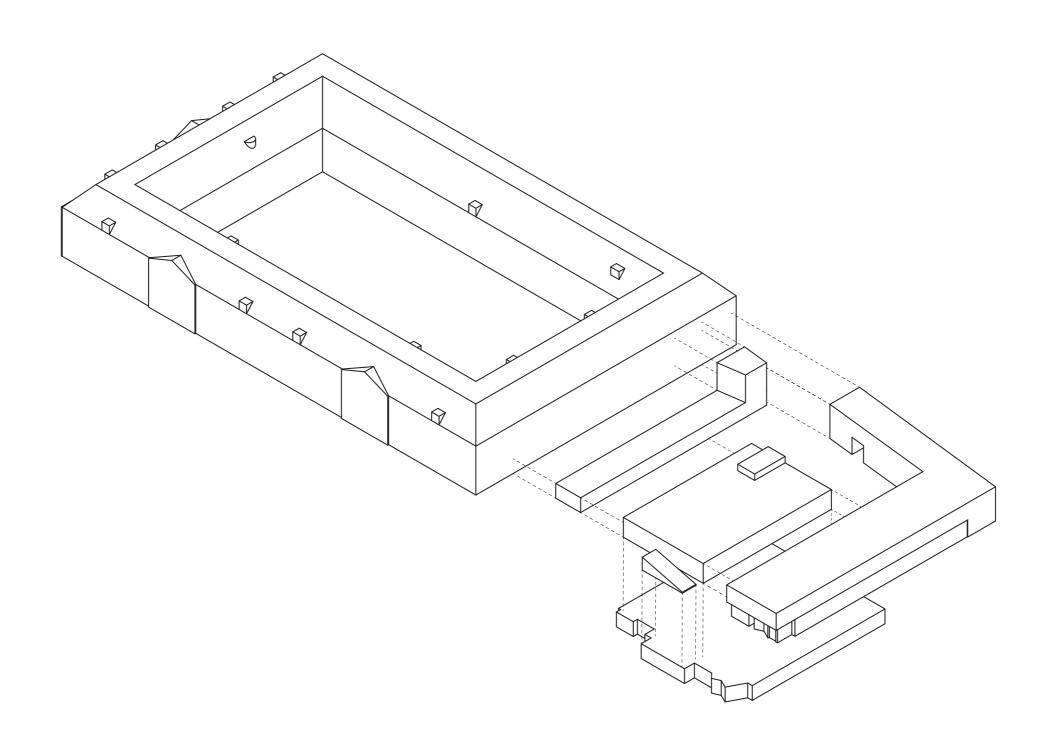


## THE KOUDENHORN BUILDING



## **BUILDING FORM**

# INTRODUCTION

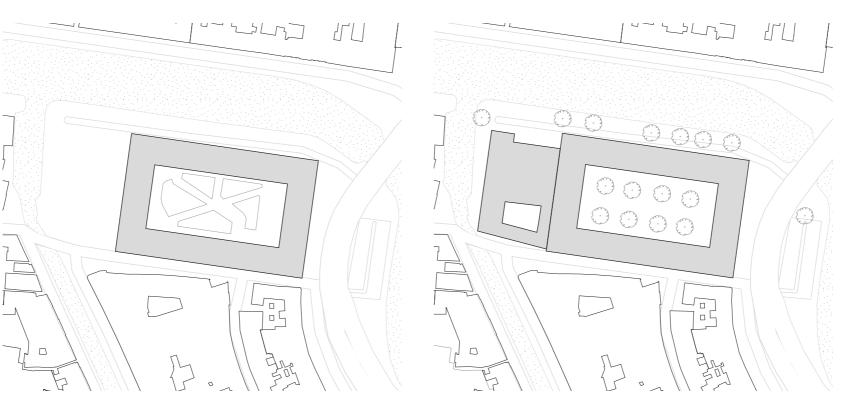


# INTRODUCTION

## HISTORIC DEVELOPMENT



1756 market

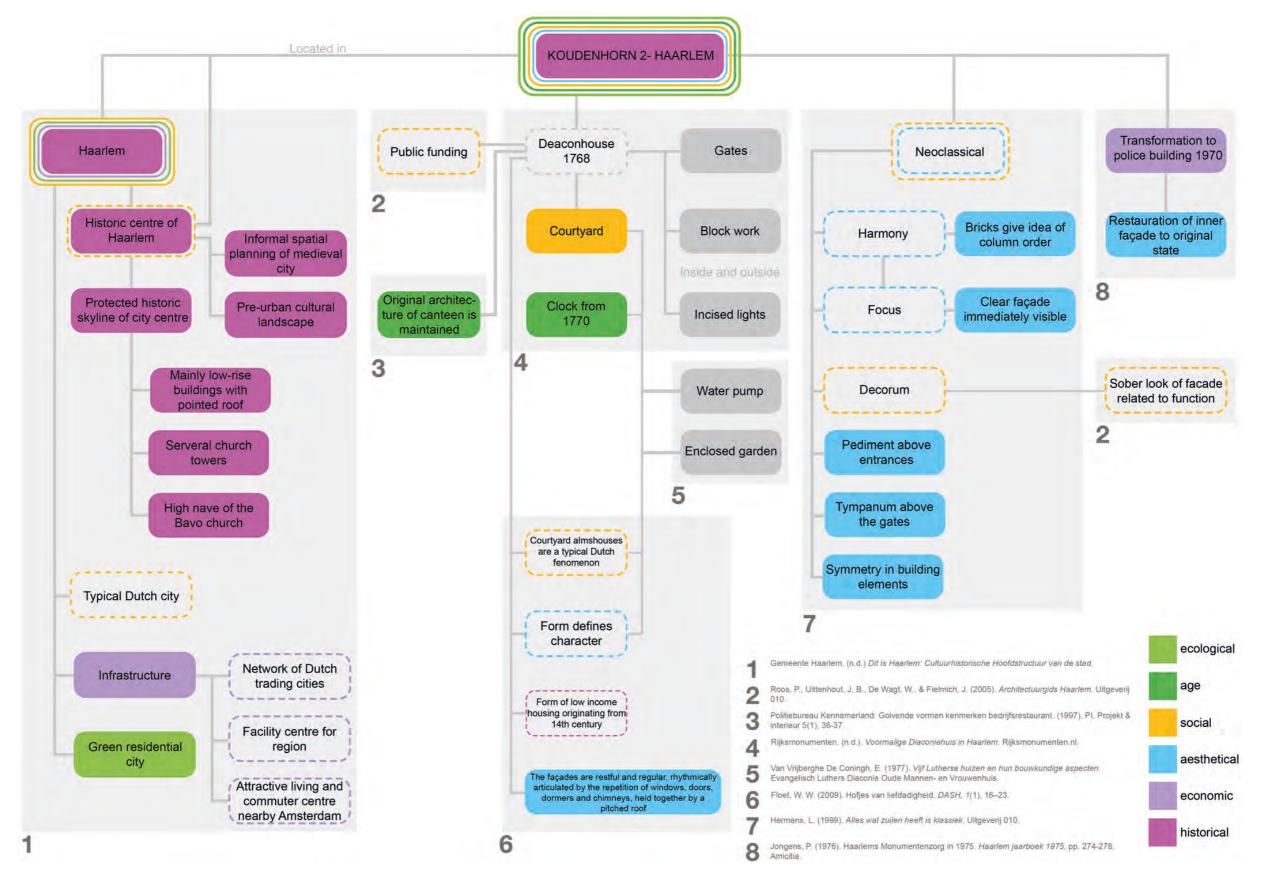


1960 police office

1975 new police addition

# NTRODUCTION CONTEXTICITY OF HAARLEM

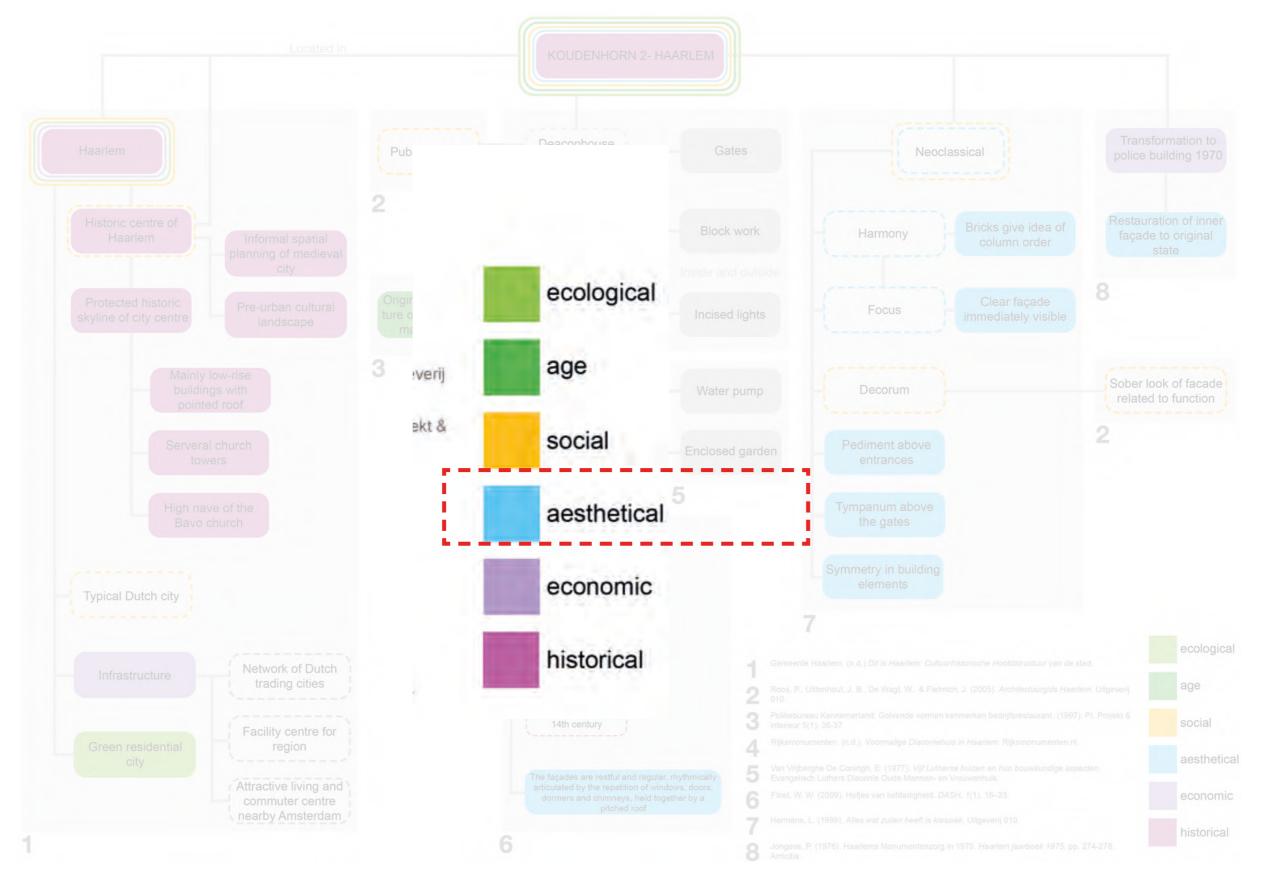




(Veldpaus & Pereira Roders., 2014)

## HA VALUES

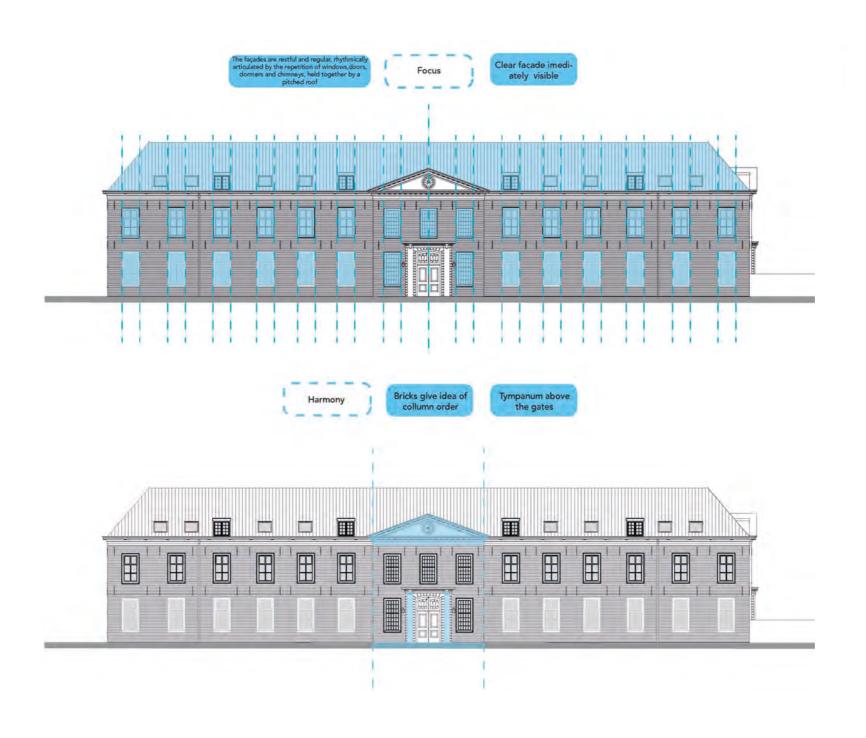
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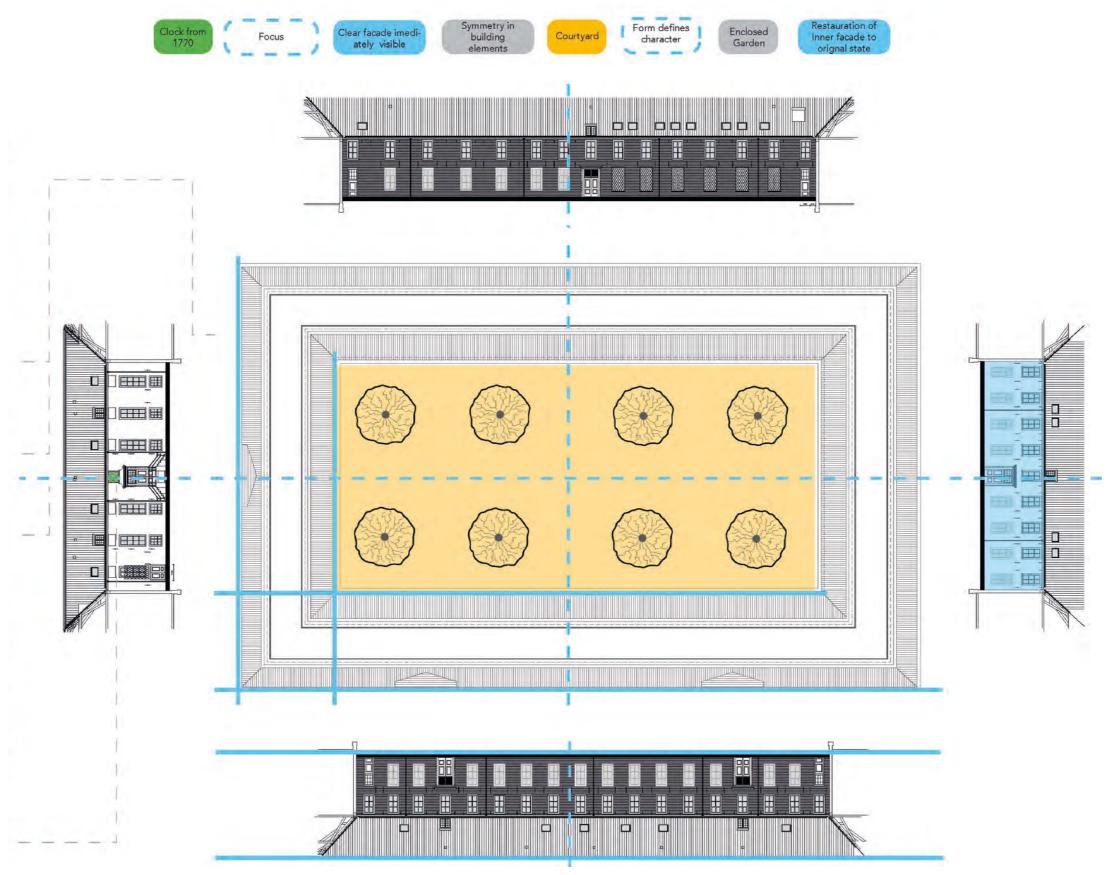


(Veldpaus & Pereira Roders., 2014)

## HA VALUES

# ANALYSIS



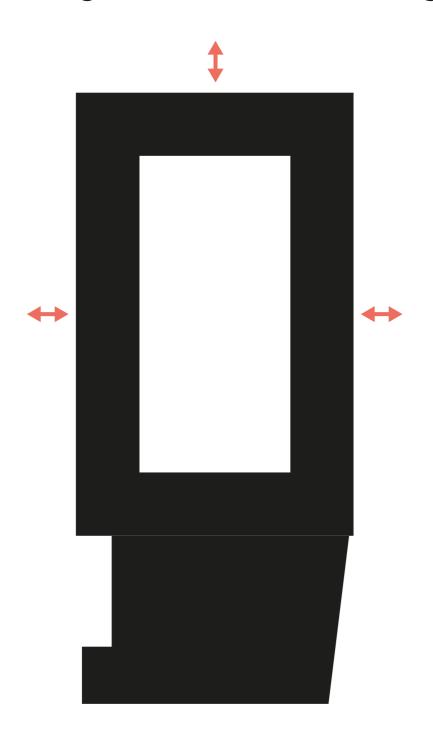


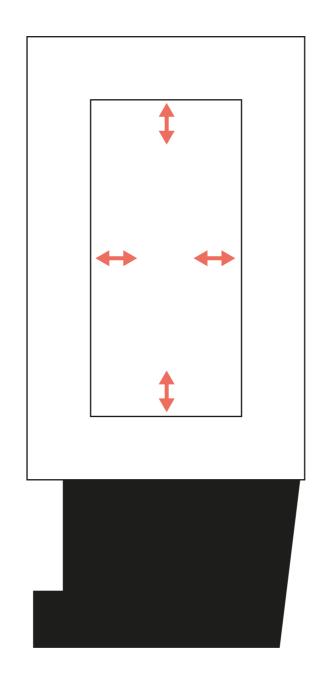
# ANALYSIS

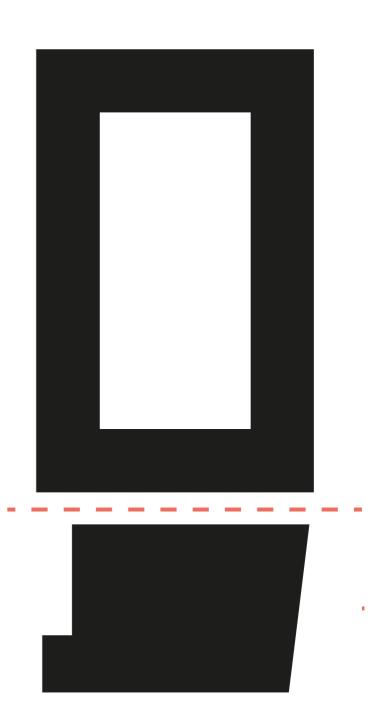
Building and Urban surroundings

Building and courtyard

Old and New





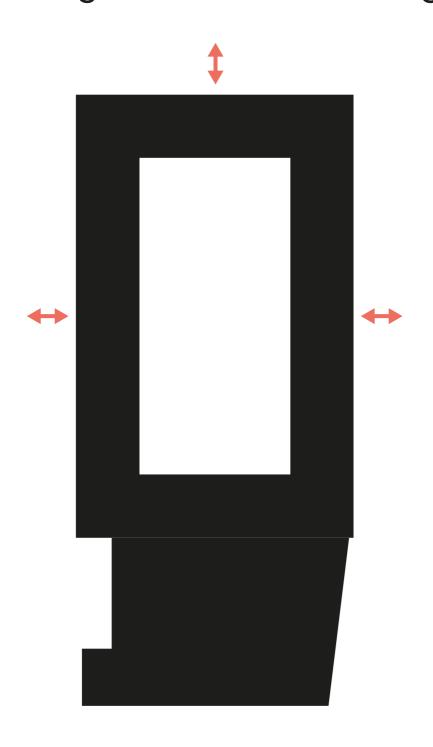


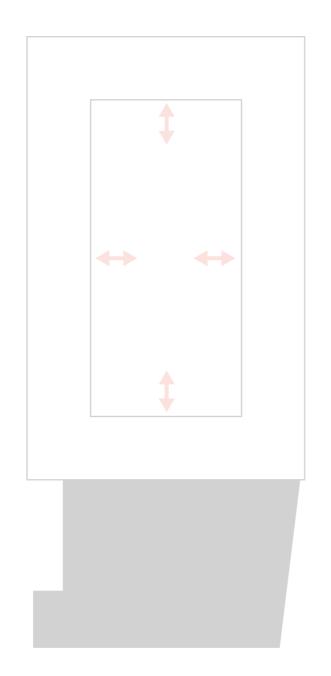
# ANALYSIS

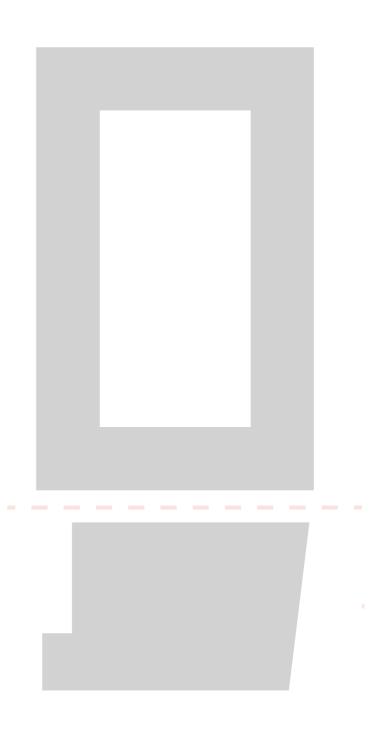
Building and Urban surroundings

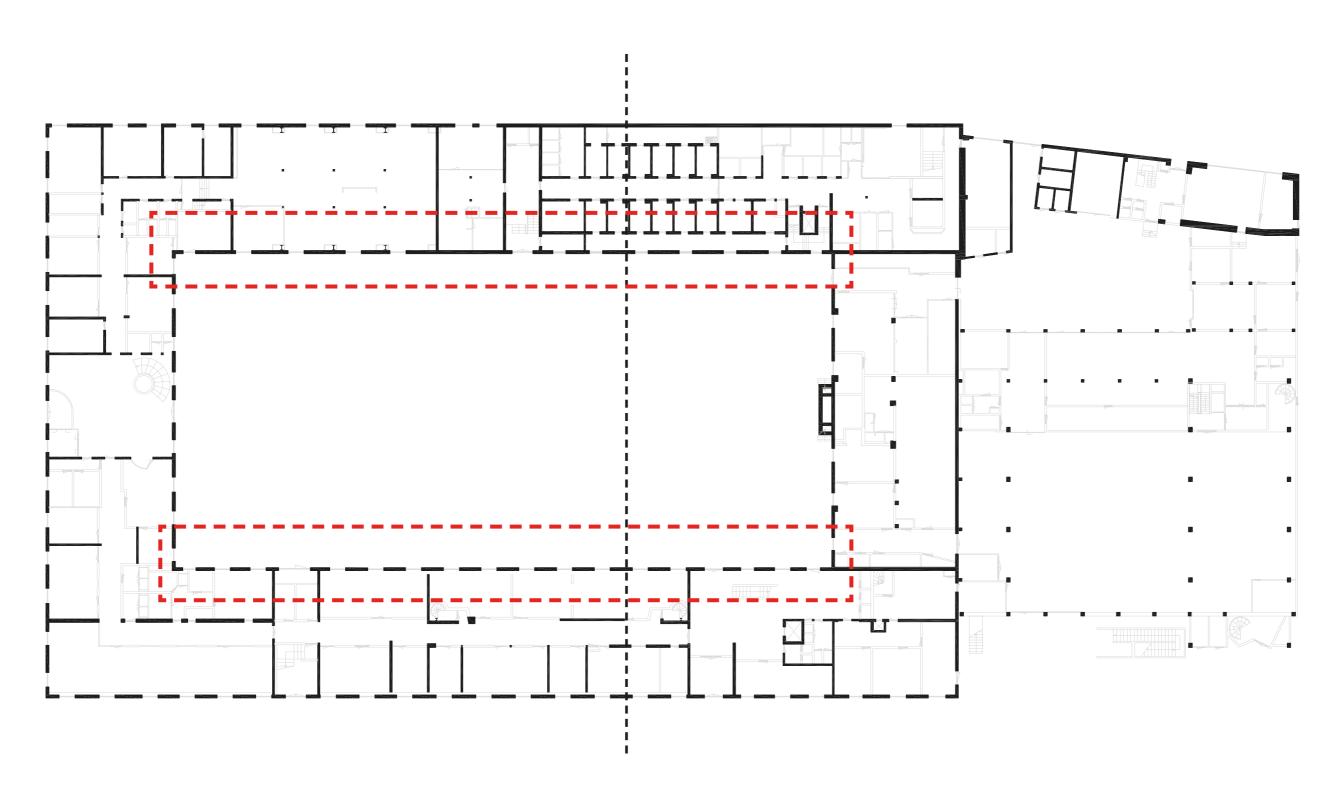
Building and courtyard

Old and New







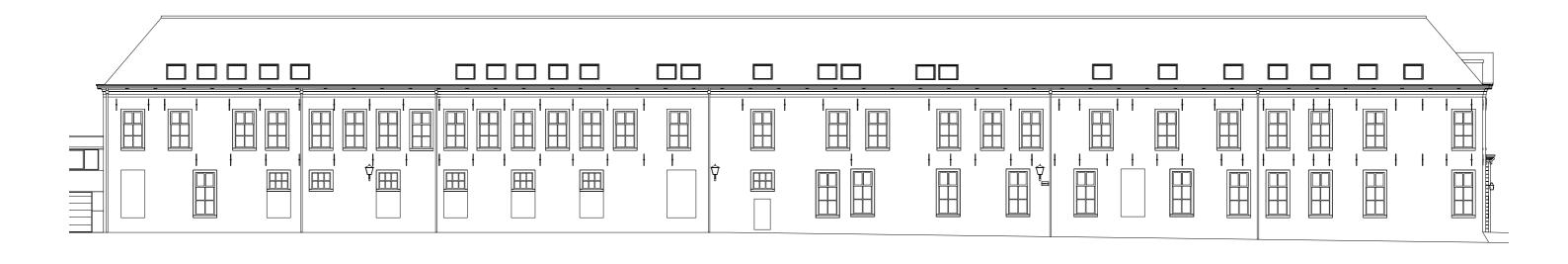


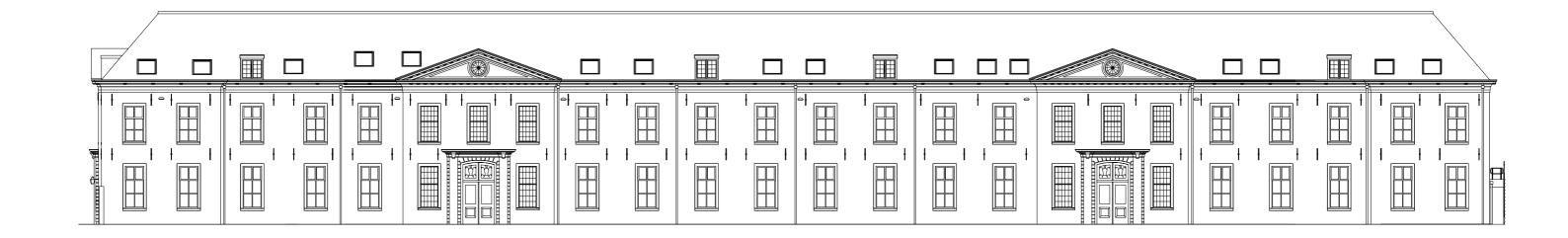
# ANALYSIS



# ANALYSIS





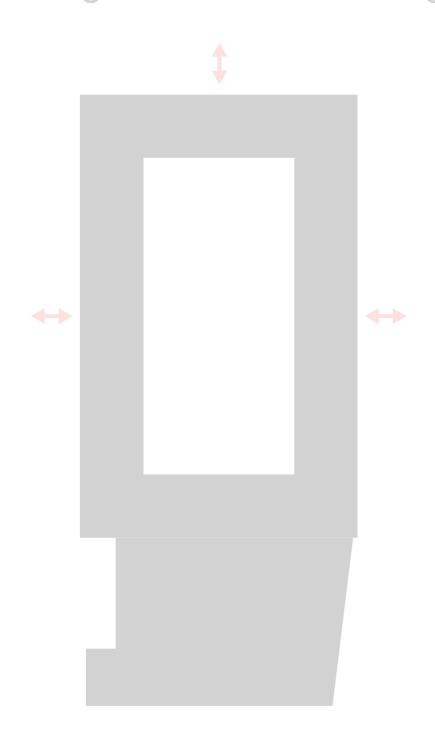


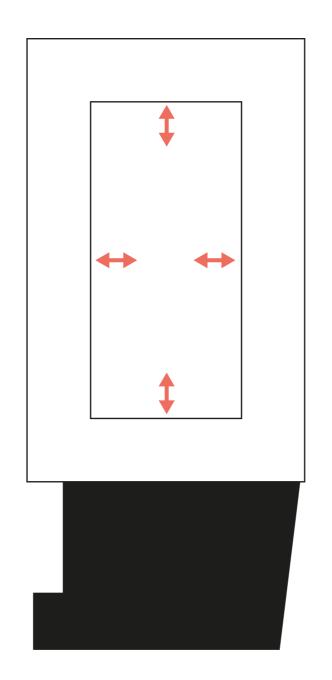
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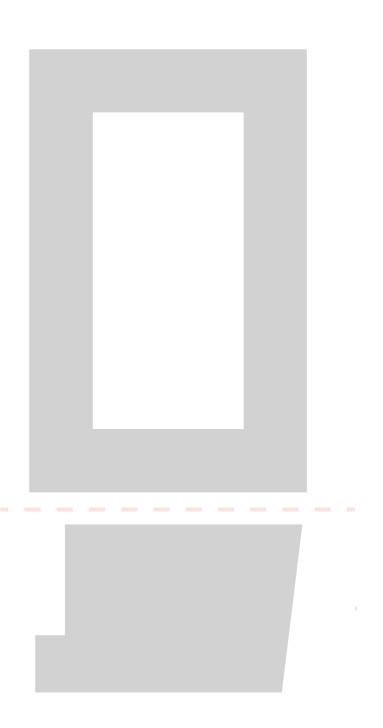
Building and Urban surroundings

Building and courtyard

Old and New

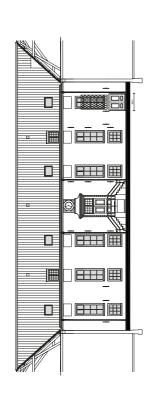


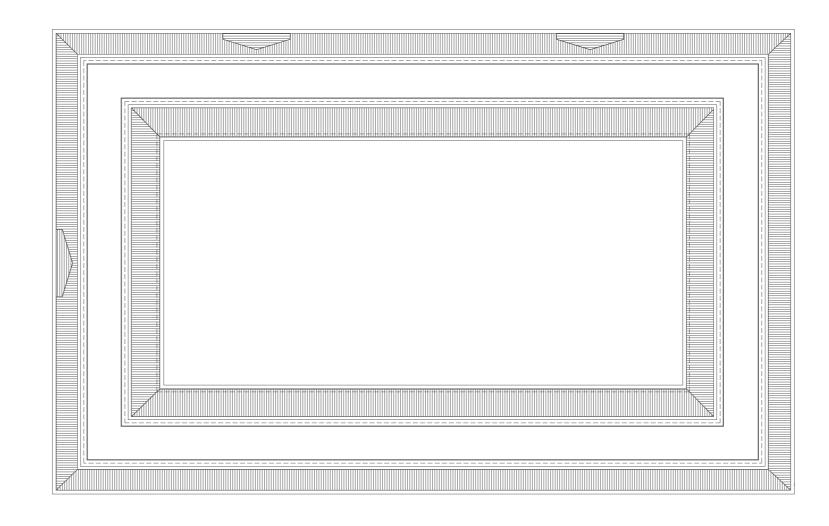


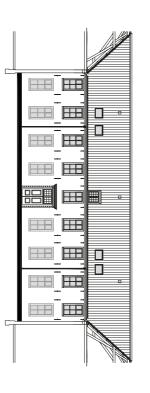










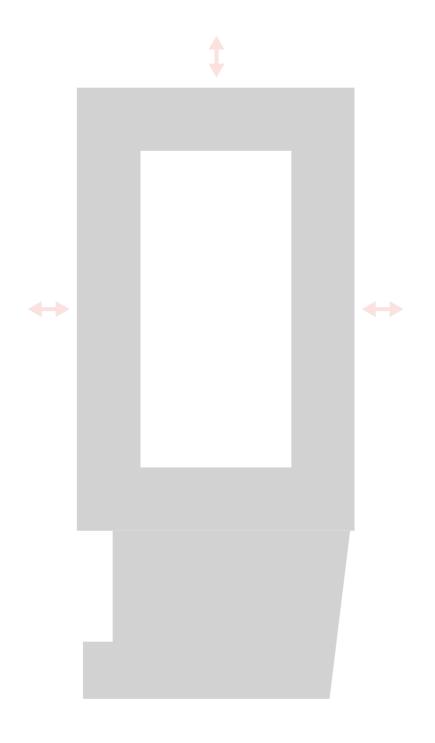


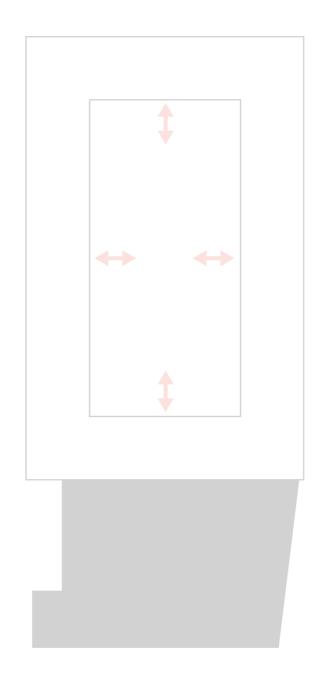


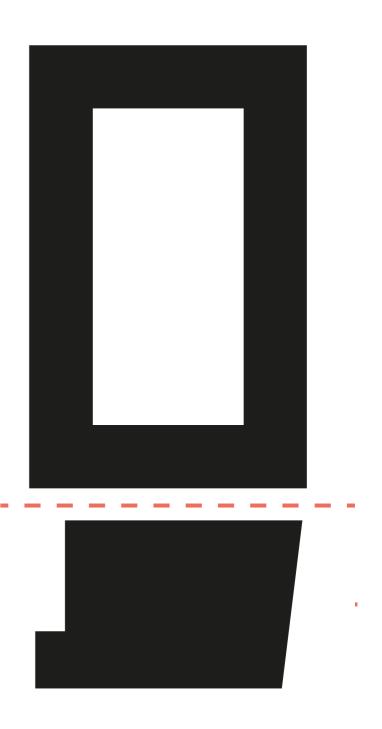
# ANALYSIS

Building and Urban surroundings Building and courtyard

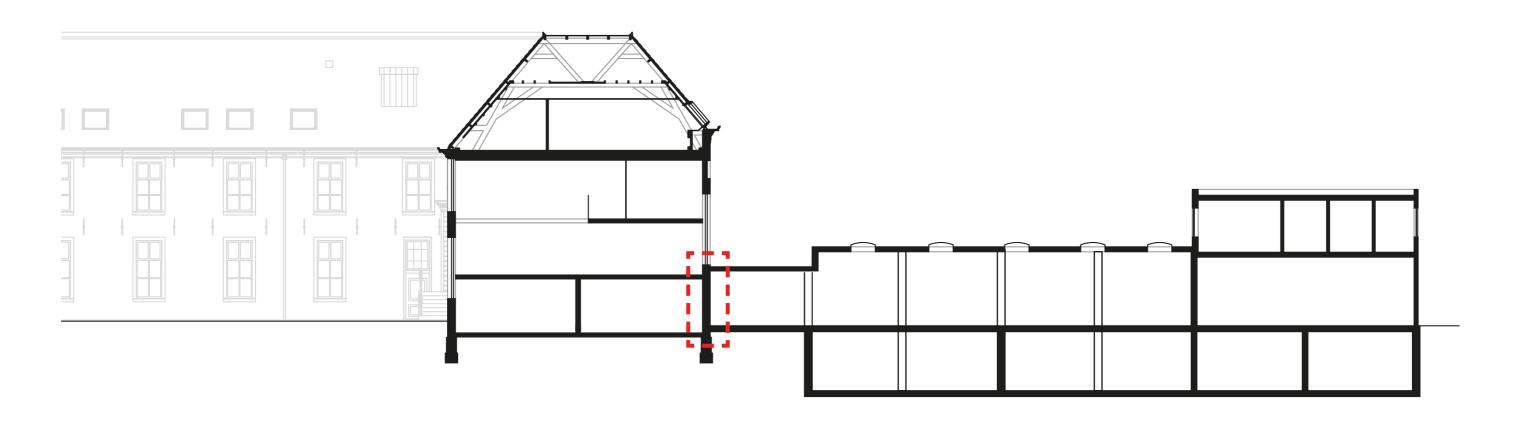
Old and New







# ANALYSIS



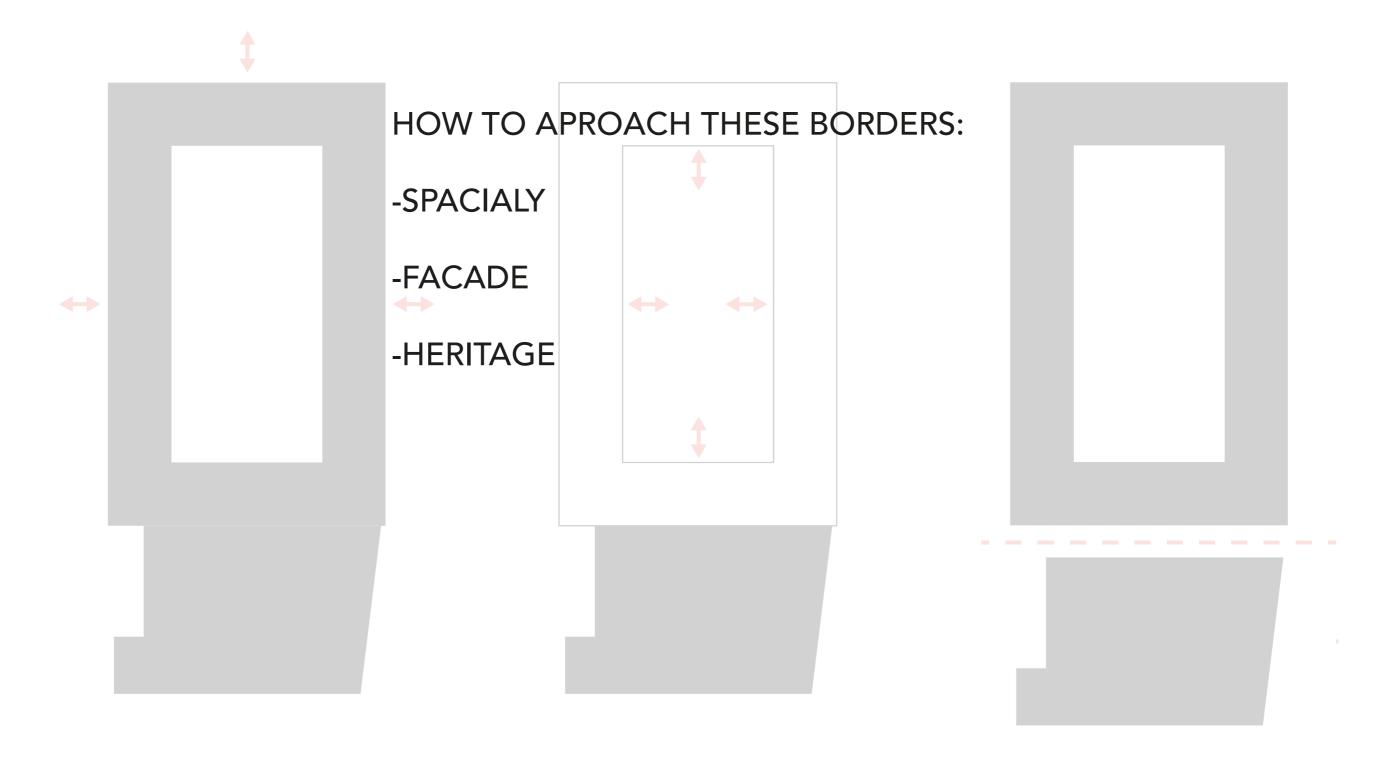
21

# ANALYSIS



# ANALYSIS

Building and Urban surroundings Building and courtyard Old and New

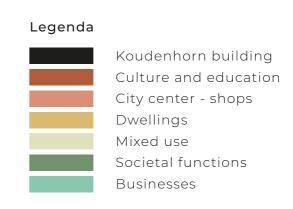


Future function for the building?



Public or Private?

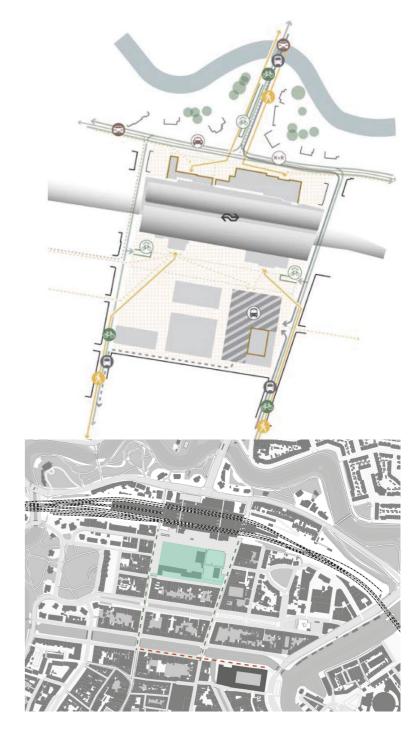
## **FUNCTIONS**



## STARTING POINT: VIBRANT CITY CENTRE

## **DEVELOPMENTS**





## Legenda

Koudenhorn building
Culture and education
City center - shops
Dwellings
Mixed use
Societal functions
Businesses



## CONNECTION TO INFRASTRUCTURE DEVELOPMENT

## 6 STRATEGISCHE KEUZES



01 Mengen & verdichten



02 Buurtgericht ontwikkelen



03 Vergroenen & vernatten



04 Bevorderen gezonde leefomgeving



05 Ruimte voor de energietransitie



06 Mobiliteitstransitie



- 1 Woningbouw concentreren in grootschalige gebiedsontwikkelingen.
- 2 Substantieel aantal arbeidsplaatsen toevoegen aan de Waarderpolder en bij de OV-knooppunten.
- 3 Beschermen bestaande wijken: menging en karakter behouden.



- 4 Versterken tien-minuten netwerk en
- 5 Sociale basis en ontmoetingsplaatsen in de buurt versterken.



- 6 Ruimte creëren voor klimaatadaptatie ten koste van ruimte voor de auto.
- 7 Boezemwaterstructuur versterken.



- 8 Meer kwaliteit in het buitengebied o.a: opwaarderen natuurwaarde van boerenland.
- 9 Ecologische verbindingen tussen hotspots versterken.



- 10 Ruimte reserveren en creëren voor energietransitie.
- 11 Regionale fietsverbindingen verbeteren en verbinden met tien-minuten-netwerk.
- 12 Knooppuntontwikkelingen in combinatie met verbeteren HOV bereikbaarheid.

## HAARLEM I GOALS

### 1.3.1 OMGEVINGSVISIE HAARLEM 2045

The vision of the municipality of Haarlem for 2045 elaborates on six main topics; a climate proof city, energy transition, strengthening of the social tissue, improving the attractiveness as living and working city, Haarlem as a healthy city for humans and animals and the Haarlem as sustainable and accessible city. These topics are translated into six strategical choices formulated as:

#### 1. Mixing and condensing

This first topic relates to three of the in total 12 key focusses that aim to concentrate the construction of new housing in large scale urban developments and add a substantial amount of jobs in the Waarderpolder and close to public transport nodes. The developments however should not impact the exiting neighborhoods with their mix and character.

#### 2. Neighborhood oriented developments

The topic related to the neighborhoods aims to strengthen the so called 10-minute networks and city streets and to strengthen the social basis and places for meeting and encounters in the areas.

#### 3. Greening and rewetting

Two key focusses related to this topic are the aim to create space for climate adaptation at the expense of space for cars and strengthening of the 'boezemwater' structure.

#### 4. Promote healthy living environment

The aims for this strategical choice are to improve the quality in the countryside by upgrading the nature value of farmland and the strengthening of ecological connections between hotspots.

#### 5. Space for energy transition

The fifth strategical choice aims to free up space for energy transition.

#### 6. Mobility transition

The last topic of strategical choices aims to improve the regional bicycle network and connect it to the 10-minute networks and the development and improvement of public transport nodes.

# HOUSING FOR EVERYONE, CREATING JOBS, SOCIAL SUSTAINABILITY FOR ALL CLASSES

## **NEW FUNCTION**

# ANALYSIS

## Homeless shelter

"City centre: more attention to shelter spaces for homeless young adults"

"Collaboration with the centre for youth and family"

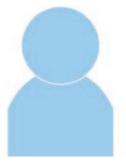


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## YOUTH CENTRE STRUCTURE

# ANALYSIS

Individual housing



**5 YEAR HOUSING** 

Short term shelter



**6 MONTHS SHELTER** 

Youth directors



CONSTANT GUIDANCE

## **NEW FUNCTION**

# ANALYSIS

## PRIVATE FUNCTION



**SHELTER** 

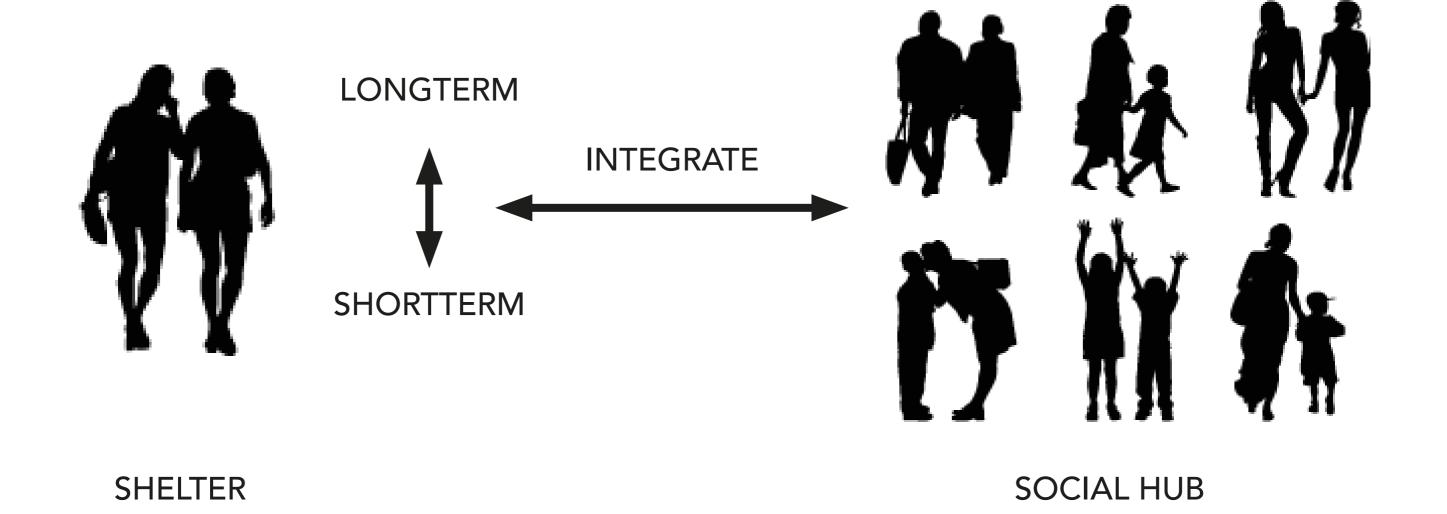
## **PUBLIC CITY CENTRE**



**SOCIAL HUB** 

## PRIVATE FUNCTION

## PUBLIC CITY CENTRE



## **BUILDING SCALE**





**MAIN SQUARE** 

KOUDENHORN

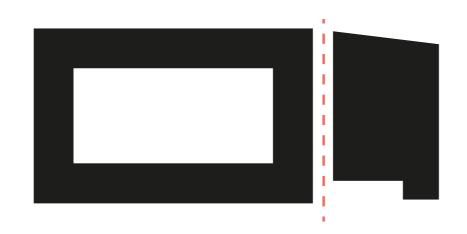
# PRIVATE TO PUBLIC

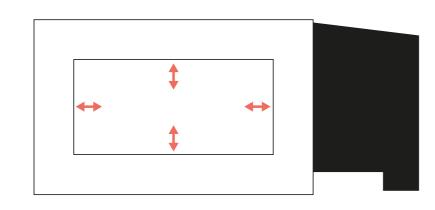


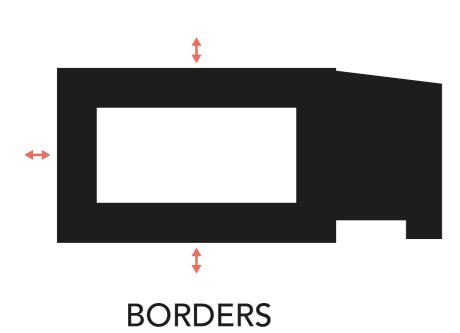
HOW TO DO THIS?

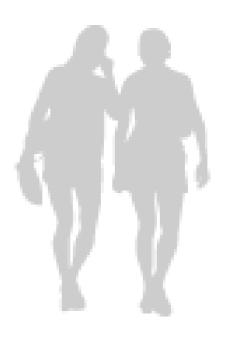












**PRIVATE** 



#### RESEARCH QUESTION

### RESEARCH

How can the **transparency of the border** and the **transparency of syntax** be used within the redesign of heritage buildings to establish preferred user movement patterns between spaces in relation to public and private functions?

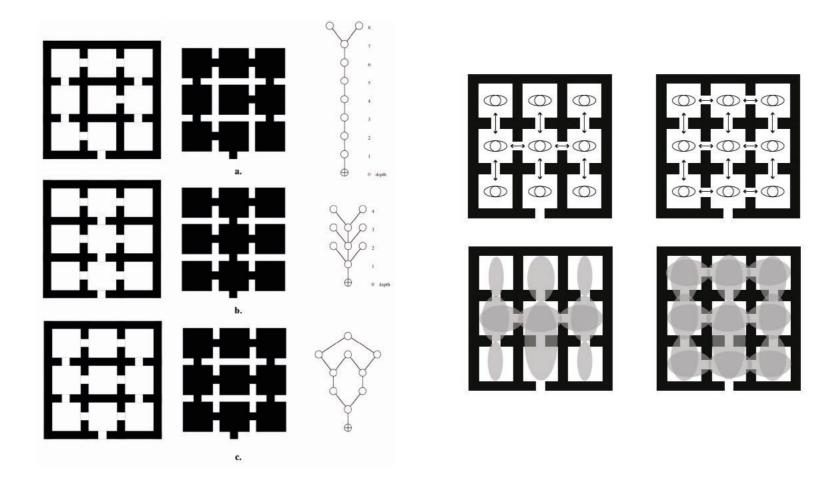
### RESEARCH

- -Proportion of a space
- -Relation between spaces
- -Connection between spaces
- -Purpose of a space

### TRANSPARENCY OF SYNTAX

### RESEARCH

### **SPACE SYNTAX**



Hillier, 2006:

Hillier, 2007:

### TRANSPARENCY OF SYNTAX

# RESEARCH

### **NUDGING ELEMENTS**

#### Required nudge element

activity

necessary

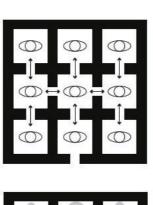
No element required

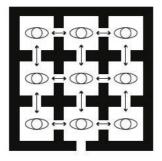
Ambiguous elements

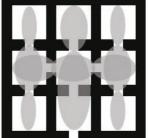
Elements

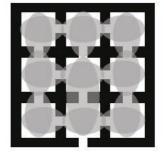
Social

Elements that clearly indicate









#### TRANSPARENCY OF THE BORDER

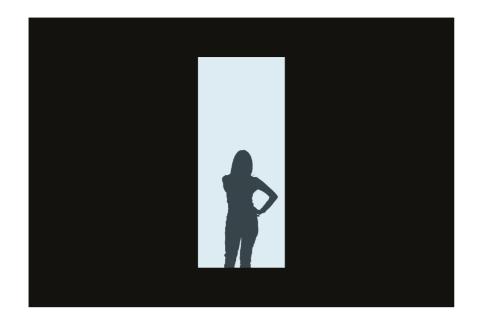
### RESEARCH

- -Proportion of a border
- -Open Closed
- -Materiallity

### RESEARCH

### TOOLS: PERCEPTION OF THE BORDER

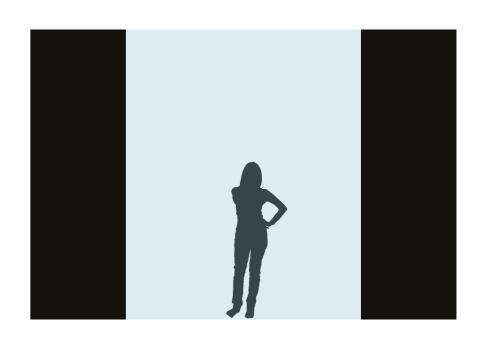
**BORDER - RELATION** 



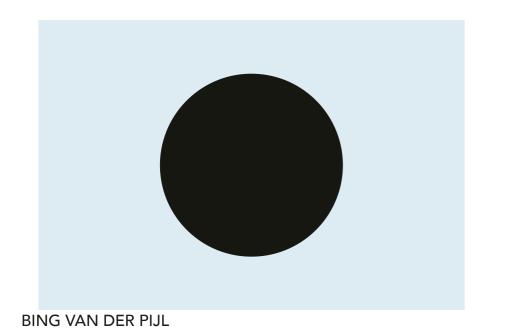
**BORDER - NO RELATION** 



**NO BORDER - RELATION** 



TRANSPARENT - NO BORDER



TRANSLUCENT - BORDER



Marquardt et al. (2015)

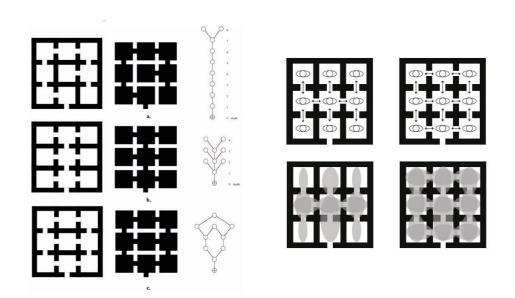
**OPAQUE - BORDER** 

#### RESEARCH > DESIGN

### RESEARCH

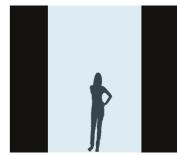
### **CREATING A METHODOLOGY**

SPACIAL ANALYSIS

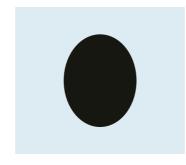


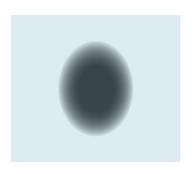






**TOOLS** 

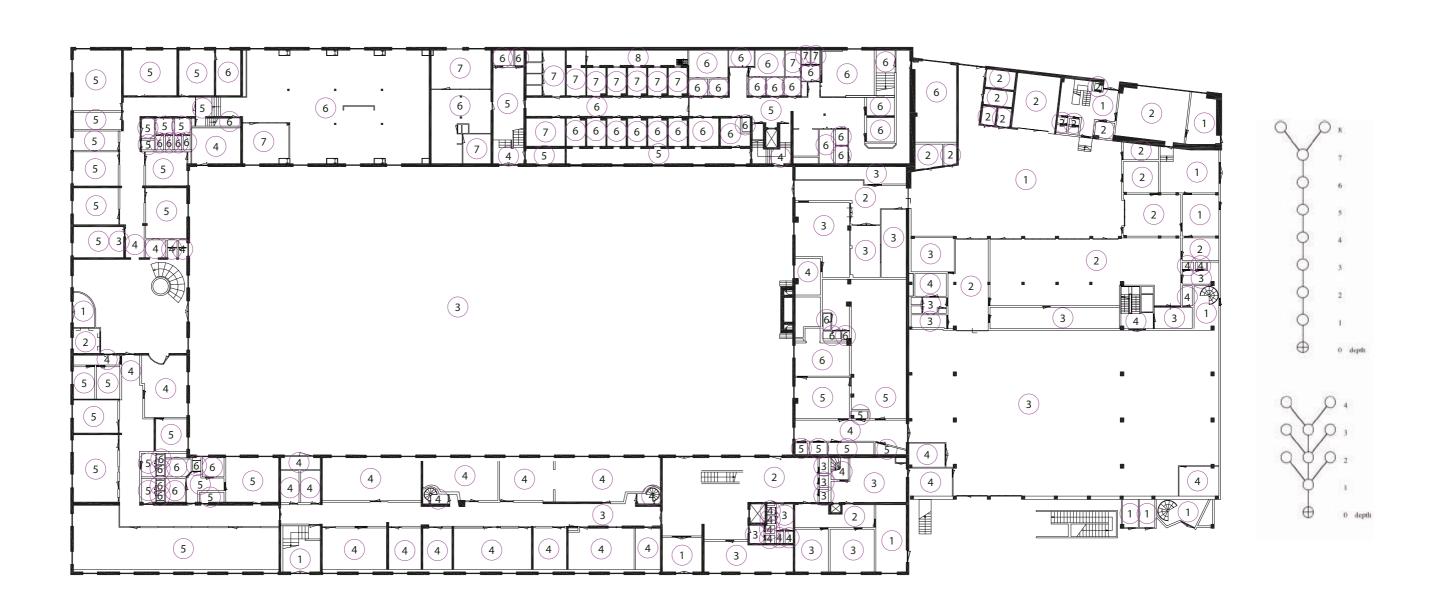






#### SPACE SYNTAX ANALYSIS

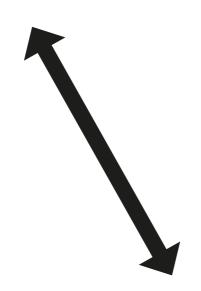
# RESEARCH



#### **OPTIMALIZATION**

### RESEARCH

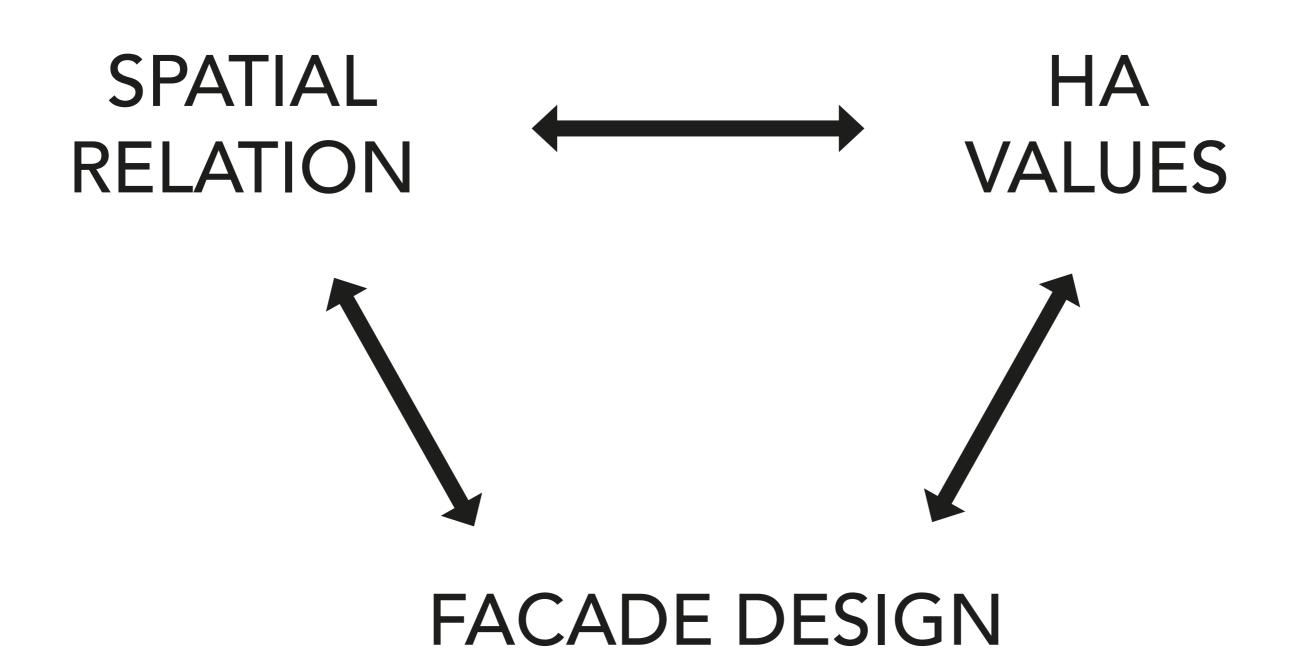
# SPATIAL RELATION



FACADE DESIGN

#### **OPTIMALIZATION**

### RESEARCH

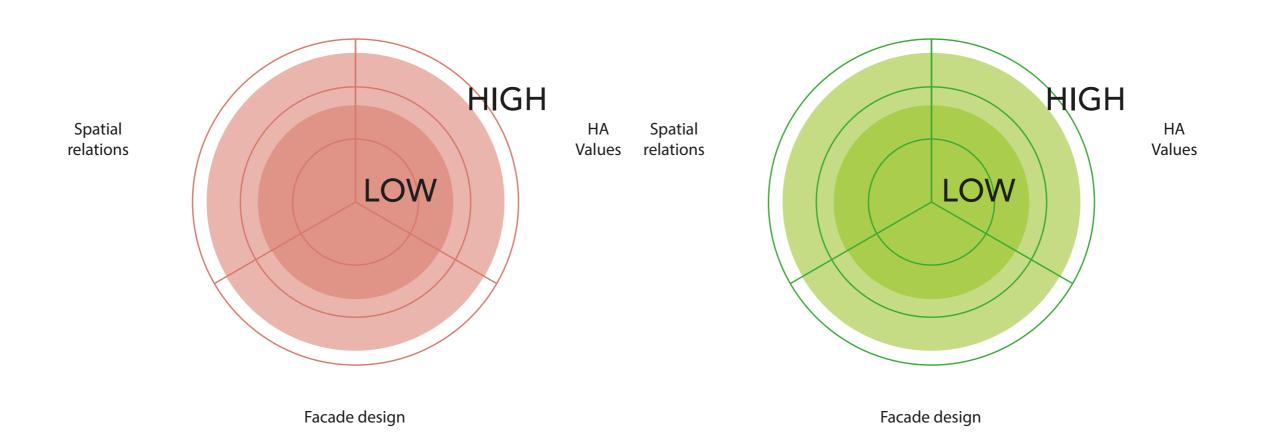


#### **OPTIMALIZATION**

### RESEARCH

#### **INFLUENCE**

#### **BALANCE OF INTERVENTION**

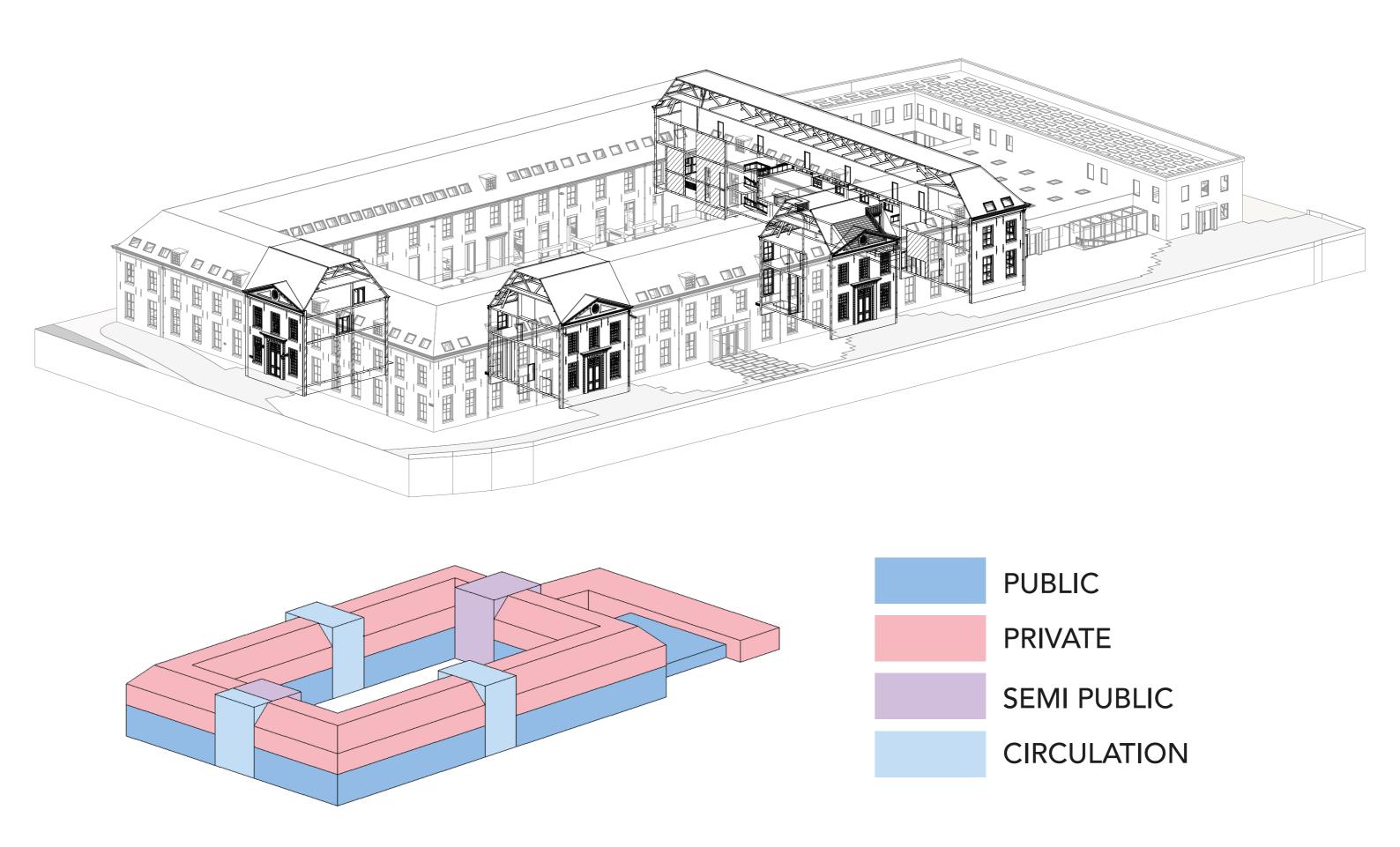


#### SPACE SYNTAX ANALYSIS

### RESEARCH



### **AXO | PUBLIC - PRIVATE**

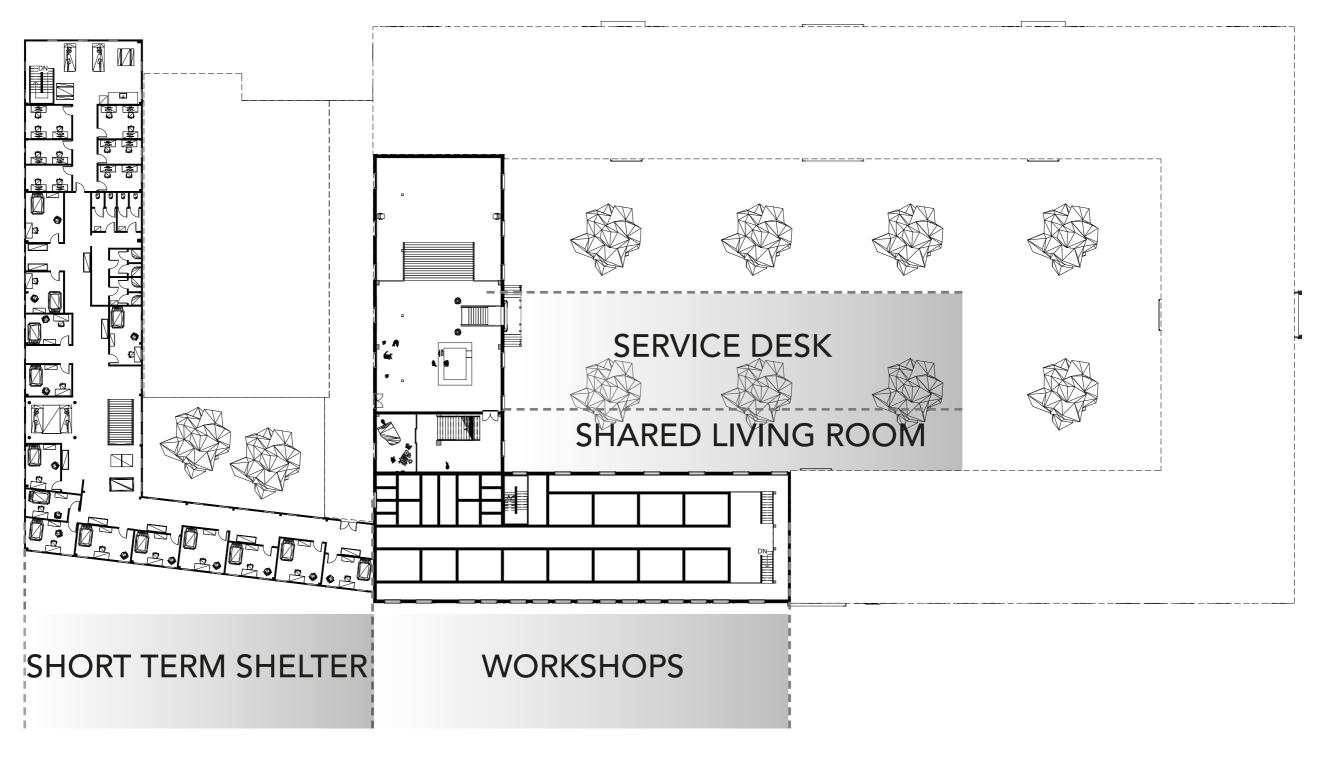


### GF | NEW FUNCTIONS

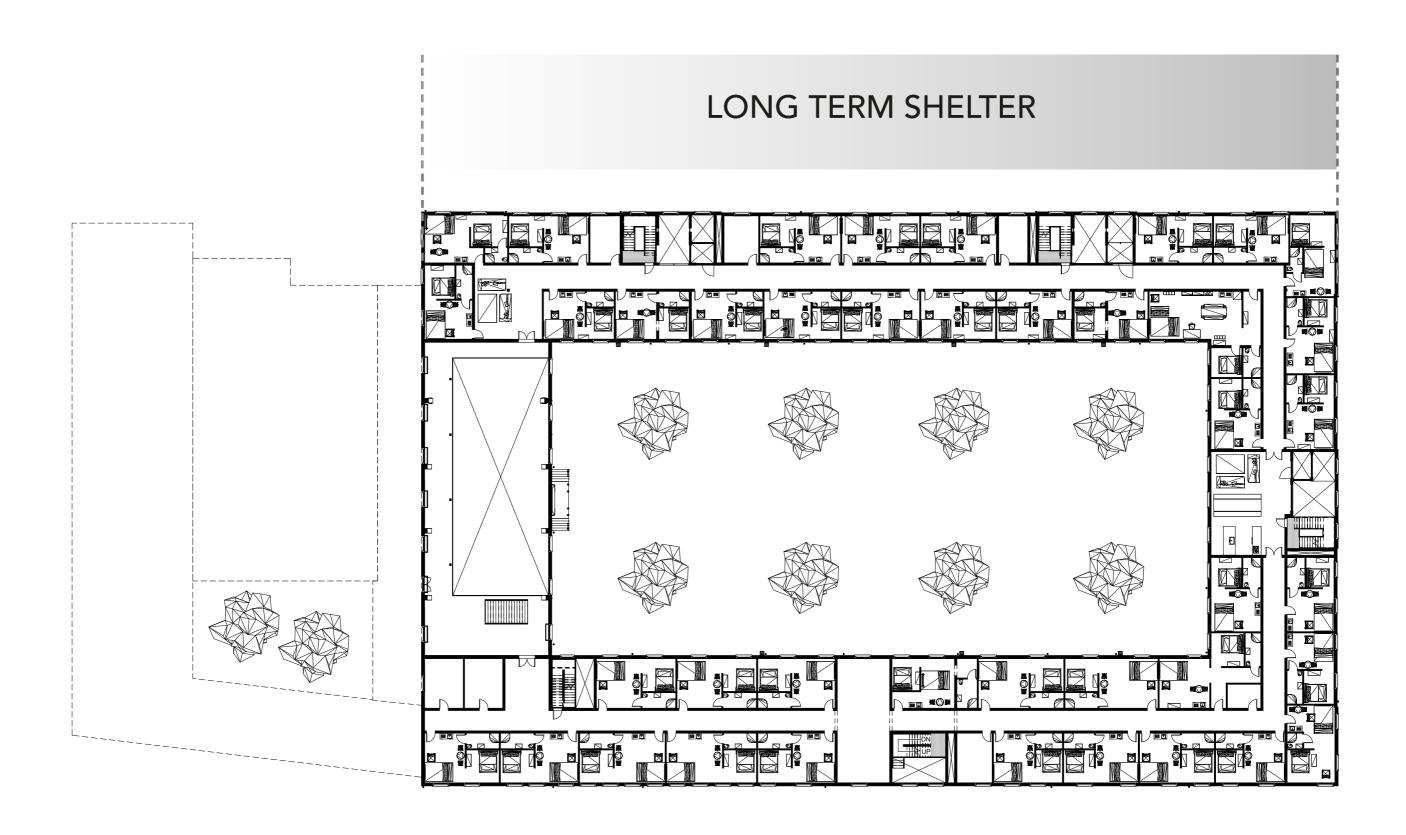
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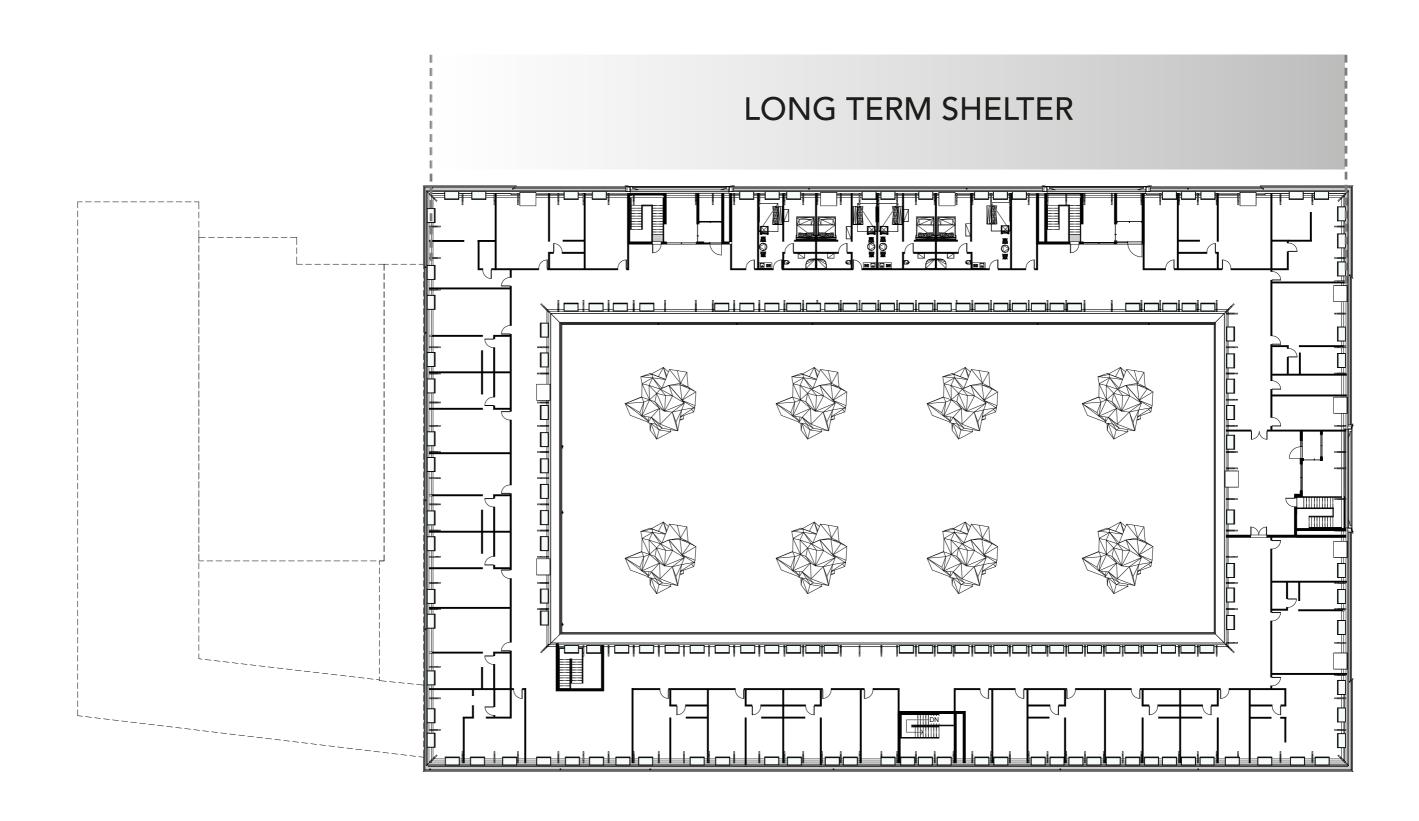
### **ENTRESOL NEW FUNCTIONS**



# DESIGN



### 2ND FLOOR NEW FUNCTIONS



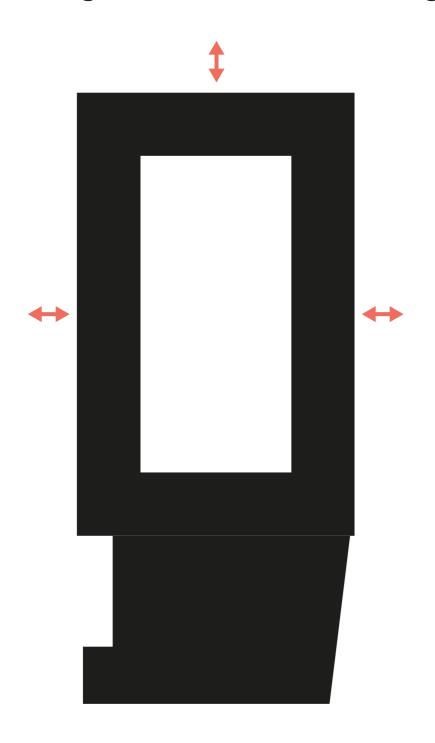
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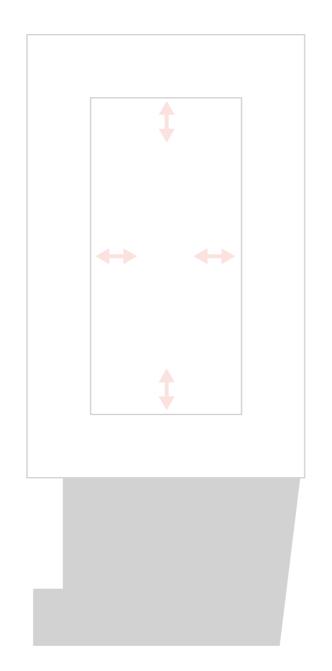
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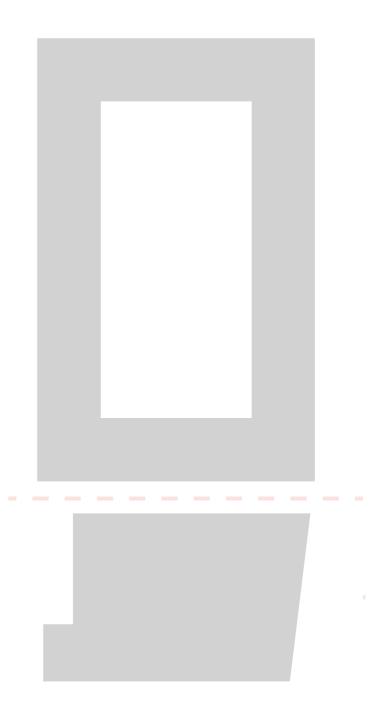
Building and Urban surroundings

Building and courtyard

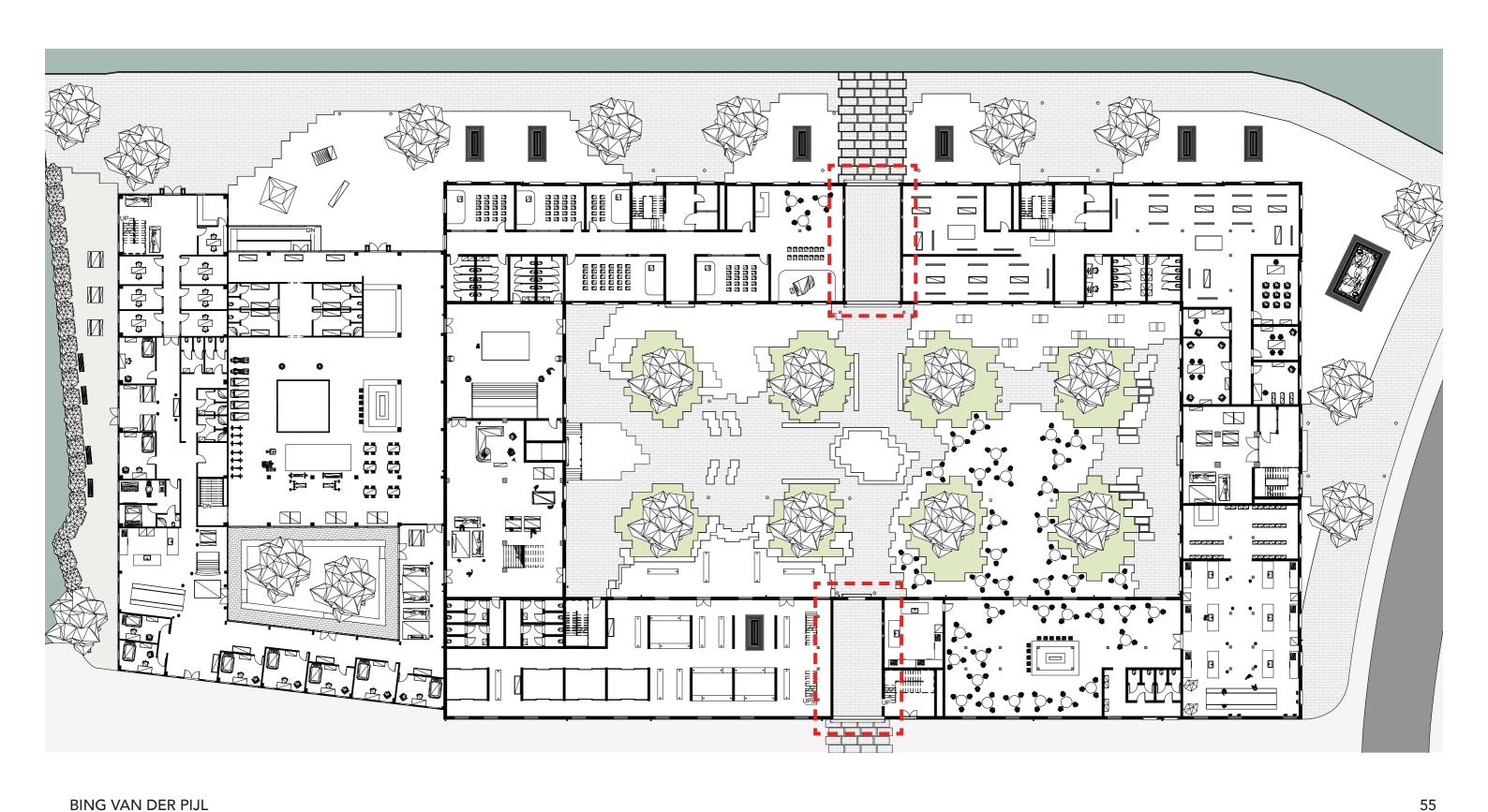
Old and New





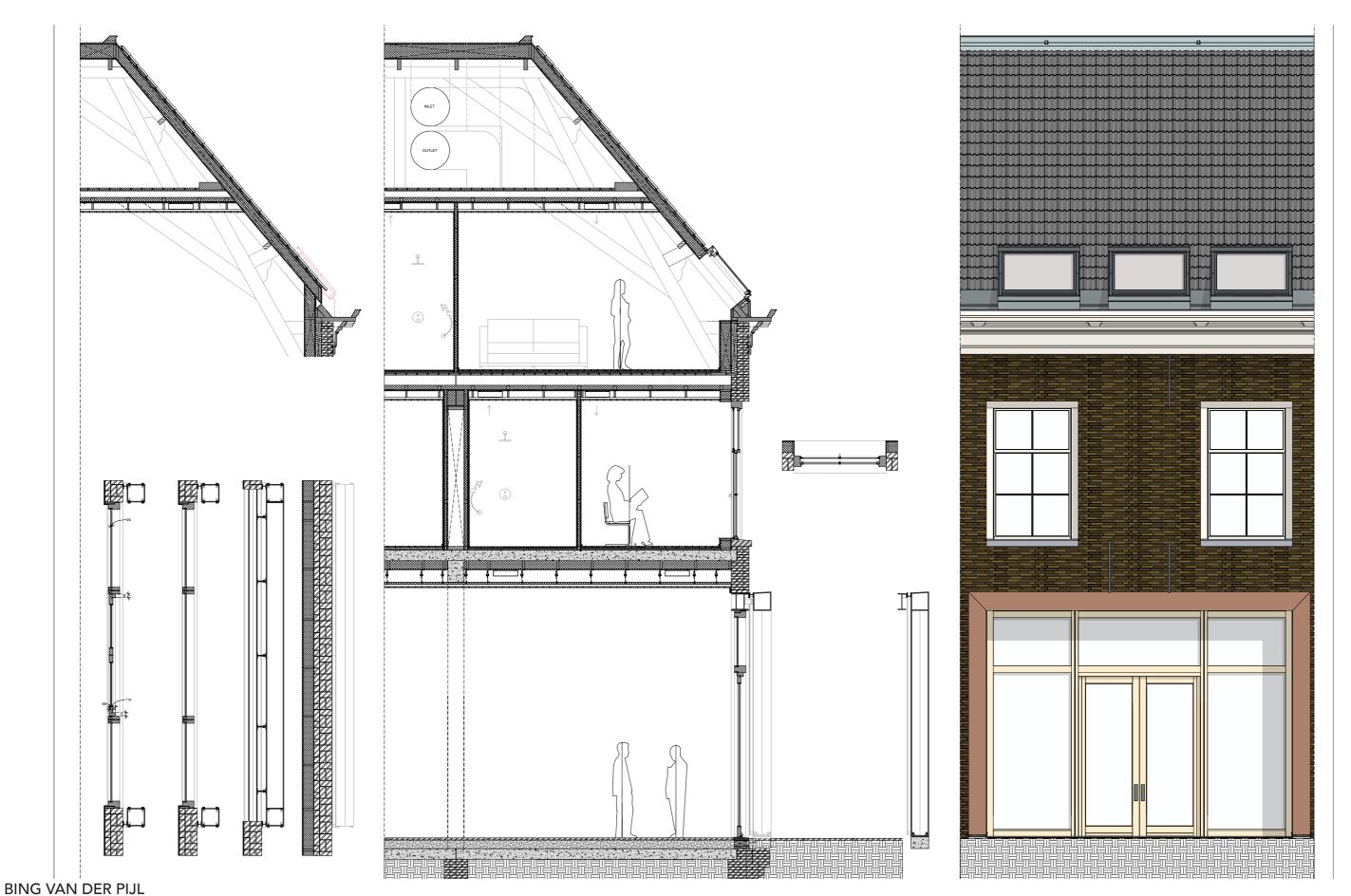


### **DESIGN PASSAGES**

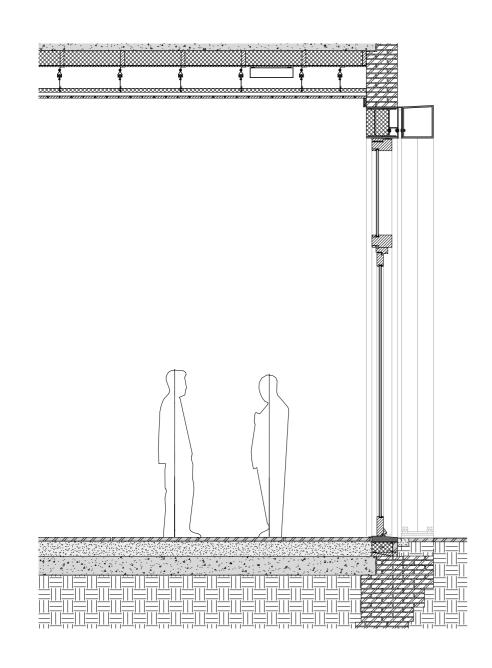


SECTION 1:20

BT



### **DESIGN | PASSAGE**

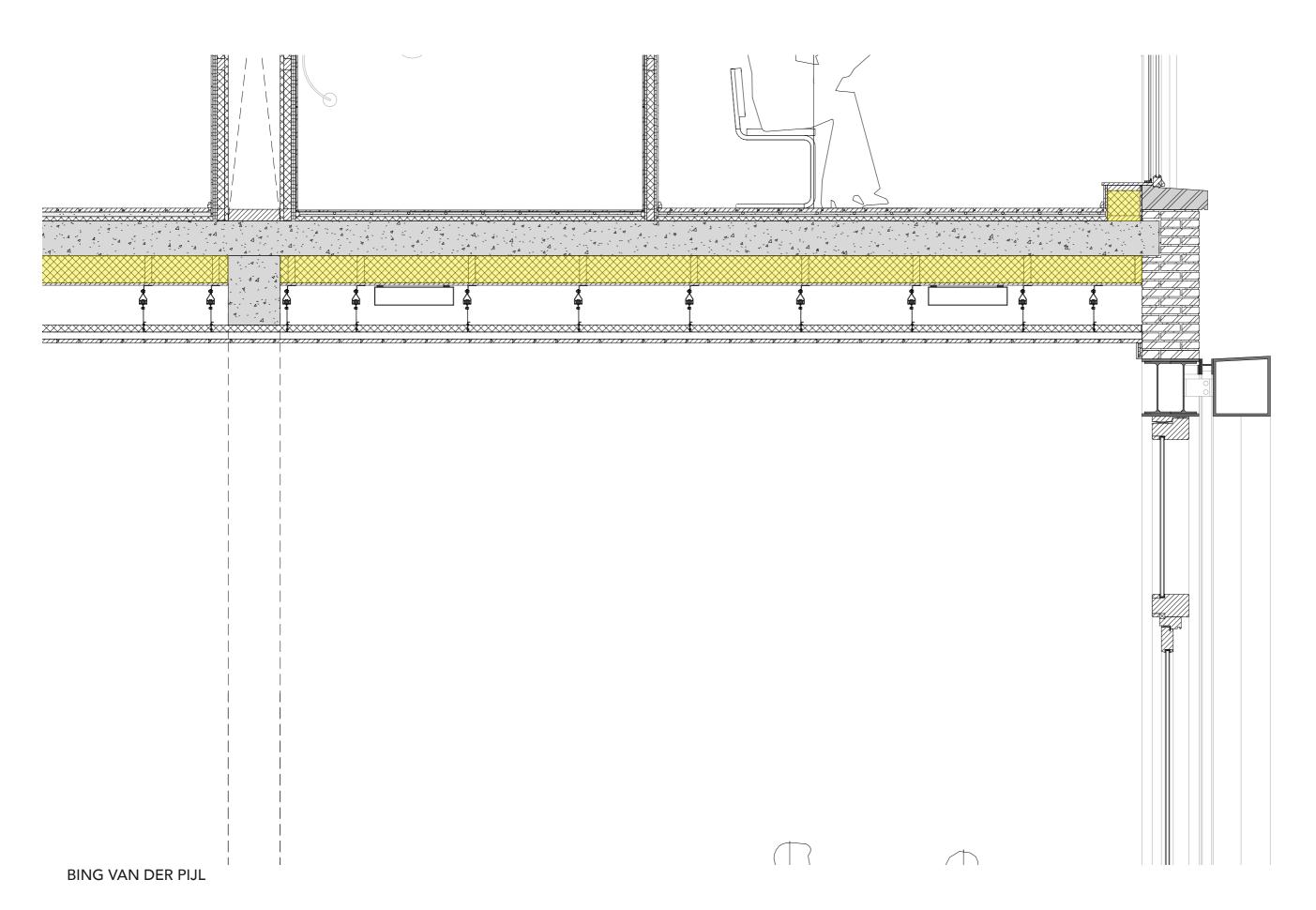






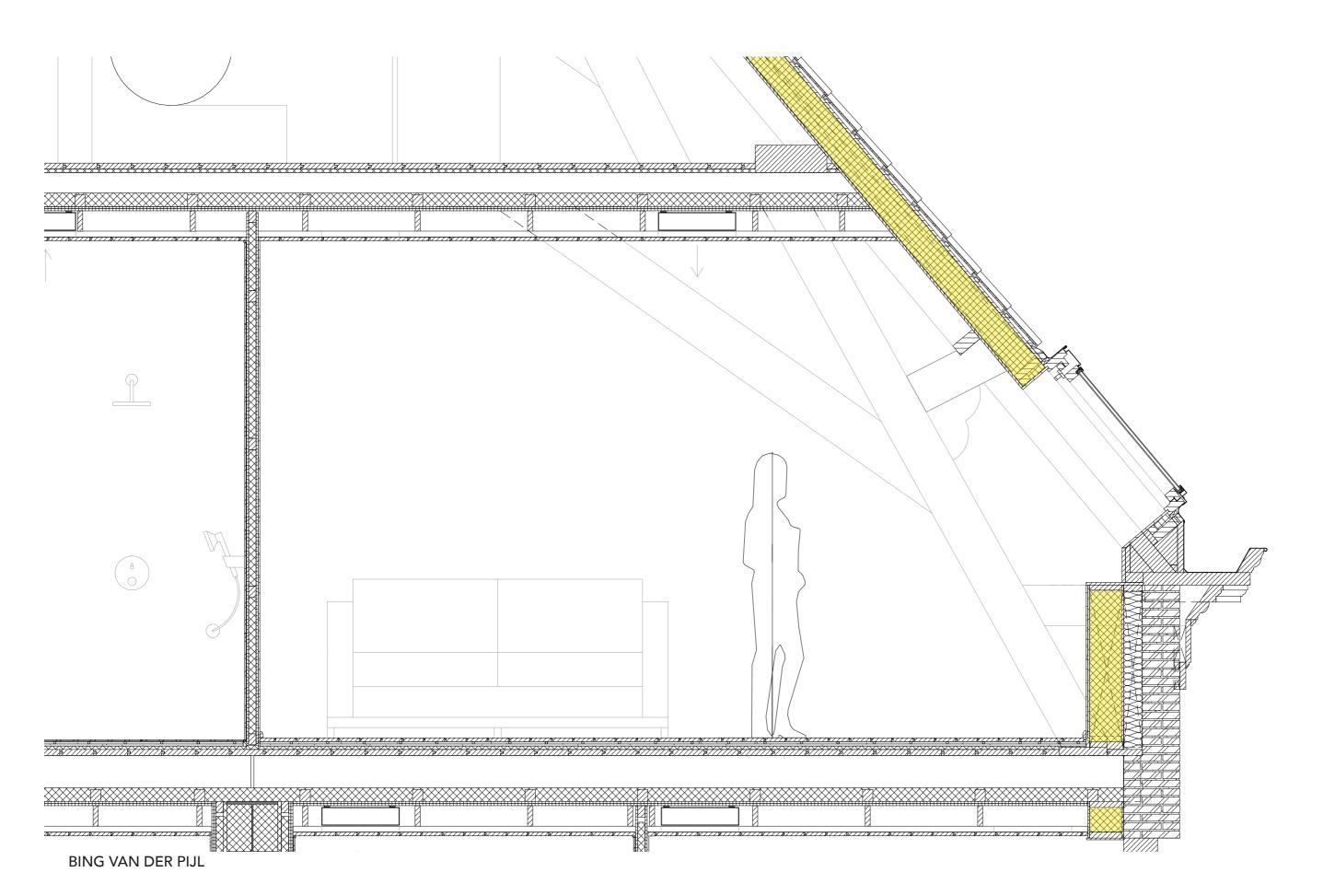
### 1ST FLOOR DETAIL





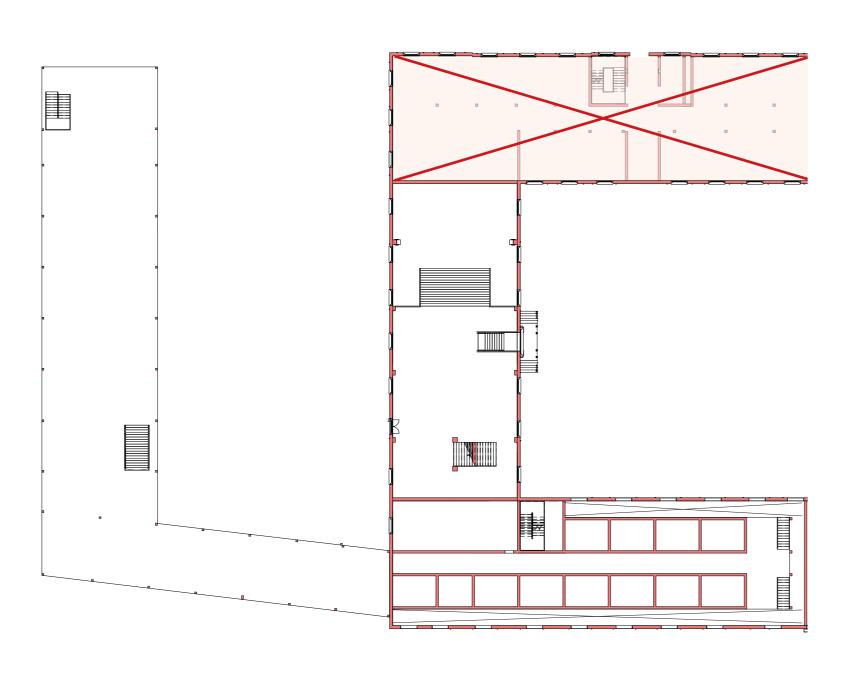
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### SECOND FLOOR AND ROOF DETAIL





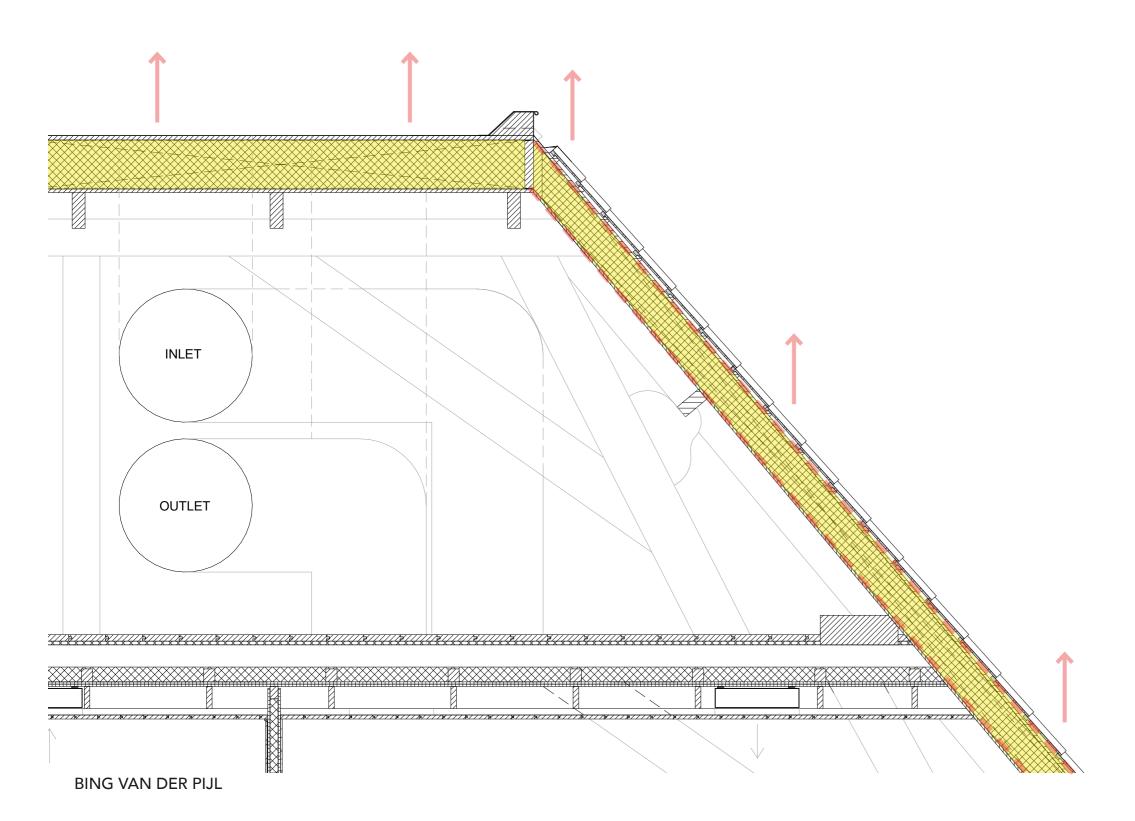






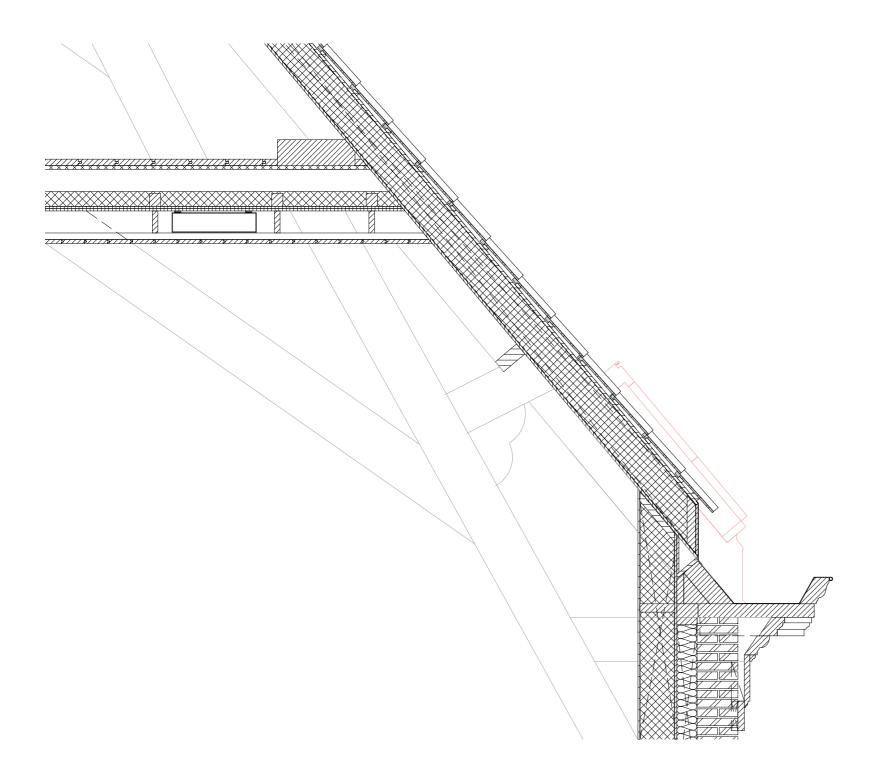
### **ROOF INSULATION**

# BT



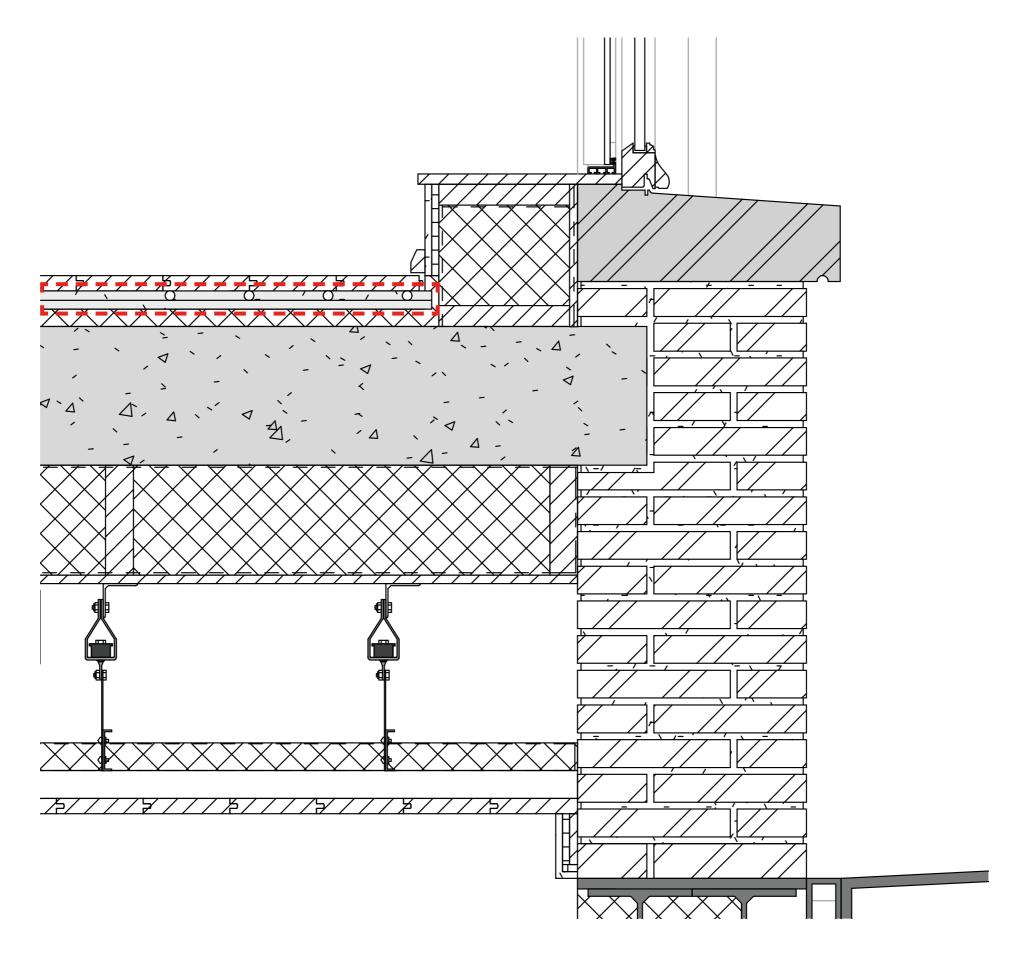
### **ROOF WINDOWS**



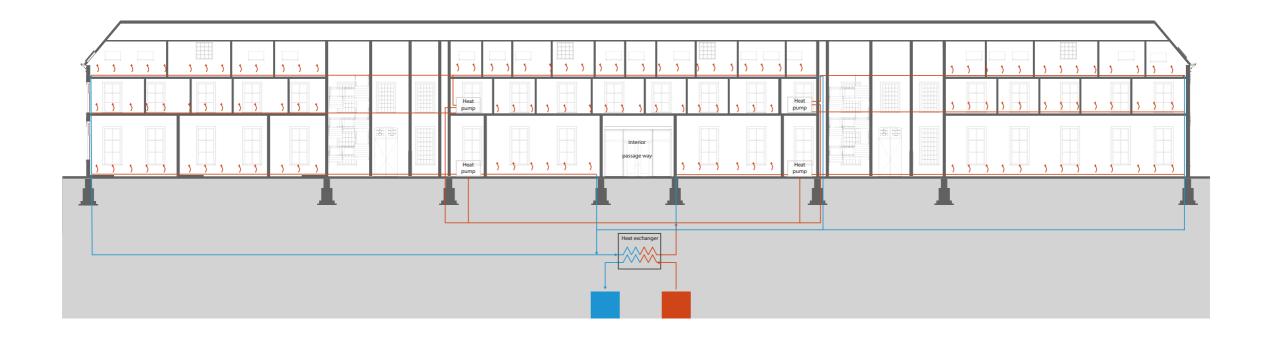




### **CLIMATE: THERMAL BRIDGES**



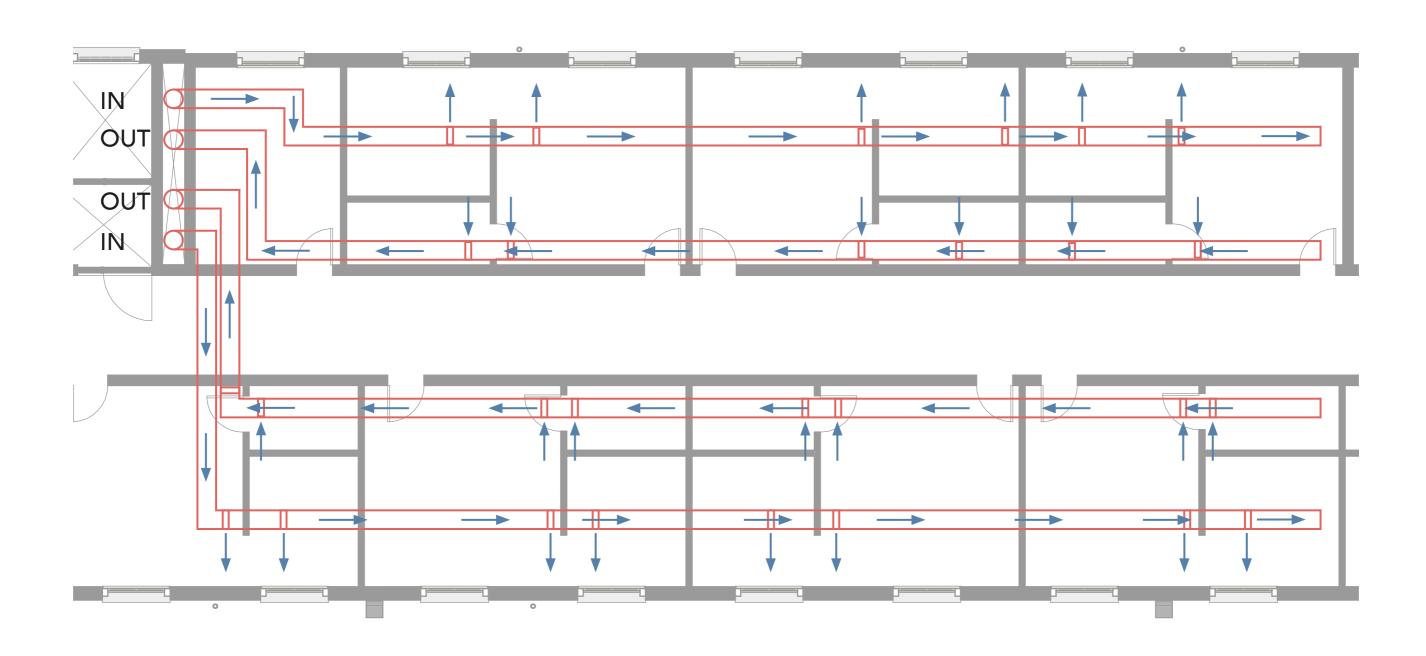




# BT



# BT



### DESIGN PASSAGES



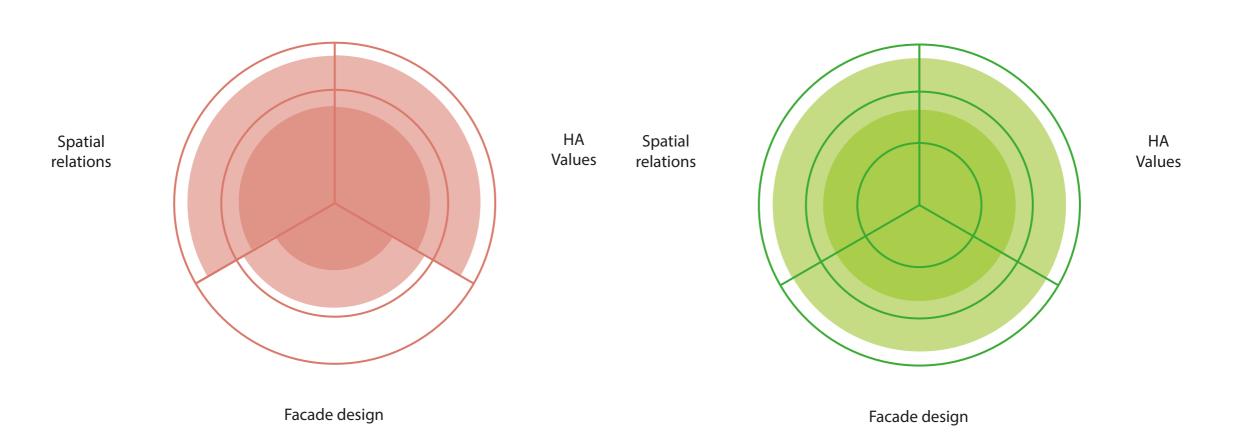
# DESIGN



### **DESIGN PASSAGES**

### **INFLUENCE**

#### **BALANCE OF INTERVENTION**



### **DESIGN FACADE ZAKSTRAAT**

# DESIGN



### DESIGN FACADE ZAKSTRAAT



### **DESIGN FACADE ZAKSTRAAT**

# DESIGN



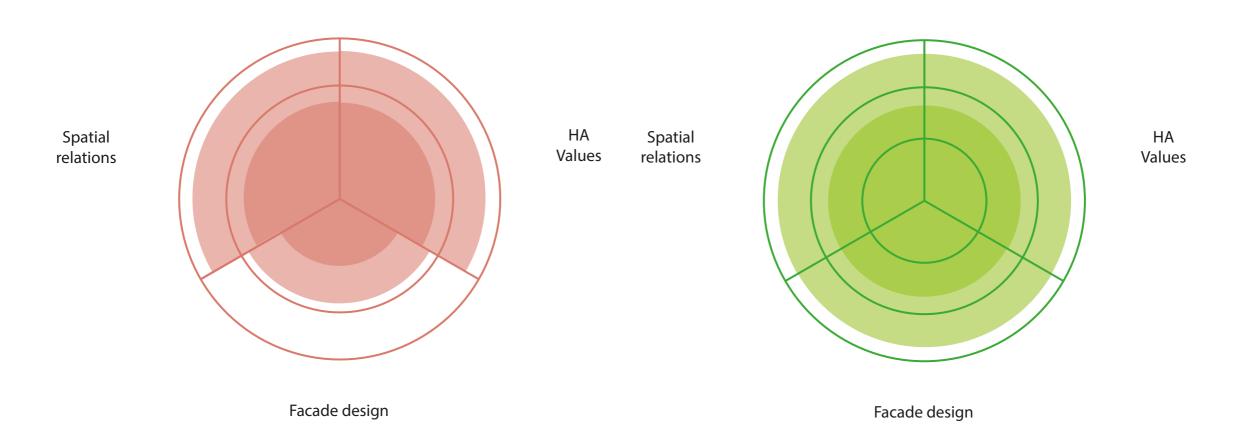


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### **INFLUENCE**

### **BALANCE OF INTERVENTION**



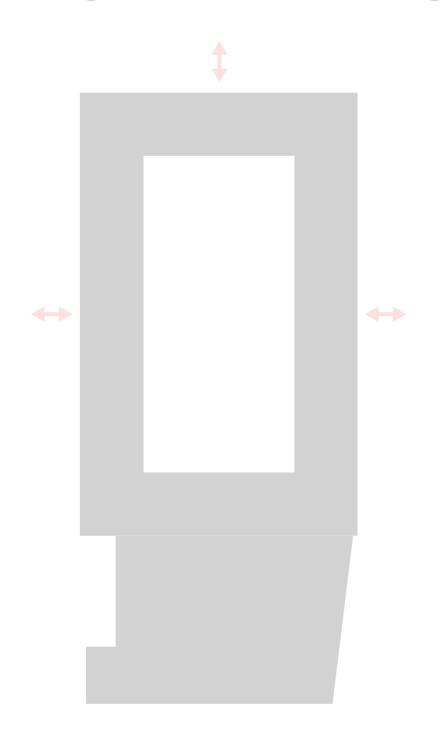
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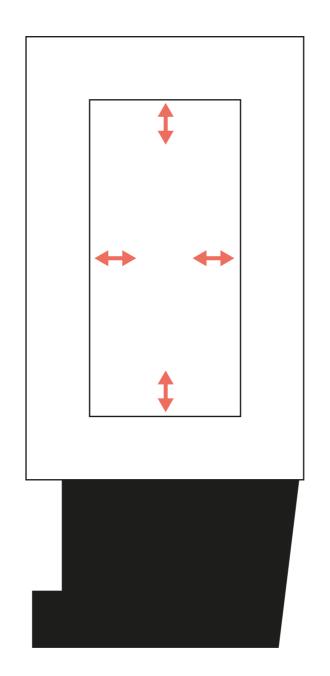
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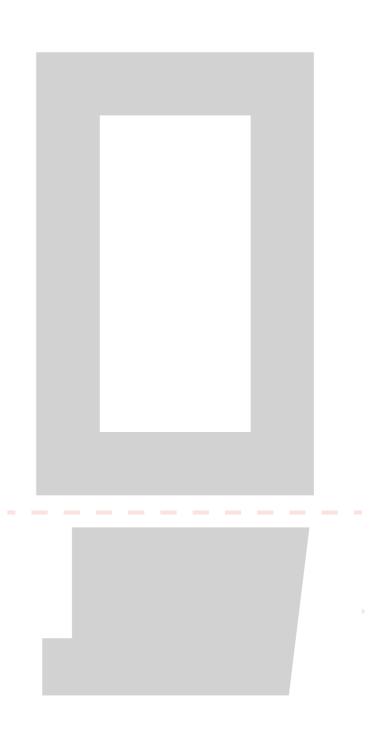
Building and Urban surroundings

Building and courtyard

Old and New







### **DESIGN SERVICE DESK**



### **DESIGN SERVICE DESK**

# DESIGN

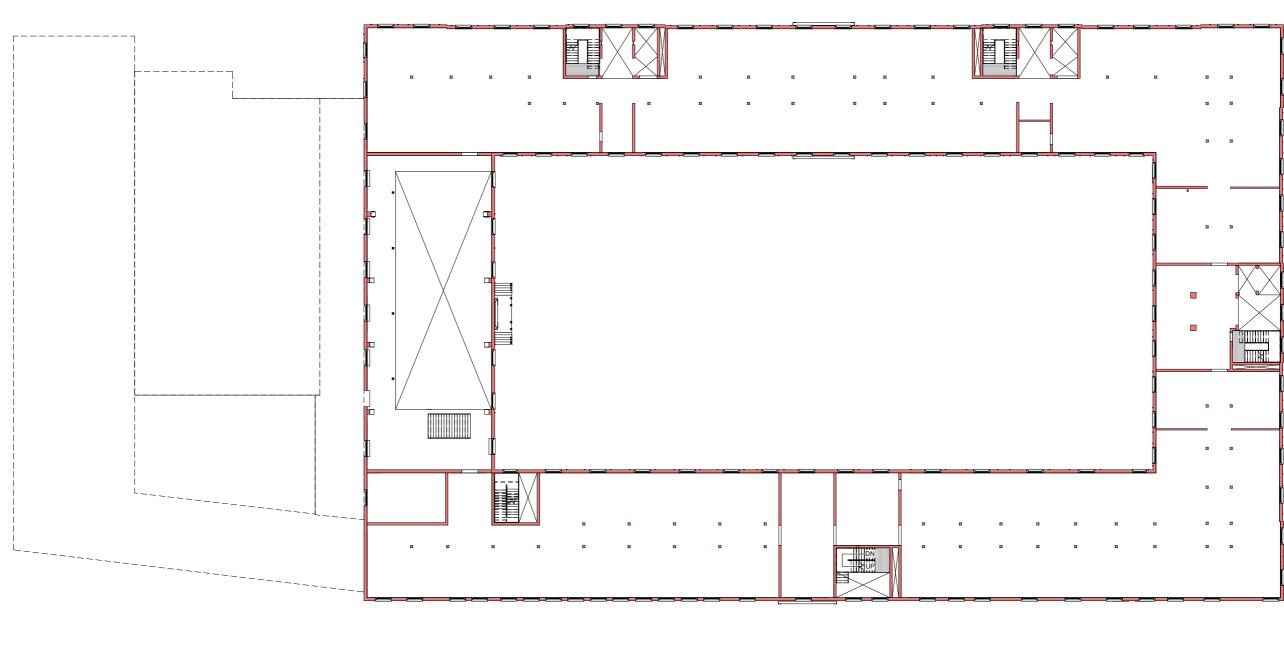


### **STRUCTURE**

# BT







LOADBEARING STRUCTURE

### **DESIGN SERVICE DESK**





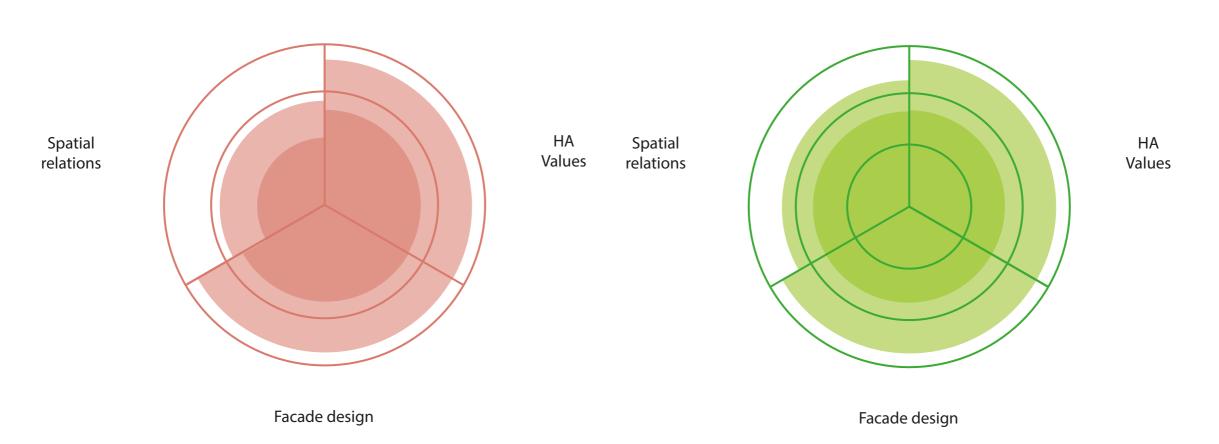
### **DESIGN SERVICE DESK**

# DESIGN



### **INFLUENCE**

### **BALANCE OF INTERVENTION**

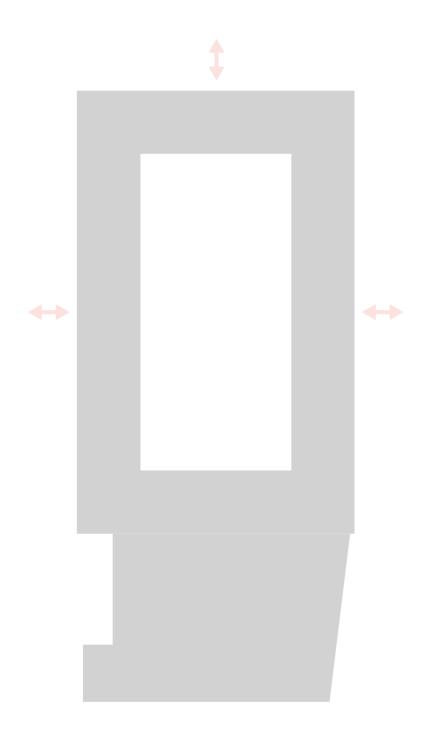


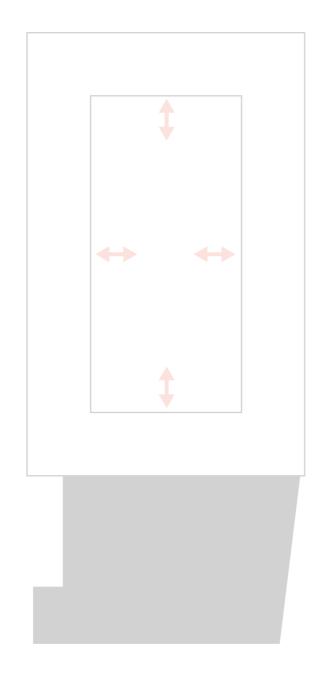
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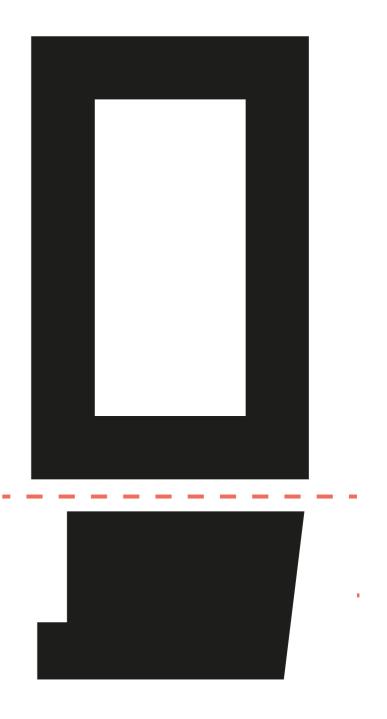
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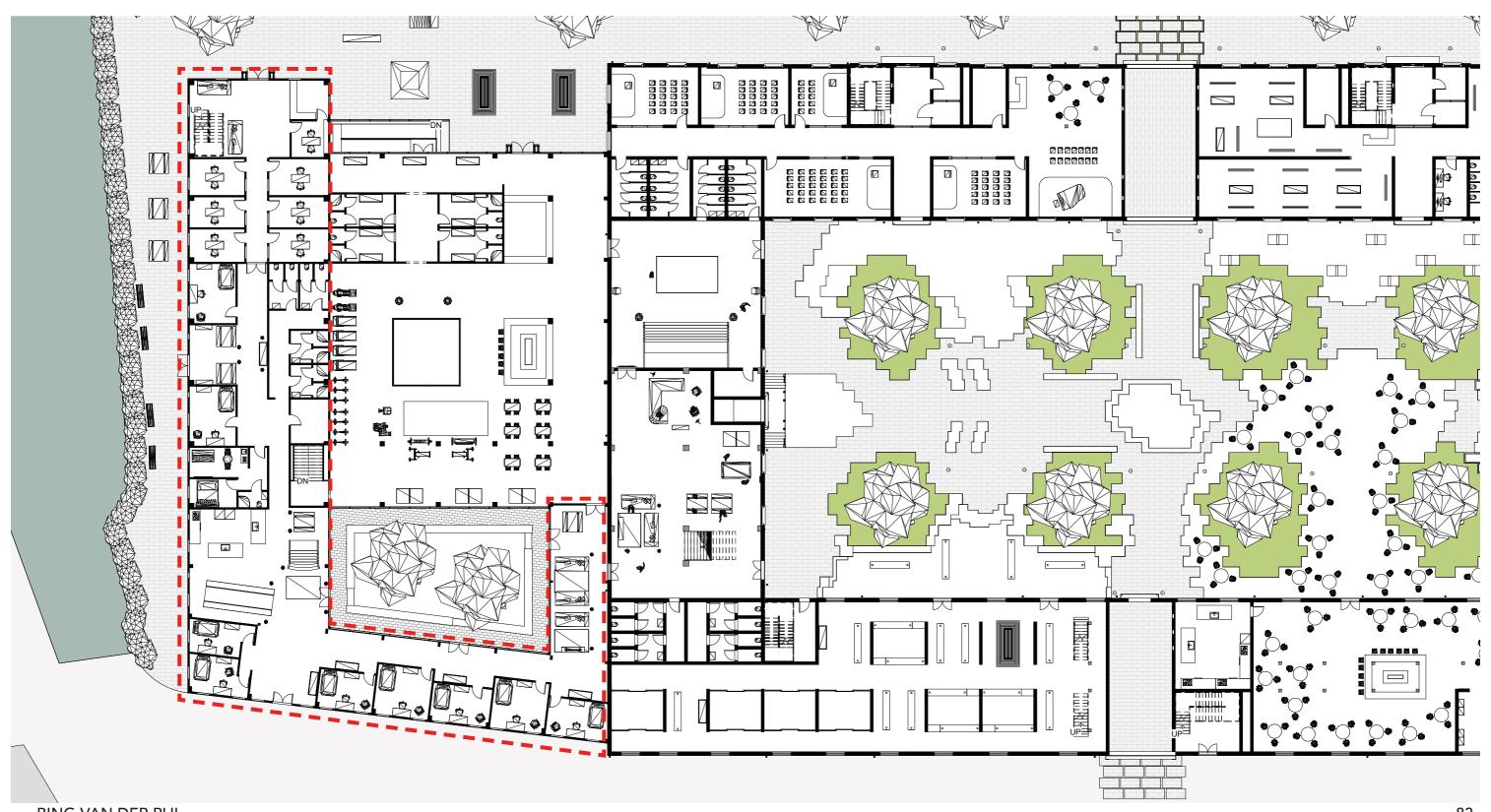
Building and Urban surroundings Building and courtyard

Old and New

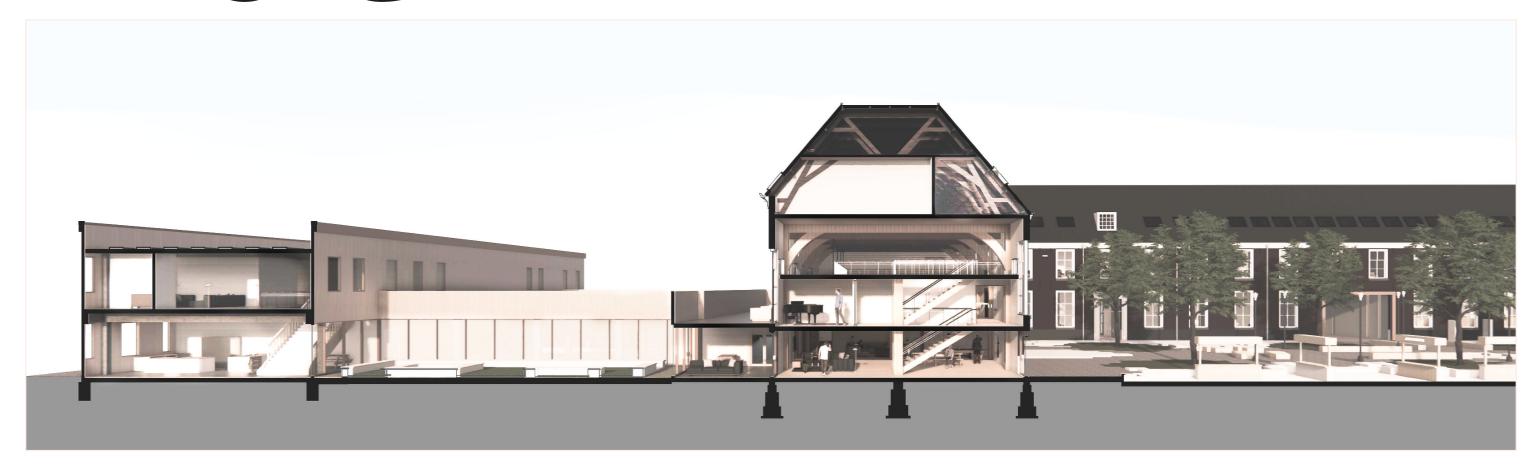






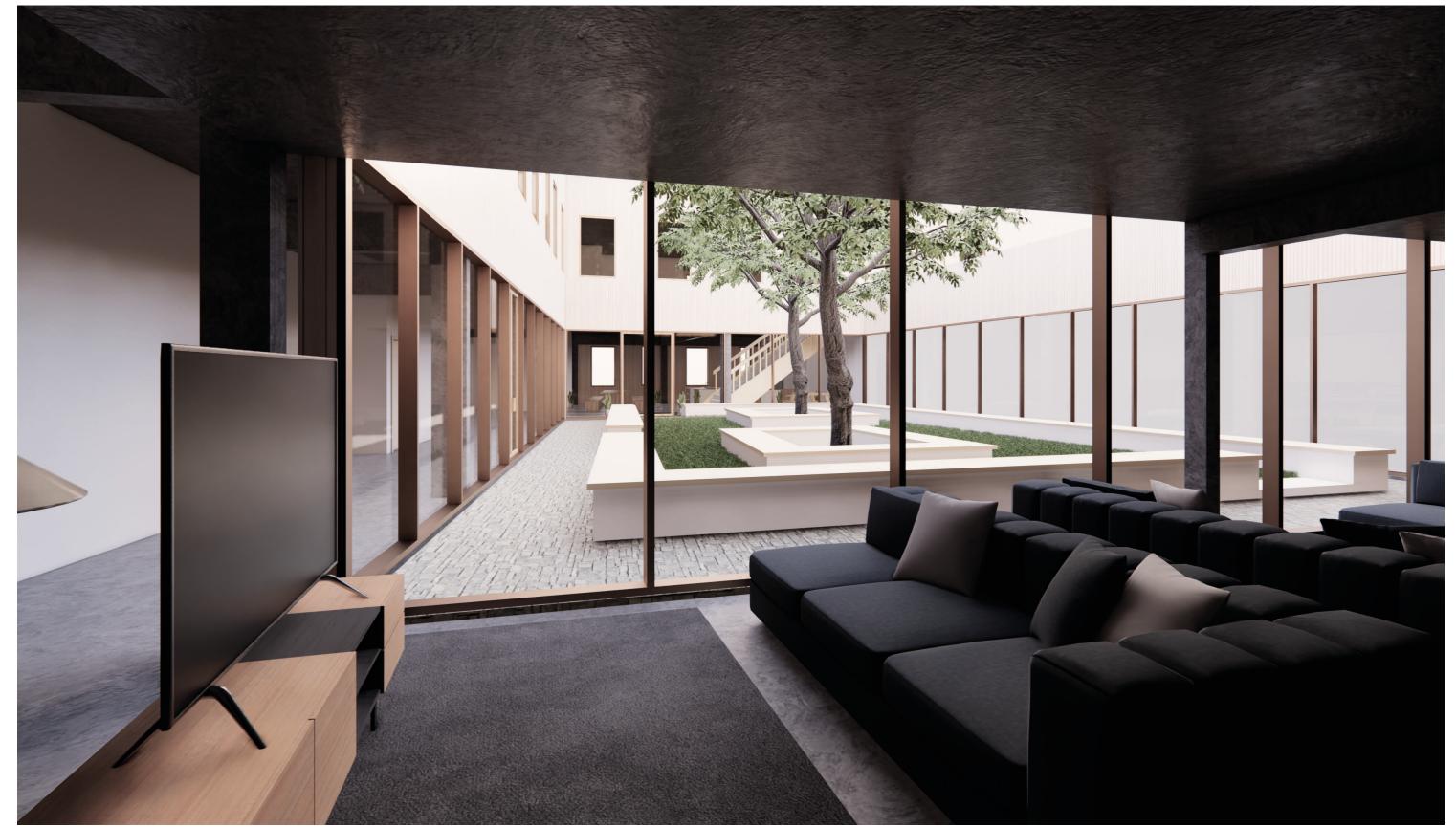


# DESIGN





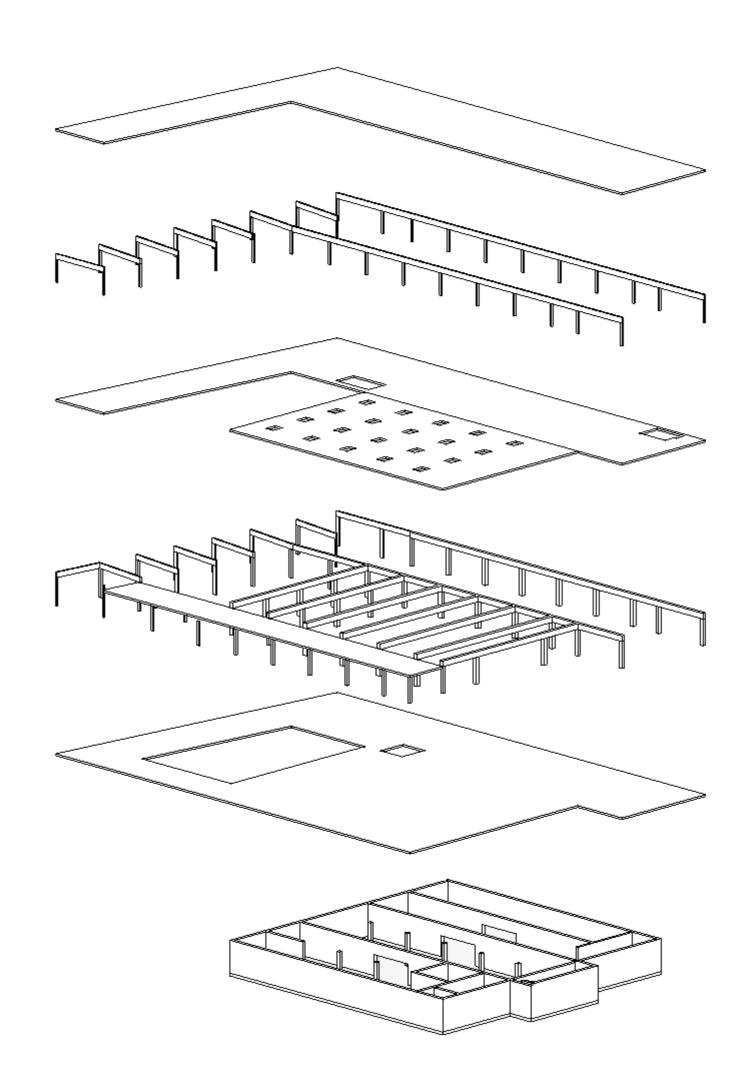
# DESIGN







# BT



### FINAL DESIGN

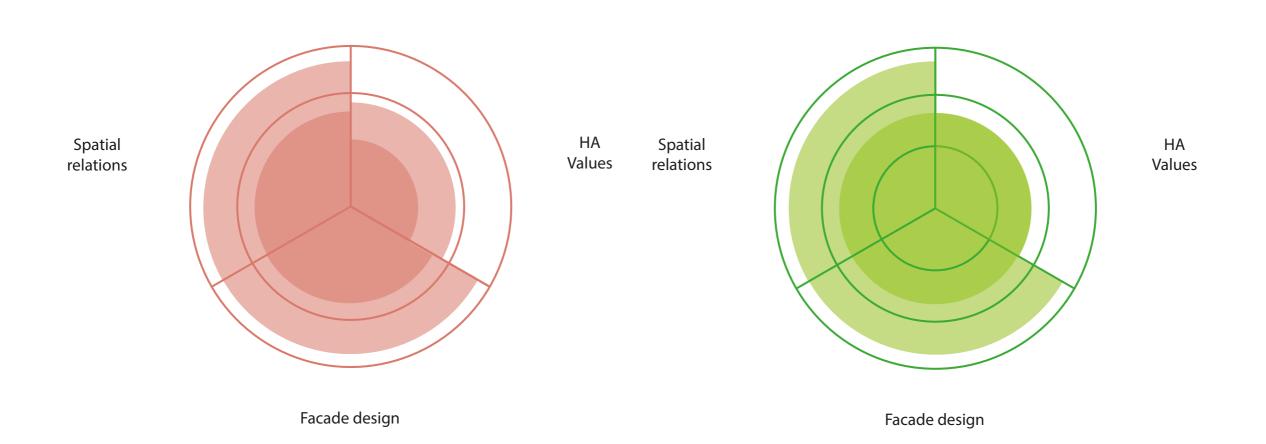
# DESIGN





#### **INFLUENCE**

#### **BALANCE OF INTERVENTION**



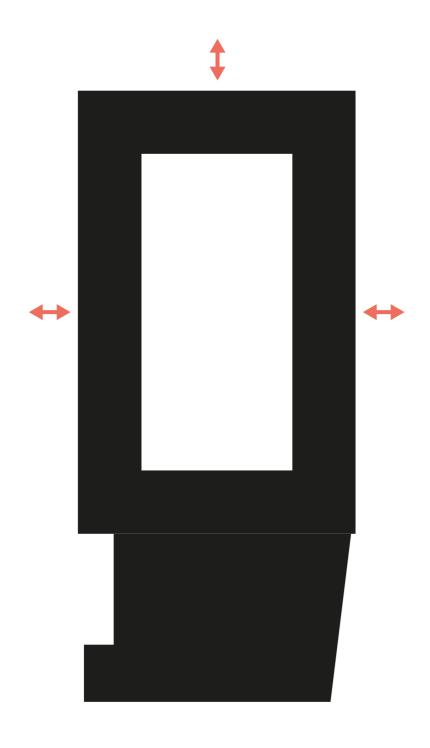
### 3 BORDERS

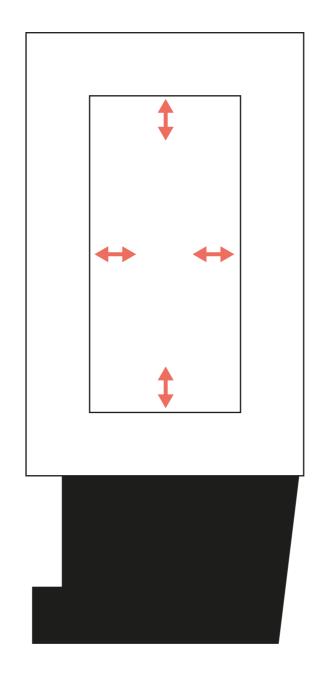
# DESIGN

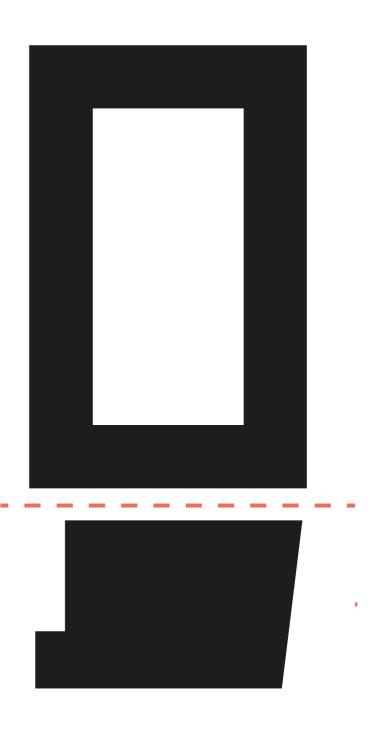
Building and Urban surroundings

Building and courtyard

Old and New







### SPACE SYNTAX

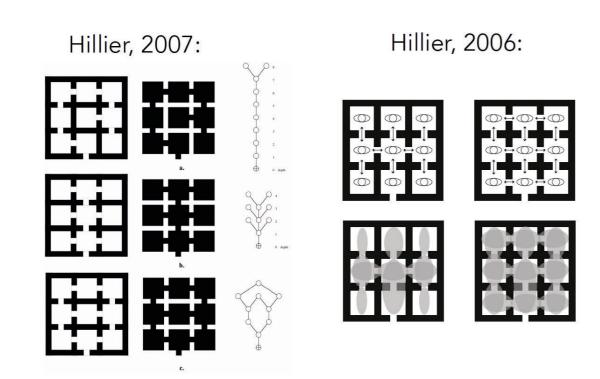


### CONCLUSION

How can the **transparency of the border** and the **transparency of syntax** be used within the redesign of heritage buildings to establish preferred user movement patterns between spaces in relation to public and private functions?

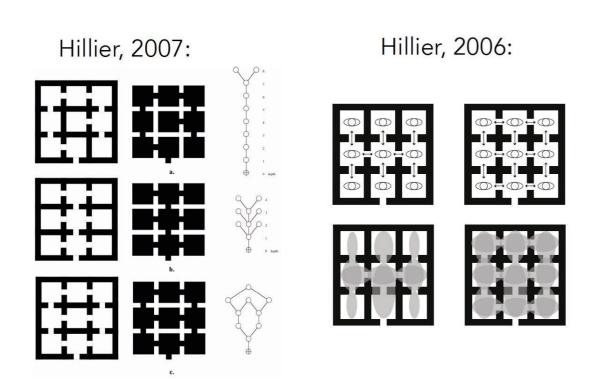
# CONCLUSION

A space syntax analysis

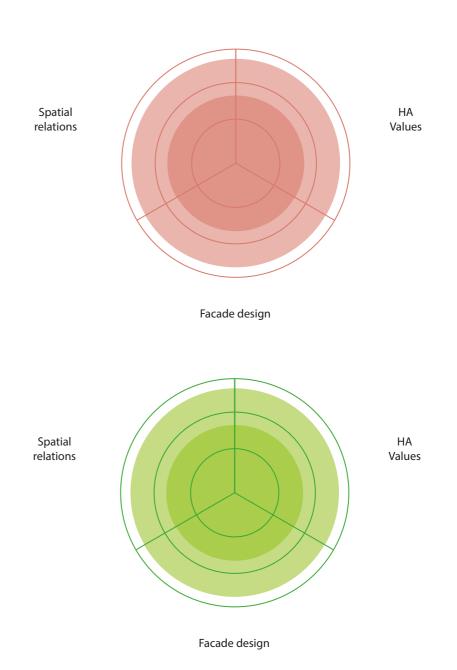


### CONCLUSION

A space syntax analysis

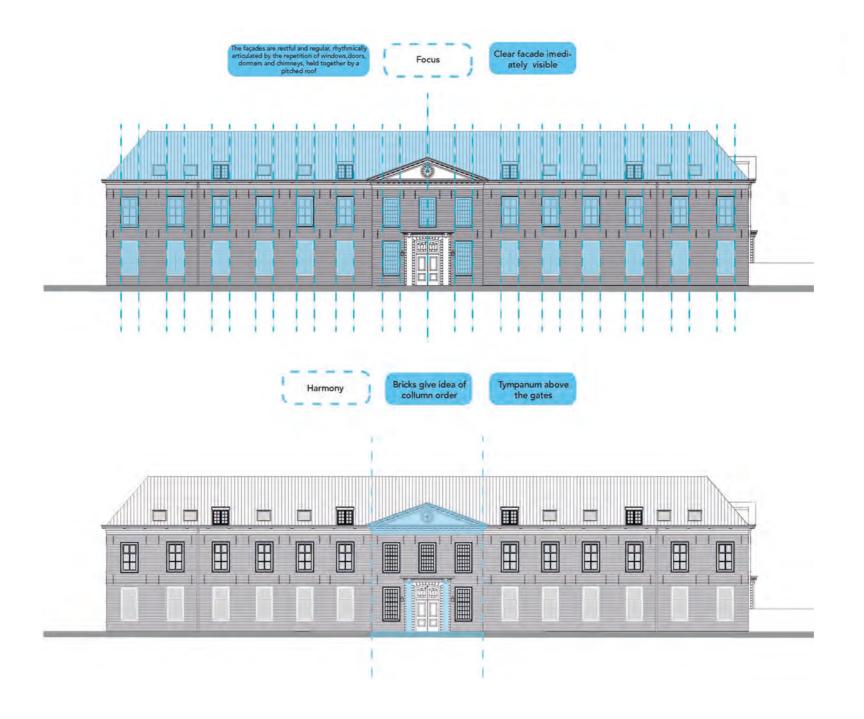


### Balance diagrams



# REFLECTION

Tangible vs intangible

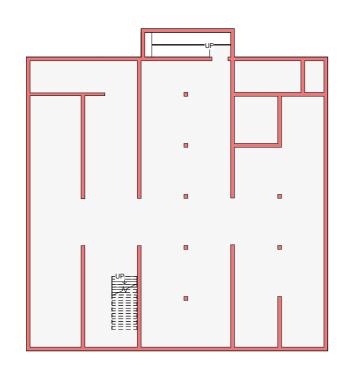


### THANKS FOR YOUR ATTENTION



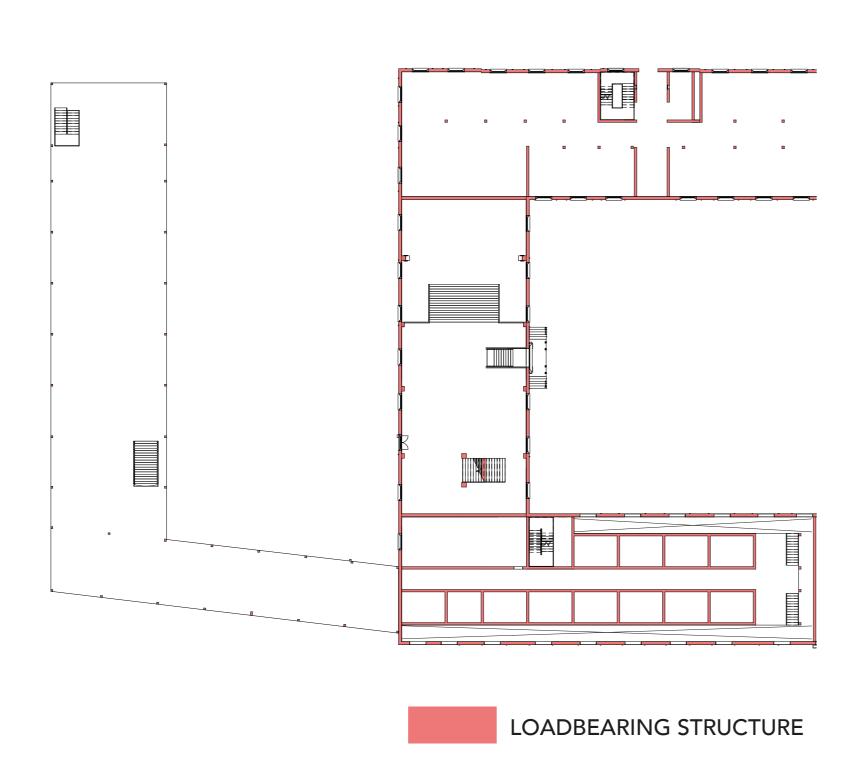










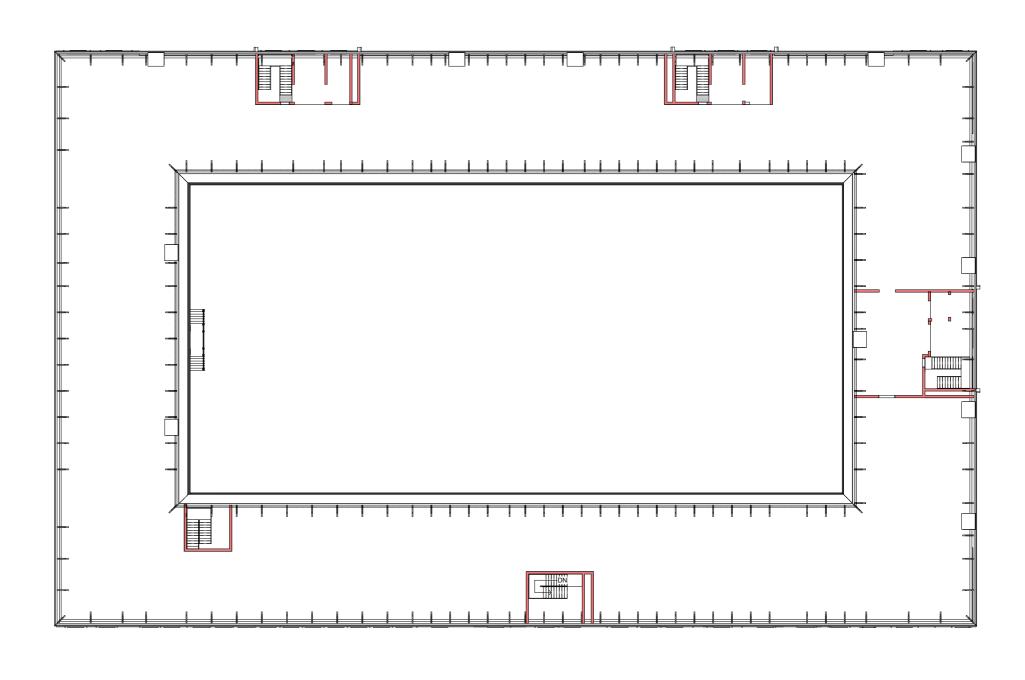






LOADBEARING STRUCTURE





LOADBEARING STRUCTURE

# BT

