of Versailles is therefore empirical: it contains multiple orders and characters. If we look at the property that belongs to the palace, however, we must denote it as purely conceptual. To more elaborately focus on this, we will shortly discuss the competition entry of OMA (see also *introduction*).

This competition entry, namely, occupied a certain area of the Binnenhof. The design for this area, however, consisted of three different buildings: one designed by Rem Koolhaas, one by Elia Zenghelis and the last by Zaha Hadid. These three buildings were connected by bridges but were otherwise rather *spatially independent*.²⁴ In this case, consequently, there exists a difference between the *level that is designed as a whole* and that which is *considered as a whole*. The latter being, in this case, the area demarcated in the design competition.

Intuitively – and this is hard to fundamentally prove – I have the idea that many, many architectural works do not distinguish between these two. Most architects get appointed a plot, block or part of a building and design this with a certain concept in mind to make it into an architectural whole.²⁵ This means the level of the assignment matches the level on which the designer designs. An exception to this rule, then, is the schizophrenic design by OMA. They divide the assignment in three parts, and design these parts independently of each other part. Naturally, this is slightly more empirical than designing one overall building. But still, it does not result in anything that is even comparable to the multiplicity that we have found at the Binnenhof. We cannot speak of the elaborate body of ambiguity and variety that so strongly characterizes our main case.

The question, consequently, remains whether an architect is able

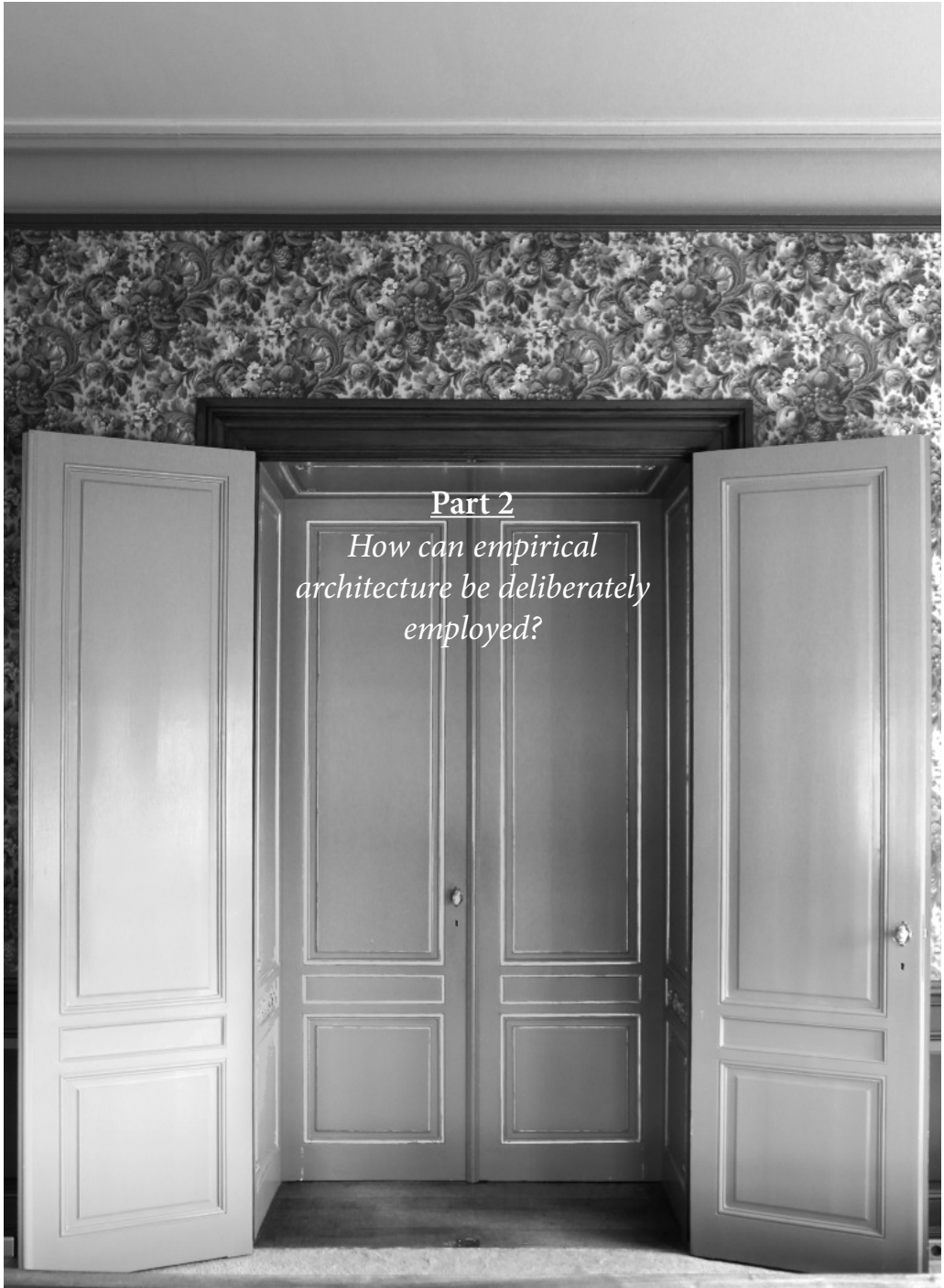
24. Fiederer, L. (2016, april 22).

25. Naturally, this assumption is built on the statements of Turnovsky and Rowe & Koetter. More on it can be found in works by Geert Bekaert: Bekaert, G. ([1970]2014). Architect en architectuur. In H. Heynen, A. Loeckx, L. De Cauter, & K. Van Herck, Dat is Architectuur (pp. 443-446). Rotterdam: nai010.

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to design empirical form. The pitfall we have described at the very beginning, in the example of Marie-Antoinette, continues to prove difficult. Architects tend to fall into the same conceptuality when trying to oppose the conceptuality of Versailles. In the next chapter we will discuss some architectural works that *appear* to be successful idealisations of empirical form. By carefully describing as many aspects of these designs as possible, we will try to reconstruct the *process* that led to such a form. And we consciously aim for the *process*, as we have discussed before in the essay, because looking at a concrete shape will not lead to empirical form, but instead, to – for instance – historicism, as in the case of *Camillo Sitte's* urban strategies.

So, having an elaborate idea of the *what* – textually defined in the essay and visually elaborated on in the analysis – we will now turn to the *how*, in the next chapter.



Part 2

*How can empirical
architecture be deliberately
employed?*

2.1 The Idealization of Empirical Form

A Reference Analysis

Now that we have discussed the meaning of the word empirical – and have architecturally visualised it – a further step towards the paradoxical idealisation can be made. We will turn to three cases where we recognize an idealisation of empirical form. By means of literature research and architectural analysis we will try to reconstruct the process that led to the eventual empirical form. This reconstruction forms the basic analytical framework – and is an absolute necessity – on which to build in the later design assignment.

In order to reconstruct the empirical process, all information is needed, in order to thoroughly understand the concrete built appearance of the reference. We will discuss three cases which are, firstly, introduced. In this *introduction* the backgrounds and the concrete building process will be dealt with for each reference. The second part, *spatial composition*, will be by *experience* – and this is a rather personal, phenomenological interpretation of the architecture – analyse the built form. This part is further – or rather more truthfully – depicted in architectural drawings; *plan, facade, section*, and *spatial sequence* are critically examined in order to qualify the variations and different concepts. This can perhaps be regarded as a very concise version of the analysis carried out earlier. In the final part, a reconstruction and qualitative judgement about the ‘*empiricality*’ of the architecture will eventually be given. This concluding part will discuss why each reference is – or is not – to some degree empirical.

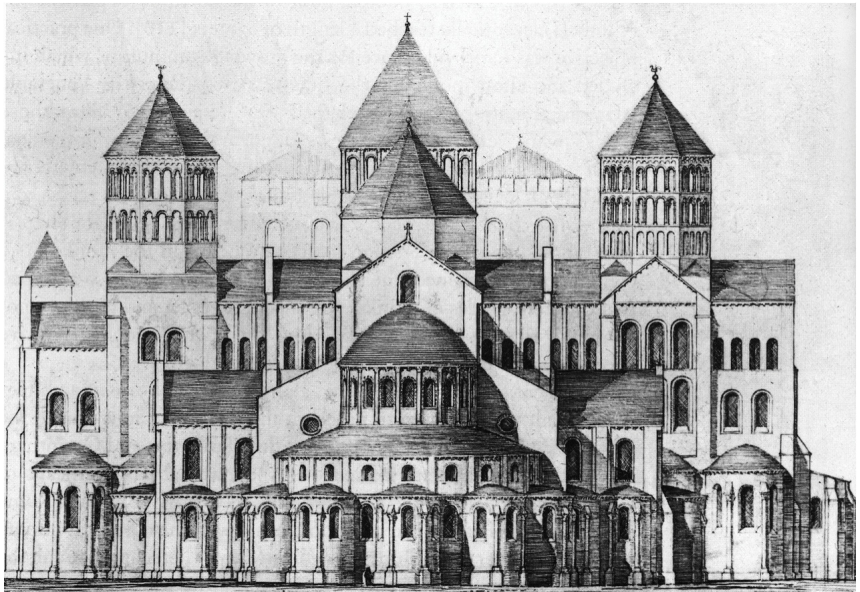
THE IDEALIZATION OF EMPIRICAL FORM

A comparative analysis of the three references at the end – after having discussed all three – enables us to distinguish similarities and differences which, hopefully, reveals a general manner, or some general characteristics, of the process that has led to empirical form.

Based on literary research, three cases have been selected, respectively: the Romanesque church of Cluny III, The Neo-Classical Sir John Soane Museum and the Modern Utrecht City Hall.

The three references have been picked from several times in order to distinguish basic underlying characteristics of empirical form that are not necessarily bound to a certain movement, style or historic period. 'Empirical architecture', as discussed earlier, forms a fundamental tendency in architectural history. References from several times are therefore discussed in order to discern some of the durable inner characteristics of (the idealisation of) empirical form.

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2.1.1 Romanesque Architecture, Europe (1000-1200)

2.1.1.1 Introduction

1. Romanesque architecture is actually more of a historic denomination for a specific period in the development of the medieval Christian church, than an individual style.

2. Colenbrander, B. (2014). Two Prominent Attempts at Architecture. *Architectural Review Flanders*, 11, 202-215.

3. Van Schaik, M., & Boom, S. (2008). *Romaanse Bouwkunst - Archipedia*.

< [*Image 2.1*](#)
Facade of Cluny III

Medieval *Romanesque* architecture is an early example that reveals characteristics of the *idealised empirical*.¹ Romanesque architecture – and we will mainly focus on its churches here – appears to celebrate and delight in *multitude*, whereas the late-medieval Gothic favours a more coherent *unity* of architectural elements.² In the middle ages it is especially the Romanesque period that displays an increase in spatial complexity:

‘The increasing complication of Romanesque articulation in the twelfth century, subdividing space, walls and membering into ever smaller units, had an inevitable result: the clarity achieved by the juxtaposition of large geometrical parts was lost in an overabundance of detail; surfaces and spaces merged into a reunified whole.’ (Saalman, 1968, pp. 39)

Its *additive* nature – which was made possible by developments in construction techniques – enabled the form of the Romanesque building to expand modularly into ever more complex ensembles.³ Although some early Romanesque churches were indeed *built* additively, later ones were *deliberately conceived* with a differentiated and complex spatial composition.⁴ The most striking illustration of this formal development must be Cluny III (see image 2.1), an enormous abbey church that – apart from its incredible size – reveals a most complicated and impressive expression of its parts, which is in the very heartland of the Romanesque.⁵

The term ‘Romanesque’ was introduced by Charles de Gerville, who distinguished a similarity to Roman architecture.⁶ This similarity, however, is of an indirect nature since Romanesque architecture was based on Carolingian architecture, which was in turn inspired on *Roman* architecture, for – naturally – Charlemagne’s ideal of a *Renovatio Imperii Romanorum* had to be based on something Roman.⁷ Because of the continuous movement of emperors and pilgrims, Romanesque characteristics spread to many parts of Europe, where the Romanesque features were interpreted and developed further regionally.⁸ Whereas the German buildings – for instance – were more robust and fantastic, their French counterparts were more clearly arranged – and – while the importance of the façade was emphasized in Italy, their English equals were characterized by a powerful solidity.⁹

During the developments in Romanesque architecture – most importantly the application of heavy stone-vaultings, alternate square piers, the use of towers and the integration of apse, ambulatory and chapels into a *chevet* – the Romanesque church grew into a large modularly composed organism.¹⁰ The eventual result of this development was a church that often included an aggregation of narthex, towers, nave, aisles, crossing tower, transept (with aisles), choir, apse, ambulatory and radiating chapels – a structure that seemingly balances on the edge of chaos but over time proved to be developed into a complex yet formally integrated whole. In order to provide pilgrims with the opportunity to visit the tomb without disturbing the canon, the chevet was introduced in France.¹¹ Other elements of the plan, such as the narthex, appear to stem from similar functional considerations.

Still, the ‘*relative independence*’ of elements was maintained, as was the important distinction between horizontality and verticality – or

4. Van der Ploeg, K. (2006). Transformations of Meaning in Medieval Architecture. In R. Suntrup, & J. Veenstra, *Building the Past. Konstruktion der eigenen Vergangenheit.* (pp. 123 - 164). Frankfurt: Peter Lang.

5. Saalman, H. (1968). *Medieval Architecture.* London: Studio Vista.

6. Van Schaik, M., & Boom, S. (2008).

7. Langereis, S. (2010). *Breken met het Verleden: herinneren en vergeten op het Valkhof in de Bataafse revolutiejaren.* Nijmegen: Uitgeverij Vantilt.

8. Cole, E. (2004). *De Taal van Architectuur.* Kerkdriel: Librero.

9. Norberg-Schulz, C. (1975). *Meaning in Western Architecture*. (P. Publishers, Trans.) London: Studio Vista.

longitudinality and centrality – in the strong differentiation of tower and nave.¹² When the dematerialisation of the wall – which was initiated in the Romanesque but later reached its full potential – was carried on, the independence of elements vanished as the medieval cathedral had reached its culmination in the form of a synthesis, called the *Gothic cathedral*.

10. Ibid.

'A Romanesque church ... is, after all, characterized by a weak structure that is composed additively from separate components that do not offer the constructively integrated spatiality of the later Gothic cathedrals.'(Colenbrander, 2014, pp. 211)

11. Watkin, D. (2001). *De Westerse Architectuur - Een Geschiedenis* (2nd ed.). (Bookmakers, Trans.) Nijmegen: SUN.

Contradictory to these structural developments – the piers carrying the stone-vaulting and eventually resulting in this dematerialisation of the wall – the symbolic relevance of the Romanesque church was still in the meaning of its mass. This mass, which represented a safe haven for Christians – a *Himmelsburg* – was of primary importance for the Romanesque church.¹³ The consequent fortress-like appearance – by means of the verticality of its towers and the solidity of its brickwork – thus symbolises the *'existential significance of protection and transcendental aspiration'*.¹⁴ The church was both *gateway* and *stronghold* to heaven.

12. Norberg-Schulz, C. (1975).

13. Sedlmayr, H. (1950). *Die Entstehung der Kathedrale*. Zürich: Atlantis Verlag.

14. Norberg-Schulz, C. (1975). pp. 150

The rhythmic spatial emphasis that is the result of all these technological, functional and semiotic developments will be studied next, in an analysis of the spatial qualities of some Romanesque buildings, especially the great abbey of Cluny III. Cluny III is particularly relevant because it was – much in opposition to early Romanesque churches – conceived as a totality. It thus illustrates the 'idealisation' of the empirical form that was the result of developments in earlier Romanesque churches. Given our paradox concerning the *idealisation* of empirical form, this church is particularly relevant.

2.1.1.2 Cluny III and its spatial composition

The ecclesiastical power – especially of the Cistercian and Benedictine order – was considerable in medieval France.¹⁵ The centre of the latter was situated at Cluny, which became one of the most influential European institutes. Cluny III – which succeeded Cluny II and Cluny I – was the third church to be built for the abbey of Cluny:

‘What was only tentatively articulated at Cluny II, became clearly expressed in Cluny III, begun in 1088 when the reform movement was at its crest ... The choir arrangement, that is forechoir and apse, opening through an arcade in into a barrel-vaulted ambulatory, surrounded by a ring of apsidal chapels is a monumental development of earlier ambulatory forms. The clear expression of parts that this solution permits is essentially Romanesque’ (Saalman, 1968, pp. 36)

15. Watkin, D. (2001). pp 123

16. Norberg-Schulz, C. (1975).

17. Watkin, D. (2001).

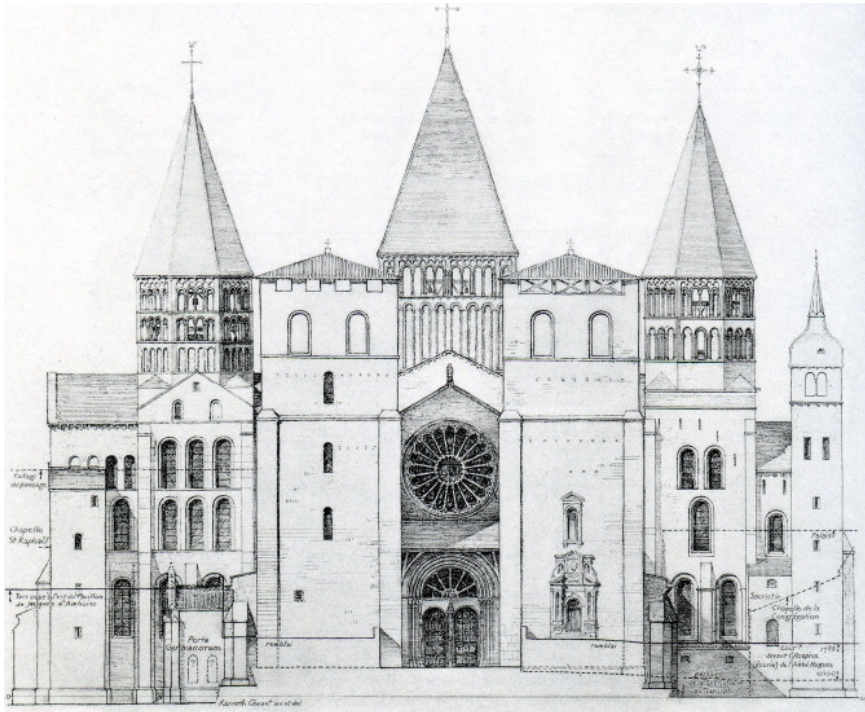
18. Norberg-Schulz, C. (1975). pp. 171

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This third church was conceived because the second was soon considered too small to accommodate the populations that followed the growing monastic centralization.¹⁶ The church was, at the time, the largest Christian church with an astonishing length of 183 meter.¹⁷

The *entrance* of the Cluny III church was clamped between two slightly asymmetrical towers at the front (see image 2.2 and 2.5). These substantial towers were preceded by an impressive stairs. The entrance connected to a *narthex* behind, which was added to an already existing nave later. The narthex is flanked by two single aisles and the articulation of this later part clearly differs from the adjacent nave. The transition between this narthex – *‘a waiting place before the processions enter the church’*¹⁸– and nave was accentuated by a tympanum (see image 2.3). This

Image 2.2 >
Front facade of Cluny III with the entrance, also see image 2.5, no. 1



tympanum was the first of a number of impressive Romanesque portals and is reverberated in, amongst others, the abbeys of Moissac and Vézelay. It was flanked by two small stairs.

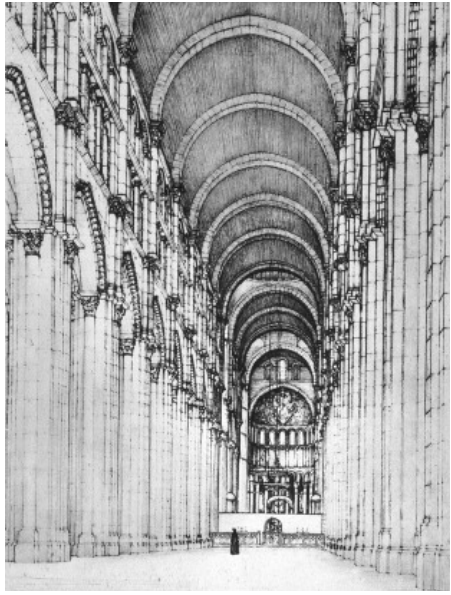
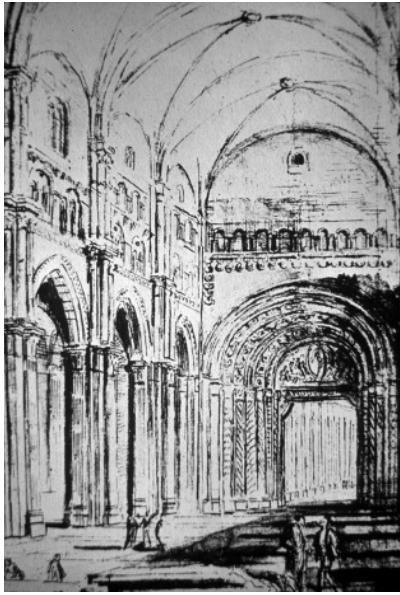
This tympanum precedes a 30-meter high *nave*, which was flanked by double aisles. The single aisles of the narthex were connected directly to these double aisles of the nave (see image 2.5). Whereas the nave ends in a tunnel-vaulted roof, the aisles are crowned by pointed arches. The light flows in from the sides at multiple levels, articulating the linear rhythm of the stepped basilica.

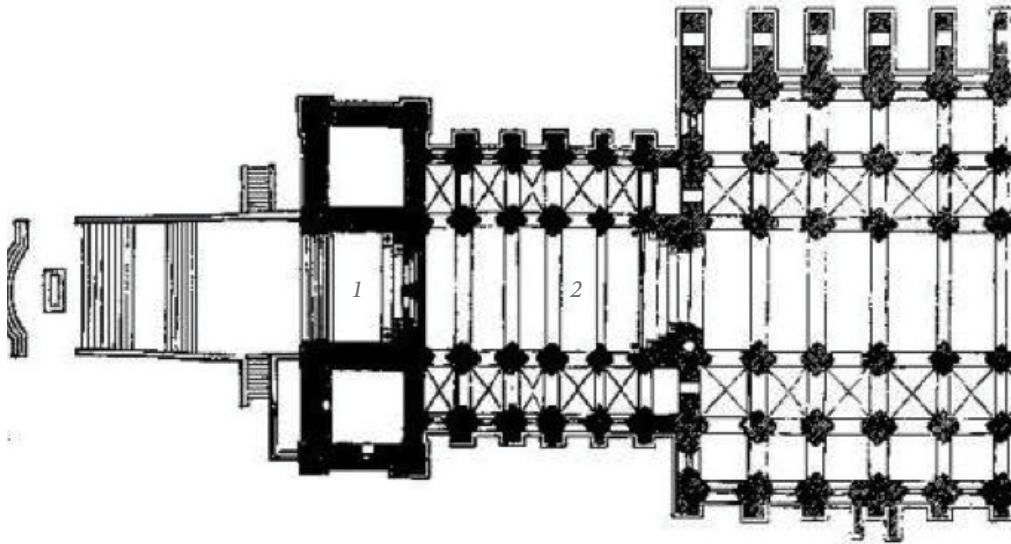
The linearity is interrupted by the two *transepts*, which are emphasized by domes from the inside and crossing towers from the outside. These transverse axes differentiate the longitudinal basilica into several areas. The domes consequently articulate and differentiate the crossing, and subsequently enrich the spatial variety (see image 2.8). Like the towers, both sides of the transepts were seemingly symmetrical in their overall shape but their detailed and complex individual articulations – windows, doors, towers and brickwork – reveal a much more complex structure. This perhaps relates to the fact that the monastery was located at one of the sides, ultimately requiring the church to be at least slightly asymmetrical (see image 2.5). The longitudinal basilica – with all its spatial articulations – finally culminates in the verticality and centrality of the barrel-vaulted *ambulatory* with its adjoining apsidal chapels, which is often called a chevet (see image 2.9).

This chevet – which because of its proximity to the second transept can hardly be spatially defined or comprehended – constitutes the ending of the longitudinal axis started at the entrance. The church was connected to the monastery at the first transept, causing a certain dissimilarity between either side of the church (see image 2.5)

Image 2.3 >
Sketch of the
narthex of Cluny
III, also see image
2.5, no. 2

Image 2.4 >>
Sketch of the nave,
also see image 2.5,
no. 3





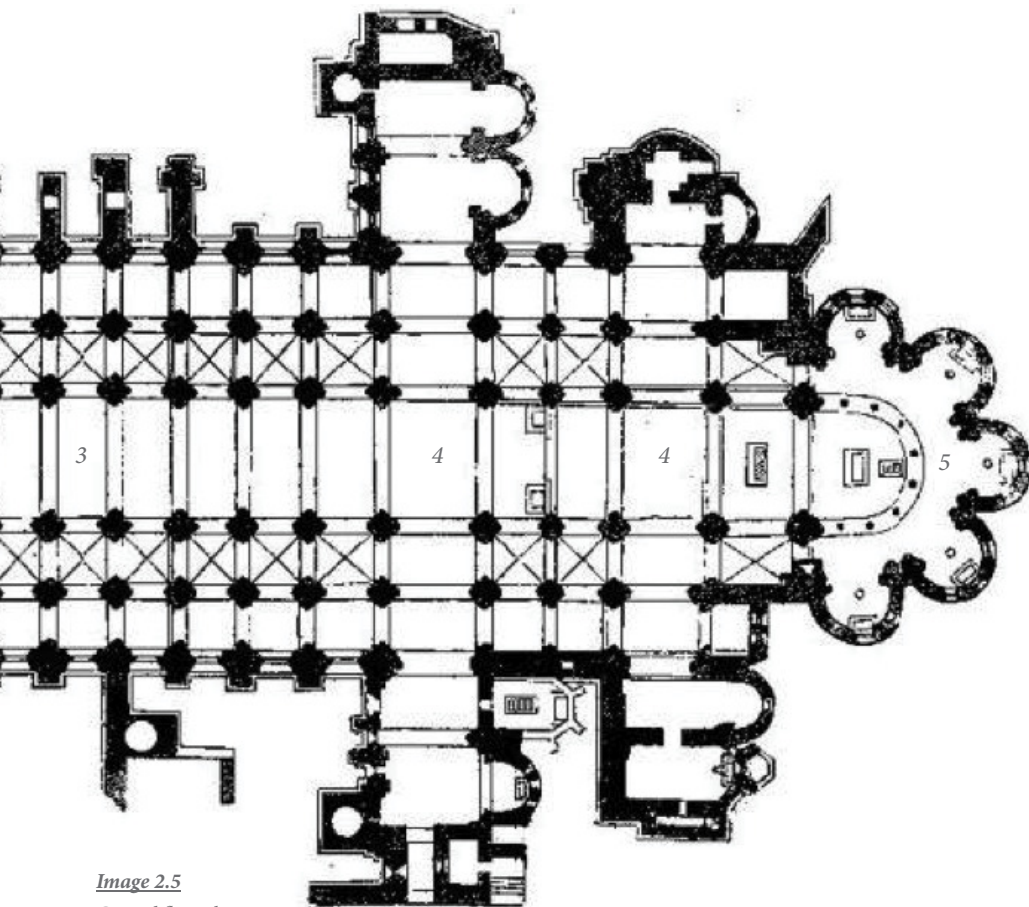


Image 2.5

*Ground floor plan
of Cluny III, 1:800*

- 1. Entrance*
- 2. Narthex*
- 3. Nave*
- 4. Crossings of nave
and transept*
- 5. Ambulatory*

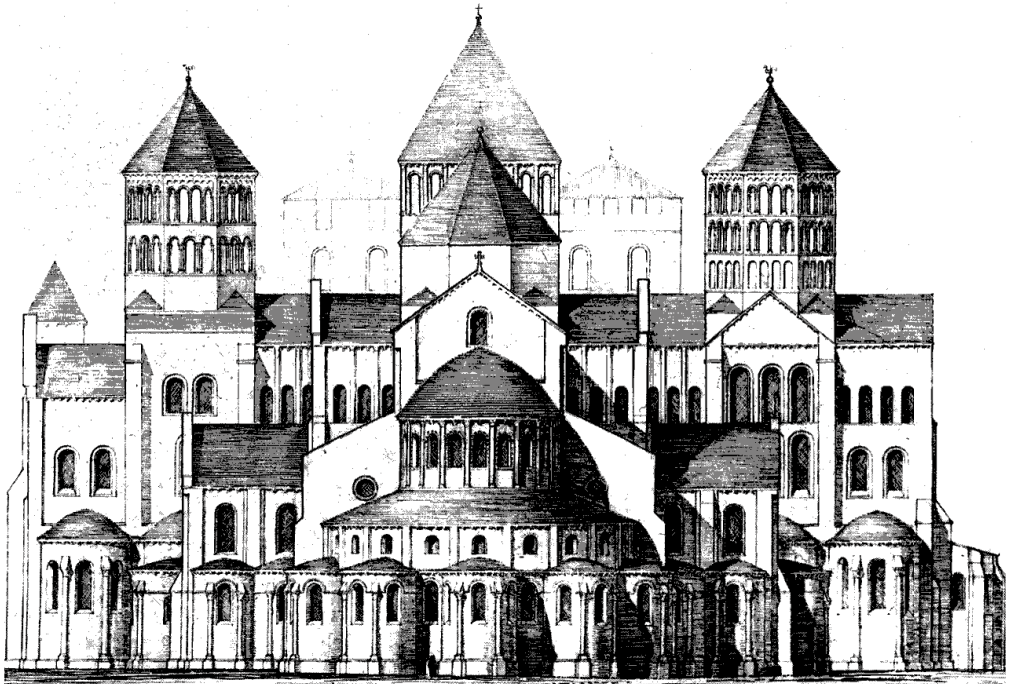


Image 2.6
East elevation of
Cluny III,
scale 1:800

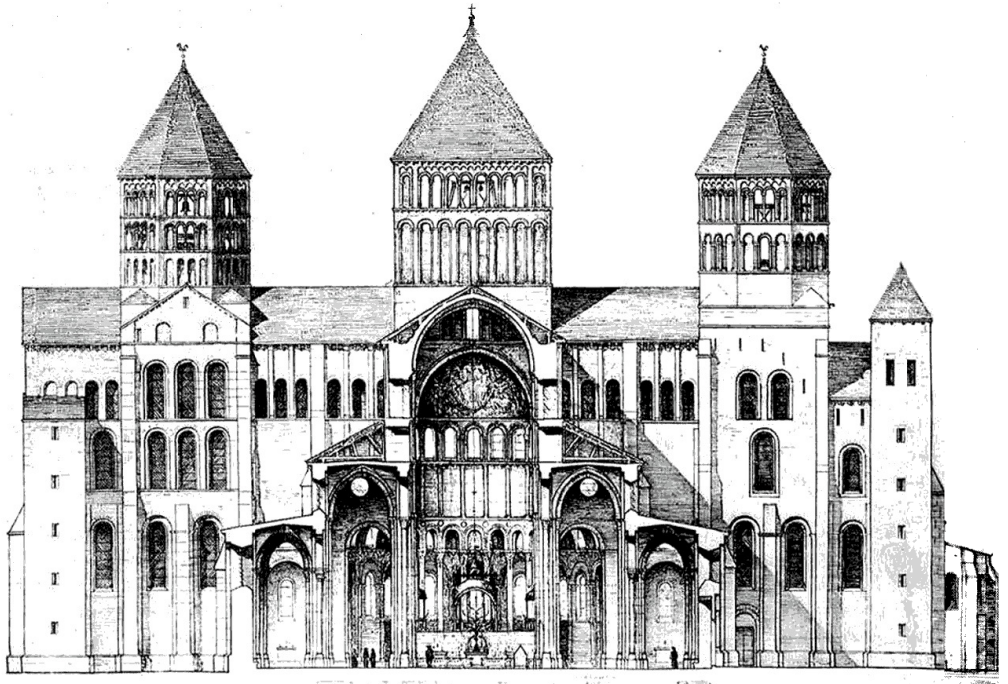
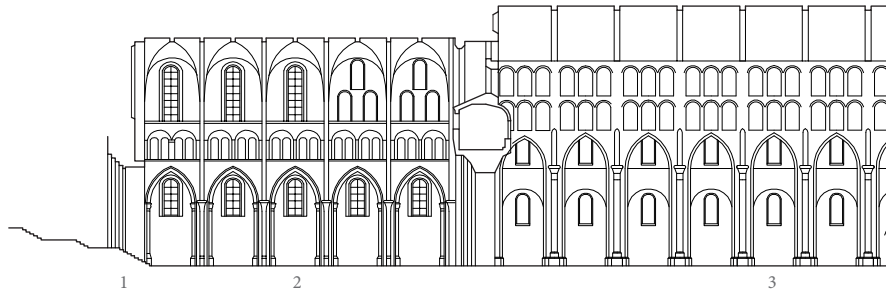


Image 2.7

*Section of Cluny III
at the nave, parallel
to the elevation.*

scale 1:800



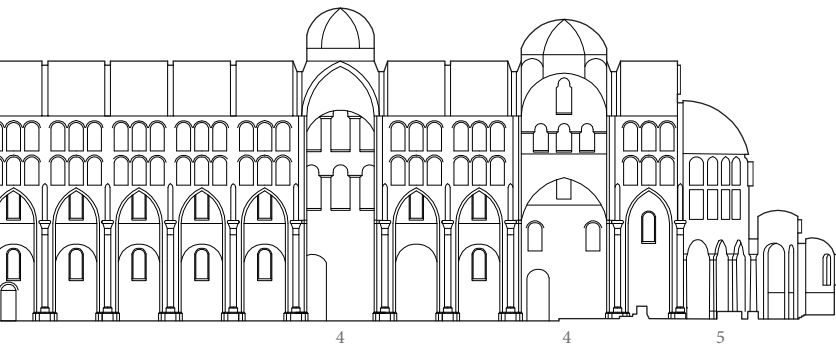


Image 2.8

Sectional Sequence

of Cluny III as

described at the

spatial composition

scale 1:800

1. Entrance

2. Narthex

3. Nave

*4. Crossings of nave
and transept*

5. Ambulatory

The clear articulation of independent parts – although already emphasized in the sequence of spaces on the inside – is expressed even more vividly in the exterior (see image 2.10). The church – with its main body, towers, chapels, annexes, staircases doors and windows – seems a depiction of a fortified *city*, a true and vivid *abbild* of a *Himmelsburg*.

2.1.1.3 Other Romanesque Examples

Apart from Cluny III, we will shortly discuss the spatial composition of some other Romanesque buildings in order to distinguish some striking empirical characteristics that have not yet been discussed. Apart from the *additive* nature – or rather an additive *spatial arrangement* – other important aspects are the use of *spolia* and the generation of *meaning*.

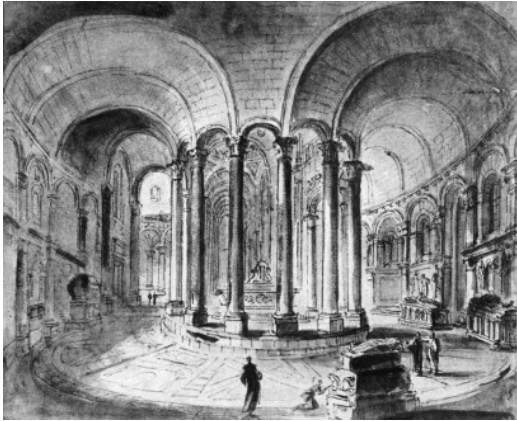
As discussed earlier, the development from the Romanesque church into the late-medieval cathedral caused a complete formal integration of elements into a new and integrated totality, which heralded the arrival of the Gothic cathedral. As Kees van der Ploeg argues, this formal integration bears witness of the ‘*Unwillingness of Gothic architecture to create symbolic meanings*’ since the expression of parts becomes subordinate to the generic expression of the totality.¹⁹ This means, that meaning was more easily expressed in Romanesque architecture – due to the relative independence of elements – than in Gothic, where meaning could only be transferred in a more generic sense, or through additional decorations. Thus Hans Sedlmayer’s claim, who considers the Gothic cathedral *als abbild des Himmels*²⁰, is congruent with this theory since the medieval Christian church, which in its Romanesque phase was still able to produce multiple – even contradictory – meanings, became ‘degraded’ to a single non-specific meaning: that of depiction of the heavenly Jerusalem. So, whereas the columns in the Romanesque

19. Van der Ploeg, K. (2006). pp. 155

20. Sedlmayer, H. (1950). *Die Entstehung der Kathedrale*. Zürich: Atlantis Verlag.

Image 2.9 >
Sketch of the ambulatory and chapels (*chevet*), also see image 2.5, no. 5

Image 2.10 >>
Sketch of the exterior



church of – for instance – St Michael in Hildesheim were still separately articulated to such a degree that they could be considered reliquaries, their spatially integrated Gothic counterparts could only serve the entire structure (and thus meaning) that expressed the rather unspecific meaning of an image of heaven.

In the case of the chapels of Aachen and Nijmegen, respectively Carolingian and Romanesque, the individuality of the column is enhanced by the use of *spolia*. In Charlemagne's Palatine Chapel in Aachen, the meaning of the individual column was – also – used to convey a certain meaning: that of the legitimate succession of the Roman empire by the Frankish dynasty of king Charlemagne.²¹ The incorporation of authentic Roman columns and mosaics – *spolia* – into the Aachen chapel was most probably intended to physically manifest this message. A similar attitude could have applied to Charlemagne's residence in Nijmegen.²² The area of Nijmegen, strategically situated where the ridge meets the river, was known for its Roman origin as encampment and – later on – as Roman city of Noviomagus. Charlemagne, likely enthused about the place for this reason, decided to build a residence on the hilltop. This residence, however, was unfortunately destroyed in the late 9th century.

Frederick Barbarossa – a later emperor – restored this neglected residence to its former splendour later, as he deeply admired Charlemagne, his predecessor.²³ Barbarossa – much like Charlemagne – used *spolia* to establish and present himself, as the legitimate heir of both the Roman and Carolingian empire: Carolingian capitals were combined with authentic Roman marble columns in the Romanesque Sint-Maarten-chapel (see image 2.11). These columns were most probably found on site and were both likely to stem from Charlemagne's devastated residence, who thus in turn must have used ancient Roman fragments.

21. Langereis, S. (2010). *Breken met het Verleden: herinneren en vergeten op het Valkhof in de Bataafse Revolutiejaren*. Nijmegen: Uitgeverij Vantilt.

22. Ibid

23. Ibid

Image 2.11 >
Columns as
Spolia in the Sint-
Maarten-chapel in
Nijmegen



The use of spolia is consequently more than a mere characteristic of Romanesque architecture, it is a means to establish independence of elements and thereby the generation of a meaning or message, in these cases, that of legitimate succession or Imperial continuity.

In the San Miniato al Monte in Florence, finally, the medieval attitude is perhaps most illustratively displayed, by the erection of a Romanesque church on a crypt (see image 2.12):

'Nothing could demonstrate more concretely the 'dissonance' of arbitrarily juxtaposed formal patterns characterizing medieval artistic method than the total lack of relationship between the systems of support in the nave and crypt of S. Miniato. Whatever logic determined the spacing of the crypt colonettes, no possible arrangement could avoid a conflict with the foundations of the choir columns penetrating through the crypt vaults. But 'incoherence' should not be interpreted as 'insignificance'. The meaning of medieval abstractions, whether graphic or architectural, is contained not in the parts, but in the complex totality of the pattern itself.' (Saalman, 1968, pp. 34)

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2.1.1.4 The Romanesque and the Empirical

Medieval Romanesque architecture has shown to be compiled and complex. Although the plans of many Romanesque churches reveal an almost conceptual expression through their modular composition, their spatial articulation – as becomes apparent in exteriors and sections – does not result from conceptual grounds. Instead, Romanesque buildings often embrace complexities by the integration of multiple building models (Basilica, tower and Rotunda), by their additive nature, by the juxtaposition of different entities and finally by the independence of their

*Image 2.12 >
The solid brick column - that stands central in the image - pierces right through the crypt and completely ignores its order*



elements.

24. Van der Ploeg,
K. (2006).

The complex spatial composition of Romanesque churches derives – as the addition of the chevet illustrates – mostly from the complex nature of the activities taking place. Instead of building from scratch, incidents – such as old fragments – are embraced, but do not take over the entire structure; they are merely compiled elements that retain a relative individuality within the totality all elements constitute altogether.

The seemingly conceptual plan of a Romanesque church, such as that of Cluny, can perhaps be better regarded as a framework or blueprint – the order that is needed as background for the disorder to develop – for the independent geometrical components to burgeon from the modules as laid down by the plan. In that sense the concept of the plan is supplemented with that of the rhythmical articulation of several parts in the section, that of the exterior articulation, that of individual members and finally that of incidents. The aggregation of many concepts that thus defines the Romanesque cathedral can be compared to that at the Binnenhof. Whereas in Cluny III the interior appears as a clearer arrangement of the more chaotic exterior, the case is exactly opposite at the Binnenhof, where the *interior* is of a disorderly nature and the *exterior* is more clearly ordered.

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Romanesque architecture, in the end, seems to embrace the exploitation and fragmentation of architecture. Especially since Romanesque architecture was conceived long before the ‘intellectualisation’²⁴ of the architect during the *quattrocento*, its typical *indifferent* attitude towards a conceptual entirety is fundamentally empirical. It allows for true multiplicity that stems from building reality.



2.1.2 Sir John Soane Museum, John Soane – London(1796-1837)

2.1.2.1 Introduction

1. Darley, G.,
Middleton, R.,
Watkin, D.,
Richardson, M.,
Woodward, C.,
Dean, P., et al.
(1999). *John Soane
Architect - Master
of Space and Light*.
(M. Richardson, &
M. Stevens, Eds.)
London: Royal
Academy of Arts.

2. Darley, G.
(1999). *John Soane:
An Accidental
Romantic*. London:
Yale University
Press.

3. Darley, G.,
Middleton, R.,
Watkin, D.,
Richardson, M.,
Woodward, C.,
Dean, P., et al.
(1999).

< **Image 2.13**
*Facade of the
Sir John Soane
Museum*

Sir John Soane is known for his idiosyncratic and meticulous compositions of space and light, and – although he was taught in the Classical – it is the very violation and subversion of the Classical that typifies his most prominent works.¹ Apart from his collections of books, architectural fragments and busts, Soane's interests into the ambiguity of architectural elements is extraordinary, as his doors turn into walls, his mirrors into spaces and his spaces into niches. His private house at Lincoln's Inn Fields – since 1833's Act of Parliament known as the *Sir John Soane Museum* – is a built memorial to these personal interests. It conveys an extremely complex architecture which must be the climax of his oeuvre, and forms an accumulation of the architectural means expressed in his earlier works, such as *Pitzhanger Manor*, *The Bank of England* and the *Houses of Parliament*.

Sir John Soane was of humble birth, born the son of a bricklayer. When working for his brother William in Chertsey, he was introduced to James Peacock, the right hand of the promising George Dance the younger.² This rare opportunity led to a studentship at the Royal Academy and – because of Soane's ambitions – to a golden medal, ensuring him a travel to Paris, Rome and beyond. Being one of the fortunate *Grand Tourists*, Soane obtained the knowledge, acquaintances and resources that ensured a classical architectural career.³ His ambitiousness and eagerness to learn eventually made up for his humble birth – which he cunningly obscured – and he obtained a Coat of Armor, professorship at the Royal Academy and eventually even knighthood. Still, his personal life was a

painfully dreadful business. Apart from his anger, self-pity and continuous occupation, his family life was a substantial disappointment as Soane lost his dream for an architectural dynasty to death (John Soane junior died) and to theatre (George Soane had an interest in theatre instead of architecture). Utterly disappointed, Soane seems to have translated his architectural ambitions into a *house* instead of a *dynasty*, and thus created a monument, perhaps even an academy, to his architectural ambitions; a self-explanatory artefact of his architectural education: the *Sir John Soane Museum*. It has influenced architects and students ever since.⁴

4. Ibid.

5. Darley, G. (1999)

The Sir John Soane museum has been built over several decades. Soane bought the house at Lincoln's Inn Fields 12 in 1792 and has been experimenting with the house from that moment on. He deliberately chose to build his residence at Lincoln's Inn Fields because of the proximity to notable places such as the Bank of England, the Palace of Westminster and the Royal Academy.⁵ Having rebuilt no. 12, he later extended the volume towards no. 13. Later on, when his collection was almost pouring out of the available space – which it ultimately still does – no. 13 itself was also acquired and rebuilt, embellished with a stone protruded loggia with caryatids at the front. Eventually, even no. 14 was obtained and partly added to the house. In 1837, upon Soane's death, the *1833 Parliament Act* was enabled which locked the museum in its (then) current state and entrusted it to its trustees. The museum was accessible as a public museum from that moment on.

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2.1.2.2 Spatial Composition

We have to state here, firstly, that the route as initially laid out by Soane differs from the one that one can experience today. In order to reconstruct

6. Summerson, J., Soane, J., & Dorey, H. (2001). *A New Description of Sir John Soane's Museum* (10th ed.). London: The Trustees.

Porphyry is a material that was extracted in Egypt and used – especially – for Roman emperors. This volcanic rock was wine-red in colour and very rare, see: Verhofstad, J., & Touret, J. (2004, September). Porfier: Een Keizerlijk Gesteente. *GEA*, 3, 89-93.

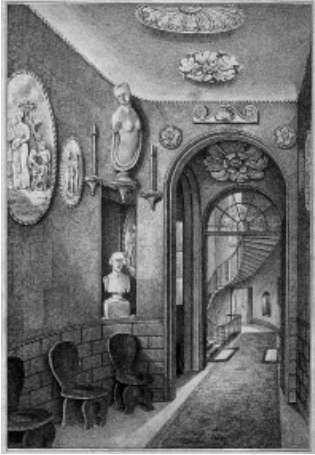
7. Ibid.

8. Ibid.

the intentions of the architect, however, we will examine the route as it was intended, starting at the entrance of no. 13.

The elevation of the museum on Lincoln's Inn Fields is quite classically organized, with a central axis of symmetry and a stone loggia projecting from the dark brick wall, topped by two caryatids and – peculiarly enough – embellished with four *gothic* pedestals; a typical trait of Soane. The museum is entered through a door in a small niche on the street, reached by a stairs which spans the void beneath (see image 2.13, 2.22 & 2.24). Upon entering the museum, the dark *Vestibule* frames a view on the softly lit *Staircase*. The ornaments on the imitation-porphry walls of the Vestibule are symmetrically arranged, almost mocking the trapezoidal space that is focused on the rounded corner at the far end of the room.⁶ This rounded corner – strangely enough – constitutes the fifth axis of symmetry in the Vestibule, by the arrangement of the bust and flanking pedestals. Yet this axis is itself ridiculed by the small void extending towards the inner hall – the second vestibule – and thus denying the solution of this fifth axis to solve the order in the trapezoidal space (see image 2.14 and 2.21, no. 1 & 2). This all concerns just the first two of the collection of roughly a hundred rooms. The Vestibule is accompanied with a second Vestibule, or *Inner Hall*, which is in turn flanked by a niche that is connected – via a similar void to the one mentioned earlier – to the staircase. This Inner Hall's dome is crowned by a cast Rose based on the Temple of Mars Ultor in Rome.⁷

The *Staircase*, to which the First Vestibule served as frame, is again characterized by its trapezoidal shape (see image 2.21, no. 3). This shape is caused by the slanted wall that emanates from the shape of the initial parcel, a shape that Soane could have effaced while rebuilding no. 13, but has deliberately chosen not to.⁸ The walls around the Staircase are



painted in imitation-marble. Along the stairs several recesses, paintings and mirrors enrich the sequence. From the *Staircase*, one door leads to the *Breakfast Parlour*, the other to the *Library* and *Dining Room*. The *Library* and *Dining Room* have an ambiguous relation. Both are coloured with Pompeii-red paint and yet, they are materialised and ornamented in different ways. The ‘floating arches’ – for they are ‘hollow’ and not supported by columns causing them to create a tangible tension – are the only thing that separate the two rooms (see image 2.15). Similar floating arches also top the bookcases on the walls of the *Library* and the mirror in between the two reflects the library space in such a way – above eye-height so the beholder cannot see himself – that the visitor is not able to grasp the spatial configuration of the house. The convex mirrors in the corners of the *Dining Room* subsequently enhance this spatial alienation, and are joined by mirrors on the hearth and another pair flanking the window, creating puzzling views when moving between these rooms.

<< Image 2.14
 Sketch of the
 Vestibule or Hall,
 Inner Hall and
 Staircase, also see
 image 2.21, no 1,2
 & 3

< Image 2.15
 Sketch of the Dining
 Room (in front) and
 the Library (in the
 background), also
 see image 2.21, no.
 4 & 5

From the *Dining Room*, two routes arrive at the rear: one via the *Little study* and the *Dressing room*, the other via the *Breakfast Parlour* (see image 2.21, no. 6,7 & 8). The *Breakfast Parlour* is either a combination of three rooms, or one room divided in three sub-rooms (see image 2.18). The lowered and domed ceiling is topped by an octagonal lantern containing coloured glass, and is flanked by two elevated spaces which culminate in yellow tinted skylights. Thus the independence of these interrelated spaces is not merely articulated by their shape but also by the intensity and colour of the light. Mirrors of all sizes more intensely alter the appearance of the room when moving through the space. Because of the convex mirror at the spandrels of the dome, the space itself becomes its ornament. This space is perhaps the nucleus of Soane’s spatial poetry as he himself acknowledges in his ‘*Description*’ from 1830:



<< **Image 2.16**
Sketch of the
Dressing Room, also
see image 2.21, no. 7

< **Image 2.17**
Sketch of the Little
Study, also see
image 2.21, no. 6

> **Image 2.18**
Sketch of the
Breakfast Parlour,
also see image 2.21,
no. 8



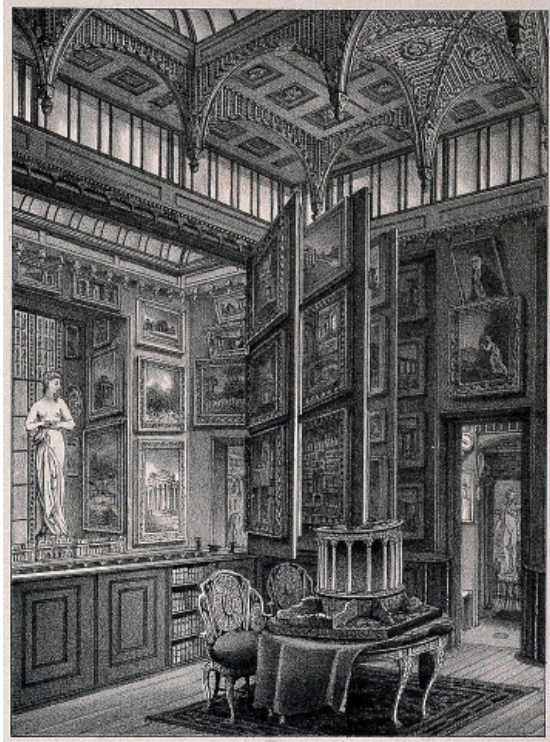


‘The view from [the Breakfast Parlour] into the Monument Court and into the Museum, the mirrors in the ceiling, and the looking-glass, combined with the variety of outline and general arrangements in the design and decoration of this limited space, present a succession of those fanciful effects which constitute the poetry of Architecture.’ (Soane, [1830]2001, pp. 68)

Upon exiting this *Breakfast Parlour*, one arrives at the *Dome*, a square space that is one of many that altogether constitute the multi-storey rectangular rear of the museum (see image 2.23). The rear is differentiated into several areas: *the New Picture Room (top left)*, *the Dome (also see image 2.19)*, *the South Passage, Colonnade, Corridor* and eventually *the Picture Room (top right, see also image 2.20)*. The rear is not only differentiated in form (narrow or wide) and materialisation (stone, wood or plaster), but rather by the intensity of the light, which is filtered by the multitude of floors and voids at the rectangular rear. Thus, a variation of light – *overexposed* and primary in top spaces such as the *Student’s Room* and the *Dome*, *claire-obscur* and tertiary at the *Catacombs* and the *Sepulchral Chamber* and *softly lit* and secondary in the *New Picture Room* – accentuates and dramatizes the spatial sequence here. By means of lanterns, holes, grilles and frames, light is filtered from the roof-lanterns, slowly pouring into the darkest vaults of the basement. Important works of art here are the Egyptian sarcophagus of Seti I, the paintings by Hogarth and some etchings of Piranesi at Paestum.

< **Image 2.19**
Sketch of the
Dome with Seti
I’s sarcophagus
beneath and a
statue of Apollo
above. Also see
image 2.21, no. 9

Beneath the *Picture Room*, Soane realised his *Monks Parlour*. This space, partly doubled in height, is linked to the *Picture Room* when its panels are folded open. The ceiling of the *Monks Parlour* thus becomes a niche-extension to the *Picture Room* above and is materialised and composed accordingly. This creates an ambiguous situation when the



panels are closed as the top and bottom of the Monk's Parlour completely differ in appearance without an obvious cause. The rather Gothic Monks Parlour, then, is ornamented with Gothic fragments from Westminster Abbey and breathes a completely different atmosphere – medieval instead of classical – from the adjacent catacombs.

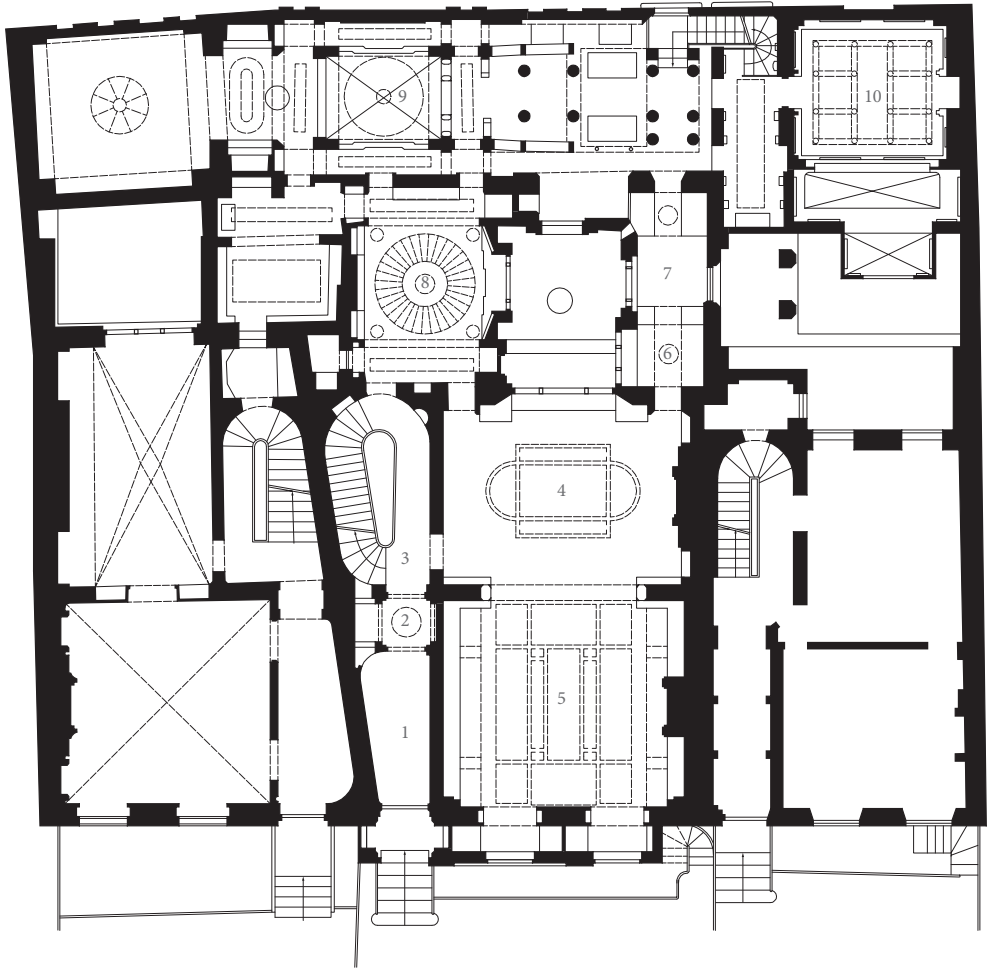
Apart from these, there are a lot more ambiguous rooms such as the *Model Room*, the Northern and Southern *Drawing Room*, the *Ante Room*, the *Courtyards* and the *Shakespeare Recess*. All of these have yet another shape, lighting and materialisation, creating the richness and variety of experience that so strongly characterize Soane's architecture. The hierarchy of spaces seems to be infinite: a room has a *poché* that itself houses another *poché* of another *poché* that is still articulated by a separate skylight and flanking mirrors. Axes of symmetry shift, turn and wiggle as one crosses adjoining spaces. Doors disappear in specifically designed niches. Transitions are dramatized and at times made virtually intangible. Darkness and lightness, narrowness and wideness and, finally, introversion and extraversion are handled with great care in order to arrive at the desired sequence, and the house, consequently, is designed from the inside out. An external view from the first floor reveals the chaotic roofscape that articulates the abundance of lanterns, ceilings and cupolas so distinctive for something designed from within. Every room is defined differently, and the difference between scenery and encased, between *servant* architecture and *served* art, becomes imperceptible at times, when casts, urns and busts become pillars, walls and ornaments. The intriguing spatial arrangement of space can only be comprehended by a thorough study of the spaces when visiting and thus *experiencing* the house; plans, sections and even perspectives – although already quite elucidative – fall short in explaining its complex character:

< *Image 2.20*

Sketch of the Picture Room with the panels folded open. The niche that is thus established, constitutes part of the ceiling of the Monk's Parlour beneath. Also see image 2.21, no. 10

‘The plan of the house at 13 Lincoln’s Inn fields looks, at first, like an alteration. But Soane completely demolished the existing building when he bought it, though the house was neither old nor ill-built ... Soane creates what appear to be perfectly regular, symmetrically framed spaces. He then wraps layers of space around these skeletal frameworks and proceeds to subvert the geometry of these conglomerate spaces by dematerialising the architecture, flooding the walls with light from concealed sources ... The prime pockets of space are connected to one another in the most extraordinary ways, rarely on the main axes, as one would imagine, but obliquely and tangentially ... Soane’s spaces cannot be apprehended as a whole. They have to be experienced.’ (Robin Middleton, 1999, pp. 29-30)

Image 2.21 >
Ground Floor Plan,
of Lincoln’s Inn
Fields 12, 13 & 14.
1:200
1. Vestibule/Hall
2. Inner Hall/
Second Vestibule
3. Staircase
4. Dining Room
5. Library
6. Little Study
7. Dressing Room
8. Breakfast Parlour
9. Dome
10. Picture Room



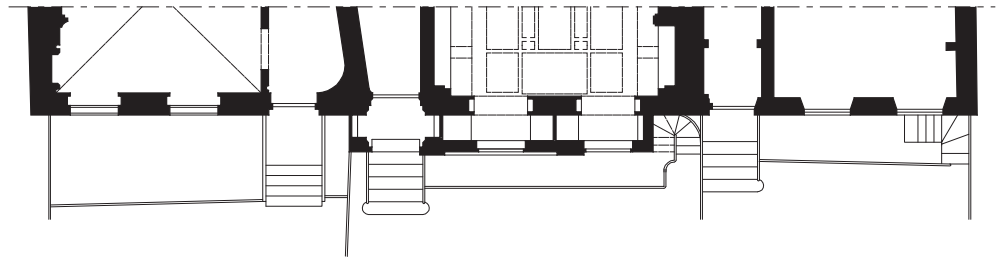


Image 2.22
Elevation at the
Front of the Muse-
um and horizontal
connection to spaces
beyond (bottom).
scale 1:200

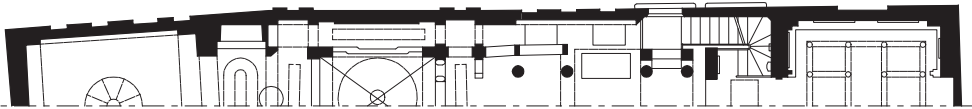
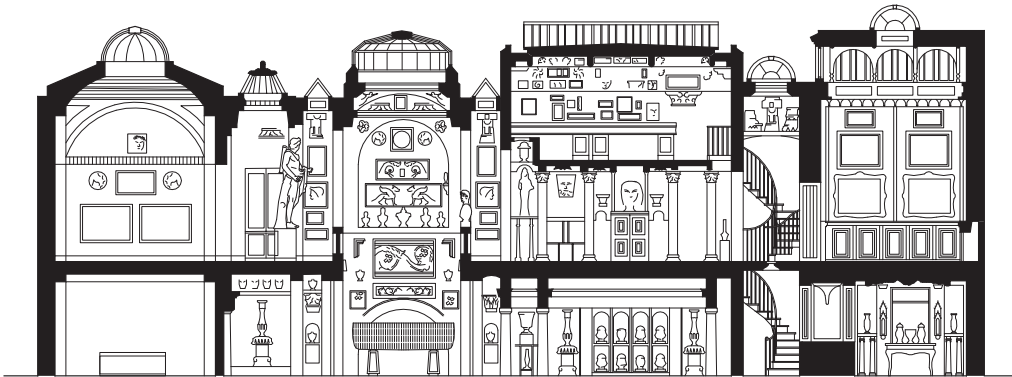
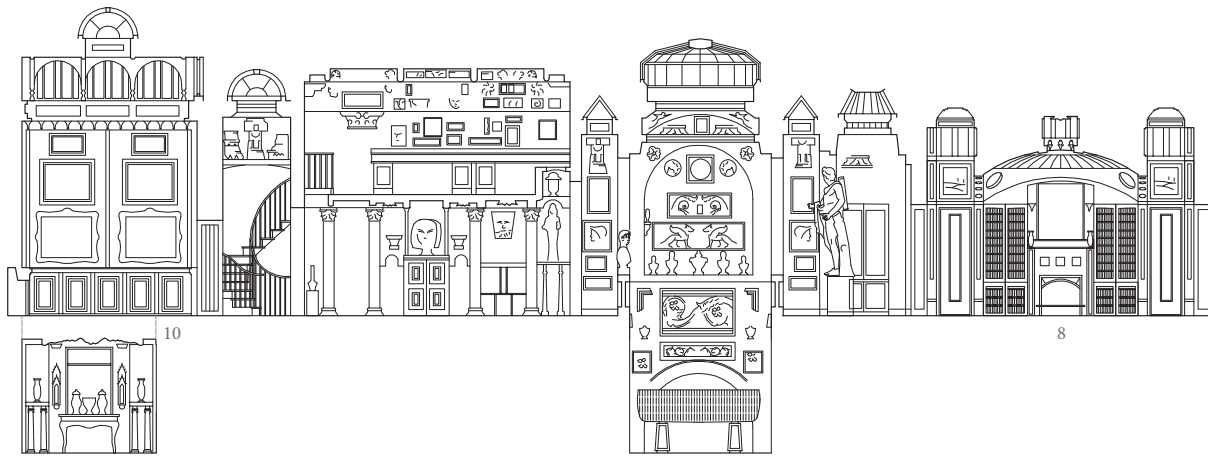


Image 2.23

Section at the lower rear of the Museum, parallel to the elevation, and beneath it, the position of this section in the plan. scale 1:200



10

9

8



Image 2.24

*Sectional Sequence
of Museum as
described in the
spatial composition*

1. Vestibule/Hall
2. Inner Hall/
Second Vestibule
3. Staircase
4. Dining Room
5. Library
8. Breakfast Parlour
9. Dome
10. Picture Room

2.1.2.3 Soane and the Empirical

So how did Soane arrive at this complex architecture? The multiplicity of his work is perhaps best reflected in the interpretations and legitimizations of the house. Although the design carries out the grammar of Egyptian, (neo-)Classic and Gothic style, it is also tied to the Romantic (the romantic painter J.M.W. Turner was a close friend), the Modern – Soane’s interest in light and his lack of ornament were striking for some – and the postmodern, as legitimate messiah of – amongst others – Venturi’s *Complexity and Contradiction*.⁹ This multi-interpretive reading of Soane exhibits the inherent complexity of his architecture: it is essentially empirical for it prefers a multitude of characters, styles and shapes over a unitary whole. Many argue that it was a combination of Soane’s extended knowledge of the Classical and his curious fascinations for the ambiguous that enabled him to design beyond the traditional Classic notions of architecture.¹⁰ In one of his lectures, he exposes this desire for the ambiguous when advocating van Brugh’s Blenheim: *‘The great extent of this noble structure, the picturesque effect of its various parts, the infinite and pleasing variety, the breaks and contrasts in the different heights and masses, produce the most exquisite sensations in the scientific beholder, whether the view be distant, intermediate, or near’*.¹¹ Yet, the aspect of time also influenced the design since the many private frustrations of Soane often resulted in shifts of perspective, consequently implying another alteration of his work.¹² Indeed, this can be derived from the plans throughout several years, which show a complex structure which constantly alters rather than a systematic replacement of the existing. Mallgrave, in the end, explains his odd genius from the complex historical context: *‘Soane, as we have seen, was trained as a neoclassical architect,*

9. Howard, E. B. (Producer), & Grigor, M. (Director). (2005). *Sir John Soane: An English Architect, An American Legacy* [Motion Picture].

10. Darley, G. (1999).

11. Soane, J. (1812-1815). Royal Academy Lectures on Architecture (V and XI). In H. F. Mallgrave, *Architectural Theory Volume I: An Anthology from Vitruvius to 1870* (8th (2013) ed., pp. 218-220). Oxford: Blackwell Publishing.

12. Darley, G. (1999).

13. Mallgrave, H. F. (2013). *Architectural Theory Volume I: An Anthology from Vitruvius to 1870* (8th ed.). Oxford: Blackwell Publishing. pp. 306

14. Spuybroek, L. (2015). The acrobatics of the Figure. In G. W. de Vries, *ARCHESCAPE: The Piranesi flights* (pp. 3-10). Amsterdam: 1001.

*but with his interest in character and almost eccentric fascination with ruins, he is very much an architect at the forefront of emerging baroque and picturesque sensibilities.*¹³

Another important feature is that of Soane's illustrator, Joseph Gandy. He refined Soane's architectural ideas with strongly romantic, theatrical and picturesque renderings when drawing up perspectives of successive spaces, thus articulating that most crucial aspect of *experience* and – while providing Soane with his much needed '*visual argument*' – finally laying bare his romantic potential:

'[Gandy] ensured that Soane's interiors were a picturesque journey; the succession of brilliantly lit and profoundly dark spaces was, in his hands, a validation and evocation of Soane's intent ... Although we now see much of Soane's work through Gandy's eyes, it is tempting to wonder whether Soane had begun to see his buildings as they might appear to Gandy, before he had himself laid a line on paper' (Gillian Darley, 1999, pp. 146)

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As Soane much admired Piranesi, whom he met just before the latter died, Gandy seemed to be the perfect companion to illustrate Soane's architecture, for, much like Piranesi's '*speculative drawing*' – drawing as a practice and goal in itself¹⁴ – Gandy mastered the act of *drawing as a practice in itself* and might – as Gillian Darley insinuates above – even have inspired Soane to exploit and take pleasure in anticipating his romantic architectural scenes.

Soane's empirical architecture in the end seems to stem – for a fox he was – from the ambiguous nature of the person. On the one hand true to his Classic fundamentals, on the other true to the tendency towards the romantic and picturesque, so compellingly displayed in the work of

his close friends – Gandy and Turner – and consequently allowing him to think beyond the rigid and plain principles of classicism, with yet that sense for the prescient modern. It enabled him to arrive at the picturesque without becoming trapped in a plain imitation of it.¹⁵ Soane proved able to derive genius from the duality which was – indeed – able to give birth to an *idealised empirical*. By the implementation of characters and fragments from his oeuvre – a kind of arrogant *spolia* containing his domes and Gothic influence from Westminster, his rooms and parlours from his Pitzhanger Manor, his sequences referring to his works at the Bank of England and his crypts and vaults influenced by his work on tombs – he was able to implement a rich multiplicity of space on a site that cropped and confined this very space. This enabled Soane to twist, wrap and wiggle spaces around restrictions to be composed in an extremely ambiguous composition. And to all this he added his curious fascinations, his collections, thus projecting another layer of (classic) *spolia* – his antique collection of casts, urns, mirrors, vases, fragments and busts – on an already fragmented composition of spatial *bricolage*.

Yet, as his *Act of Parliament* reveals, the rooms and collections were ought to be kept *‘as nearly as possible in the state in which Sir John Soane shall leave it’*.¹⁶ He consequently created an ambiguous and seemingly random sequence, containing countless contradictions and numerous curiosities, but poured all in an exact and unbending shape, in a meticulously composed structure which caused his *Lincoln’s Inn Fields* to be both fundamentally empirical and un-empirical at the same time.

15. Soane argues in his Lecture VIII that the Gothic is beautiful when legitimate, true and innovative – like the medieval Gothic – but is highly pitiful when plainly imitated, see: Soane, J. (1812-1815). Royal Academy Lectures on Architecture V, VIII and XI. In H. F. Mallgrave, *Architectural Theory Volume I: An Anthology from Vitruvius to 1870* (8th (2013) ed., pp. 325-329). Oxford: Blackwell Publishing.

16. Summerson, J., Soane, J., & Dorey, H. (2001). pp. 126



2.1.3 Utrecht Town Hall, Enric Miralles – Utrecht (2000)

2.1.3.1 Introduction

1. Mastenbroek, B. (2001). Design is a stroll on the beach, *Architecture is a roller coaster. Archis, 1*, pp. 109-113.

2. Bevan, R. (2000, July 7). Enric Miralles: 1955-2000. *Building Design, 2*.

The Utrecht City Hall – *Stadhuis Utrecht* – by Enric Miralles is the summit of historical juggling. Even before the latest addition – or rather reconfiguration – by Miralles, the building consisted of numerous historical layers that were painstakingly hidden behind lowered ceilings, partitioned walls and thick layers of plaster and timber. Miralles released these historical elements from their hidden sources and exposed – even exploited – them. The City Hall was deprived of its amiable envelope, thus exposing all those inherent complexities that trouble the historically grown canal block. Once the envelope was ripped apart, the orientation of the city hall block was turned 180 degrees – rear became front and vice versa – which enabled the labyrinthine structure, that became more and more congested over the centuries, to be ordered by a generous supply of air, light and space (see image 2.25). To the very level of rooms, windows and doors, elements have been removed from their origins, causing this architectural ‘Frankenstein’ – as Bjarne Mastenbroek put it – to become a totally different thing that still contains the recognizable curiosities of other things.¹ The design was consequently more of a process, a process which added to Miralles’ otherwise quite typical vocabulary and led to an extremely complex composition of architectural and historical elements that suited the inherent historical significance of the town hall.

Enric Miralles was an architect that was taught at the *Escuela Tecnica Superior de Arquitectura Barcelona*. He later started working at the office of Piuon and Viaplana.² After some time, Miralles parted ways with this Spanish office and set up an office of his own with Carme Pinos

< [Image 2.25](#)
Facade and main entrance of the Utrecht Town Hall

– his first wife – to explore more radical and irregular forms. Their work was conceived at a time that architecture was flourishing in post-Franco Spain and a neo-modern avant-garde – including architects like Pinos and Miralles – took up the stage.³ Miralles and Pinos owe much to the deconstructivist vocabulary without actively taking part in the underlying ideological and theoretical argument:

‘Miralles had no theoretical extrapolations, violent anti-establishment angst or high critical theory. Yet his mass of exquisite drawings – which look ambiguous but are direct instructions on what to build – are in the Deconstructivist heartland. His projects are certainly not aggressive: they are unashamedly poetic and exuberant. But the swirling, jagged forms are the headline not the whole substance of the work’ (Rattenbury, Bevan & Long, 2004, pp. 145-146)

3. Zabalbeascoa, A. (1992). *The New Spanish Architecture*. New York: Rizzoli.

4. Rattenbury, K., Bevan, R., & Long, K. (2006). *Architects Today* (Paperback ed.). London: Laurence King Publishing.

5. Lapunzina, A. (2005). *Architecture of Spain*. London: Greenwood Press.

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The Igualada cemetery and the Olympic archery prove the fruitful collaboration at the office of Pinos and Miralles. Still, the latter later set up a new practice with Benedetta Tagliabue – called EMBT – and they designed projects like the Scottish Parliament building, the Utrecht City Hall and Parc de Diagonal Mar. Miralles’ grammar is defined by sculptural, tilted and distorted forms, historic and topographical reference and change or movement – of any kind: human, spatial or temporal – accompanied by a sense for meticulously precise translation of drawings into substance. All results in a concrete and ‘spatially dramatic’ composition that signifies the preceding sculptural sketches.⁴ Another aspect of Miralles’ architecture – his penchant for *spatial narrative* – is denoted at his *Igualada cemetery* where several architectural elements, sequences and spaces seem to refer to ‘stranded ships’ and ‘rivers of souls’ while the route descends into the ground and is thus literally buried.⁵

6. Speranza, P. (2016, January/February). Time as a Medium: Early Work of Enric Miralles. *Architectural Design*, 86(1), pp. 60-65.

7. Miralles, E., & Tagliabue, B. (2002). *EMBT: Enric Miralles, Benedetta Tagliabue: work in progress*. Barcelona: Col·legi d'arquitectes de Catalunya. The movement of a girl unlocking her bike from the railing in one of his collages on page 164 testifies this fascination with movement and time, while being adorned with alterations of perspective and light.

8. Jacobs, I., Pietersma, A., Santen, B. v., Wilmer, T., & Jamar, J. (2000). *The town hall of Utrecht*. Utrecht: Matrijs.

According to Philip Speranza, Miralles embraces time and tries to employ spaces, materials and elements in such a way that they signify the passage of time in order to create a richness and variety of experience.⁶ The change of days – for instance – can be felt from the projection of the sun through a specifically designed hole, that of seasons through the accumulated needles of trees in the seams between large stones and that of years and decades through the decay of lighting fixtures and wooden planks in the concrete, causing employees to fill these holes and add another layer to Miralles' intentionally designed *palimpsest*. This obsession with time seems to stem from a more general one with change: change of spaces through shifting perspectives or viewpoints and change of time through the altering appearance of architectural elements as a result of the movement of space or time. This is all compellingly illustrated by the importance of the *promenade architecturale* in his work – that provides visitors with constantly altering viewpoints – and his typical collage-like photo's that *capture* the movement and mutual relation of space and time.⁷

Miralles' Utrecht City Hall is constructed over several years and involved a complete reconfiguration of the existing ensemble. The complex is basically an assemblage of small canal houses. Although the City Hall initially only comprised one house, it consumed several others and consequently grew steadily into a complete city block over the years. This block was partly enwrapped by a Neo-Classical elevation by J. van Embden in the early 19th century.⁸ Eventually – once the complete block was property of the municipality – a wing was added at the back in the 1930's. It was in this state that Miralles found the gloomy conglomerate before he reinterpreted its properties. His architectural juxtapositions – which are sometimes almost architecturally cruel – are found in every room and as a result no room is the same. The most radical changes

have been concentrated at the – former – back. Here, he tore down the 1930's addition in order to 'rediscover that internal rhythm' and made this tangible by the 'passageway that traverses it all'.⁹ He also reinterpreted the sequential hierarchy of space and consequently placed the entrance at the back, protruding from the existing neo-classicist façade while flanked by a series of bricolage-like new buildings of his signature. His attitude towards the existing is quite extraordinary for the late twentieth century architectural climate in the Netherlands, since most similar projects – as Arjen Oosterman notes – 'can do little else than slightly ignore the existing' by imposing it with 'a more or less elegant modernism'.¹⁰

'The respect shown for historic buildings [by contemporaries of Miralles] is based on the deeply felt lack of an essential relationship with them ... The relationship between Miralles, the site and what is already there is of a different kind. He takes what is there to be valuable, but no more valuable than the new. Neither is the opposite an a priori starting point. Everything is material, and has to be processed to a greater or lesser degree in order to work spatially. From objet trouvé to encroachment to demolition, every device is deployed in this spatial game.' (Oosterman, 2001, pp. 99-100)

2.1.3.2 Spatial Composition

The Utrecht City Hall is approached from a square that was intentionally enlarged by the rupture of the building envelope. This provided the square with more space, which formerly belonged to the courtyard of the block. The square was made even more important by the placement of the new main entrance and corresponding additions at the newly conceived square (see image 2.25 & 2.26). Miralles' consequent exposure of the inside of the disfigured canal block and his subsequent glorification of this

9. Miralles, E., & Tagliabue, B. (2002). pp. 161-164

10. Oosterman, A. (2001). A Glorious Accident. *Archis*, 1, pp. 96-108.

Image 2.26 >
Picture of the new 'front' featuring fences, cars and bikes. The entrance is situated on the left, emphasized by the extruded staircase. Lines in the pavement indicate former canal houses and the water bins refer to the river of which some revetments have been found underground during the renovation. The benches at the right are inspired on Rietveld's Zig-Zag chair.

Image 2.27 >>
Entrance(right) and narrow start of the Staircase and outer wall of Civic Hall (far left), in the foyer. Also see image 2.34, no. 1, 2 & 3



maimed, naked and deformed architectural body – that is staged towards a deliberately accommodated audience – feels like an act of architectural sadism that reveals an almost Boschian peculiarity. It goes without saying that this reversal of the traditional block-typology causes problems: cars park in front of the façades – as if they feel no obligation to free the façade of unattractive features – and dubious people gather around the Rietveld-inspired benches situated in the junction that formerly belonged to the internal courtyard.¹¹ Fences and nets – that seem to be added later – are silent witnesses of the obscure activities that are accommodated by the dark edges in the corners of the building. And it is in one of these corners – that is marked by the protruding staircase – that one enters the building.

From the *Entrance* one arrives in a double-storey *Foyer*, which is dominated by the free-standing *Civic Hall* (see image 2.27). This hall is made free by Miralles' cuts and demolitions of floors and walls surrounding the hall. Removed pieces of plaster still refer to these demolished walls. Some paintings from the municipality its collections decorate the walls of the free-standing hall and its doorways are made more visible by separate pieces of parquet in front of them, effectively making tangible the space that these doorways seem to claim. At the far end of this foyer is a rather odd door – seemingly constituting a mediation between a small and large door – that indicates the entrance to the main *Wedding Room* (see image 2.28). At the other end, right next to the main entrance, a small stairs leads to the *Main Staircase* (see image 2.29) that establishes the starting point of the *Promenade Architecturale*. This promenade finds its origin at the narrow beginning of the stairs, then ascends while increasing in width – much in contradiction with a classical stairs – and via a glass hallway, that provides one with views of the square, is later continued on the balcony, flanked by the civic hall, and ends in the

11. Seidel, B.
(Performer).
(2016, October 3).
*Architectural Tour
Town Hall - Gilde
Utrecht. Utrecht
Town Hall, Utrecht.*

***Image 2.28** >
Peculiar door that
provides access to
the Wedding Room,
which is situated at
the ground floor, at
the far end of the
foyer, underneath
the Council Cham-
ber. See also image
2.34, no.6.*

***Image 2.29** >>
Internal view of the
staircase that was
protruded from the
existing Neo-clas-
sical building. See
also image 2.34,
no. 4.*





Image 2.30
View after ascending the stairs, with the council chamber situated at the far end of the balcony. The wedding room is situated underneath the council chamber. The civic hall is situated on the right. See also image 2.34, no.5.

Image 2.31

Interior of the council chamber with the 'floating' beams that once supported the floor that is now removed. See also image 2.34, no.6.



Council Chamber (see image 2.30 & 2.31) .

On the way, bare brickwork, illuminated pieces of veneer and oak planks seem to function as *guides* along the route. Once arrived in the *Council Chamber*, the palimpsest nature of the building – revealed by the rhythms of beams and different shades of bare brickwork – functions as the stage for the chairs and desks of the council members. From the council chamber, the route curls around the free-standing civic hall and then follows the U-shaped plan of the building. The *U-shaped hallway* (see image 2.34, no. 7), or rather corridor, is differentiated into a sequence of different spaces, as Miralles inserted slanting and curving walls that differentiate both the offices along this hallway and the hallway itself. Halfway the corridor, Miralles' new built addition meets the existing in a junction that is emphasized by the composition of several staircases near the junction (see image 2.32). The staircase also addresses the level differences that typify the City Hall since it is an aggregation of individual houses.

From this staircase, one notices the slanted-facade-inspired addition of Miralles which is said to refer to the traditional Dutch canal-fronts.¹² The corridor continues in the new built wing and ends at the free-standing early twentieth century façade, the only remnant of the 1930's extension (see image 2.33). This typical course of the corridor can be found on all floors, curving around the civic hall – on the top floor this is an 'internal square' – then turning right at the junction and ending at the staircase near the freestanding 1930's façade.

12. Seidel, B.
(Performer).
(2016, October 3).
*Architectural Tour
Town Hall - Gilde
Utrecht. Utrecht
Town Hall, Utrecht.*

Image 2.32 >
*Staircase at the
junction of old and
new. The steps are
materialized using
steel, wood and
concrete producing
an almost melodic
sound when
ascending the stairs.
See also image 2.34,
no.7.*

Image 2.33 >>
*The deformed
1930's facade.
See also image 2.34,
no.7.*



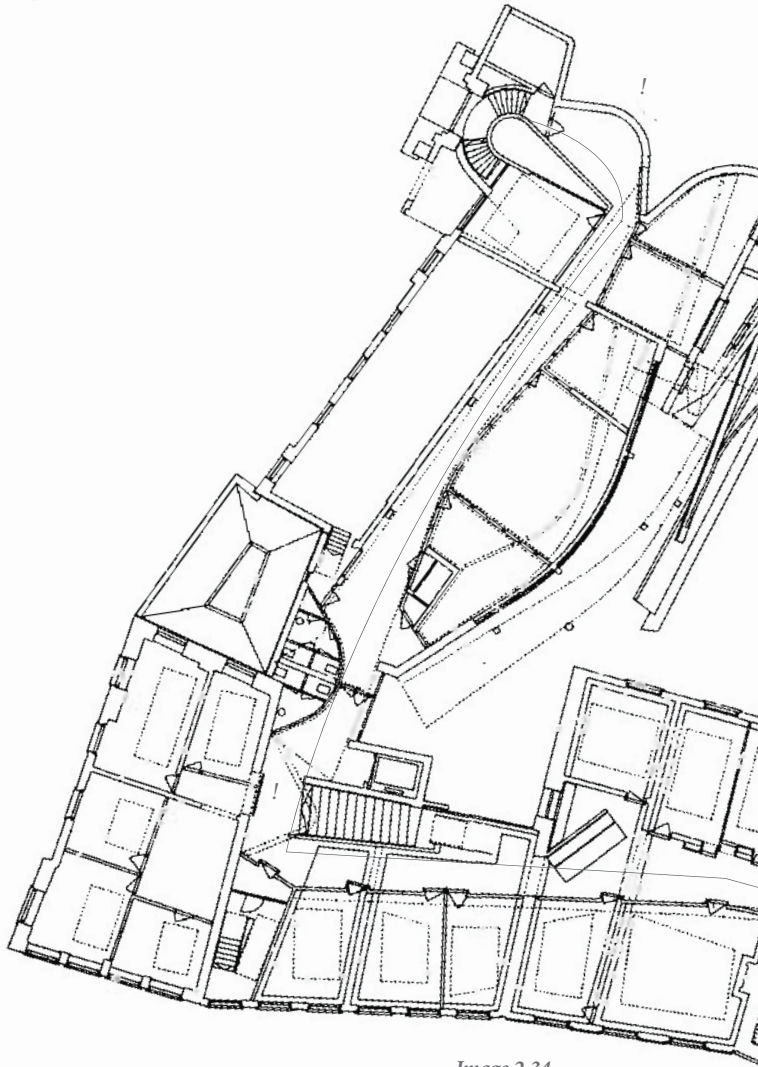


Image 2.34

Plan of the first(!) floor, 1:400

1. Entrance (on ground floor)

2. Foyer (on ground floor)

3. Civic Hall

4. Staircase

5. Promenade

*6. Council Chamber (Main
Wedding Room lies under it)*

7. U-shaped Route

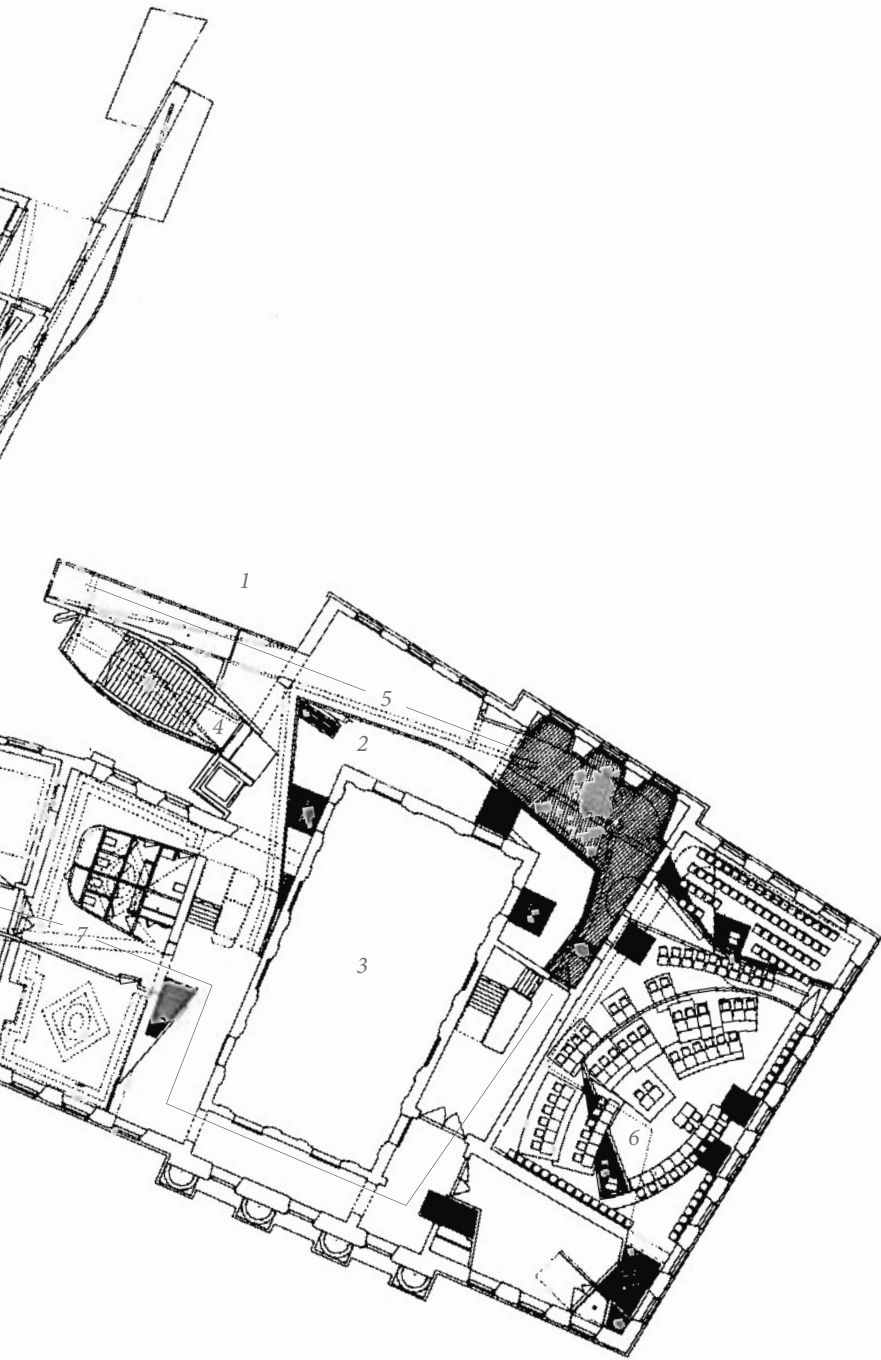




Image 2.35
*Elevation at the
Entrance of the
Utrecht City Hall,
scale 1:800*



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Image 2.36

Section parallel to
the elevation of the
Utrecht City Hall
scale 1:800

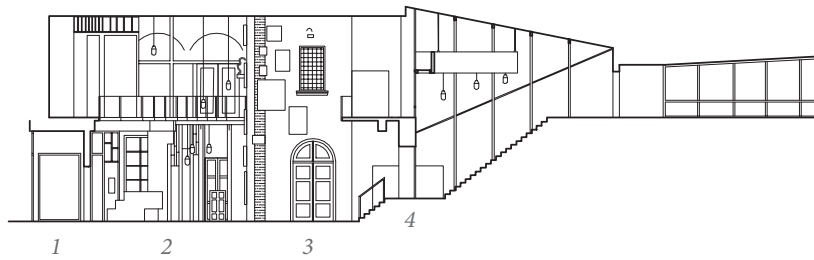


Image 2.37

*Sectional sequence of the
Utrecht Town Hall, 1:400.*


- 1. Entrance*
- 2. Foyer*
- 3. Door to Civic Hall*
- 4. Staircase*
- 5. Promenade*
- 6. Council Chamber*



5

6

2.1.3.3 Miralles and the Empirical

So the question is whether Miralles' town hall – given the seeming contingency – can be considered empirical. Fact is, that many of the elements inserted in the city hall have precedents in Miralles' oeuvre. Not only the metal frame in front, the twisted grid of the staircase, the curved and slanted walls along the corridor and the exact use of materials but also his more general attitude towards historical layers can be found in many other works. The historical contingencies, for as far as they are contingent, appear inferior to this typical *vocabulaire*. They are merely obscuring factors to conceal his quite obstinate signature – which can sometimes be found to be extremely plain, like the  - shape, that seems to stem from his autograph, and can be distinguished several times in the plan.

Here, contingency is a target in itself rather than a finding along the way. Contingency – or perhaps the empirical – becomes a concept.¹³ This is exactly the *'false complexity'* that Venturi denoted: a desired complexity rather than a complexity that originates from the complex nature of reality itself. Miralles' complexity is completely different from the complexity which Wittgenstein encountered when he wanted to center his window on both sides of his wall. The complexity Miralles proclaims originates from a desire and will thus *always* result in complexity, whatever the circumstances may be. He is biased and seems to lack the 'indifferentness' that is much needed. We have seen before that empirical architecture is not equal to total complexity or chaos.

Yet, Miralles – like Burroughs and Cage – freed himself from total control. Like Burroughs' magazines and Cage's radiowaves, Miralles' historical site contained things he did not control but decided to work with *a priori*. Furthermore, unlike Soane who secured his house

13. This is also argued by: Voorthuis, J. (2016, November). Meaning of Shapes. *Lecture series Architectural and Urban Theory*. Eindhoven.

UTRECHT TOWN HALL

in a certain state, Miralles' oeuvre reveals the desire for his buildings to change. The Utrecht town hall is thus *seemingly* empirical: both experience, randomness and contradiction appear in the discussion of Miralles' work. Yet, the contingency he finds is complemented – or perhaps weakened – with the conceptual contingency that stems from his stubborn architectural belief. This imposed and unnecessary complexity blurs the actual empirical nature of the conglomerate: the advocated architecture has taken over the empirical and becomes romanticized to such a degree that it quite dominantly orders everything and functions as a framework to make design choices upon (a concept): nearly every space is characterized by some bare brickwork, some wooden beams, a bit of translucent veneer and a bunch of odd-formed strand board plates. The empirical *has become* the concept and – to indicate the ambiguous paradox of the empirical – this is exactly why it is not, in its essence, empirical. Miralles' Utrecht City Hall is a detached reference to the empirical rather than a concrete embodiment.

2.2 Conclusion II

The concrete appearance of *empirical architecture* ultimately seems to stem from the complex nature of the activities taking place. Although many buildings only acquire an empirical shape through the accumulation of many years of alteration – and thereby escape the obstinate conceptuality of a certain designer or builder – it seems possible to *design* such architectural form. The establishment of the John Soane museum has shown that empirical architecture is very different from total chaos: its façades and rooms define order, in order to break with it.

The resulting spatial ensemble provides delightful alterations of view, silent corners and unexpected spaces while also allowing for unabashed hierarchy and symmetry. This is a quality that can also be distinguished at the Binnenhof. And, although conceptual architecture rules out empirical features, empirical architecture does not rule out conceptual characteristics. The conceptual order of the façade of the Sir John Soane house, or that of the plan of the church of Cluny III, initiate the base from which the multiplicity of concepts and characters is allowed to grow.

So far, the aspect of meaning, which we have distinguished at the Romanesque section, has been left unaffected. And, although the aspect has showed to correspond to empirical form – as the busts in Soane's house and the spolia in the Romanesque churches have proved – we will not elaborate any further on it, since it goes beyond our scope.

We must, finally, end to conclude that – even although it was our starting point – in empirical architecture, neither Chaos nor Order dominates. Instead there exists a balanced conversation between them that accommodates both their needs.

2.3 Bridge

I. Berlin, I. ([1953]2013). *The Hedgehog and the Fox* (2nd ed.). (H. Hardy, Ed.) London: Weidenfeld & Nicolson.

A reflection is needed now, where we exactly state what we *will* and *will not* do in order to determine a way to deal with empirical form.

Firstly, we must acknowledge that our examination of the three projects is essentially moral. And it probably needs to be, if we want to know what to do, and what not to. In the end, this *is* a manifesto, and it needs to be so in order to get to empirical architecture. That is our paradox.

We will, however, try to more concretely illustrate our ‘verdict’ by shortly discussing the philosophical theories of Wittgenstein, and – thereafter – what we will and will not choose to build upon from the references. At the end, we can subsequently construct a general way to deal with our paradox based on all that has been discussed.

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2.3.1 Wittgenstein, *The Tractatus* and the *Investigations*

That there exist two opposing philosophical tendencies has been illustrated before, by the metaphor of the hedgehog and the fox as initiated by Isaiah Berlin.¹ Turnovsky also acknowledges this opposition. He even places this philosophical debate in a wider geographical-historical context:

“The opposition between the conceptual/theoretical/rational and the empirical was expressed most vividly in the dispute between continental European rationalism and British empiricism during the seventeenth century. Here Spinoza, Leibniz, Pascal and above all Descartes; there Bacon, Locke, Hume and also Berkeley. As is well known, the rationalists gave priority to mental constructs, hypotheses and theories while the empiricists

emphasised perception, observation, sense impressions and 'givens'.

(Turnovsky, [1985] 2009, pp. 20)

The interesting thing now – that Turnovsky concludes – is that Wittgenstein can be assigned to both.² His *Tractatus Logico-Philosophicus* – constructing an absolute and ideal language – can be assigned to the conceptual, while the second, his *Philosophical Investigations*, looking at concrete existing language conditions, can be named empirical.

His first book is totalitarian, fully structured and hierarchical, filled with statements from '1. *Die Welt ist alles das der Fall ist*' to '7. *Wovon man nicht sprechen kann, darüber muss man schweigen*'.³ The meaning of a word is defined here by its relation to reality.⁴ Wittgenstein constructs a totalitarian hierarchical language that is an accurate picture of an ultimate reality.

His later philosophy, *Philosophical Investigations*, asked instead of stated, looked at ordinary language instead of ultimate reality: the meaning of a word was derived from its everyday *use*.⁵ And, consequently, reality was not an ultimate reality, but was shaped by language instead. Ambiguities and contradictions were *embraced* rather than *evaded* in this later book. It is here that Wittgenstein rejects general explanations: '*Don't think, but look!*'⁶

This latter philosophy, which naturally connects to the empirical, is a fertile ground for us to further sketch our path. Parallel to it, we could state that empirical architecture derives from *looking, using* and *experiencing* rather than from *thinking* and *theorizing*. Instead of propagating architectural concepts with an apodictic pretension, much like the *Tractatus* does – consequently ignoring any justification – we will have to look at concrete existing conditions. We should ask instead

2. Turnovsky, J. ([1985]2009). *The Poetics of a Wall Projection*. (B. Steele, Ed., & K. Kleinman, Trans.) London: Architectural Association.

3. Wittgenstein, L. ([1922] 1982). *Tractatus logico-philosophicus* (3 ed.). (W. Hermans, Trans.) Amsterdam: Athenaeum-Polak & Van Gennep.

4. Delius, C., & Gatzemeier, M. (2005). *Geschiedenis van de filosofie*. Groningen: Tandem Verlag. pp. 103-106

5. Wittgenstein, L. ([1953] 2002). *Filosofische Onderzoekingen (Philosophical Investigations)* (2 ed.). (M. Derksen, & S. Terwee, Trans.) Amsterdam: Boom.

6. Biletzki, A., &

Matar, A. (2014, March 3). Ludwig Wittgenstein. Stanford Encyclopedia of Philosophy, 1-14.

of state, see, hear and feel instead of think: How do I want to enter this building? What is already there? What material suits this function?

2.3.2 Constructing a Design Process

It is here that we must elaborately debunk Miralles' architecture. Does it look at *use*, at the *ordinary* or at *experience*? I do not think so. His balcony, for instance, is curved. Yet, the beams beneath it are straight, and meet each other in a rather clumsy way because of this decision. From use and experience one would make a balcony that would have been straight, like the civic hall flanking the balcony, so that the beams could neatly support the balcony. Miralles' stairs show the same unnecessary complexity. Their beginning is really narrow, obscured behind a wall and consequently, hard to reach. How does this relate to the complexity of going upwards? Should the stairs not be at least a bit inviting? What is the use of a stairs that no-one recognizes? The wall that hides the stairs is inserted by Miralles himself. How would anyone notice the stairs like this? And why is their start this narrow? Furthermore, the windows in doors are placed randomly – very much in contradiction with the tectonic material logic. Panels, doors and frames are forced into shapes that are not theirs, the logic of materials is repeatedly ignored: square strand board plates are constrained to parallelogram shapes and planks of parquet are bent into astonishingly amorphous forms.

When we see all kind of sculptural movements in the plan, the hedgehog has definitely revealed himself. The shape of spaces is determined not by the individual needs of the spaces, but rather by a nice 'sketchy' view on plan level. Indeed, it is said before, that Miralles' architecture is often a literal translation of the preceding sketches. Something no-one will ever experience. We even distinguish the M-shape

from his autograph – which has been more concretely expressed in the metal frame on the square. This definitely indicates that the shapes are not determined by the complexities at eye-level. The shapes are not determined by use and experience but by theorizing and thinking instead. And, there is not one space that was fully conceived by Miralles, that in some way matches a simple square space, an *ordinary* and most basic architectural element that has been used for millennia. Miralles has, empirically seen, lost it. He seems to evade *any* reference to the ordinary. Miralles' aim seems to lie in pure chaos rather than in empirical form. His concept seems to de-construct *everything*. And it is at this 'everything', that we should become suspicious. For when 'everything' can be explained from a certain term, we have entered the domain of the *concept*. Miralles advocates pure conceptuality and chaos at the same time, which results in an ambiguous – but not empirical – attitude: his complexities and contradictions are mostly unnecessary. The complete body of his architecture is subject to the chaotic concept. And that is exactly what we do *not* want, as argued before. It is therefore that we will not design like Miralles does. We will not design spaces from a plan. We will not try to de-construct any ordinary shape. We will not lapse into pure rebellion against order.

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Instead we shall design like Soane seems to have done. Soane's method comes closest to an idealised empirical. Soane's house is composed from an aggregation of individual rooms that all answer to the character of the activity taking place (Breakfast Parlour, Library, Dining Room etc.). The library, for instance, is designed from the perspective of the books. The rhythm of bookcases determines the width of the room. Two windows provide the room with the much needed light. The bookcases are then placed along the walls that stand perpendicular to the

BRIDGE

window, thus protecting them from direct sunlight. The books can be read on a chair that flanks the bookcase, and is placed at such a distance from the window, that it provides the reader with precisely the right amount of light. The height of the bookcase differs from the height of the room, and is of such a height that one can grab a book without having to climb a stairs. A hearth next to the chair ensures that the reader does not get cold. A small protrusion of the bookcase at waist-height, finally, allows the reader to temporarily lay down his books here, and put down his cup of coffee. This rather ordinary room suits the activities that take place. There are no slanting bookshelves, windows in the floor or curving walls as one would expect from Miralles. It is just an ordinary library, devoted to use and the experience of reading, storing, and grabbing a book.

This library, on its turn, has been connected to other spaces. Spaces that are clearly materialised and dimensioned in accordance with the activities they house. The accumulation of all these spaces is logically laid out in the available room on the plot. Major elements such as partitioning walls and stairs constitute the basic irregular structure in which the rooms are integrated. The rooms have been integrated in such a way that they logically establish a sequence. Important transitions are made tangible by alterations in symmetry, shape and light. Other transitions are hardly noticed. Sometimes the symmetry of individual rooms is subject to a certain individual element such as a window, door or niche which escapes the grid. The composition of individual rooms is *never* absolute. This is nicely illustrated by a niche in the Breakfast parlour which was important enough to be lit by a separate skylight, in order to constitute a separate entity within the order of the room. Some works of art seem important enough to dominate the architecture (void at Seti I's sarcophagus) and sometimes the architecture is embellished – or even

contradicted – by other works or artefacts.

In a similar manner, we can explain the appearance of the Romanesque church. The narthex, a waiting place, is designed for people that are waiting before they can enter the church. It is a bit smaller than the nave, but still conforms to its linear arrangement. Similarly the shape of the ambulatory and chapels can be explained. All these are again structured in such a way that they constitute a logical whole without ignoring the specific properties belonging to each part. The one transition is made very tangible by a tympanum, another made virtually impalpable through the use of columns. We are now able to sharpen our understanding of the meaning and process that precede empirical form.

The typical attitude, whereby a building is created from the complexity of activities, restricted by certain contextual conditions and finally overlaid with fascinations and individual impulses which form separate entities within the composition, characterizes an empirical process. All decisions are individually made on different levels of scale to accommodate *that* certain condition. The lack of an overall coherence of all interventions – of a general concept to which every individual design decision refers – is the *basic condition* from which to arrive at an empirical architecture. This rules out conceptualism, but it also rules out historicism and traditionalism. The consequent architecture is neither limited by a false simplicity, nor is it restricted by a causeless complexity. Sometimes, the façade complies with the rhythm of the street. Sometimes it does not. Sometimes a door is placed according to the order of a room, but sometimes it is also not. Every choice is made on a multiplicity of impulses that can never be fully accommodated or described by a general hegemonic concept. It is the accumulation of all these completely separate impulses at various levels of scale which are fit into a more or less coherent

7. With this archetype space I mean: a space that eventually contains the features to be able to be fully devoted to its activity.

whole, that founds the eventual *body* for an idealised empirical form.

It is like this that we should generally structure our design process. *Firstly* we must identify the activities that take place. These activities must all get assigned a space that pleasantly accommodates the activity. This space, then, must be designed from its use, from the *experience of carrying out the activity in that space*. What does the activity mean? What actions are performed? What kind of shape does this imply? What kind of lighting matches the activity? What kind of ceiling belongs to such a space? What kind of furniture do I need for the activity? Do I need a heavy or a light chair? A wooden or a metal bookcase? What material fits the activity? Does the activity imply a warm, a cleanable or a sound-isolating material on the walls? Would a view enrich the activity? What intensity of light do I need? What sound does harm to the activity? What sound does not? Do I want to visually separate the space into small units or is the entirety of the space more important? And so on ...

By carefully sketching as many aspects of each space as possible, we can determine a certain shape that is constituted from a broad variety of impulses. Naturally, we should be able to explain why we have made each choice on the basis of the activities taking place. A completely transparent wall for a library, for example, is hardly justifiable as books are damaged by the intensity of daylight. A curved wall would also be hardly justifiable as books are square, and a curved wall does not really accommodate a book. At the end of such a process we would conclude with a sort of *archetype-space* that answers to the features of the activity on as many levels as possible.⁷

Once we have drawn up a variety of these archetype-spaces, we

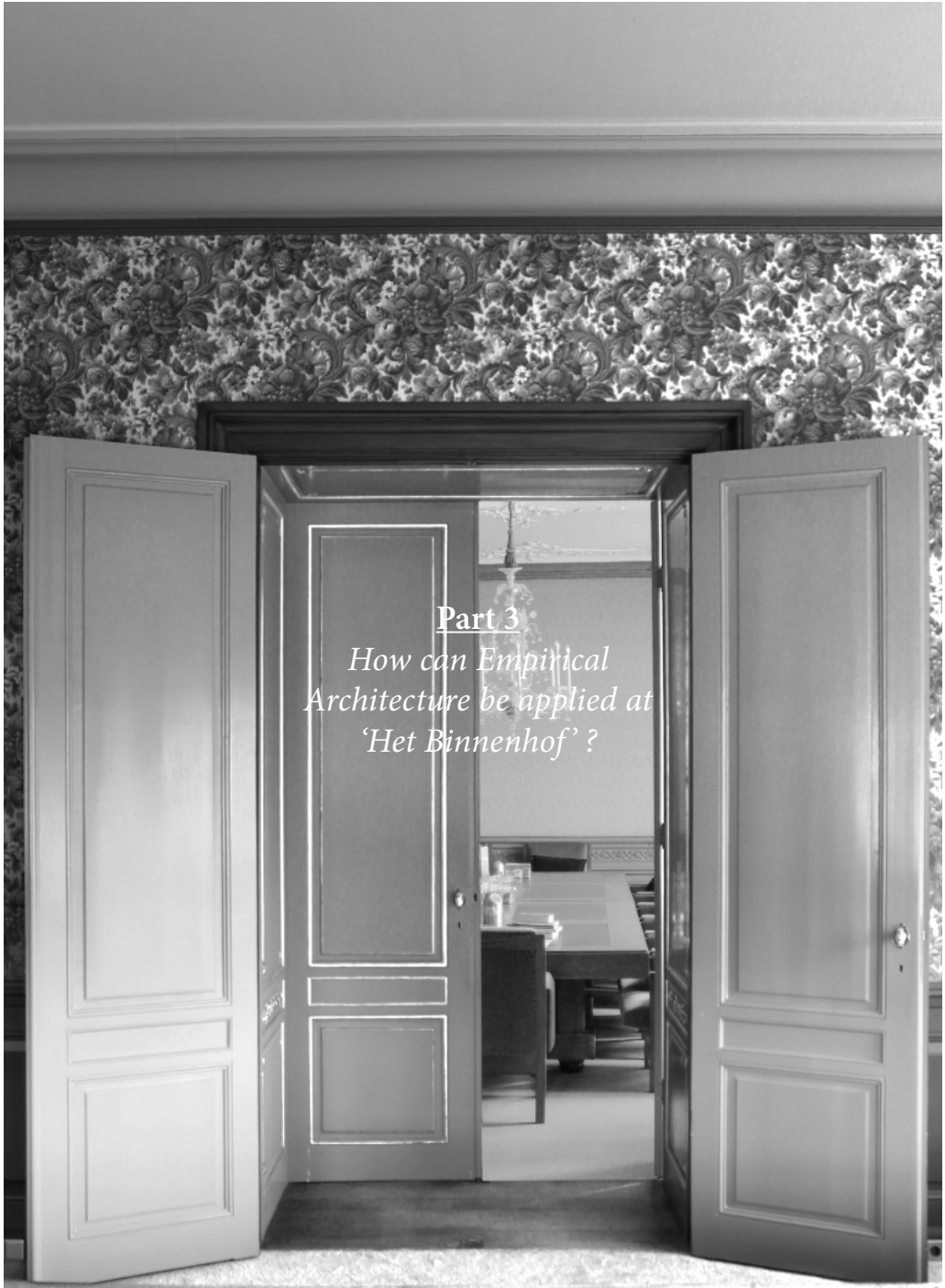
could - *secondly* - put these in a logical sequence. Where does the route start? How tangible is the connection between in- and outside? What spaces will be situated along the facade? What spaces will not be situated along the facade? Where do I want to come in? What space is situated on the first floor? What space on the fourth?

We can then design the building on the level that was earlier distinguished at the Binnenhof: that of rooms. The rooms that are experienced as a whole and consequently correspond with the level of perception. Naturally, the facade is also something one experiences and uses. And the facade can be designed accordingly. In the case of Soane, the facade is designed to answer to the rhythm of the street on the one hand – by the partition in three units – but also implies the unity of the three houses behind, by the articulation and protrusion of the central part, thus constituting an axis of symmetry that links them together, and articulates the unity of the museum.

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Consequently we have composed a method to get to empirical form without falling into a mere imitation of it. We have prescribed a very open-ended process instead of a concrete form, as Camillo Sitte, for instance, did. But – equally important – we have also ruled out the overall coherence that typifies a concept, by schizophrenically dividing the design decisions over ‘several persons’, that each get assigned a part of the design. And, even within these parts, we have to base each design decision on a question concerning an *aspect* of that space (the material of the bookcase, the profile of a step).

In the next chapter, ultimately, we will try to verify the path that has been sketched now. Is it indeed possible to get to empirical form? Or do we, like Zumthor, still lapse into aesthetic preferences and trends?



Part 3

*How can Empirical
Architecture be applied at
'Het Binnenhof' ?*

3.1 Design by Experience

Although many has been discussed and illustrated around the notion of empirical architecture before, we might wonder what it eventually means to design something empirically. Naturally, the previous chapter has provided us with a general idea. But where does one start? In order to concretely examine the employment of empirical architecture, we will firstly need a location. This location, logically, is the Binnenhof. But, that still does not really tell us anything. Do we start drawing up a new building? If we would rebuild, we would actually ignore our starting point, and, like others have done before, start *imposing* something. That is not what we want here. This would thus imply that we start from the *existing*. But, this still involves a problem: if we are to renovate in an existing and compound conglomerate, the result will inevitably lead to something empirical, as we would simply add a layer to a building that consists of many already. Would this not be similar to any other renovation assignment? And if it would, what is the whole point then?

I have been struggling with this question for indeed, the difference with any other renovation project initially seemed negligible. Other renovation projects, however, such as that of Nieuwenhuis which we have discussed before, do not seem to be designed empirically *within that which is inserted itself*. Nieuwenhuis operates as one architect, who inserts a design that is mostly, in itself, conceptual. His interventions clearly correspond to an underlying idea. The façades and walls that are inserted by Nieuwenhuis reinterpret the entire building and compose it into a coherent new whole. The level of design equals that of the assignment. If we want to answer our main question, therefore, we need to find out whether empirical design is possible *within* the additions of the renovation design

itself! Empiricality must arise *within the accumulation of our design interventions*. In other words, all design interventions should not be able to be reduced to a single conceptual whole. It is within the interventions, and not within the complete conglomerate, that we need to reveal the multiplicity that typified works such as the Sir John Soane Museum. It is within the area we re-design, that multiplicity needs to be found in order to relate to our main research question.

A *cause* is thereby needed. We need something to base our multiplicity on. We need a *design assignment*. A design assignment that introduces a *programme* that contains the activities and complexities from which we can derive a variety of several design decisions that altogether – hopefully – constitute our set of *empirical* architectural interventions. The result of all this would then be a partial re-design that instead of posing a concept, seamlessly integrates and adds to the variety of the conglomerate that establishes the *Eerste Kamer-building* along the *Binnenhof*.

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Programme

The design assignment comprises the area of the *Eerste Kamer* building which has been analysed earlier. Its borders are the delineations of the ‘design plot’. One of the main challenges in the conglomerate is that of *public accessibility*.¹ Because of the fragility of historic staircases, hallways and other important chambers, a new structure is desired that is able to prevent the precious building from excessive wear and tear. This separate domain for visitors could then take on some of the erosion that is caused by intensive use.

Another important issue is *vertical access*. There are three staircases in the *Eerste Kamer-building*, and only one elevator. Because of level differences, the elevator only provides access to a small amount

1. This has been concluded during several meetings with ir. Askon Eden, who has been employed at the Rijksgebouwendienst for several decades as urbanist, architect and interim chief government architect.

of rooms. And, two of the three staircases are of great historical value whereas the third is rather small, is not appropriate for public use. Therefore, an additional vertical connection is desired as well. On the basis of further inventories, a concise design brief has been composed:

Design Brief

<i>Library</i>	<i>50 m²</i>
<i>Entrance Hall</i>	<i>30 m²</i>
<i>Café</i>	<i>20 m²</i>
<i>Staircase</i>	<i>30 m²</i>
<i>Toilets</i>	<i>15 m²</i>
<i>Small lecture room</i>	<i>10-20 m²</i>

As outlined in the previous chapter, the proposed design method consists of:

1. Firstly, a thorough inventory of all the activities – starting from the design brief above – and a consequent spatial design for each of these activities in the form of a space. This will result in a number of individually designed spaces, designed in a certain ‘vacuum,’ totally disconnected from any context.
2. Secondly, these spaces will be related, to the facade and other spaces, and will then be wrapped around existing elements. They will be crammed, shifted and pushed through the existing structure. It is in this latter phase that compromises are made. Some spaces will be heavily deformed in order to fit and link to the elements around, whereas others will not. It is here that the empiricity, that we have earlier distinguished at the analysis, will arise in the form of all kinds of transitions between orders and characters: stairs, uneven or asymmetrical spaces, odd transitions and idiosyncratic dispositions. It is here that the variety that arises from the programme above will be shaped. It is here that I hope to establish empirical architecture.

3.1.1 Design of individual spaces

Library

Having established a general programme of the spaces needed, I started to, firstly, *look*. Like the later Wittgenstein argued, one must *look* instead of *think*. The library was the first space I designed and I subsequently started looking at the activities, use and experience of using a library. I took a look at my bookcase. I picked a book, got it out, read some text and put it back. Then I went to the University library to search for some more books. I tried to be as much aware as possible of the activities I carried out there.

Firstly, one enters the library and needs an information point. A map or computer or something in order to comprehend the spatial structure that typifies the arrangement of books. Then one distinguishes what portion of the space is dedicated to the theme one is interested in. One searches for that portion of space, finds it and starts looking for books. Many of them may seem interesting at first and many books are thus quickly viewed. Others put away instantly. Some are even partly read.

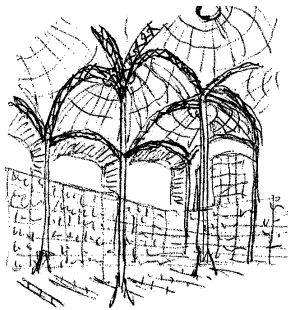
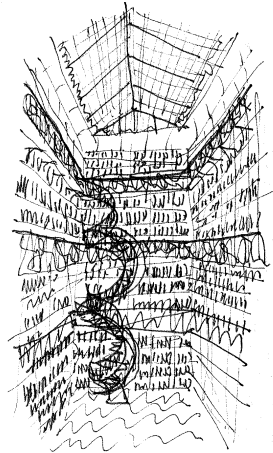
I notice that I especially miss a place to lay down heavy books that I quickly want to scan. Also, there is not so much light in some sections. I choose some books, take them with me and put the others back on the shelf. Then I walk towards the desk, and go home again.

Thereafter, I searched for images of all kinds of libraries. At every one of them, I wondered whether I would feel comfortable walking, sitting, searching and reading in the spaces I saw. I wanted to see as many as possible, to later make well-underpinned choices. In other words, I wanted to build an elaborate *Musée Imaginaire*, as Herzberger stated, of different forms in order to find an appropriate one for each of all the different aspects of the activities of searching, storing, getting

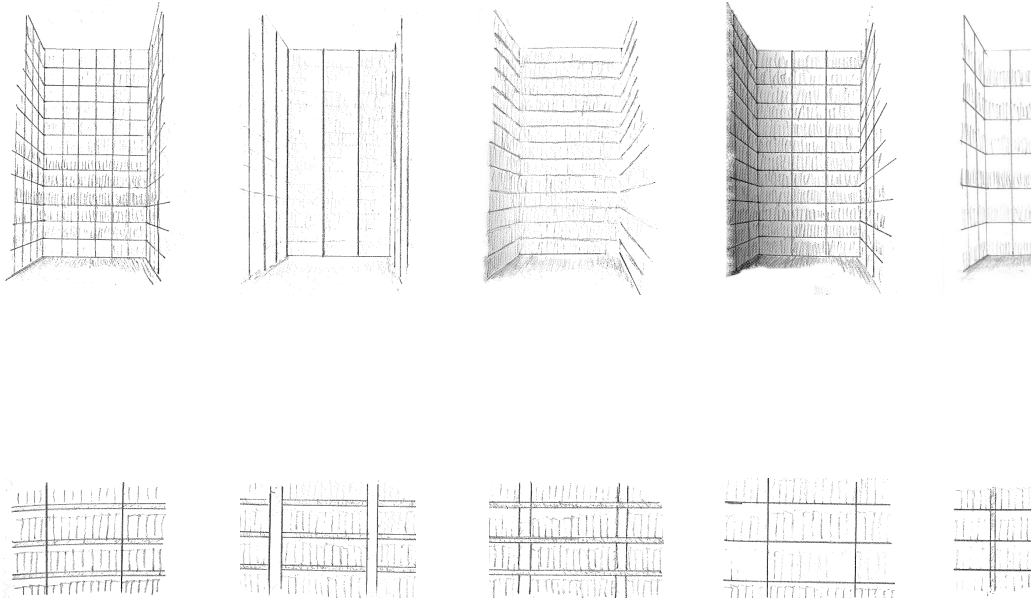
and reading books. At some libraries the act of searching seemed best supported by the simple and small square-shaped plan. At other libraries, the act of reading was best supported, by the desks flanking a window. At some libraries I liked the shape of the ceiling, at others I liked the floor. From all these libraries I have distinguished as many properties as possible that can be designed: the shape of the space, the shape of the ceiling, the shape of the floor, the materials of these three, the way the bookshelves are organized, their tectonic articulation (are the vertical or horizontal planks continuous?), their materialisation, their form, the way of lighting, the intensity of the light, daylight or artificial light, the way to organize the books in the room, the way the books rest on the shelf, and, the measurements and grid of the shelves. On all these aspects I made separate sequences of sketches. I firstly determined the basic shape. The form of the library of the Tweede Kamer – that has a small rectangular base and is mostly characterized by its height – best accommodates a certain clarity of organization: all the books can be seen instantly (see image 3.1). This shape also makes sure that the visitor is always in close proximity to the books and – perhaps more importantly – limits the amount of empty space. It is especially empty space that typifies many contemporary libraries I know. That by Jo Coenen in Amsterdam, that of OMA in Seattle and that of Wiel Arets in Utrecht, but also that of Aalto and Labrouste all seem to pay tribute to empty space rather than to the books they house. A simple square form with a small width and depth, however, makes sure that the visitor is always surrounded by books, is always in close proximity to them, as I consider most comfortable.

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***Image 3.1** >*
Some of my sketches of basic shapes of libraries: Duke Humfrey's library, Oxford Bodleian Library (top), Tweede Kamer Library, The Hague by C.H. Peters (center) and Bibliothèque Nationale, Paris by Labrouste.

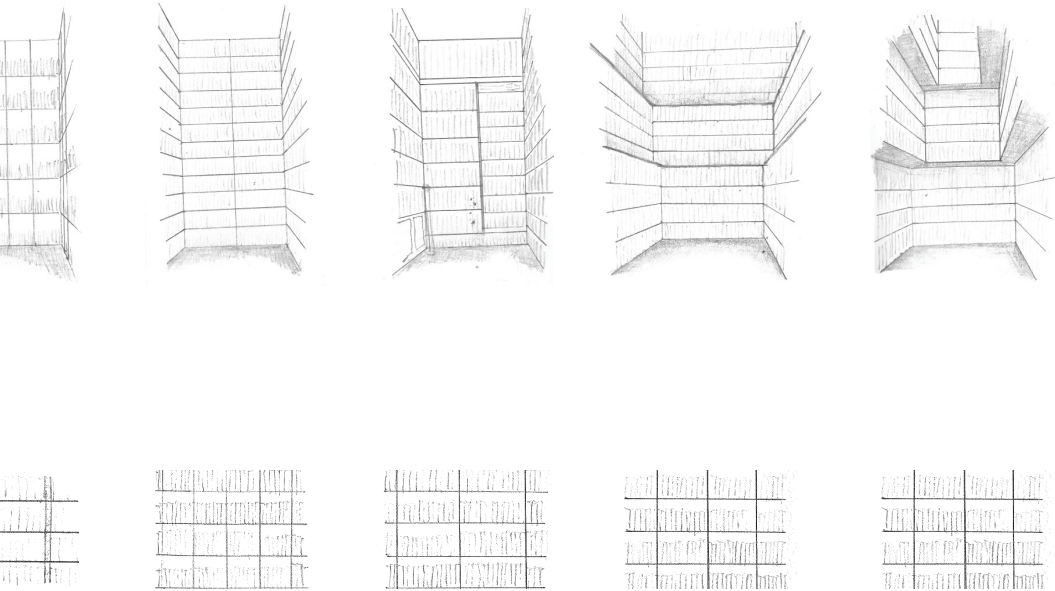


Labrouste.

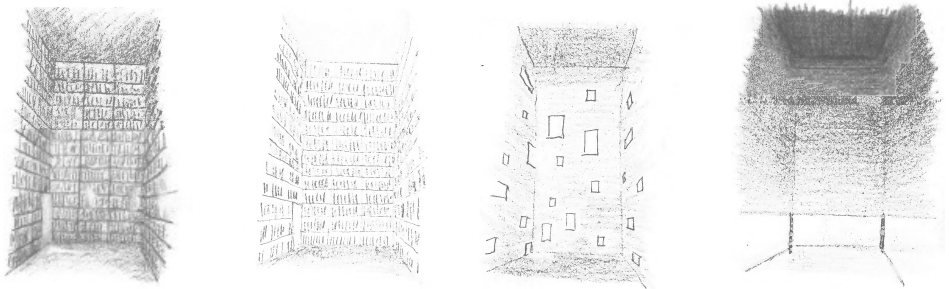


The precise articulation of the wall and shelves, in a rectangular library shape, has been explored above (see image 3.2). On both a small and a large scale, I tried to see how the articulation, material, thickness and proportion of the shelf-grid influenced the space. A space with a square shelf-grid, for instance, more resembled a room with lockers or a cemetery, rather than a library. Also, the accumulation of books would imply a more horizontal rhythm. The book, namely, is best organized in a horizontal way, so that every book is not leaning on any other, very much easing the act of grabbing a book. When, however, there are no

Image 3.2
Series of sketches of the influence of the shelf grid on the library space (top) and details of the exact articulation and spacing of the shelves (bottom).



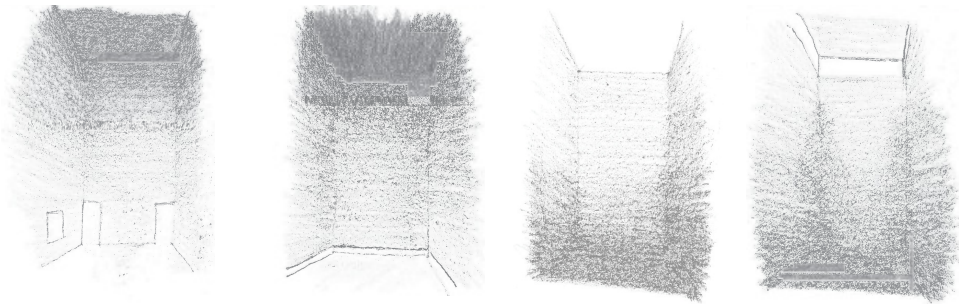
vertical members anymore, one cannot grab a book without slightly tilting the whole row. The domino effect that would arise when there are no vertical members at all, does not really invite one to grab a book. Therefore, I chose a grid somewhere in between the two (900x300 mm). A slight difference in thickness between vertical and horizontal members then accentuates the horizontal arrangement of the books. I also tried to protrude or set back the walls, which both, however, reduced the clarity of the spatial organization from my point of view, and I have therefore maintained the vertical walls of books.



For the aspect of light, especially a dark library seems appropriate (see image 3.3). When light comes in from beneath, however, it almost feels like the library is exposed and naked. The darkness and seclusion of a library to me appears to be very important. And indeed, if I picture myself in a transparent or light library, I feel very uncomfortable.

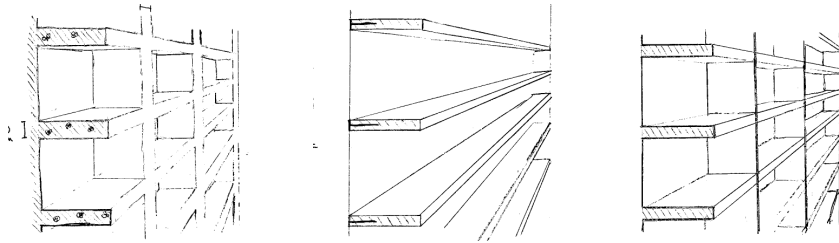
I remember being in the Stuttgart City Library, a completely white library that had more in common with a hospital or prison than with a library. The light was extremely bright and I thought it was horrible. A certain darkness and isolation, for some reason, please me. I want to get

Image 3.3
Series of sketches of the influence of light in the rectangular library space.

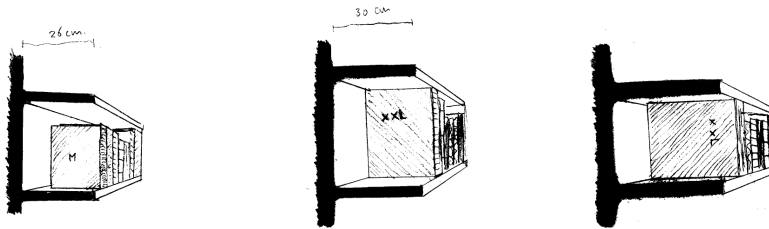


lost in the books, crawl through the astonishing multitude of knowledge without continuously being seen. Naturally, however, some light is needed. When this light comes from the ceiling, as often is the case, the library is provided with natural light without resulting in a transparency of any kind. A sort of secludedness is still ensured.

Although the thickness and width of the bookshelves was established before, the depth is still left unaffected. This depth, however matters a lot. When it is far greater than that of the books, namely, the books are set back and the sides of the vertical and horizontal members

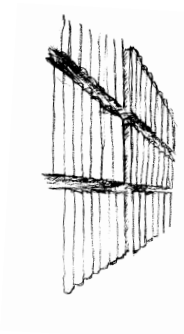
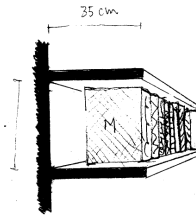
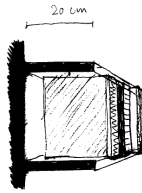
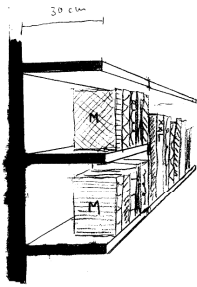
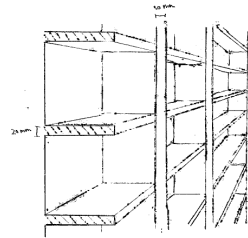
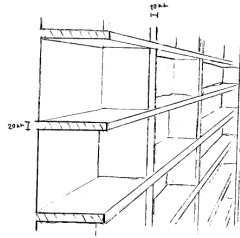
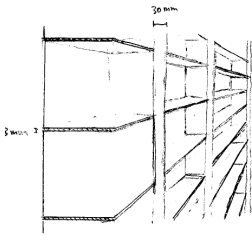


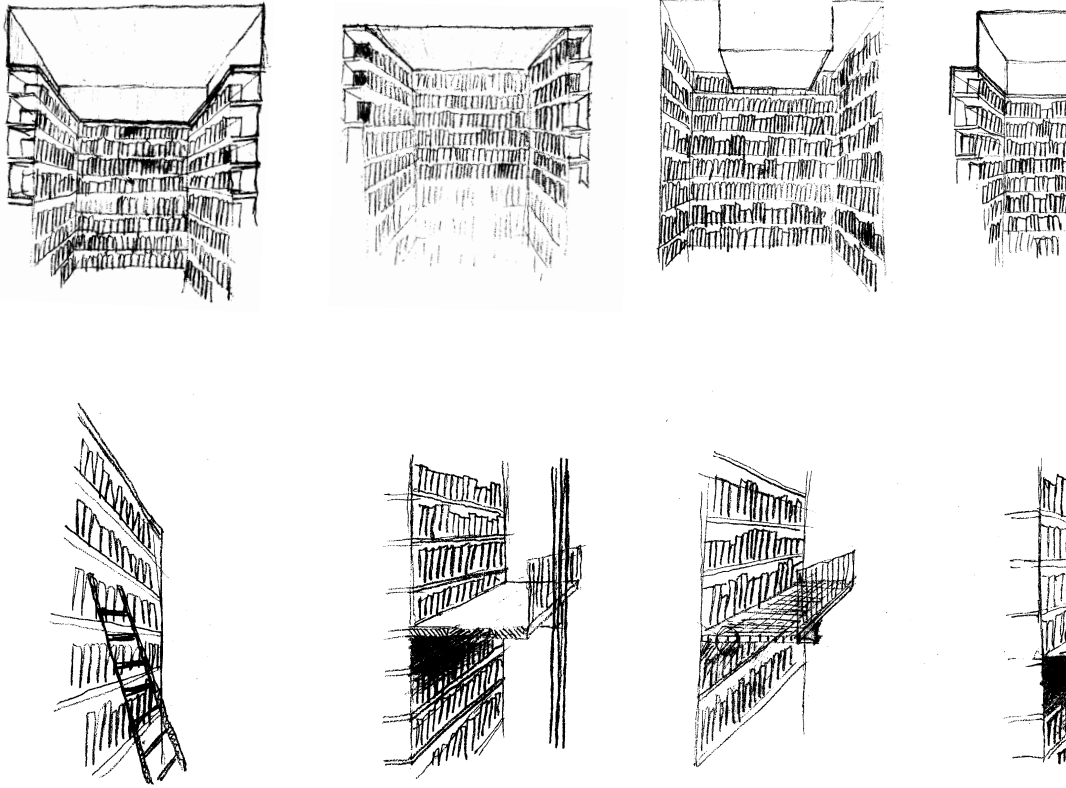
320



more strongly determine the colour and materialization of the space. When the depth is equal to the books, nevertheless, the influence of the material of the shelves on the space is smaller, as only the thin profile of the shelves can be seen (see image 3.4, bottom). The materialisation of the shelf also very much affects the character of the space. Metal shelves, very hard, cold and sharp, do not match the character of very fragile and old books. The same applies to concrete. I have therefore chosen oak-wood, as one would perhaps expect in an archetype library. And what to do with the different sizes of books? What size accommodates most of the books

Image 3.4
Series of sketches looking at the materialization of the shelves(top), the size of books and shelves(center) and the placement of the books on the shelves as a result of the depth(bottom).

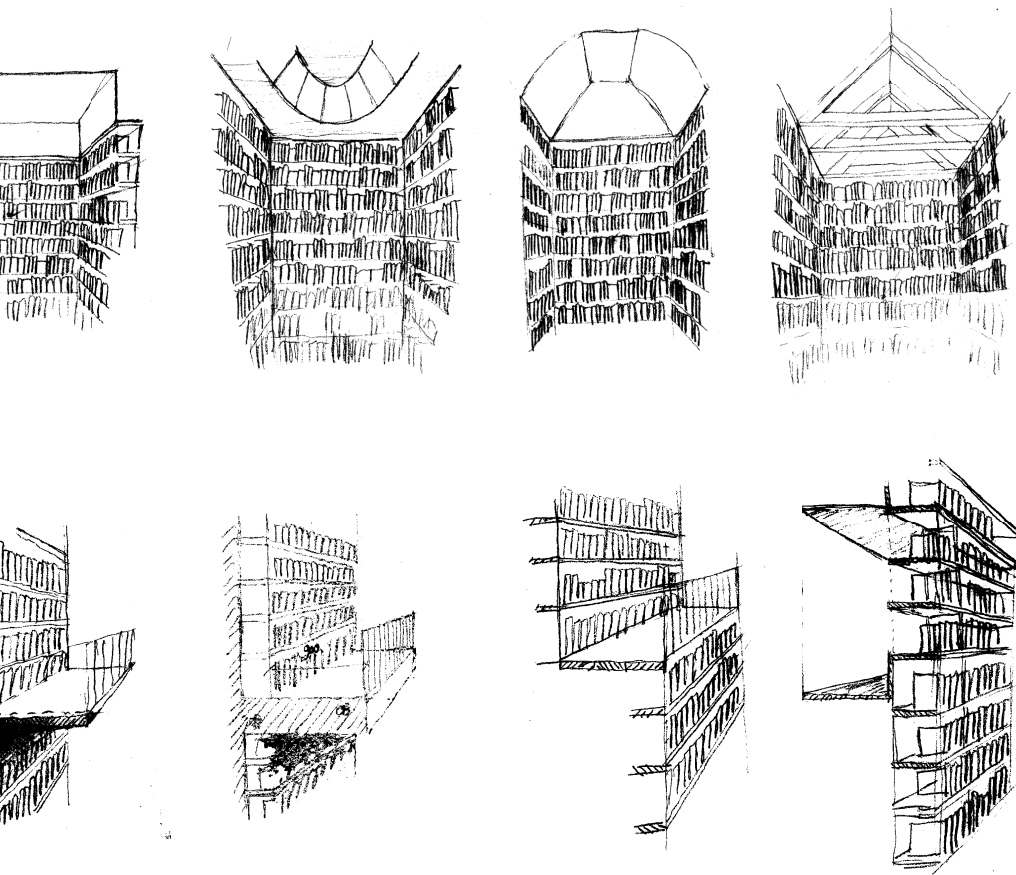




without becoming too large? I eventually chose to solve this problem with a height of 270 mm, into which about ninety-five percent of my books – which are architecture books that are generally rather large – would fit.

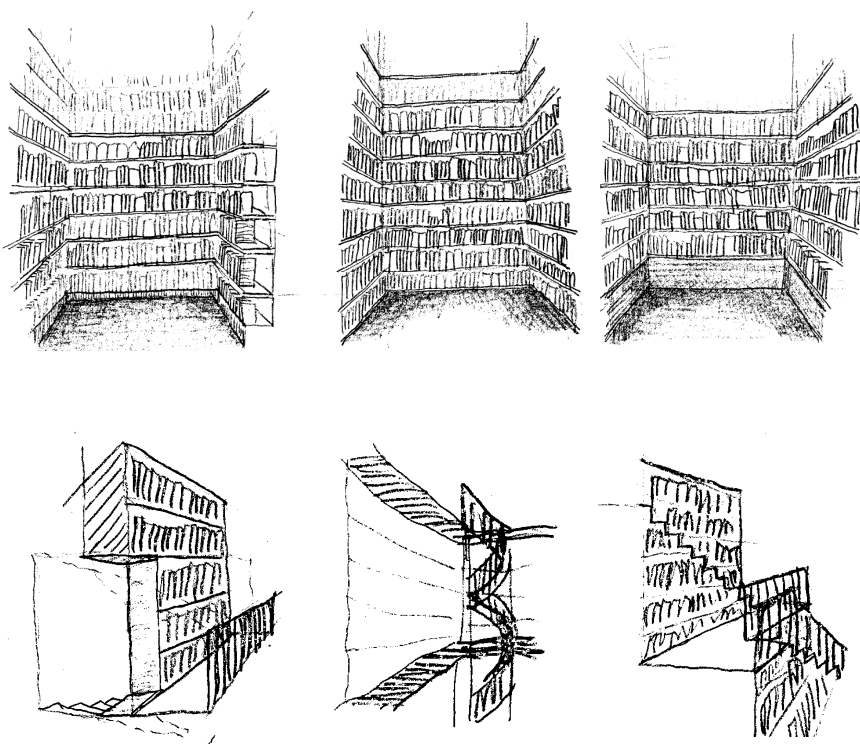
After this, I sketched larger entities like ceiling, balcony, floor and stairs. Especially the flat ceilings I think are a very blunt ending of the verticality of the library space. A nice timber construction, that guides the vertical lines towards their culmination in a ridge, seems more appropriate to end the verticality that constitutes the basic organizing direction of the books (see image 3.5, top right). The vertical accessibility of books is

Image 3.5
Series of sketches looking at the shape of the ceiling (top) and the vertical access to the books (bottom).



examined in the bottom of *image 3.5*. I especially liked the option whereby the access was situated behind the books, so that the overall arrangement was not interrupted by balconies. This also implied, however, that the spines of the books were oriented towards the hallway, which in turn causes the library space itself to be filled with the back sides of the books. Therefore I eventually still chose balconies instead.

For the exact shape of the floor, I have also explored several options. Apart from possible height differences, the height at which the books are placed is also examined. A slight height difference between floor

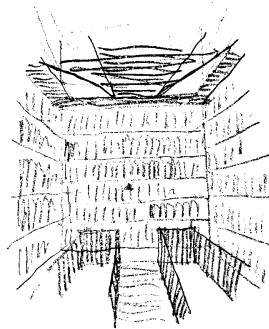
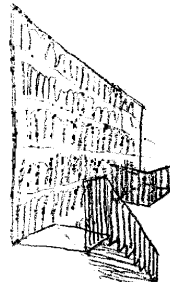
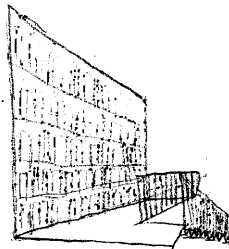
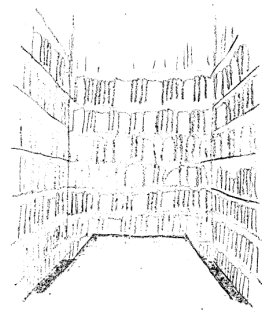
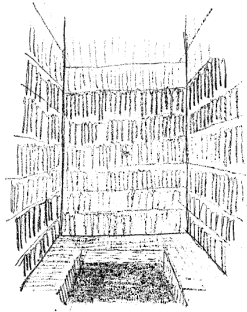


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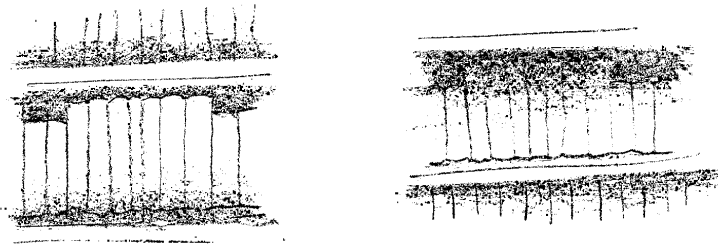
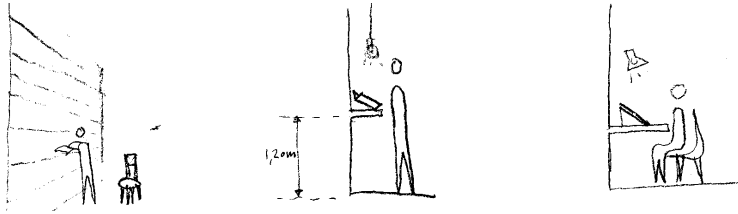
and first row of books of about 100 mm makes sure the books are not placed too low and the idea of walls with books is not undermined (see top of image 3.6).

One of the final aspects is the vertical movement. The stairs can be shaped in different ways. They can be hidden behind the books, concentrated in a corner, protruded from the shelves, placed next to the balcony or integrated into the balcony (see bottom of image 3.6). It is this last option I have chosen, one large spiral of balconies and stairs that – squarely – circles through the collection of books.

Image 3.6
 Series of sketches
 examining the shape
 of the floor (top)
 and the vertical
 movement (bottom).



Apart from these, many more sketches have been made. On the different stages of reading (quickly scanning, quickly reading a chapter or reading a whole book), the shape of the railing, the transparency of the balcony floor, the different kinds of wood and more (see image 3.7). This all results in a detailed description of the aspects of the eventual character and shape of the library. Therefore, the first of the number of activities has now received a shape of its own. A shape that is indeed empirically designed, by means of observations and experiences: measuring books, measuring bookcases, visiting libraries and sketching and looking at many



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possible shapes, always from eye-perspective. Like the chambers in the Binnenhof, the library is designed as a whole. We consequently have a relatively precise description of the space that results from all the decisions that have now been made, many of them not mentioned here because their number is too extensive to fully cover here. The final result is displayed in *image 3.8*: a rectangular space, with an oak wooden shelving grid of 900x300 mm and a depth of 280 mm, allowing the books to be slightly set back so that the sides of the shelves can be seen. Metal balconies and stairs squarely spiral up, flanked by a metal fence. A wood herringbone pattern

Image 3.7
 Other sketches:
 different patterns
 of fencing(top),
 different intensities
 of reading(middle)
 and different
 lights on the book
 shelves(bottom).

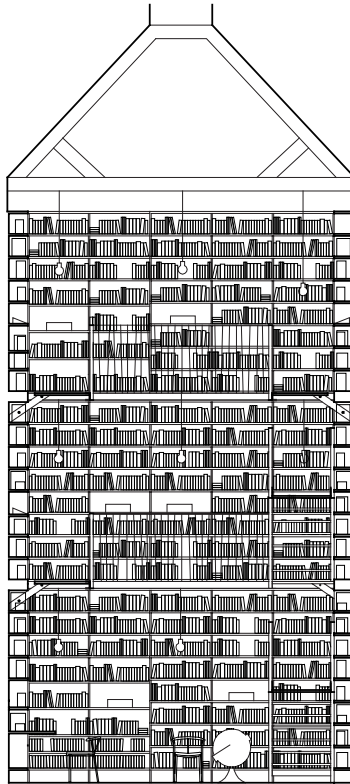


Image 3.8

*Detailed drawing of
the eventual Library*

Scale 1:100

covers the floor, lacking a dominant direction to further accentuate the floor since the wall should stand out instead. Several shelves are left empty and several book stands allow the library visitor to lay down his books while searching. Small light bulbs hanging from the balconies can be grasped and moved in order to further enlighten things without exposing the whole library to a similar intensity. Easily movable chairs can be used when reading for a longer time. The rectangular space, that measures about 5100 x 10500 x 10000 mm is finally crowned by a triangular wooden frame that ends the vertical members of the shelves.

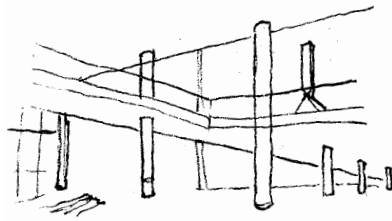
Entrance Hall

The second space houses the activity of entering. When entering a public building, there is often a space that ‘welcomes’ the visitor. This – in my experience – is often a rather large space, like the entrance hall of the Guggenheim in New York or that of the Rijksmuseum in Amsterdam. The very Ridderzaal on the Binnenhof – which was incredibly majestic for its time – was initially intended as an entrance hall as well.² Naturally, the entrance hall is the first thing that one really sees. It indicates the further architecture of the building. It is a first clue of what will follow and is therefore, perhaps, one of the most important spaces. It is an invitation to the visitor. And the invitation is often hard to decline. There is always something spectacular about entrance halls: the Louvre, for example, with those enormous glass pyramids, the entrance hall to Antwerp Station, with that enormous space, or that of the National Museum in Prague, with its impressive stairs (see image 3.9).

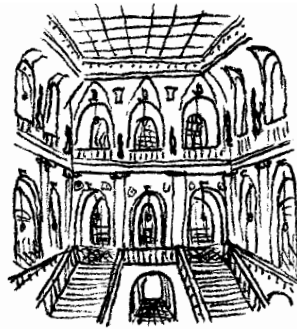
The archetype entrance hall, therefore, must impress. In many cases, this seems to be done by a strong repetition of elements. In the MOMA, for example, this is achieved by a long axis that is accentuated by the columns (see image 3.9). In the National museum in Prague this is achieved by the repetition of stairs and openings. In the Guggenheim in New York, finally, a repetition of floors articulates the height of the void, and it is this void that lies directly behind the entrance. It is in this repetition, and thereby the articulation of a certain architectural entity, that I have further explored. The totality of the space thereby seemed most important. It is therefore especially the totality I have explored in my sketches. The basic shape of the entrance hall of the National Museum in Prague functioned as the basic model.

2. Alberts, J., Smit, D. E., & Habben-Janssen, E. M. (2013). pp. 44

*Image 3.9 >
Some of my sketches
of basic shapes
of entrance halls:
MOMA in New
York(top), National
Museum in
Prague(middle) and
Guggenheim, New
York(bottom).*



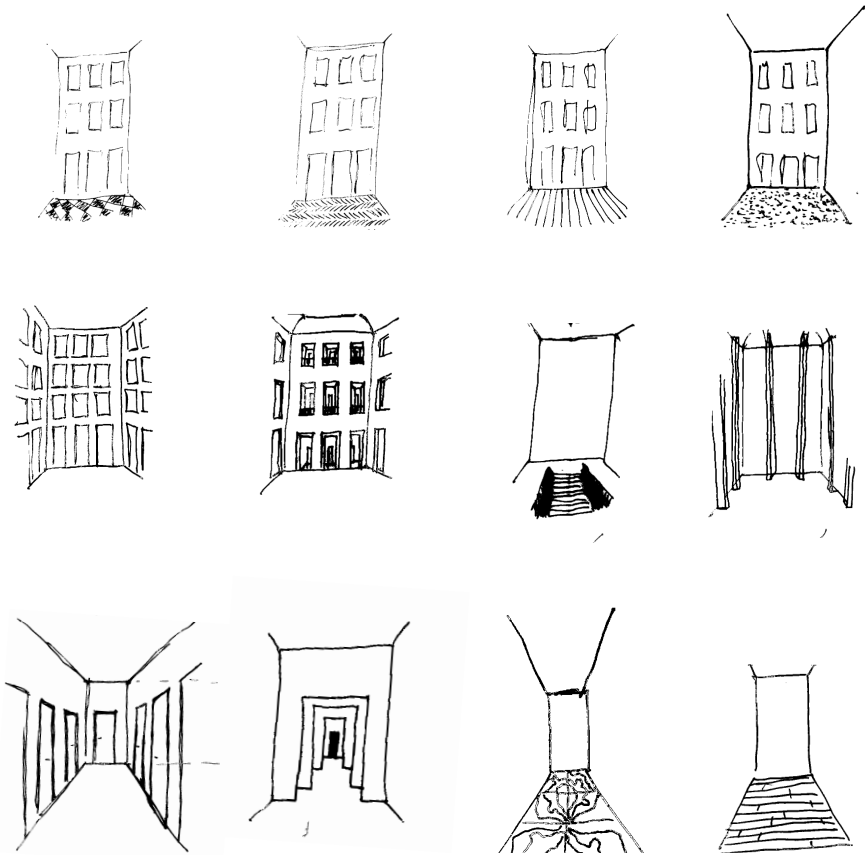
Moma, New York.



National museum Prague.

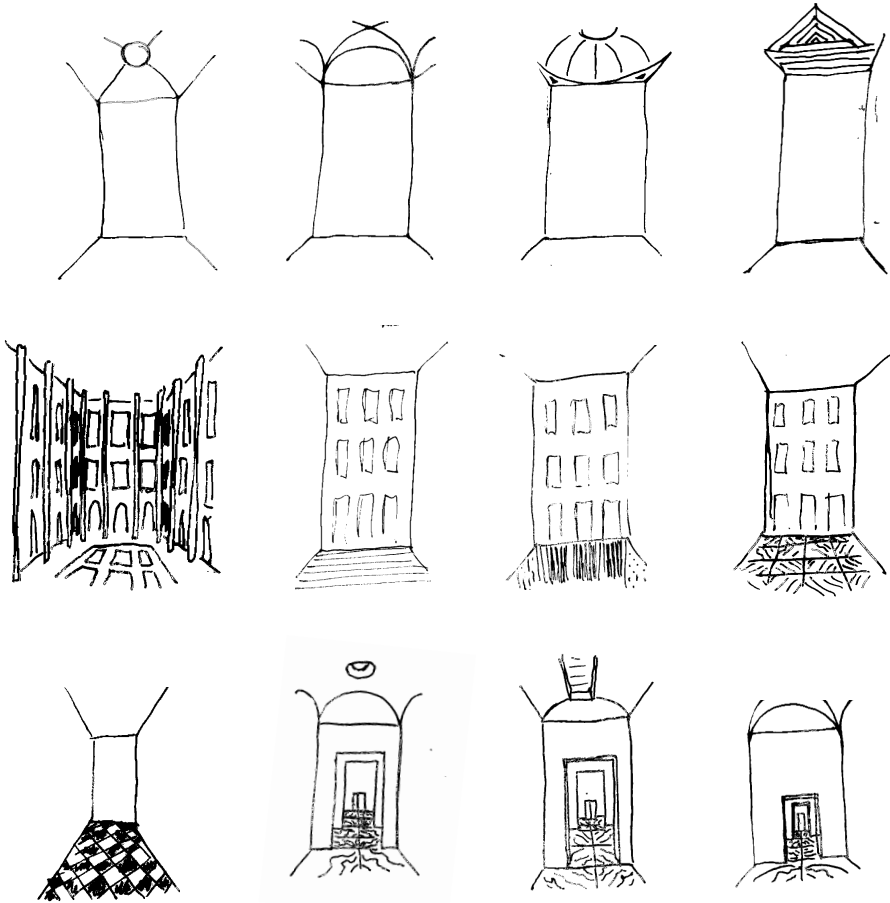


Guggenheim NY.

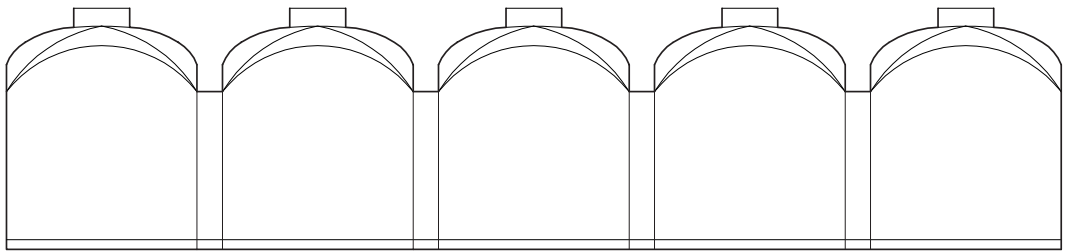


From the basic shape, I started making different variations to see how the ceiling, the direction of columns and stairs, the reflection of the floor and the repetition of windows and doors affects the appearance of the space. A marble floor, for example – because of its open-book repetition and consequently symmetry – strongly emphasizes the measurements of a room (see image 3.10, bottom). A repetition of doors, windows and stairs also contributes to the overall impressiveness. Also, a cupola as ceiling, for example, seems to strongly emphasize the height of a room. A reflecting floor emphasizes the height as well. The top and middle sequence in *image*

Image 3.10
Series of sketches on the influence of material, ceiling, stairs, columns, windows and doors on a space. Top and middle illustrate a vertical space while the bottom illustrates a horizontal space.



3.10 illustrate several characteristics of a mostly vertical space, whereas the bottom sequence illustrates several characteristics of a longitudinal space. The marble, for example, is more suitable to articulate the length, whereas the reflective floor better articulates the height. And, whereas columns better emphasize the height, transverse walls with openings better emphasize the length. Eventually two spaces have been designed. A *hall* and a *hallway*. From the second phase, the implementation, I already knew that a hallway was needed in order to connect entrance to entrance hall. Here, however, for the sake of clarity, a strict separation between the



design of the rooms and the implementation of the rooms is maintained.

The length of the hallway is articulated by the repetition of transverse walls. Its length is twenty meters, and a marble open-book floor further emphasizes the measurements. The height is four meters, and the width measures three. A repetition of plaster cupola's further accentuates the depth, and light comes through several oculi from the top.

The entrance hall, finally, consists of a large rectangular space, measuring fifteen meters in height, eight in width and twelve in length. A reflective floor, stairs and cupola emphasize the verticality of the space.

Image 3.11

*Detailed drawing
of the eventual
hallway.*

Scale 1:100

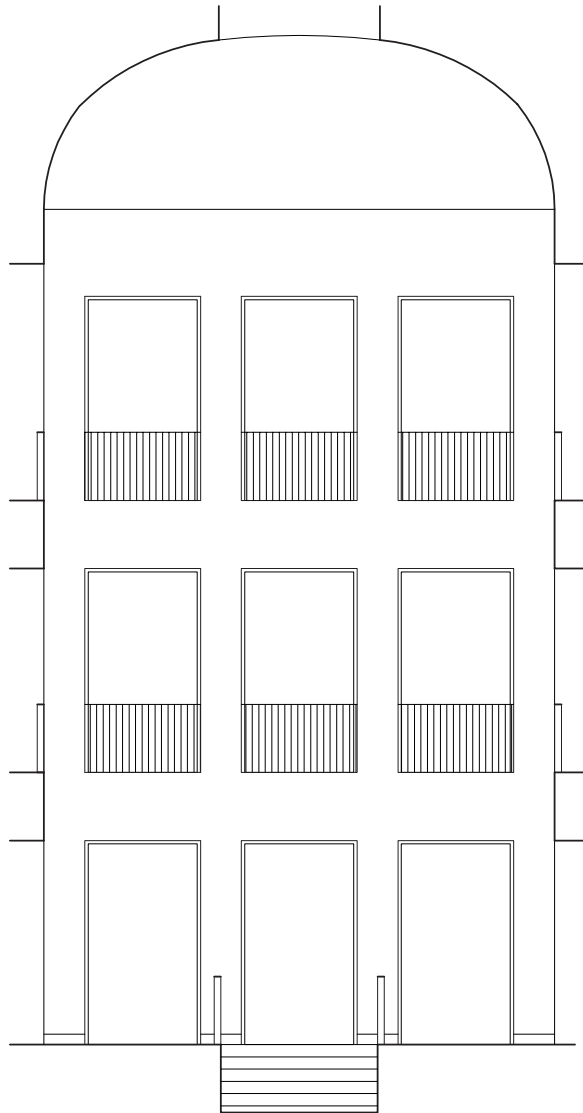


Image 3.12
Detailed drawing
of the eventual
entrance hall
Scale 1:100

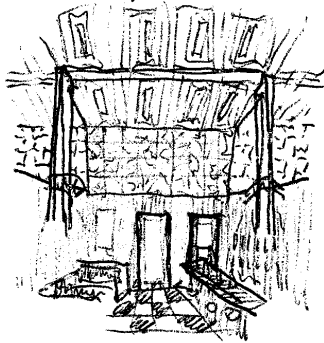
Cafe

Although at the entrance hall, the totality was most important, I think that a café is actually an accumulation of several spaces, and that consequently, the single unit is more important. A café consists of tables, oriented inwards, but made interesting by the indirect relations to other tables: the sounds of other people whispering and chattering, the smell of coffee and the distanced view on other people. A café, for me, is a resting place, where one escapes the bustle, distances himself and is able to enjoy the temporary distance. I enjoy being able to look out from a window, to look at the turbulent mass of people passing by while – myself – pleasantly sitting and drinking coffee or tea.

By series of sketches, the café was given shape. I started from tables and chairs. Naturally, there are many different shapes for the table top and legs. A round table with a minimal foot seemed most comfortable, since a round table allows anyone to join while a square table strongly determines the number of people around it. Light chairs, furthermore, seemed to best fit the function of a cafe, given that chairs are constantly moved around in a cafe setting.

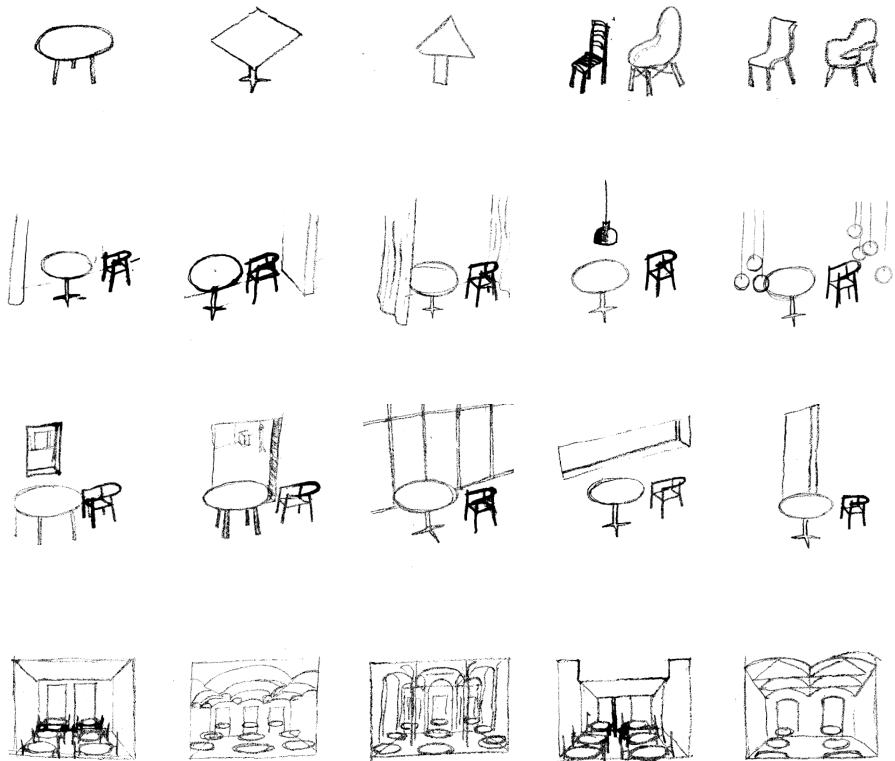
The arrangement of the sum of all tables, is able to take on many forms. It can be arranged in rows, diagonally or randomly. Also, tables of different sizes can be used to further accommodate different groups of visitors. However, the aggregation of different chairs and tables soon becomes too messy and the much needed overall coherence is then lost in an overabundance of different tables. A round table, however, can both serve a couple and a group of nine or ten people. Furthermore I sketched several sizes of tables and cafés, but due to the space this all requires, only a small selection from the total volume of sketches is displayed in *image 3.14*.

Image 3.13 >
Some of my sketches of basic shapes of cafés: American bar by Adolf Loos in Vienna (top) and typical French café (bottom).



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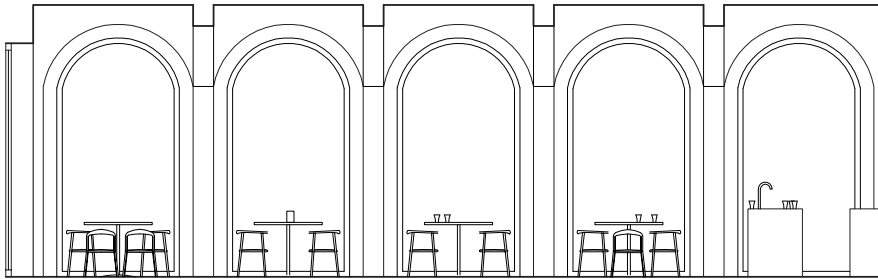




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By means of columns, curtains, lamps and different sorts of windows, I tried to find a balance between segregation and integration. A large window of about two by three meters, for instance, vaguely defined a certain space whereas a curtain wall did not (see image 3.14). A column also subtly defines a space while a wall does not. Finally, the shape of the ceiling also proved to be very decisive. Especially the variant with arches and columns proved very useful as it established a pleasant relation between being part of the space on the one side, and still sitting in an individual area on the other.

Image 3.14
 Selection of sketches: different types of tables and chairs (top), several space-defining elements (middle) and several types of ceilings (bottom).



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Image 3.15

*Detailed drawing of
the eventual café.*

Scale 1:100

The eventual space that is the result of all the measuring, sketching and trying is displayed in *image 3.15*. The cafe is constituted from a grid of 2500 by 2500 mm, able to house a round table with a diameter of 1000 mm and chairs around. The space is differentiated into smaller spaces through the arches and columns, which in turn determine the position of the window. The space is organised in a longitudinal way, only two units wide, so that every table is placed along a window. The floor is made of end-grain wood, a very durable material for an intensely used space such as a café. This ground surface of the space measures 12500 by 5000 mm.

Staircase

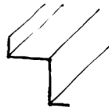
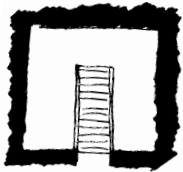
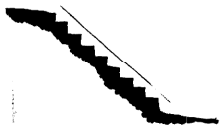
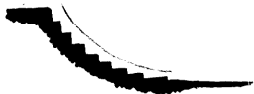
The staircase, like the entrance hall, is more a space to go through than it is a space to carry out a certain activity. If we would ascribe an activity to the staircase, it would be that of climbing. I think it is precisely this act of climbing, therefore, to which the stairs should be fully dedicated. A stairs, basically, constitutes the bridging of a vertical height difference by dividing the height difference in smaller ones, that can be overcome. The shape and movement of feet, hands and body thus needs to be taken into account when designing the start, end, profile and railing of the stairs. There are many different features of the stairs: firstly, there is the profile, then the slope, width, length, structure, material, the articulation of the stairs by the wall, the change of the slope, the direction of every individual stair, the start and ending of the stairs and so on.

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What many stairs lack – in my experience – is the accommodation of the movement that, I think, should determine the shape of the stairs. The shape of a foot, for example, is not accommodated by many of those cubist aesthetic stairs. There, the foot is largely ignored. However, the foot sticks out, and consequently, the risers should slightly lean back, preventing the point of the foot from constantly clashing with them. I have seen many traces of rubber on the risers of such cubist stairs, subtle reminders that perhaps the *user* should be decisive in determining the profile of a stairs (see image 3.16).

The same applies to the ending and beginning of a stairs. The stairs connect to a horizontal plane, and it would be odd if the stairs do not in any way indicate that a horizontal plane changes into an accumulation of vertical ones. By slightly widening end and beginning of the stairs, the climber gets an indication of the significant change.

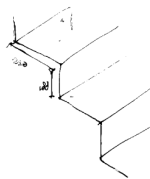
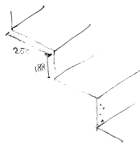
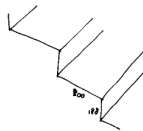
Image 3.16 >
Some of my sketches on stairs illustrating: the slope and the integration within the wall (left), The profile (middle) and the elevation of the stairs when walking towards it (right).

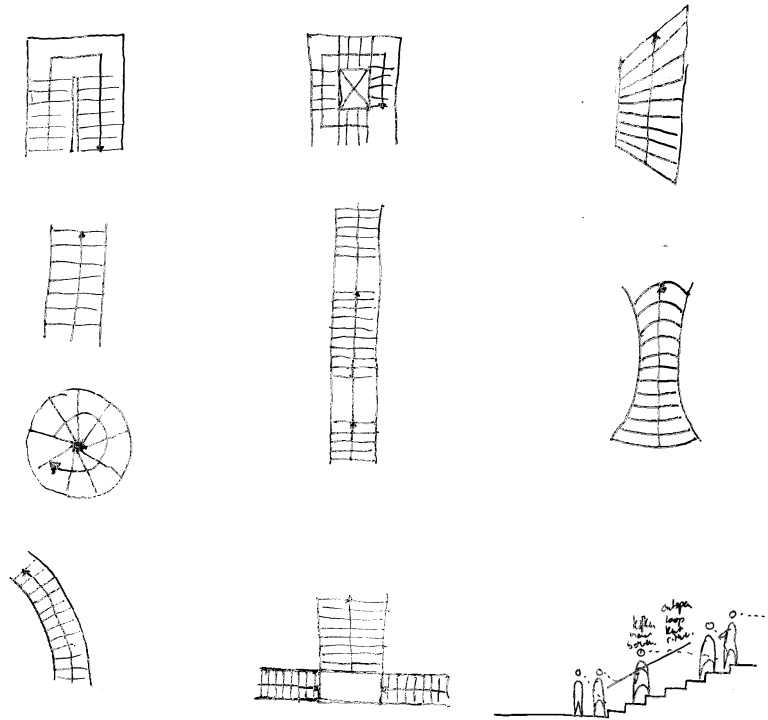


simple profiel



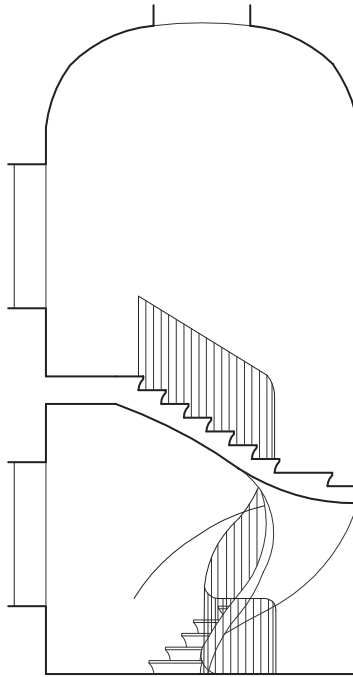
loop met hini:
mag ook in die zij-
te snelle in





Something similar can be said of the turns of the stairs. Some square stairs abruptly turn 90 degrees (see image 3.17). I have never seen anyone climb up a stairs like that: walking up, stopping for a minute, then turning ninety degrees and then continuing to climb the stairs. I would say people always walk in curved lines. Consequently, I think the lines of a stairs should be curved too. Finally, a difference between the one side of a stair and the other can be established by slightly rotating each stair. This creates several slopes – almost flat on the one and very steep on the other

Image 3.17
Selection of sketches: different types of stairs and, on the bottom right, an inventory of the several phases of climbing a stairs.



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Image 3.18

*Detailed drawing of
the eventual stairs.*

Scale 1:100

side – which allows one both to quickly climb the stairs when in a hurry, but also allows the elderly to slowly and carefully climb the stairs.

The eventual result is a composite spiralling stairs, with set-back risers, slightly rotated stairs and a metal railing. The steepness varies between a riser of 180 mm by a tread of 100 mm on the inside and a riser of 180 mm and a tread of 350 mm on the outside. The wall carries and further articulates the shape of the stairs. The beginning and ending are slightly widened (see image 3.18). One climbs up towards the view and the light.

Toilets

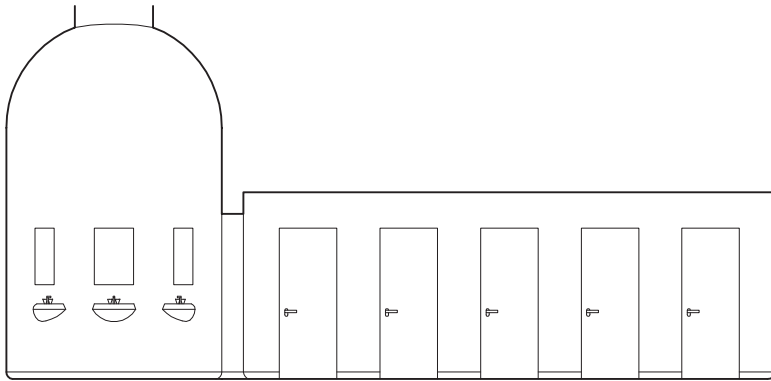
The activities on a toilet are not often precisely discussed. For our purposes here, however, we will have to. First of all, I think there is an enormous difference between using a toilet on the one hand, and carrying out other activities such as refilling a bottle of water, putting on some cologne, putting on make-up and restyling your hair, on the other. In many toilets, both are juxtaposed. In the toilet of the Ben Youssef Madrasa in Marrakech, however, the space to wash hands is very large, and slightly separated from the toilets. I very much like this. There is also a roof lantern that softly illuminates the space. It was a space where I felt comfortably to be in.

Furthermore, hygiene is a significant theme. In order to properly clean, for example, corners are very much annoying: they constitute a place where all the dirt gathers. Rounded corners are, therefore much more suitable in a place like a bathroom.

I also noticed that one *moves a lot* when entering the toilet whereas one *sits still* on the toilet itself. First, one opens the door, closes it, locks it, turns around, puts his or her jacket somewhere, puts down his or her bag, sits down, does things we will not discuss here, stands up again, grabs the bag and jacket, unlocks the door and walks out. Around the door, a lot of movement takes place while, on the toilet itself, one barely moves at all. Therefore, I would rather propose a trapezoid shape that widens towards the door, so people with a backpack can also turn around to lock the door, instead of getting stuck in the narrow square shape that is often used.

I finally sketched different sorts of organizations of toilets around the washbasins (see image 3.19). There are linear, square or circular

Image 3.19 >
Some of my sketches of the toilet: several shapes of the toilet unit from above (top), the different actions performed when moving inside a toilet space (beneath), the different shapes of the ceiling of a toilet unit, and the different options of organizing the toilet units (bottom)



arrangements possible. I especially like the longitudinal arrangements of toilets that ends in the washbasin space.

The result of all this is a high, top-illuminated and spacious chamber for the washbasins, with a row of transversely oriented toilets next to it, consequently creating a subtle border between the two (see image 3.20). All corners are slightly rounded and the toilet spaces are an extrusion of their trapezoid ground surface. Naturally, the walls are clad with black and white rectangular tiles.

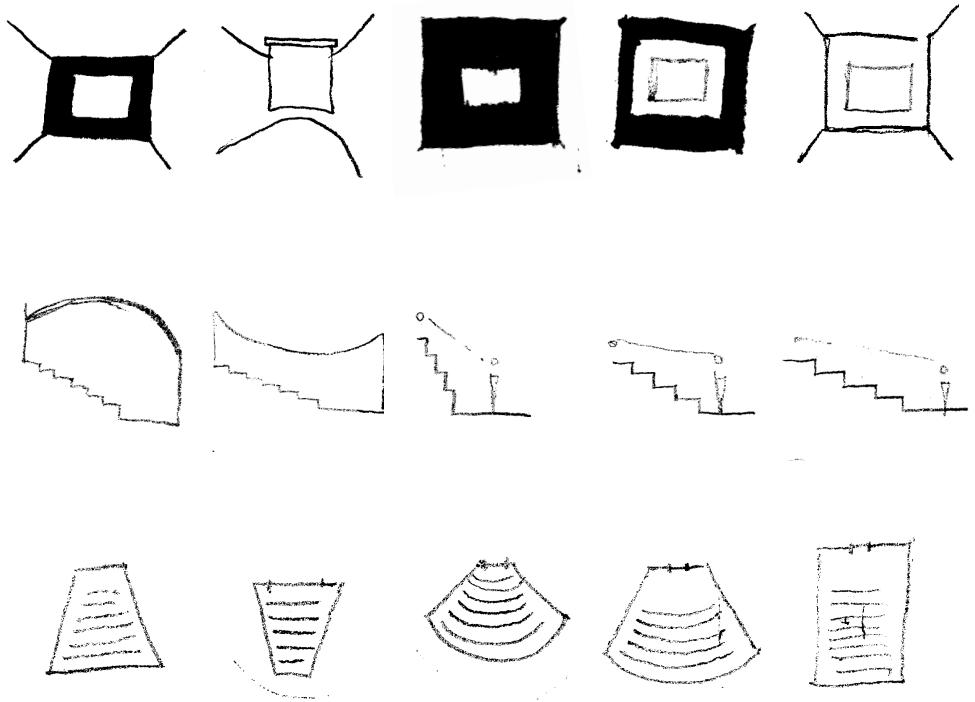
Image 3.20
Detailed drawing of
the eventual toilets.
Scale 1:100

Lecture Room

The lecture room establishes the final room that is designed here. A lecture room, quite logically, is about the relation between the one that tells and the one that listens.

What I noticed when looking at lecture halls is that in many of them, the listeners are placed in longitudinal rows. These rows however, indicate that there is a sort of equality that does not exist. The central chair in the middle row, for example, is not in any sense comparable to the far left and right chair of the back row. Therefore, instead, I would like to slightly curve the rows, so that they are all aimed at the centre of the front, the place where the speaker mostly speaks. That way, the listeners also do not have to constantly turn their heads to see the speaker but instead look right at him. Furthermore, I experience that the steeper the 'stairs' of the lecture room are – the stairs on which the seats are placed – the more everyone sees and hears. Especially when I sit in the back of a 'flat' lecture room, I soon lose attention since I then have trouble seeing and hearing what is going on. In several sketches, I explored the influence of light and dark on the view from a listeners seat. I, myself, especially like a dark lecture room, because it has no distracting features. All attention, instead, goes to the thing that stands out: the speaker and the screen.

In order to establish the steepness that has been mentioned before, the design of the chairs is of great influence. The narrower the chairs, the steeper the slope of the stairs on which these chairs are situated can be. How steep a lecture room can be, is perhaps best illustrated by the anatomical theatre in Padua. The slope is so steep, that even from the top row, everything can be fully perceived. It is such steepness that really invites everyone to be part of the lecture. The maximum steepness is given



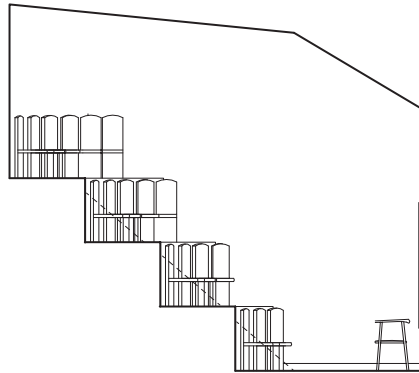
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by the allowed ratio of tread and riser of the flanking stairs.

The eventual result is displayed in *image 3.22*. Through a great steepness, all the listeners can fully communicate with the speaker. The plan is shaped like a quadrant: curved rows of chairs make sure that the listener is oriented towards the speaker. Because of this shape, the speaker, in turn, only has a relatively small area to move. The chairs are foldable, so that the horizontal surface on which the seats rest, is minimal in width, consequently increasing the amount of listeners that sit in close

Image 3.21

Sketches that quickly examine some of the features of the lecture hall: darkness and lightness (top), shape of ceiling and steepness (middle) and overall organization of chairs (bottom).



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Image 3.22

*Detailed drawing of
the eventual lecture
room.*

Scale 1:100

proximity to the lecturer. Finally, the material on the floor is black carpet. The softness of this material increases the sound quality, while the colour makes sure that all attention is drawn towards the screen and the speaker. Walls and ceiling are clad with a similar soft and dark material, like felt. The room measures 5500 by 5500 mm and is 5 meter in height. Two stairs next to the several rows of chairs provide access to the front area. A slightly slanted ceiling, finally, enhances the audibility of the speaker by directing the sound waves towards the audience.

Remarks

We now end the first design phase with a varied set of spaces, based on an extensive multitude of sketches, observations, experiences and analyses. The spaces designed so far, constitute different *archetype spaces*, that all, in some way, relate to a certain core-shape of that space, a characteristic that further ensures a certain variety between the spaces. The outcome is a collection of spaces that – indeed – very much differ in terms of shape, materialisation and orientation.

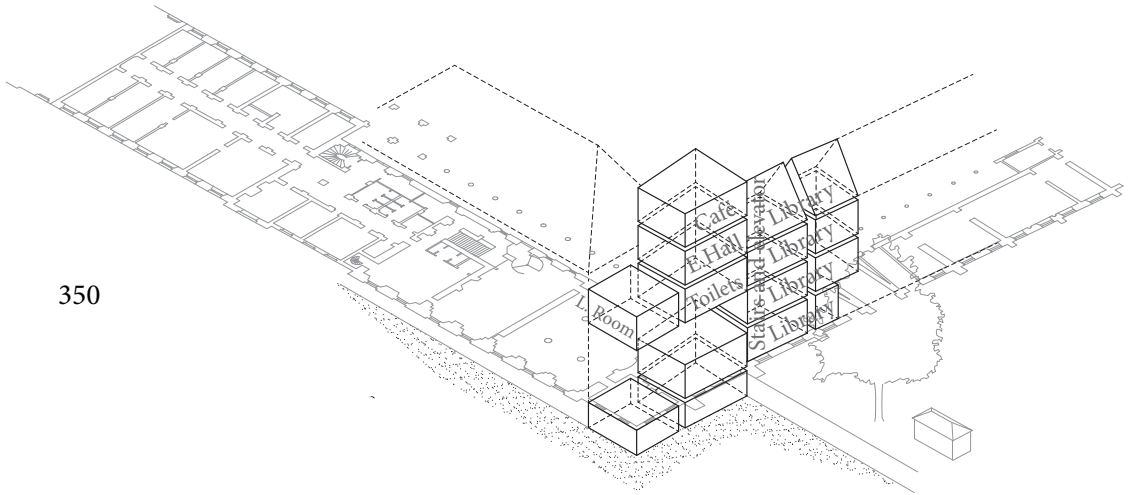
Now that we have found a definitive apparatus of spaces, we have to acknowledge that the process leading to these shapes has been completely based on subjective, incoherent and largely unclear judgements. The spaces are conceived from what *I* experience, from what *I* feel, how *I* would like to read. When anyone else would have undergone the same process, the outcome would probably have been very different. This, however, is not so much an imperfection, but rather the very quality of the design method: the result is unpredictable. There is no overall concept that can be distinguished. The fact that the eventual outcome is very much unpredictable, ambiguous – at times contradictory – answers to the basic values of empirical architecture. The eventual aggregation of this first phase thus matches the character of our design case – the *Eerste Kamer* on the *Binnenhof* – that is a unique outcome of a long chain of unpredictable and incoherent design decisions as well. If we had concluded here, that our design framework had led to a largely replicable system of regulated design decisions, an architectural *Tractatus* – somewhat like the *Ten Books on Architecture* by Vitruvius – then, we should have seriously questioned our methods.

Furthermore, we must recognize the similarity to the analysis format. Whereas the analysis first considered the separate entities – space and facade – and later linked these and looked at connections, transitions and variations, the design method starts from individual spaces and later anchors these in a context as well.

Like the analysis, the resulting vast number of drawings, references, sketches and thoughts – although still being a small part of the total mass – seems to be a typical feature. It is this multitude that results from the lack of an overall organizing principle. This is an important conclusion: a concept very much eases the design process, it allows the designer a compass that always implies a solution, creates a shortcut for the dazzling complexity of the built environment. Empiricality implies diving into all the puzzling architectural problems. This means exploring the problems, experiencing them, describing them and – hopefully – eventually solving them.

Finally, we must state here – and this has perhaps not been too subtle – that the amount of drawings slowly decreased throughout the process. Although not all sketches have been displayed, the number of drawings still steadily decreased. This is in part a great problem of empirical design. The vast multitude of possible choices is just too extensive. What I tried, however, is to illustrate – and not completely cover – the method that is distinguished so far.

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3.1.2 Implementation of spaces

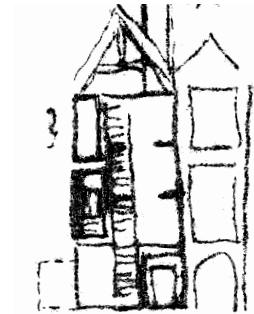
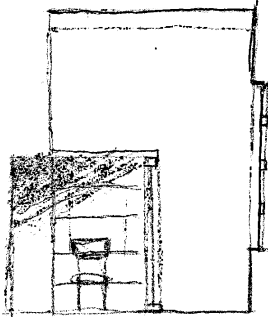
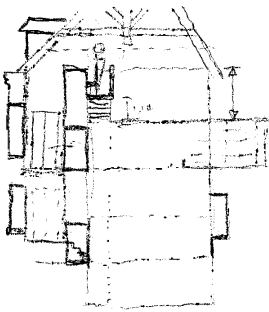
Now that the definitive collection of spaces is determined, the second stage of the design process is entered; the spaces can be related and contextualized. It is therefore in this phase that the conceptual characters of the individual spaces need to be adapted to concrete existing conditions. *We must now impose our San Miniato on our crypt.*

As may be expected from an empirical process, however, the strict separation between the *first* – the design of individual spaces – and this *second* phase, is not carried through as exactly as it may now seem. While designing the individual spaces, namely, the possible *placements* and *arrangement* of spaces was – on an abstract level – designed at the same time. Here, however, we have maintained the initial difference between the two phases, for the sake of clarity concerning the explanation of our method.

Nonetheless, firstly, an inventory of available space in the *Eerste Kamer* conglomerate has been made. It is especially at the junction that a number of spaces is situated, that is hardly used. The spaces that are barely used, or have been assigned a function way below their significance – like the electricity unit, kitchen and toilets on the ground floor – are displayed in *image 3.23*. Some bits are taken out, since stately chambers as the *Ministerskamer*, *Johann de Witt-kamer* and *Hoekkamer* are situated here. The embedment in the junction is a very positive outcome, as the public access is thus situated on a place that enables it to be linked to the rest of the conglomerate, while still maintaining a certain independence. The long galleries still pass alongside the spaces. The consistency of the conglomerate is thus not blocked by this insertion (also see *image 1.31*). Furthermore, on this spot, a separate entrance far from that of the *Eerste*

< **Image 3.23**
Axonometric plan drawing displaying the available spaces and the appointed functions: Library, Stairs, Entrance Hall, Café, Toilets and Lecture Room.

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Kamer-senators is established. The eventual assignment of functions to spaces is also displayed in *image 3.23*. The library is situated in the right wing, since the height of the library can be best accommodated here. The entrance hall, that is also characterized by a great height, is placed inside the tower. Here, namely, there might be some potential to establish a rather high space. The café is situated on the top floor of this tower, on top of and in close proximity to the entrance hall. The café, finally, provides one with an astonishing view of the city of The Hague.

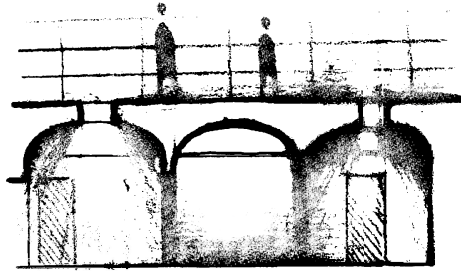
The toilets are best supported by the space underneath the entrance hall, since a false floor is needed here anyway (to connect to balcony-level), and thus establishes a useful place for all the toilet pipes. The lecture room, ultimately, is best accommodated by the space next to the toilets, for here, there is a door that directly connects to the balcony of the *Eerste Kamer*, the space that all guided tours pass through. A lecture hall nearby is then very useful for more elaborate presentations.

Now that the general spatial structure and relative position of the spaces is established, the eventual architectural design could slowly begin to take on its final shape. Spaces are now linked, reshaped, extended, protruded, set back, elongated and pushed here.

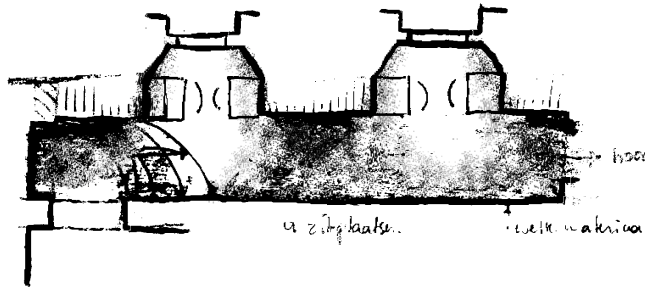
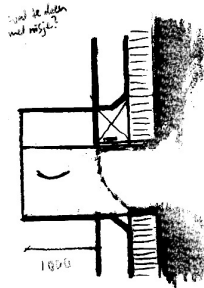
In *image 3.24*, some drawings of the implementation of the library are displayed. The library, initially, is a fully enclosed space, lit from above with a rather small floor height. Firstly, the library pierces through several floors, for the height of the library greatly exceeds the floor height of the levels of the existing structure. This means that the library must function as structural core, to carry the loads of all the beams that are violently interrupted. Furthermore, the library required completely closed walls at the sides. The wing wherein it is placed, yet, contains numerous windows. The library thus had to be slightly set

< *Image 3.24*

Sketches of the implementation of the library: creation of a place to read in front of the dormer (left), sketch of a protrusion of the library space through an existing opening into the long gallery, thus creating a workspace in the library, yet, in the Senator's domain (middle) and a rough sketch of the section with an entrance hallway, that literally pushes the library space through the openings on the other side of the ground floor(right).



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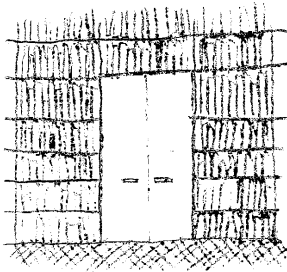
back from the facade. This would imply small longitudinal spaces along the facade (see transverse section (right) in image 3.24). Also, since an entrance is required on the Binnenhof – in order to get to the entrance hall in the tower – the library space becomes very narrow on the ground floor, especially if we would set it back from the facade again. Therefore, by pushing the library space through the openings, a small workspace is established within the thickness of the wall, and the library perimeter can consequently run along the facade without creating blind windows on the ground floor (see image 3.25, centre).

< *Image 3.25*

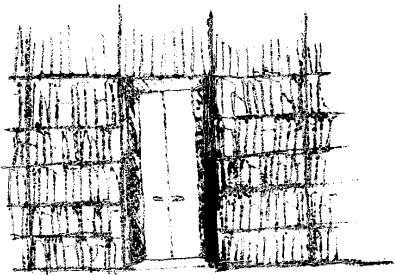
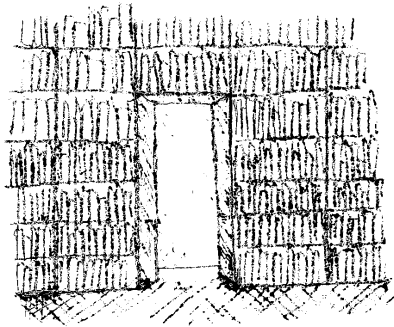
Sketches of the implementation of the library and hallway: section of the connection between the entrance hallway and the first floor of the library, which is protruded over it (top), plan of the protrusion of library space through the existing window opening, allowing the library edge to correspond with the outer wall without creating a blind window (middle) and plan of the interior of the longitudinal space that is created by setting back the library from the facade.

Earlier, we have looked at the window and flanking workspaces in the Bodleian libraries in Oxford. The space that is the result of the insertion of our library, allows for a similar arrangement: bookshelves along the walls further articulate niches, that are perfect differentiated spaces to read in. A nice view through the window even provides one with the casual wandering thought now and then (see image 3.25, bottom).

The existing roof structure, more importantly, can easily be used as ceiling of the library. This, however, requires an opening, for the library is ought to be lit from the top. A large extruding cone towards the north, hidden behind the roof construction of the long gallery (see image 3.32) eventually provides the library with diffuse light. Countless more contradictions, poetics and beauties have resulted from the implementation of the other spaces as well. The rhythm of the entrance hall, for instance, which has been adjusted to that of the load-bearing medieval beams of the tower, gave rise to numerous *Wall-Projection* complexities (see image 3.30 and 3.31). Or, for instance, the ambiguity between the steepness of the lecture room and the existing windows, whose sills get almost levelled with the steps of the slope, giving rise to a completely different experience of these windows (see image 3.33).



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Or, for instance, the wall between the library and staircase, which rests pontifically on the third cupola of the entrance hallway, thus depriving this third cupola of its oculus, consequently resulting in a dark final unit of the hallway. The hallway itself, is – in turn – related to the rhythm of arches and columns on the *Binnenhof*. Also, since the library space is protruded over it, it is linked to the floor height of the library, which is rather low. This results in a rather low entrance hall, which must appear very odd, as the facade on the *Binnenhof* indicates a much larger floor height (see image 3.33).

Also, the setback of the toilets creates a space, dominated by the beautiful plasterwork on the ceiling, without a particular function, where some chairs have been placed, consequently giving rise to a similar atmosphere that characterizes the existing long gallery on the other side. The mentioned plaster ceiling also tops the dome that in turn ends the washbasin space. By some lamps, it is lit, thus reflecting light into the washbasin space (see image 3.33 & 3.41).

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The columns and arches of the café, interfere with the windows of the (Maurits-) tower and some windows have subsequently been bricked up. Also, the several curved stairs – both the designed and the later added ones to pragmatically solve level differences – sometimes clash with the orthogonal structure of the medieval existing composition. Perhaps this is not so much of a clash, but rather a pleasant and enjoyable variety. I must end to say here, that I always loved to walk through the crypts of churches, climb through hidden towers and crawl through hidden doorways. And I invite one to picture him- or herself walking through the hallways, reading in the niches and climbing up the stairs in the drawings that follow. And perhaps, in some way, it provokes the same pleasant feeling I experienced when walking through that pleasing picturesque variety of spaces at the *Binnenhof* (see image 3.38 & 3.39).

< *Image 3.26*

Sketches of the exact placement of the door opening in the library wall.

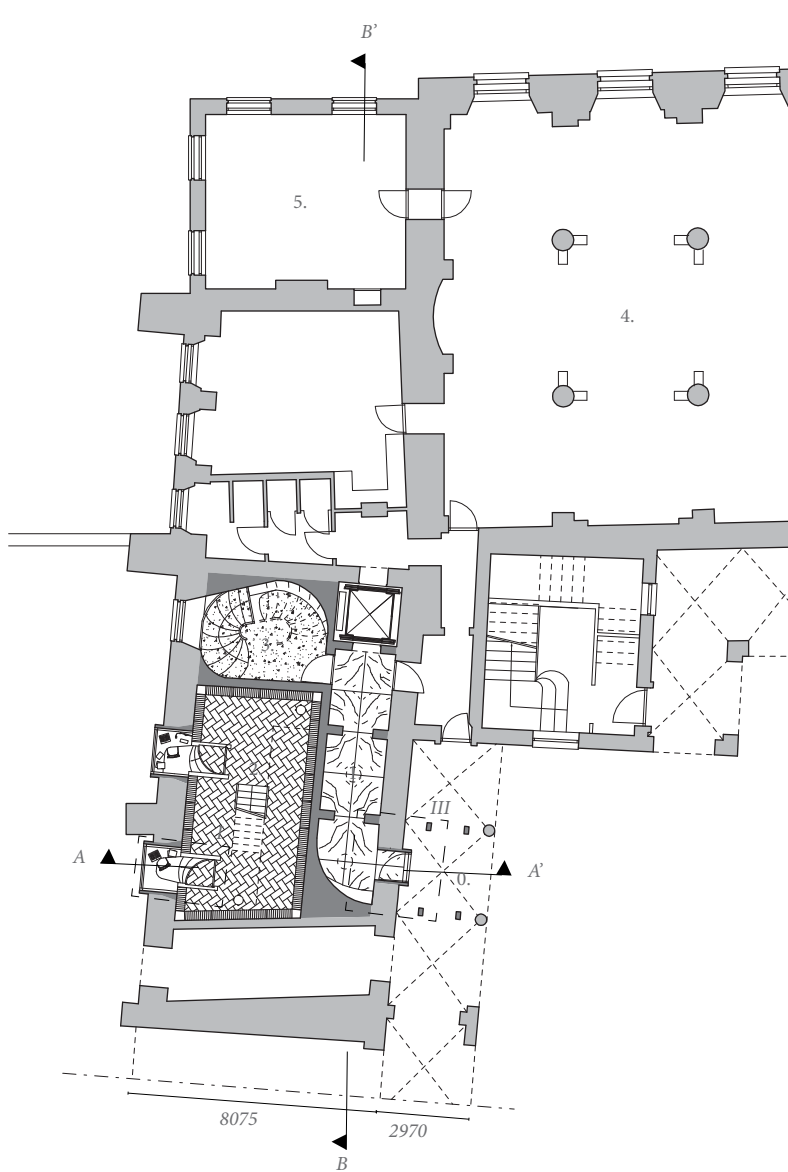


Image 3.27

Plan of the design at ground floor, 1:250.

Also see Image 1.31.

The darker gray indicates what has been changed.

- 0. Entrance
- 1. Entrance hallway
- 2. Library level 0
- 3. Staircase
- 4. Noenzaal
- 5. Johan de Witt-kamer

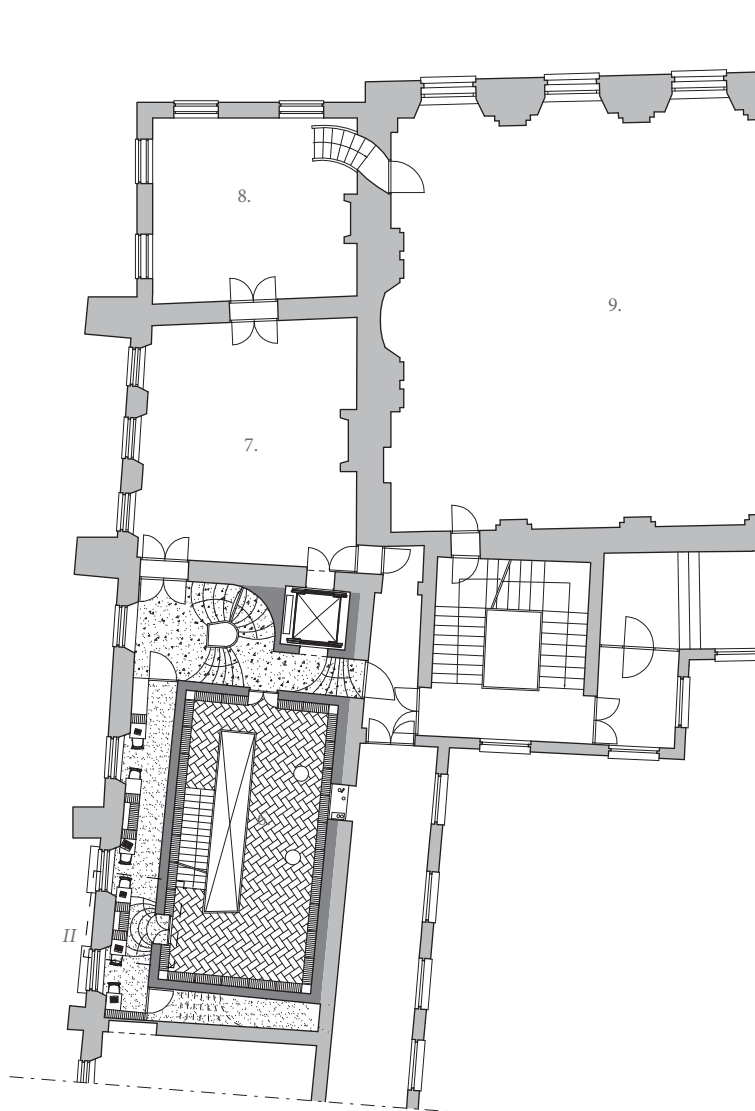


Image 3.28

Plan of the design at the first floor, 1:250.

- 6. Library level 1
- 7. Ministerskamer
- 8. Hoekkamer
- 9. Eerste Kamer

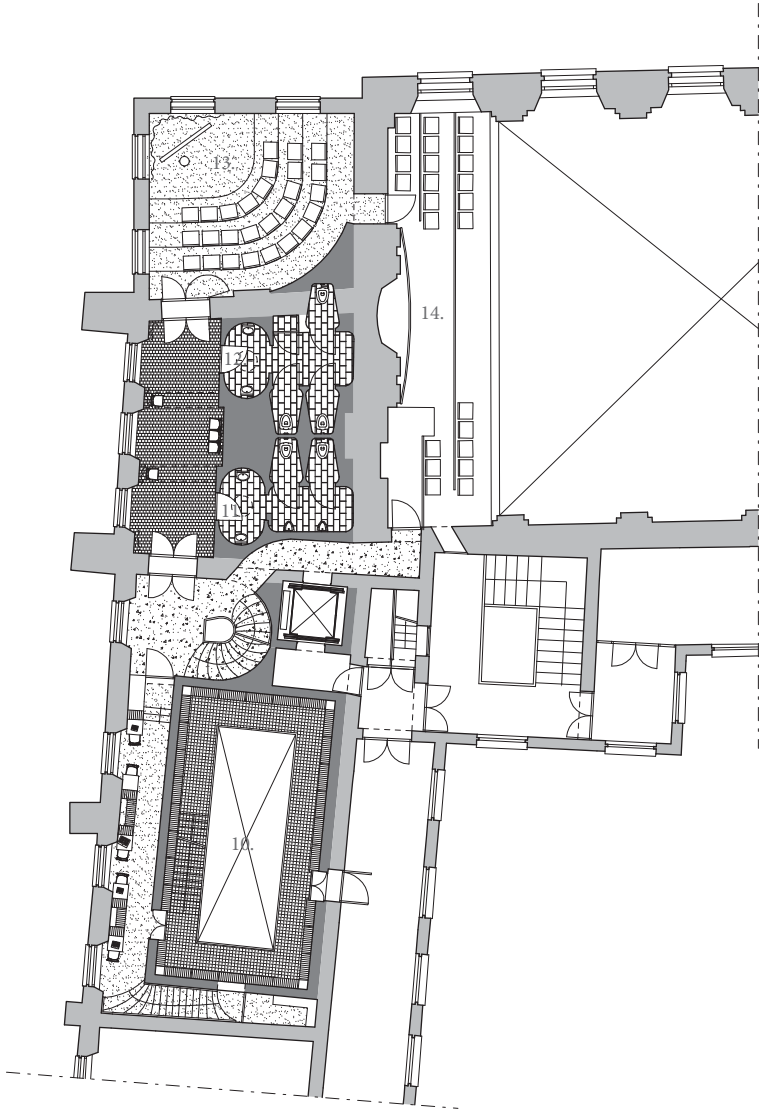


Image 3.29
*Plan of the design,
at the second floor,
1:250.*
10. Library level 3
11. Men's Toilets
12. Women's Toilets
13. Lecture Room
14. Eerste Kamer
Balcony

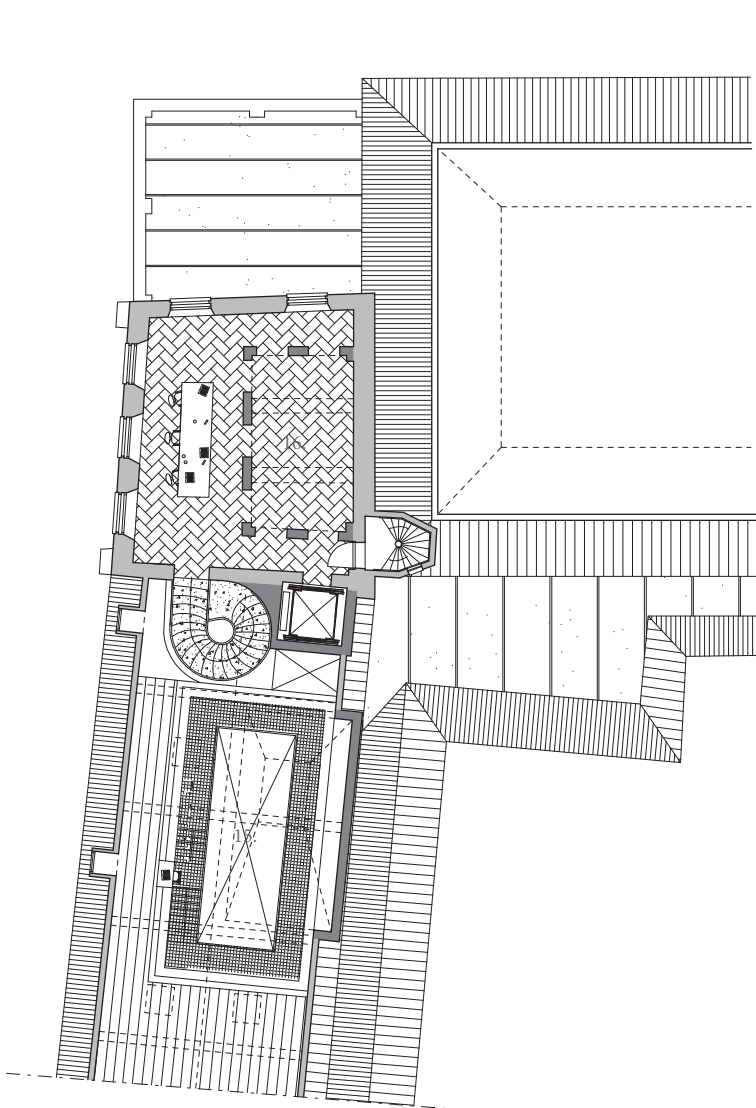


Image 3.30

*Plan of the design,
at the attic floor,*

1:250.

15. Library level 4

16. Entrance Hall

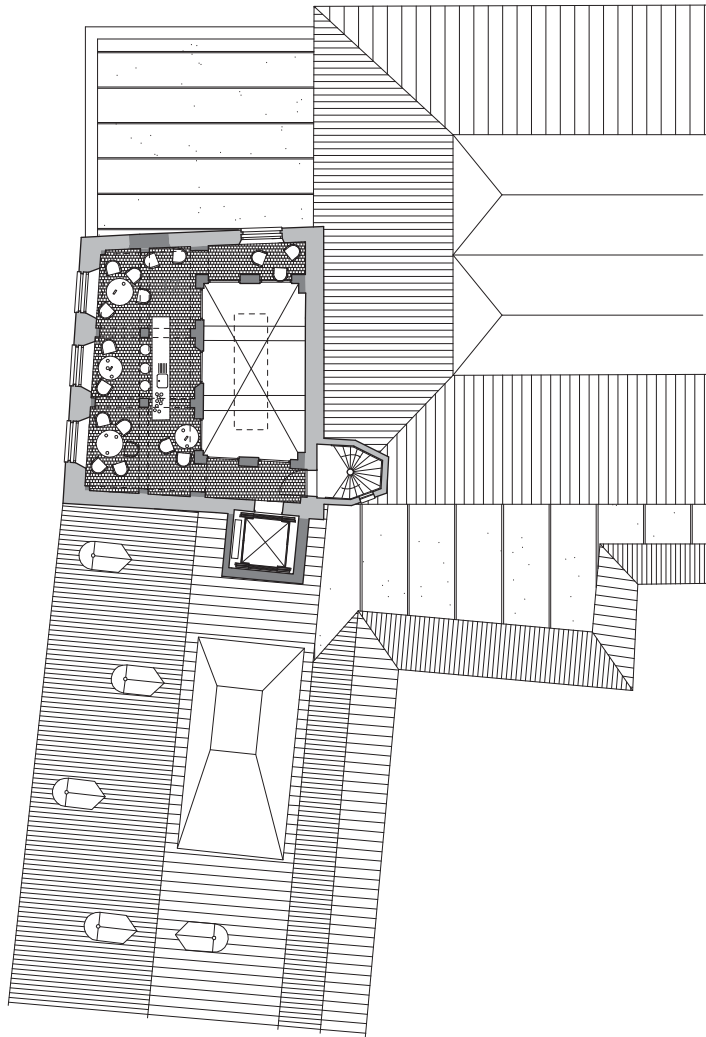
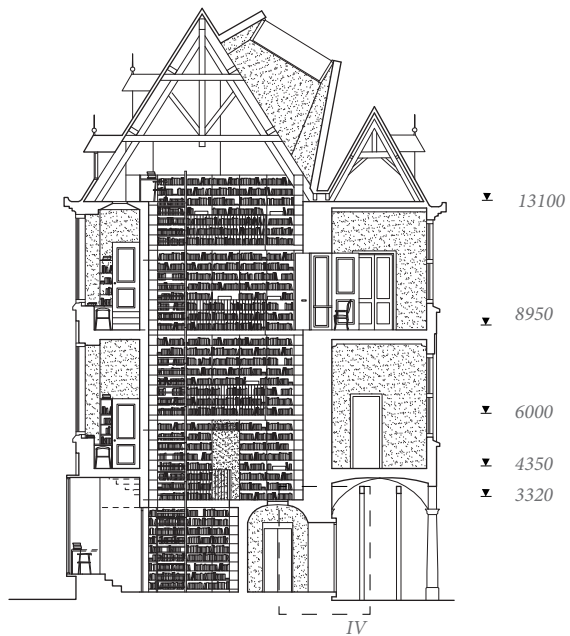


Image 3.31
Plan of the design,
at the fourth floor,
1:250.
17. Cafe



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Image 3.32

Transverse section (A-A) at the entrance. Also see image 3.27. 1:250.



Image 3.33
Longitudinal section
(B-B'). See image
3.27. 1:250



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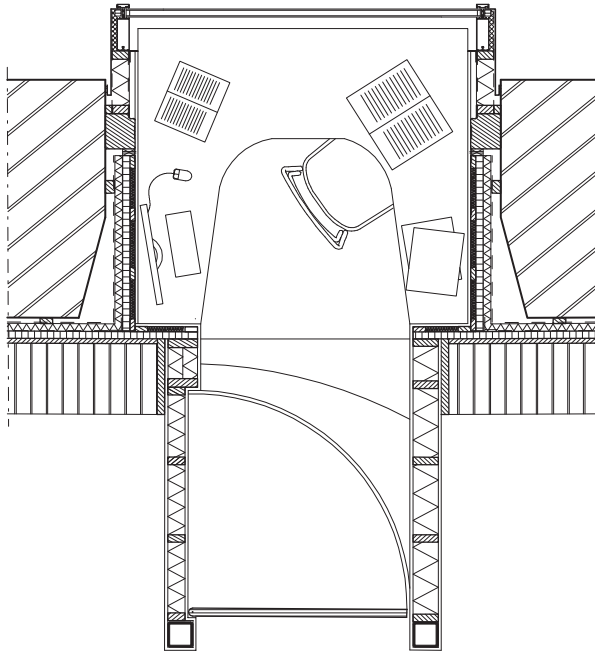
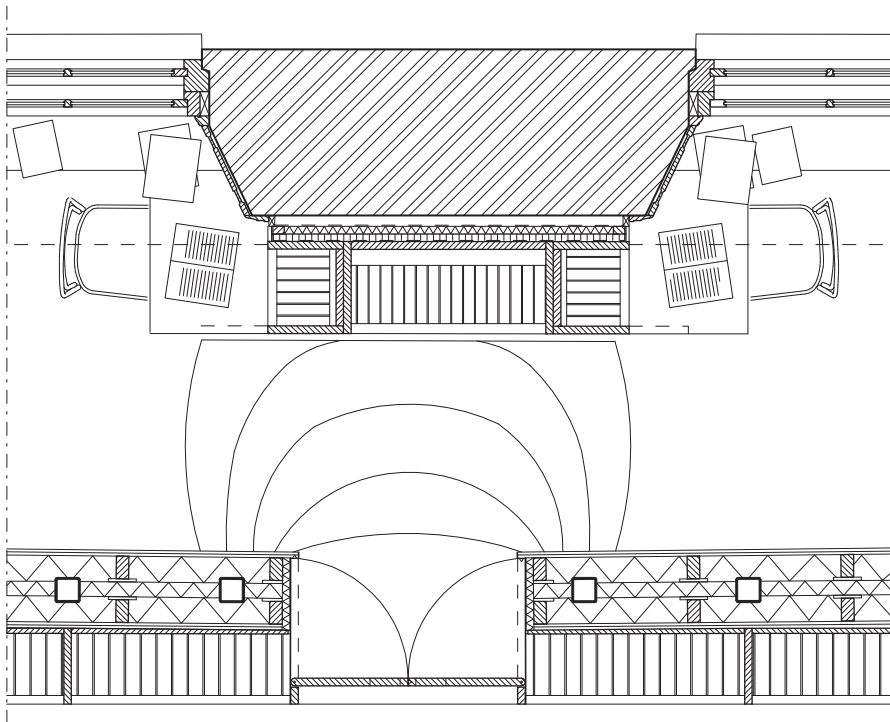


Image 3.34
Detail drawing (I)
of the workspace at
the facade, ground
floor, horizontal
section, 1:30



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Image 3.35

*Detail drawing (II)
of the workspace
at the facade, first
floor, horizontal
section, 1:30*

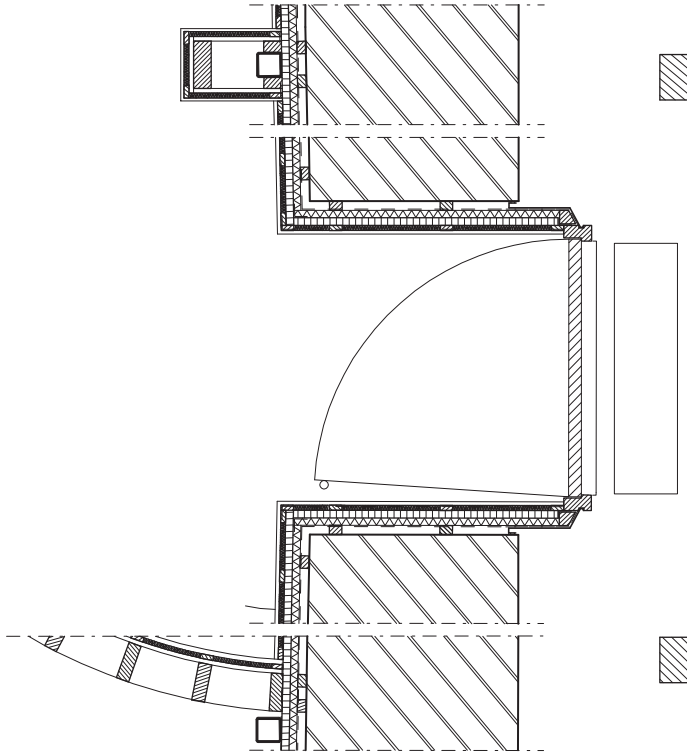


Image 3.36
Detail drawing (III)
of the entrance,
ground floor,
horizontal section,
1:30

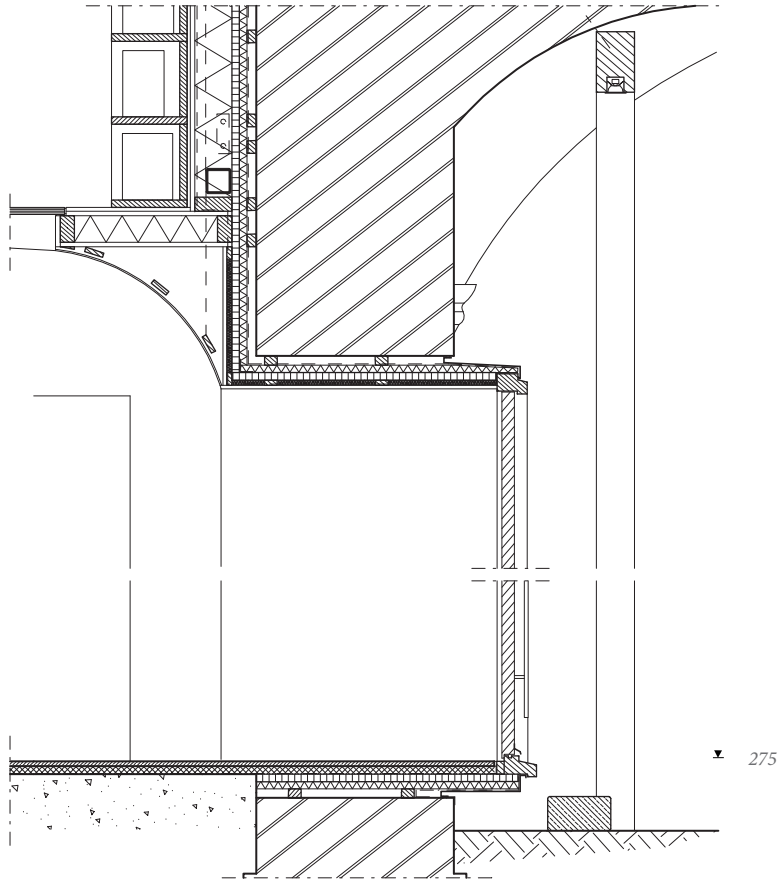


Image 3.37
Detail drawing (IV)
of the entrance,
ground floor,
vertical section, 1:30



Image 3.38
*First part of the
spatial sequence
of the route. See
images 3.27 - 3.31.*



Eerste Kamer Balcony

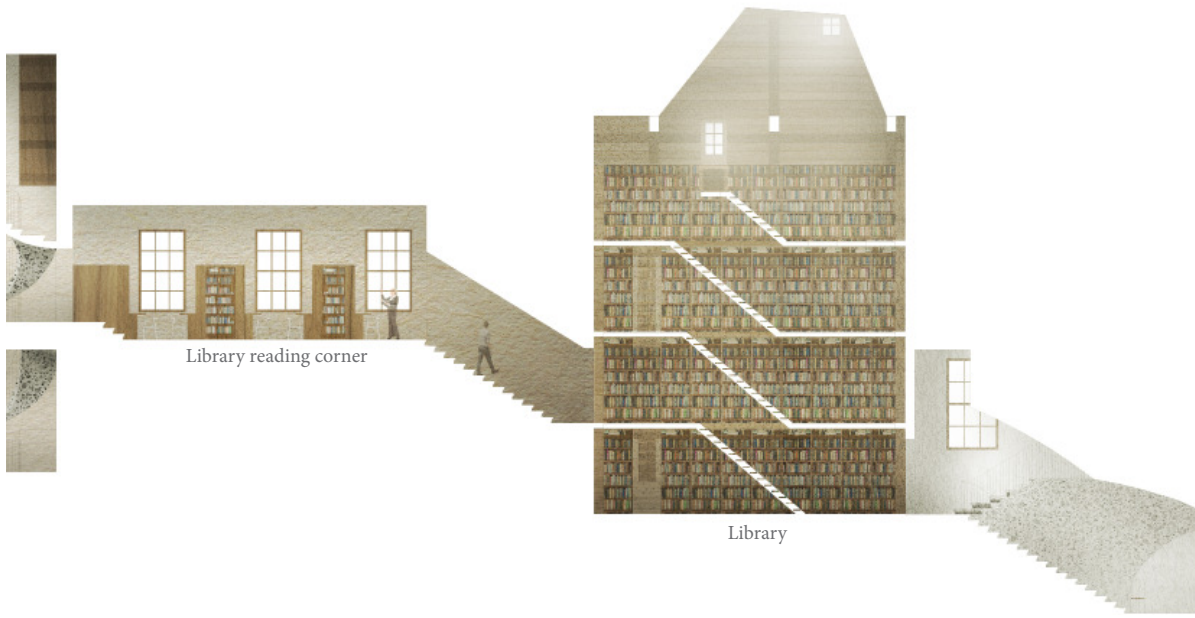


Lecture Room

Hall with toilets



Staircase



Library reading corner

Library

Staircase

Image 3.39
*Second part of the
spatial sequence
of the route. See
images 3.27 - 3.31.*



Entrance hallway

Noenzaal

Johan de Witt-kamer

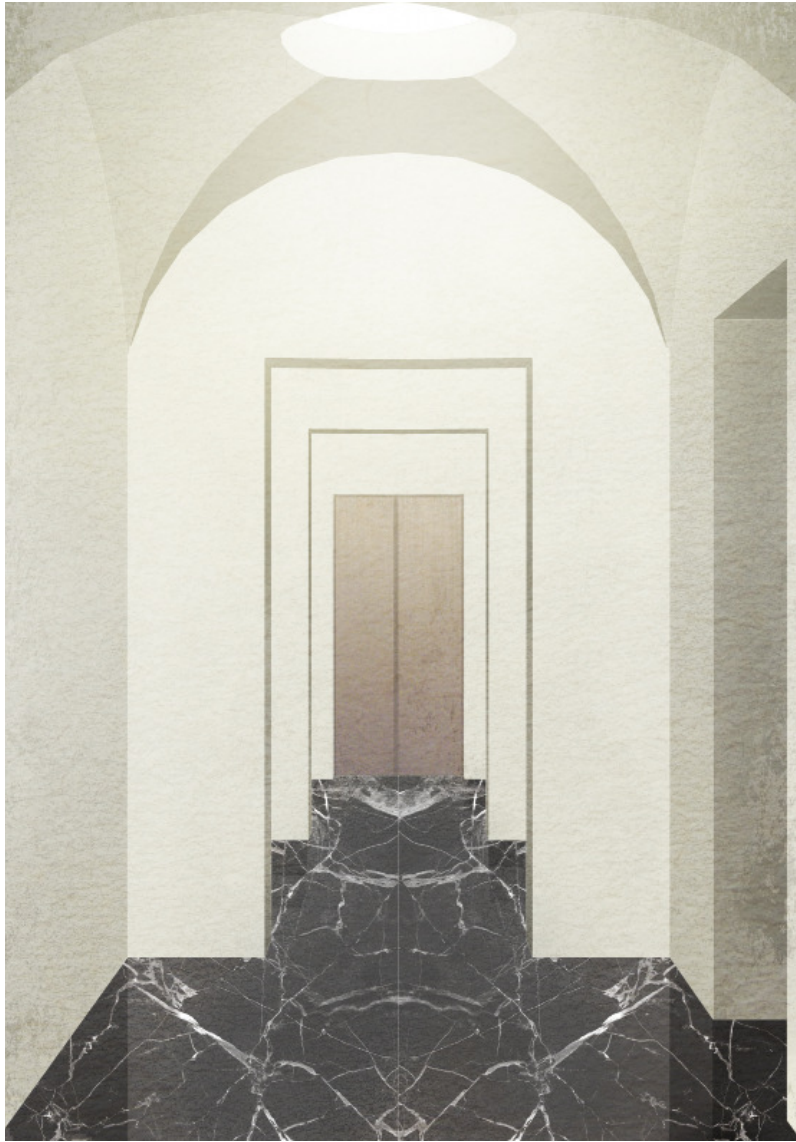


Image 3.40
View along
the route, of
the Entrance
Hallway.



Image 3.41

*View along
the route, of
the toilets.
Notice the
plaster above
the cupola.*



Image 3.42
View along
the route, of
the Staircase
beginning.

3.2 Conclusion III

We can finally conclude here, that through the subdivision of the design assignment in small pieces, through obscuring the exact relation between different levels of design interventions, the – by definition – ordering penchant of the architect, which in this case considers my penchant as architectural student, can be slightly tempered. Through designing separate pieces – which here means spaces – the overall coherence between the pieces gets slightly lost. It is a bit like designing the individual pieces of a blank puzzle: one may design the individual pieces, but does still not comprehend how they will eventually fit together, and consequently loses his absolutist influence. A natural distance between what is designed and what eventually arises is created. The same contingencies that typified medieval architecture can consequently arise. And, through the careful design of individual spaces and the later careful implementation, the result is all but random: it is based on the complexity of dwelling.

This is an alternative for the design from theoretical abstractions like plans, diagrams, 3D models, sections or other cosmic and conceptual levels of design. Whereas a plan, section, diagram or 3D model aims to display the totality, the proposed method *deliberately* avoids this totality. Naturally, after having designed the individual rooms, it will still be necessary to eventually use plans and sections to precisely implement the apparatus of spaces. But at that point, decisions have already been made and an absolutist unity is consequently harder to establish. The eventual design, by the focus on the perceptual level of a room or an individual facade, is finally, indeed, designed from *experience* and *use* and not through a rational god perspective on the level of plan or section. The

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latter levels can, in fact, never be 'experienced' or 'used'.

Naturally, there are some pitfalls. There needs, namely, to be a certain devotion of the architect towards multiplicity. One needs to have experienced or come to acknowledge a certain delight in multiplicity, as I – especially by visiting the house of Soane – have done. If we would have let Mies design the several spaces, for example, I think all of them will have looked rather similar. Mies – as he practically always did – would have abstracted the concrete reality into cosmic and universal geometric shapes. Therefore, an architect *can* ignore the clear multiplicity that stems from the programme. He can – although not self-evident – abstract all his rooms into a coherent collection that fits his architectural belief, if he really wants to.

In the process I noticed that there are also many things that are hard to design on empirical grounds. At a certain point, design decisions are specific to such a degree, that it is hard to argue their form from use and experience, for the influence of some decisions is simply to discrete. Here again, this can be considered a rather positive feature. It means that even within our multi-interpretive process framework, there are holes and inconsistencies that ask for sub-frameworks or sub-concepts. It is exactly this given, that still provides the necessary incoherence, and, consequently, a much needed resulting lack of an overall governing principle.



Part 4
Conclusion

4. Conclusion

A Paradox as Answer

1. See for example: Mallgrave, H. F. (2013). The complete medieval millennium has only resulted in the discussion of two cited works, that are both about the Gothic.

2. See: Van der Ploeg, K. (2006).

The typical medieval approach, that is based on pragmatic and empirical grounds, seems to have become lost in the architectural developments from the Gothic onwards. It is, however, in the former medieval period, that the idiosyncratic structure of the *Binnenhof*, our main subject, finds its roots. The essentially medieval composition provides the building with a variety and complexity that was much needed in order to be adapted to ever changing demands. Its architecture is the result of ordinary building practice: experiencing what is needed and answering the need with a simple and accommodating building form. The attitude of situating toilets on the facade, of adding towers, chapels and stables against the existing when needed, without answering to an all-encompassing architectural principle, is essential to medieval building practice. Reflections of this typical medieval trait can be found in the references that we have discussed: in the columns of the San Miniato and Sint-Maartens-chapel or in the disposition of spaces at Cluny III. This medieval attitude – that is indifferent to an overall coherence and instead enjoys the complexity of disorderly patterns – stems from *use* and *experience*.

Later, from the Quattrocento on, the body of architectural *theory* – very much opposing *empiricism* – dramatically increased.¹ The discipline of architecture, hence, became more and more intellectualized, theorized and conceptualized.² The architectural discipline was now taken over by concepts of perspective, proportion, symmetry and hierarchy. The *Villa Rotonda*, *Palazzo Pitti*, *Uffizi Gallery* and *Versailles* are some grand expressions of this conceptual architecture.

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Movements that turned against these absolutist ordering tendencies, seem to have gotten lost in the act of ordering themselves. The works by the *English Landscape Movement* or *Camillo Sitte*, for instance, can be considered just as conceptual as the styles they tried to oppose. Their shapes could just as well be – and sometimes were indeed – described by clear, easily interpretable rules and features of architectural form. The almost prescriptive sketches in Sitte's books vividly illustrate this. Instead of being characterized by shapes based on use or experience, – and thus not on any concept, order or theory – these 'opposers' manifested their architectures through an easily describable imitation of empirical form. Thereby they did not *truly* oppose the conceptuality and coherence of architectural tendencies, as they themselves formulated architectural orders and concepts. In trying to oppose conceptual architectural movements, they fell into the trap of becoming unitary and prescriptive in the very act. They therefore lost any relation to the *ordinary beauty of untouched nature* or to the *unregulated medieval city fabric* they respectively desired. To these *obvious reactions against order* we could also count the work of the Spanish architect Miralles.

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Of course this short summary of the complete discourse of architectural theory is rather blunt. The history of architecture may not be as 'black and white' as I now suggest. Of course, there are post-Quattrocento works of architecture that contain degrees of disorder, ordinariness and experience as typical for empirical architecture. Not all architectural works have been derived from a meticulous framework of architectural concepts. Still – also following Worringer's theory here – we are obliged to be somewhat blunt throughout this book, not only because of the strong utility of the consequent oppositions, but rather because we *by definition have to be*, in a manifesto.

CONCLUSION

3. Rowe, C., & Koetter, F. (1979) & Turnovsky, J. ([1985]2009), also see: I. Bekaert, G. ([2001]2014). Architect en architectuur. In H. Heynen, A. Loeckx, L. De Cauter, & K. Van Herck, Dat is Architectuur (pp. 443-446). Rotterdam: nai010.

4. Rowe, C., & Koetter, F. (1979). pp. 92

And, state of the art architecture is not exactly dominated by ordinary, simple and unobtrusive buildings. Both Turnovsky and Rowe & Koetter insinuate that there is *building* and there is *architecture*.³ Perhaps this best illustrates the intellectualisation of architecture. And, as Turnovsky states, the empirical is '*simply not architecture*'. And, consequently, architecture would simply be un-empirical. Such is our paradox.

Still, even within the earlier blunt generalization, there are exceptions. A powerful one we find in the work of Sir John Soane – the ingenious madman – who managed to retrieve something of the indifferent attitude that typified medieval artistic method. He delighted in ambiguity and variety. And, although unfairly counted to the hedgehogs by Rowe and Koetter, Soane was rather an ultimate archfox as he was Classical yet un-Classical, Picturesque yet un-Picturesque, unitary yet pluralist.⁴ Soane, through the people gathered around him – Piranesi, Dance, Holland, Gandy and Turner – in the end, delighted in multiplicity. There is not one thing that is able to explain Soane's house. It is neither Classicist nor Picturesque, neither Egyptian nor Gothic, neither orderly nor disorderly. It is all of them, and, precisely because of that, neither of them.

In much the same way, empirical architecture is neither order nor disorder, it is neither chaos nor unity. It is both, and thereby neither of both. It lacks an overall dominance yet in its parts contains overall dominances. It stems from an indifferentness towards architectural unity and is conceived through *experience* and *use*, rather than through theory and concepts. It is reflected in the *ordinary*, which is not bound to the invisible rules that govern architecture, and thus really answers to the complex nature of reality. Through its multiplicity, finally, it is a source for

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contradiction and ambiguity.

It is therefore, that here, we are trying to describe our *wary* manifesto, a manifesto that *is* and *is not* a manifesto. That *states* but also *asks*, that is *sure* but at the same time *doubtful*. That is ambiguous yet clear, totally structured yet in some way incomprehensible. Here, I want to warily and partially propagate the values I have found to characterize empirical architecture. This architecture is based on a variety that originates from *experience* rather than *theory*. An architecture that answers to reality instead of one that ignores or abstracts its multiplicity. An architecture that asks rather than talks. An architecture that is made for the ones experiencing the building and not for the portfolio of any architect. An architecture that produces buildings instead of billboards. One that accommodates rather than states. One that thinks about sitting, drinking, sleeping, walking, descending and looking and puts from simple and ordinary existing shapes, rather than from abstract concepts, storylines or other means that enable the architect to ignore the nature of concrete problems.⁵

5. With this I most definitely point to the schemes and story-lines that explain the shape of a building in four or five diagrammatic drawings. See, for example, the interview with MVRDV in Archiprint #9, 2016

'In recent times architects have often privileged theory in a way that has enslaved it to a set of conceptual abstractions devoid of any corporeal resonance. Architects have addressed their efforts to the 'intellect'. ... 'Theory,' as it has become defined today in many quarters, may be a seductive way to play the game, but those uninvested in the culture of architecture unfortunately do not participate.' (Mallgrave, 2013, pp. 115)

'Architectuur zou het zelfvertrouwen en de welwillendheid moeten opbrengen soms een beetje saai te zijn' (De Botton, [2006]2014, pp. 206)

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Turnovsky's denigration of the English house, stating that it is 'not architecture', poignantly illustrates the lack of architecture to connect with the ordinary and natural course of things. It illustrates the intensity of the problem, as there is a great quality in the muddled appearance of a Romanesque church, in the varied complexity of rooms in the Sir John Soane museum or in the ordinary and irregular shape of a peasant farm.

By avoiding a mere imitation of form and by interfering in the process instead, we have tried to manifest that which cannot be manifested. Like Pollock, Cage and Burroughs, which slightly dissociate themselves from their work, a design strategy is followed that is able to establish a just multiplicity by creating a certain distance. One that is the result of the multiplicity of the programmatic demands.

By interpreting the building on the level of the individual room – as the Binnenhof has always been as shown in the analysis – a variety of spaces can be designed. Through the design of a small element of the assignment – in this case a room – a certain distance between architect and building is created, very similar to the distance between Pollock's brush and his painting. By separately designing rooms – thus lacking a direct influence on the totality – the designer is unable to precisely assess what the result will be. This means that a designer must partly let go of his or her obstinate aesthetic, stylistic and conceptual preferences: every room has to be designed as an individual building, that is fully adjusted to the function it houses. From a certain archetype shape and additional choices, an eventual room is established, with certain measurements, forms, materials and lighting. The exact consequences of decisions on the level of the room cannot be foreseen. The designer loses his total influence. Herein, exactly, lies that which disabled Cage to control his radio composition: many things are controlled but there is still a small

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factor that establishes contingencies.

Spaces are then connected in a certain sequence, pushed and pulled through existing or contextual limitations, stretched or indented to accommodate rooms next to it, turned and twisted in order to fit behind a certain facade. The result is all but random: it is variety from experience.

The eventual designed aggregation then, is the result of so many different incoherent design decisions that it can – indeed – be called empirical. It indeed answers to the variety, complexity and ambiguity that is revealed in the analysis of the Binnenhof. The result is our answer to Versailles. And that we ultimately end with a *theoretical manifesto*, that pleads for more attention for experience, ambiguity, contradiction, use and the ordinary – and thus for less theory and manifestos in architecture – is perhaps exactly what is needed to overcome the ambiguous paradox of empirical architecture.

*'In het domein van de architectuur zijn er
blijkbaar twee onverzoenlijke standpunten,
enerzijds die van de architect en anderzijds
die van de wonende mens. En dit is een
onrustwekkend verschijnsel dat de aanleiding
was tot het maar al te werkelijke onderscheid
tussen architectuur en domaine bâti. ...
Hij bouwt niet voor zichzelf, maar voor de
architectuur. ... Hij is slaaf van zijn eigen ideeën
en voorstellingen van zijn beroep. In geen geval
staat hij als een vrije en onbevangen maker voor
zijn object. Bij het ontwerpen schijnt hij ergens
aan mysterieuze wetten te te gehoorzamen. Men
kan hem in dit opzicht nog het best vergelijken
aan een geroepene, een priester, ...' (Geert
Bekaert, 1970, in: *Dat is Architectuur*, pp. 443)*

5. Epilogue

1. Bekaert, G. ([2001]2014). Architect en architectuur. In H. Heynen, A. Loeckx, L. De Caeter, & K. Van Herck, Dat is Architectuur (pp. 443-446). Rotterdam: nai010.

I must finally state that all this has not been easy. Clearly, in some way, It felt as if I had to get rid of everything I learned as an architect. As Geert Bekaert states, there is a clear difference between architecture and dwelling human, between *architecture* and *domain bâti*.¹ And there have been many times that the architect in me seemed to want something else than what the dwelling, experiencing human did – whereto I was especially in this empirical context – obliged to listen to. When this project headed towards a non-conventional project, I felt really resistant. Not drawing aesthetic elevations? Not producing dazzling renderings? Not presenting a clear story from beginning to end in which all – from concept to details – relates to each other? Hmm...

I have always learned to work with concepts. The concept is something you choose and something that then guides the design. It is a basic structuring principle for the complete body of work. The architect in me wanted, like many others want I would say, a great and fancy concrete model, a set of fantastic and hyper-aesthetic elevations, with a beautiful rational plan where everything fitted, where all was logical and clear.

The path, that was eventually chosen, however, I consider to be at least equally valuable. It is perhaps precisely the fact that I so struggled to become empirical – or un-architectural – that further supports the legitimacy of the argument – that architecture is indeed very much and merely conceptual – and thus further illustrates the paradox and the great lack of architectural practice. This wary manifesto, in the end, should rather be regarded as a *question* than as an *answer*. One which I have tried to ignore in the beginning but have eventually become to embrace.

6. Summary

The Binnenhof is a medieval stronghold that, over the centuries, has grown into a muddled and complex aggregation of buildings. With its compound complexity, the building has been able to withstand the tumultuous history of Dutch governmental practice for eight-hundred years. Yet, at least since the beginning of the 17th century, all-encompassing absolutist architectural plans – palaces of either monarchy or democracy – have been drawn up in order to completely replace the existing conglomerate by reasoning from *Tabula Rasa* instead of the prevalent *Palimpsest*.

Not one of these plans has succeeded in its absolute obstinacy, and, even though their number was large, the organic – instead of the cosmic – still characterizes the place. Instead of proposing – or rather imposing – another absolutist architectural palace, I would like to argue to continue the extraordinary qualities of the fragmented, rather disorderly nature of the building. But, what does this imply? How can this character of the Binnenhof be named?

In Jan Turnovsky's *The Poetics of a Wall Projection*, a parallel to the distinguished problem is identified in the opposition between *conceptual* – that which is ordered from a unitary overall concept – and the *empirical*, that which is multivalent, adjusted to concrete existing conditions related to use. Whereas the former abstracts and ignores the complex nature of reality, the latter answers to, and delights in, the accommodation of concrete existing conditions. Naturally, this latter one – empirical – relates to the character of the Binnenhof. Empirical form, instead of conceptually abstracting the complexity of natural reality, answers to the multiplicity of impulses that is the result of dwelling reality, and subordinates itself in order to accommodate the users on many levels without either lapsing in

total order or disorder.

But, when the latter is explored and employed we come across a significant paradox: the empirical is for some reason un-architectural, and consequently architecture is un-empirical. The opposition between *empirical and conceptual* can be literally paralleled to that between *building and architecture*. It is only when empirical form is idealized – and here we must for instance think of Camillo Sitte's idealization of medieval fabric – that the empirical becomes architecture indeed. It is then, when the form that is normally the result of an indifferent attitude to building – like a peasant farm or a historically grown street – becomes intentionally desired, and thereby defined and described in comprehensible concepts and principles, that empirical form can enter the domain of architecture; the domain of order. In this very idealization however, it at the same time loses its characteristics: empirical form is ambiguous, contradictory and ordinary. When it is idealized, however, indeed manifested and utopianized in order to be elevated to 'architecture', there is no more room for ambiguity and the ordinary: '*Utopia has never offered options*' (Koetter and Rowe, 1979). Therefore *empirical architecture* is a myth, it is a paradox, an intangible utopia.

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Yet, by means of the work of aleatory artists as Cage, Burroughs and Pollock, a way out of the paradox may be found: instead of – like Sitte – focusing on a description or imitation of the *concrete shape* of empirically conceived buildings, we must intervene in our *making-process* instead. Through analyzing the compound character of references such as Romanesque churches, the Sir John Soane's museum and Enric Miralles' Town Hall – of which the last is eventually not found empirical – we see a fragmentation and variety in the design, which seems to stem from a certain individuality of the several components of the design.

SUMMARY

This variety can be derived from – as the etymological ground of the word *empirical* implies – *experience*. Instead of designing on the level of plans, sections, diagrams or other cosmic architectural representations, the design level is reduced to smaller entities. By constructing a design process whereby each activity of the design brief is translated in an individually designed space, shaped according to the experience of features and limitations that the activity poses, an incoherent variety of fundamentally different spaces is established. The collection of different spaces is then – in turn – pushed and pulled through existing contextual constraints in very much the same way in which Sir John Soane seems to have designed his idiosyncratic house. The proposed process prevents the totalitarian architect – in this case myself – from full control through the obscuring structure of the process. The architect – as servant of order – is not able anymore to fully assess the consequences of his decisions, and thereby inevitably arrives at a multiplicity of some kind, derived from the aggregation of spaces that is conceived from use and experience. The result of all this is a design that answers to the empirical character of the Binnenhof and establishes a similar quality. It is in such a manner that the un-idealizable can be idealized, that the intangible utopia can be defined. Such is my answer to the numerous plans projected on the Binnenhof, which strongly reflect their arch-example, Versailles.

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Images:

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- Image 1.1** (NA, toegangnr. 4.RGD, inv. nr. 396)
- Image 1.2** Engraving by Nicolaus Visscher, 1621, Collectie Haags Gemeentearchief
- Image 1.3** (NA, toegangnr. 4.RGD, inv. nr. 458)
- Image 1.4** (NA, toegangnr. 4.WCA, inv. nr. 12155)
(NA, toegangnr. 4.RGD, inv. nr. 460)
(NA, toegangnr. 4.RGD, inv. nr. 480)
(NA, toegangnr. 4.RGD, inv. nr. 529)
- Image 1.5** (NA, toegangnr. 4.RGD, inv. nr. 467)
- Image 1.6** (NA, toegangnr. 4.RGD, inv. nr. 467)
(Collectie Het Nieuwe Instituut / PGTK.2, 2.1p8)
(NA, toegangnr. 4.RGD, inv. nr. 469)
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Image 1.8

By Author, 2016

Image 1.9

Images by Kevin Lynch & Serlio, from: Kostof, S. ([1991]2009). *The City Shaped - Urban Patterns and Meanings Through History*. London: Thames and Hudson.

Image 1.10

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Image 1.11

Turnovsky, J. ([1985]2009). *The Poetics of a Wall Projection*. (B. Steele, Ed., & K. Kleinman, Trans.) London: Architectural Association.

Image 1.12

Painting of Versailles by Pierre Patel, 1668, Versailles Museum, From: Wikimedia Commons, directed from: www.banqueimages.crcv

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Image 1.13

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Image 1.15

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Image 1.16

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Image 1.17 Sketch by Andrea Deplazes, from: Miroslav Sik, *Analoge Architektur Ausstellungskatalog* (1987), Zürich : Boga, 1987.

Image 1.18 Davey, P. (1997). *Arts and Crafts Architecture*. London: Phaidon Press.

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Image 1.20 Boga, T. (1983). *Die Architektur von Rudolf Olgiati* (3rd ed.). Zürich: Organisationsstelle für Architekturausstellungen an der Eidgenössischen Technischen Hochschule Zürich.

Image 1.21 Based on: Haagsekaart.nl, Haags Historisch Museum

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Image 1.22 - 1.124 By Author, 2016

Image 2.1 Reconstruction by K.J. Conant, from Studyblue.com: Jessica S. Retrieved September 8, 2016 from: [https://www.studyblue.com/notes/n/romanesque-art/deck/1764592](https://www.studyblue.com/notes/note/n/romanesque-art/deck/1764592)

Image 2.2 Reconstruction by K.J. Conant, (Musée d'art et d'archéologie-Ochier, Cluny)

Image 2.3 Reconstruction drawing, found on: Inglis, E. (n.d.). *Art 335. Saints and Relics in Medieval Art, week 7*. Retrieved September 8, 2016, from oberlin.edu: <http://www.oberlin.edu/images/Art335/Art335g.html>

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Image 2.5

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Image 2.6

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Image 2.7

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Image 2.12

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- Image 2.14** Lithograph by C. Hullmandel [1835] after C. J. Richardson. From: Wikimedia Commons, directed from: <http://wellcomeimages.org/indexplus/image/V0013538.html>
- Image 2.15** Watercolour by Gandy, from: Darley, G., Middleton, R., Watkin, D., Richardson, M., Woodward, C., Dean, P., et al. (1999). *John Soane Architect - Master of Space and Light*. (M. Richardson, & M. Stevens, Eds.) London: Royal Academy of Arts.
- Image 2.16** Lithograph by C. J. Richardson, From: Wikimedia Commons, directed from: <http://wellcomeimages.org/indexplus/image/V0013539.html>
- Image 2.17** Lithograph by Soane, from: Mullen, C. (2012). *The Cabinet Of Curiosities*. Retrieved September 8, 2016, from fulltable.com: <https://www.fulltable.com/vts/c/cabinet/cabinet.htm>
- Image 2.18** Lithograph by Soane, from: Soane, J. (1832). *Description of the house and museum on the north side of Lincoln's-Inn-Fields: the residence of Sir John Soane*. London: James Moyes.
- Image 2.19** Artist Unknown, from: Burzacot, J. (2016, October 20). *The British Museums Loss was Sir John Soane's gain*. Retrieved September 8, 2016, from nilemagazine.com.au: <https://www.nilemagazine.com.au/2016-october/2016/10/20/the-british-museums-loss-was-sir-john-soanes-gain>
- Image 2.20** Lithograph by Soane, from: Soane, J. (1832). *Description of the house and museum on the north side of Lincoln's-Inn-Fields: the residence of Sir John Soane*. London: James Moyes.
- Image 2.21 - 2.33** By Author, 2016

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Image 2.34	From: Oosterman, A. (2001). A Glorious Accident. <i>Archis, 1</i> , pp. 96-108.
Image 2.35	By Author, 2016
Image 2.36	From: Oosterman, A. (2001). A Glorious Accident. <i>Archis, 1</i> , pp. 96-108.
Image 2.37	By Author, 2016
Image 3.1-3.42	By Author, 2016