

Waldorf School

a creative sanctuary in the city

The Architecture of the Interior
Cultures of Craft

P5 Presentation
June 24th 2016

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4135261



Morning verse

by Rudolf Steiner

Ik zie rond in de wereld
waarin de zon haar licht zendt,
waarin de sterren fonkelen,
waarin de stenen rusten.

De planten levend groeien,
de dieren voelend leven,
waarin de mens, bezielde,
de geest een woning geeft.

Ik schouw diep in de ziel,
die binnenin mij leeft,
de Godesgeest, hij weeft,
in zon- en zielelicht,
in wereldruimte buiten,
in ziele diepten binnen.

Tot u, o Godesgeest,
wil ik mij vragend wenden,
dat in mij kracht en zegen,
voor leren en voor arbeid,
tot wasdom moge komen.

*I look out into the world
wherein there shines the Sun,
where glimmer all the stars,
where lie the silent stones,*

*The plants that live and grow,
the beasts that feel and move.
where man in soul creates,
a dwelling for the spirit.*

*I look inward to the soul,
that lives within my being,
the spirit of God is weaving,
in sunlight and in soul-life,
in heights of world without,
in depths of soul within.*

*Spirit of God to thee
I turn myself in seeking,
that strength and grace and skill,
for learning and for work,
may live and grow in me.*

*Ich schaue in die Welt,
in der die Sonne leuchtet,
in der die Sterne funkeln,
in der die Steine lagern.*

*Die Pflanzen lebend wachsen,
die Tiere fühlend leben.
in der der Mensch beseelt
dem Geiste Wohnung gibt.*

*Ich schaue in die Seele,
die mir im Innern lebt,
der Gottesgeist, er webt
im Sonn- und Seelenlichte,
im Weltenraum da draußen,
in Seelentiefen drinnen.*

*Zu dir, o Gottes Geist,
will ich bittend mich wenden,
dass Kraft und Segen mir
zum Lernen und zur Arbeit
in meinem Innern wachse.*

Design themes

of the project

Design themes

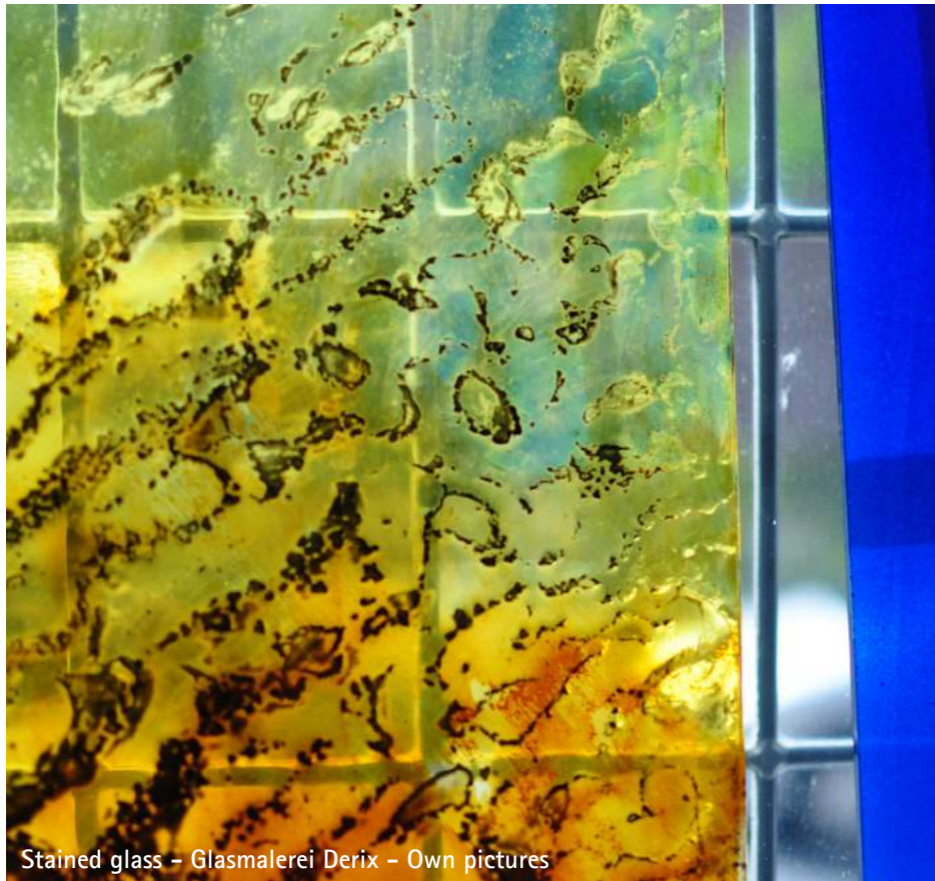
*architectural design // **rhythm and movement** // daily rituals // repetition and tradition // structure and freedom // rhythm and melody // metamorphoses*

*urban design // **nature** // reflection and personal development // individual relation with surroundings // creating a sanctuary // relation with outside*

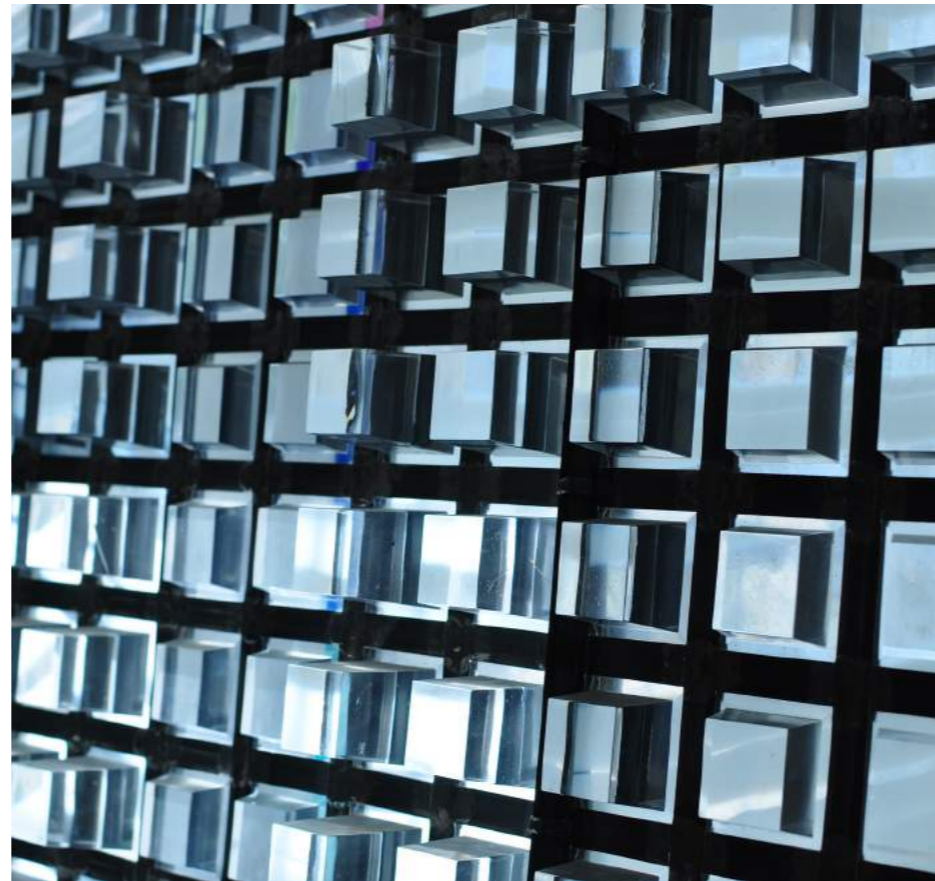
*urban design // **reinterpretation** // position in the existing // part and whole // human and fellowman // re-interpretation of the surroundings*

Introduction

into the cultures of craft



Stained glass - Glasmalerei Derix - Own pictures



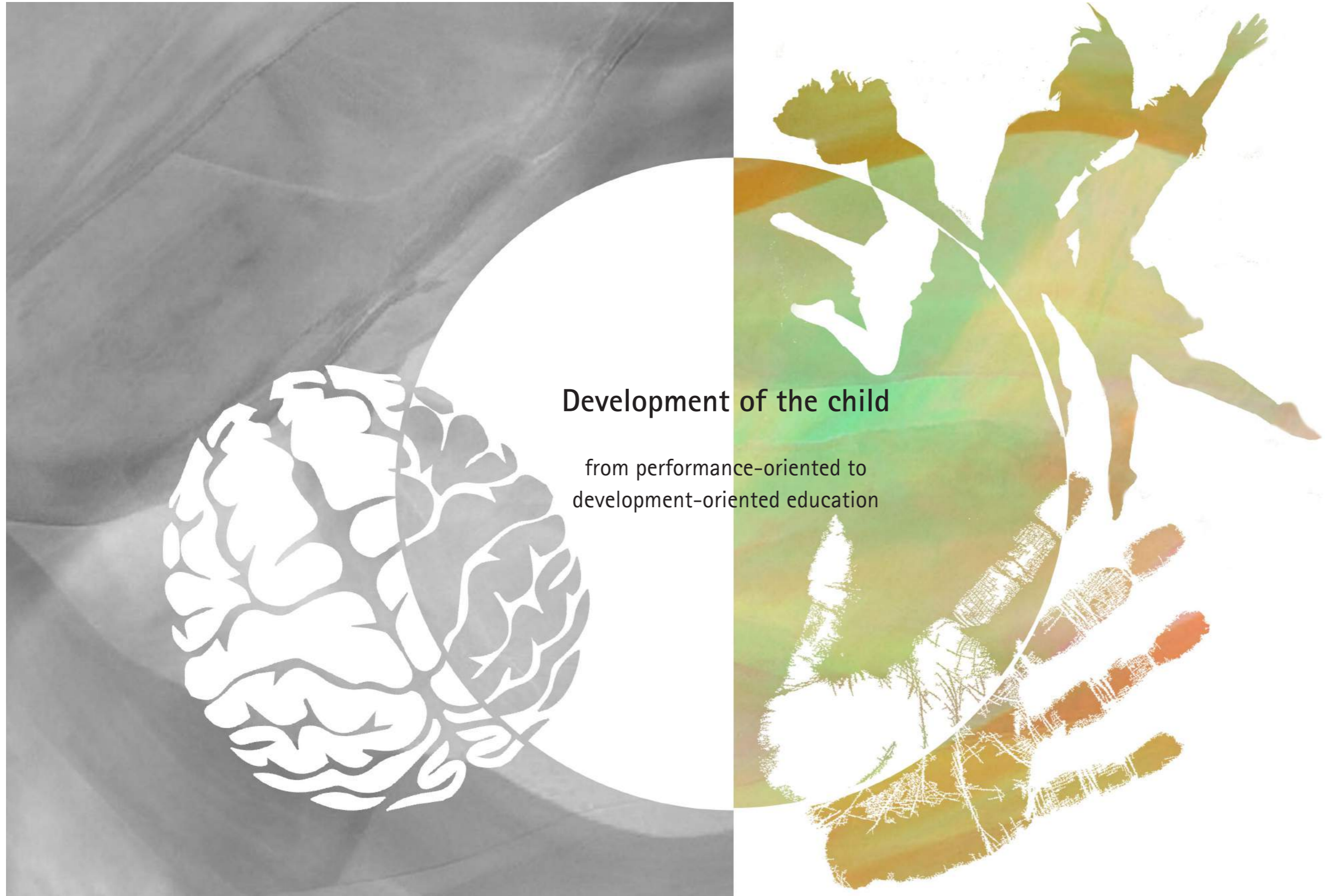
Creative freedom

as core value of craft



Problem statement

of the current educational system



Anthroposophy

balancing head, heart and hands



Charlotte Fischer - Symphonie Eurythmie

Anthroposophy

combining intellectual wisdom and creative crafting



Balancing act

between anthroposophical identity and public approachability



Rudolf Steiner - Goetheanum Dornach - Own picture



Pinksteren - Waldorf School Michael Bussum

Regional ambitions of the Waldorf School in Delft



Vrije middelbare school in steigers

Initiatiefgroep wil in september starten

DELFT | Een initiatiefgroep wil in september starten met een Vrije School voor voortgezet onderwijs. Het moet een kleinschalige middelbare school worden met voorlopig twee klassen, één voor vmbo-theoretisch en één voor havo/vwo.

HANS VERHAGEN

„Wij zijn heel optimistisch gestemd. We denken dat deze nieuwe school voor voortgezet onderwijs ook echt van de grond moet kunnen komen.” Sophie Hospers is een van de acht leden tellende initiatiefgroep, die in Delft een eigen Vrije School wil gaan opzetten.

„Hoewel het leerlingenaantal landelijk aan het afnemen is, steeg dat juist op vrije scholen - zowel bij het basis- als voortgezet onderwijs - het afgelopen jaar met vijf procent. Het kost een hoop energie en regelwerk, maar wij zijn ervan overtuigd dat voor een vestiging in

je financieel gezond. Het gaat om een klas voor vmbo-theoretisch en een gecombineerde havo/vwo-klas.”

Toejuichen

Hospers zegt dat dat de Vrije Scholen met voortgezet onderwijs in Den Haag en Rotterdam het Delftse plan van harte toejuichen.

„De verwachting is dat zij hier niet of nauwelijks last van zullen ondervinden. Voor de nieuwe vrije school in Delft gaan we ook uit van leerlingen uit de omgeving: Pijnacker-Nootdorp, Midden-Delfland en ook uit het Westland, van waaruit wij al

vestigd is nog onduidelijk. „Wij hebben daarvoor al wel een aantal opties, maar in dit stadium is het nog niet verstandig om die te noemen. Op 1 februari wordt een open dag gehouden voor belangstellende ouders en leerlingen, vermoedelijk is die op de Vrijebasisschool Widar aan de Meesterstraat in Delft.”

Delft kent momenteel relatief veel 'bijzondere' basisscholen (Vrije school Widar, Freinet-scholen, dalton, jenaplan en montessori), maar nog geen vernieuwend middelbaar onderwijs. Daar wil de initiatiefgroep verandering in brengen, ook omdat de belangstelling voor vrije scholen snel groeit.

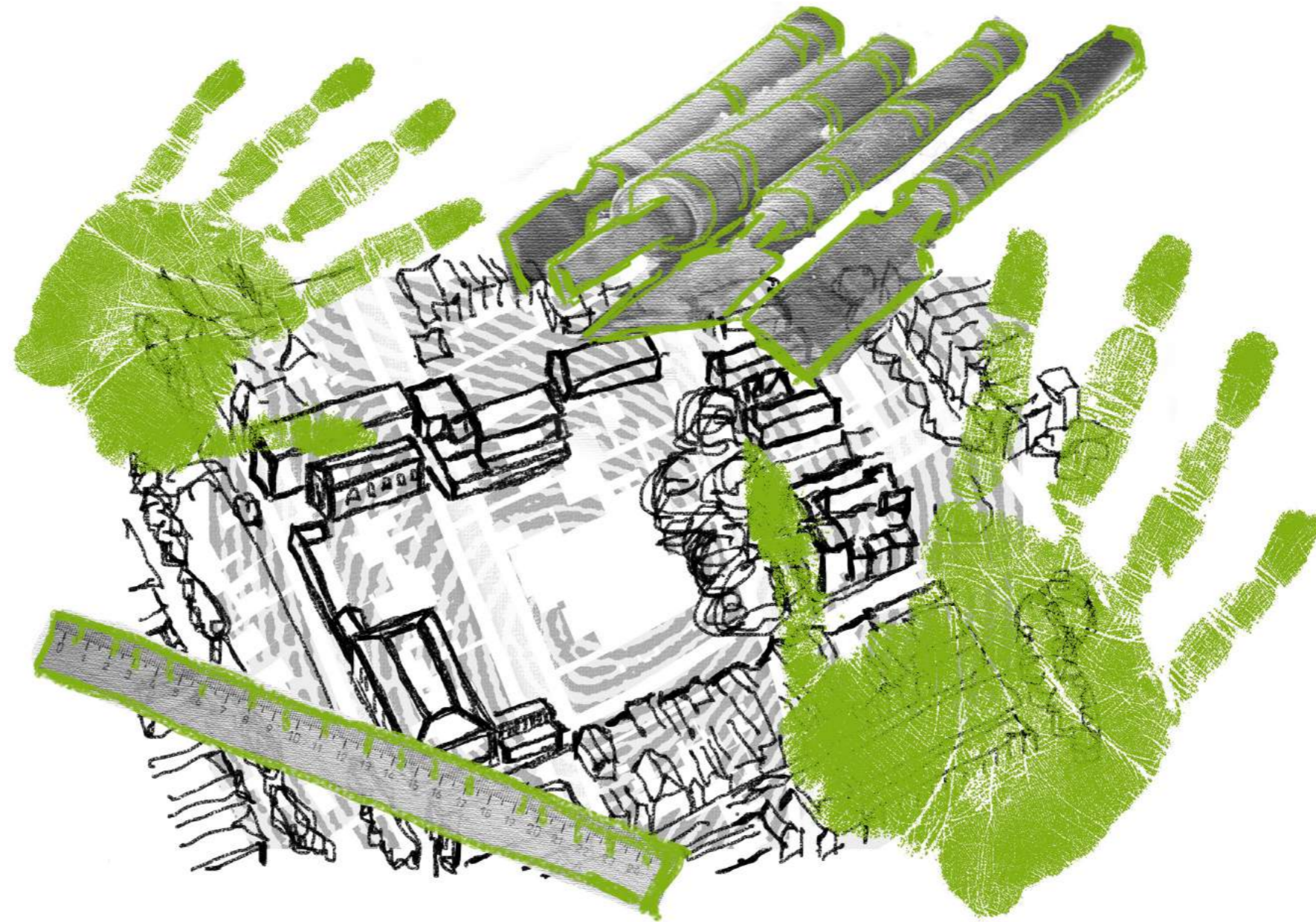
Volgens Albert Vlug, een ander lid van de initiatiefgroep, zijn er verschillende succesfactoren voor de stijgende populariteit van vrije scholen. De kleinschaligheid is er daar één van. Vlug: „Ook helpt het enorm dat onderzoeken laten zien



Grotius College Delft

Design assignment

Design a secondary Waldorf School that, both socially and spatially, engages with and contributes to the city centre of Delft and its inhabitants.



Urban // *How can the Waldorf School respond to the historic urban tissue of Delft?*

Programmatic // *How can the Waldorf School and its architectural language engage with and contribute to the city, both socially and spatially?*

Architectural // *How can the architecture of the school both provide in the Waldorf identity and also be approachable for a broader public?*

Material // *How can coloured glass enhance the architectural language of the Waldorf School?*

Design themes

*urban design // **nature** // reflection and personal development //
individual relation with surroundings // creating a sanctuary // relation with outside*

*urban design // **reinterpretation** // position in the existing //
part and whole // human and fellowman // re-interpretation of the surroundings*

*architectural design // **rhythm and movement** // daily rituals //
repetition and tradition // structure and freedom // rhythm and melody // metamorphoses*

Central location

to emphasis relation school and city



City Centre of Delft 1:10.000
Vacant courtyard
Public Square
Public Park



Beestenmarkt



Doelenplein



Grote Markt



Bastiaansplein



Prinsenhof



Hofje van Pauw



Gasthuisplaats



Kruisstraat

Central location

to emphasis relation school and city

Inner city Delft 1:1500



Gasthuisplaats

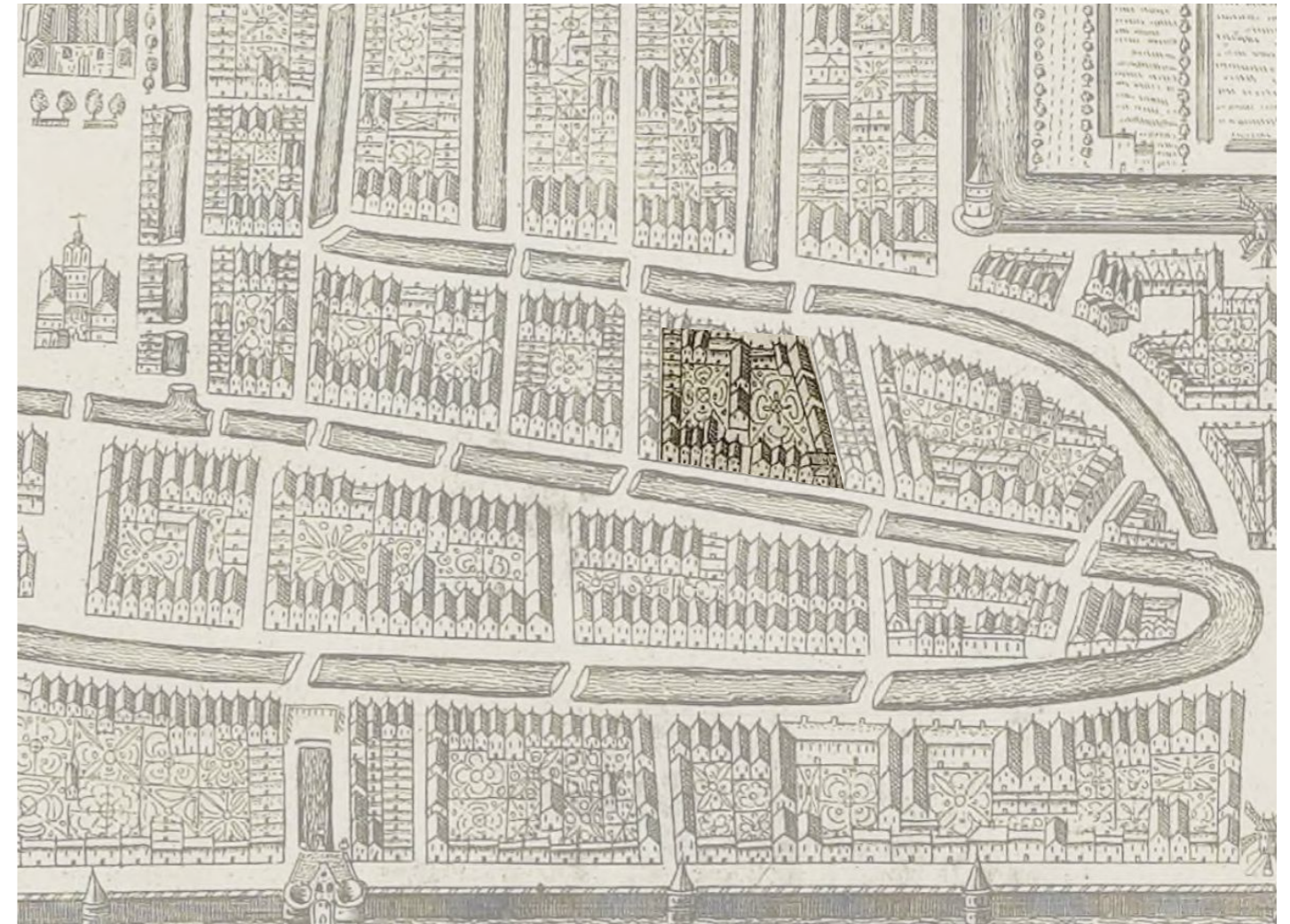
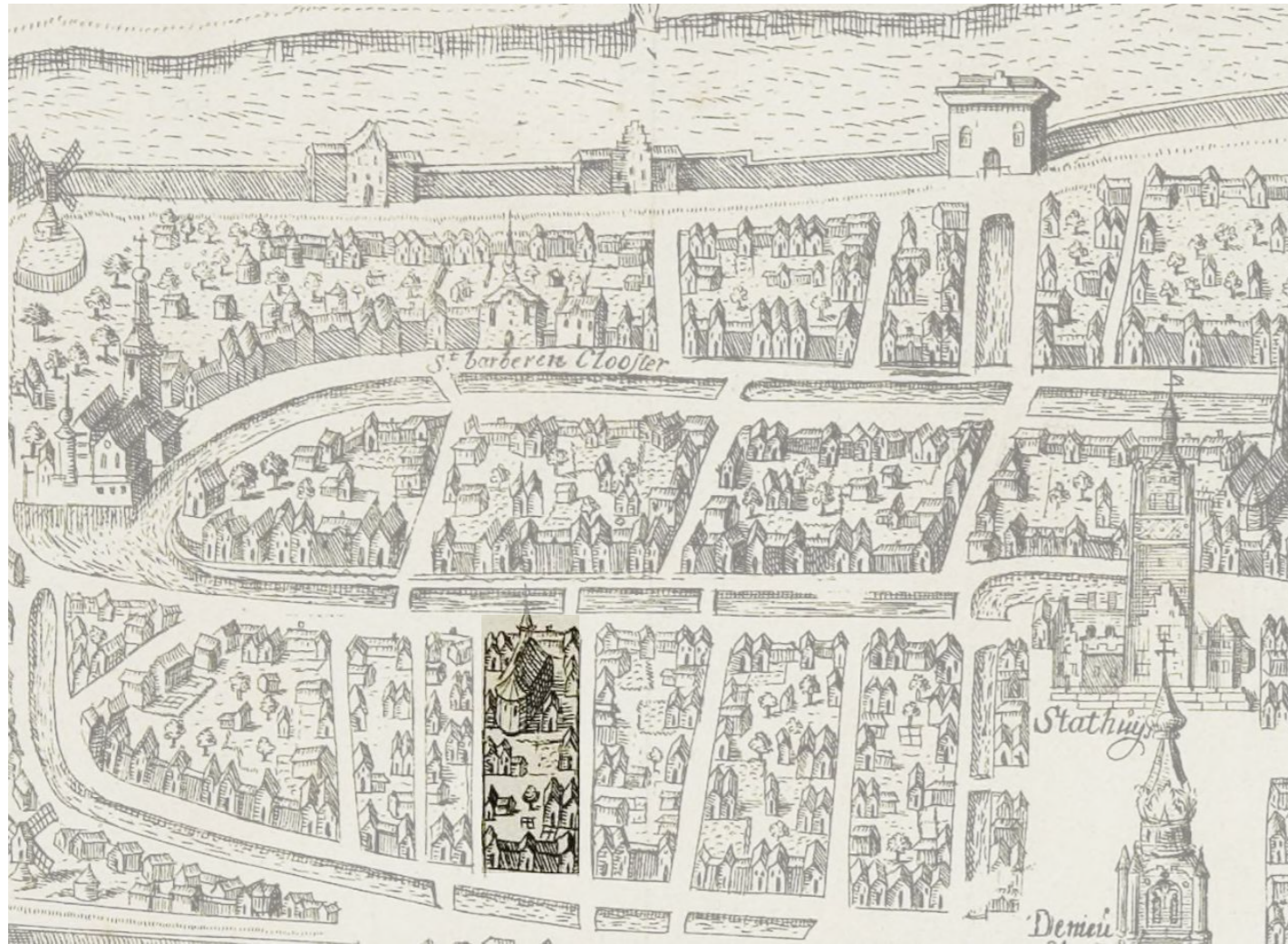
transforming the former hospital area

Gasthuisplaats Delft 1:750



Urban analysis

the historical development 1560 / 1672



Urban analysis

the historical development



Gasthuisplaats 1672

1252 *Gasthuis founded*
 1642 *Brewery becomes Plateelbakkerij*



Gasthuisplaats 1832

1838 *Boarding school founded*
 1864 *Gasthuiskerk, Womans-hall and Plateelbakkerij closed to build the Hogere Burger School*



Gasthuisplaats 1967

1862 *Synagoge founded*
 1860 *Boarding school closed*
 1898 *Headbuilding built by Hartman with large frontgarden*
 1932 *Renovation of HBS into Zusterhuis, open-air hospital and wall built by A.T. Kraan*



Gasthuisplaats 2004

1986 *Gasthuis closed: all buildings are demolished except for the Zusterhuis and the historic wall*
 2012 *Zusterhuis transformed in creative hub*



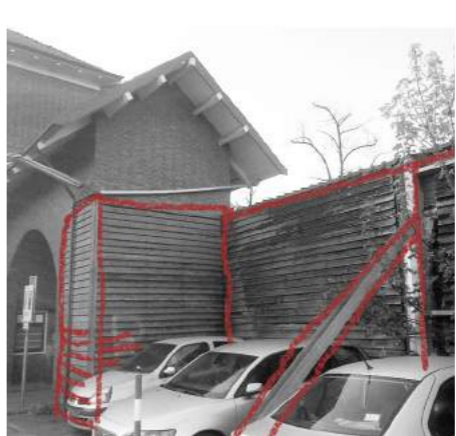
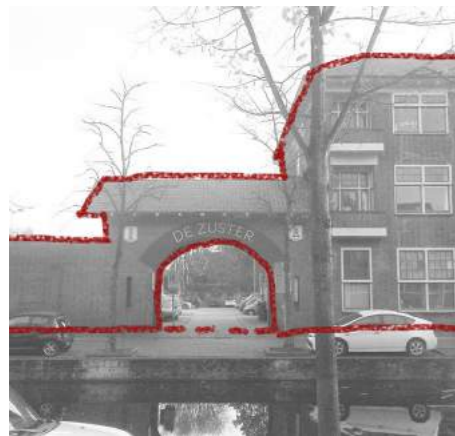
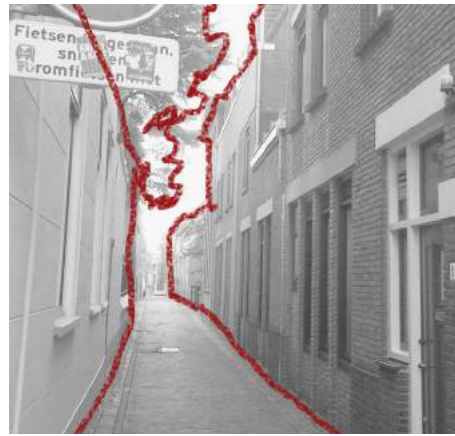
Urban analysis

history as inspiration for future



Urban analysis

the current situation



Entrances

Little alleys as hidden entrances
Inviting historical gate as clear access

Borders

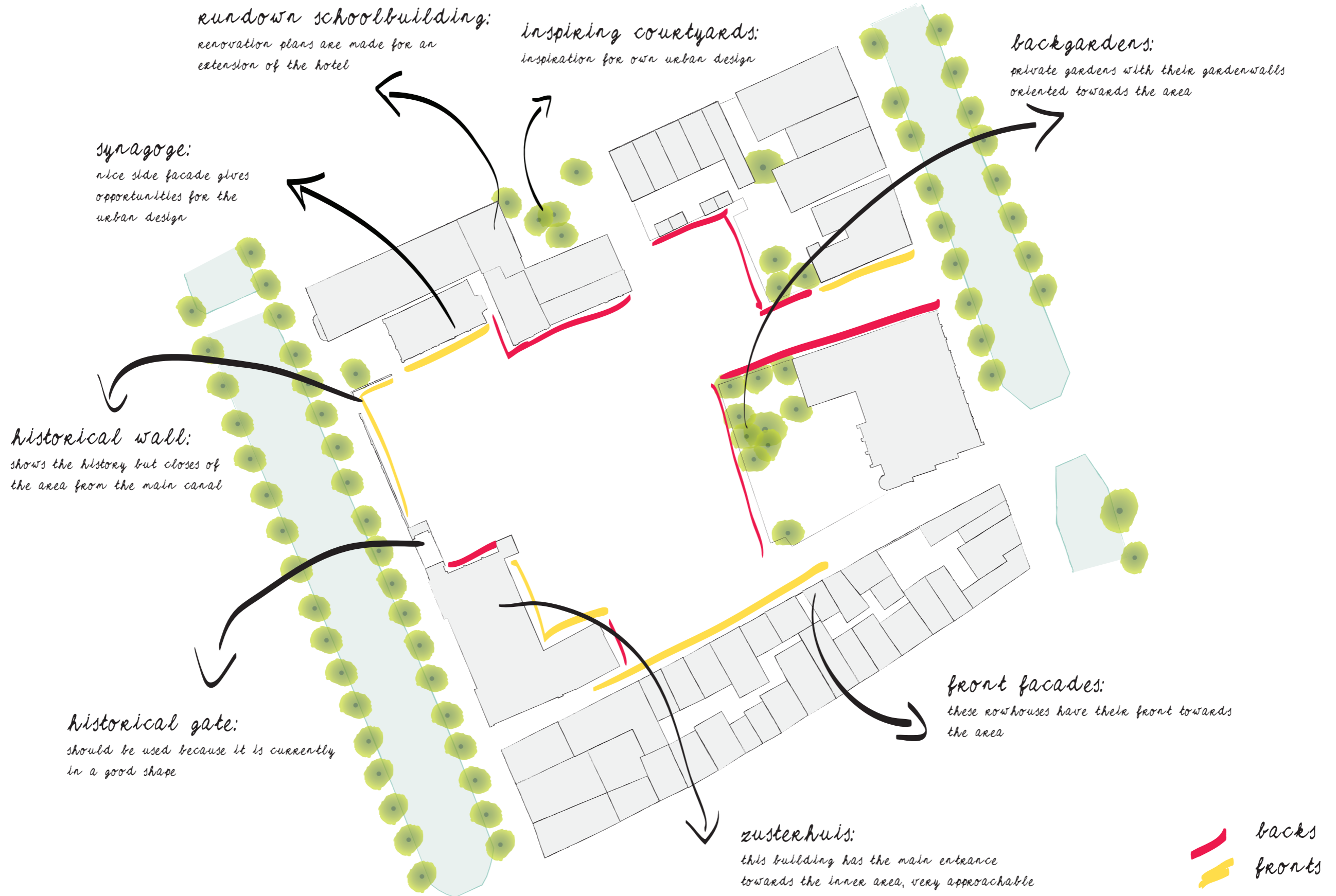
Articulated borders at the north, south and west
Unclear borders at the east created by private gardens

Chances and Challenges

Synagoge and gate as architectural chance
Rundown school and historical wall as developing challenge

Urban analysis

the current situation



Urban analysis

gates, alleys and courtyards



Urban design

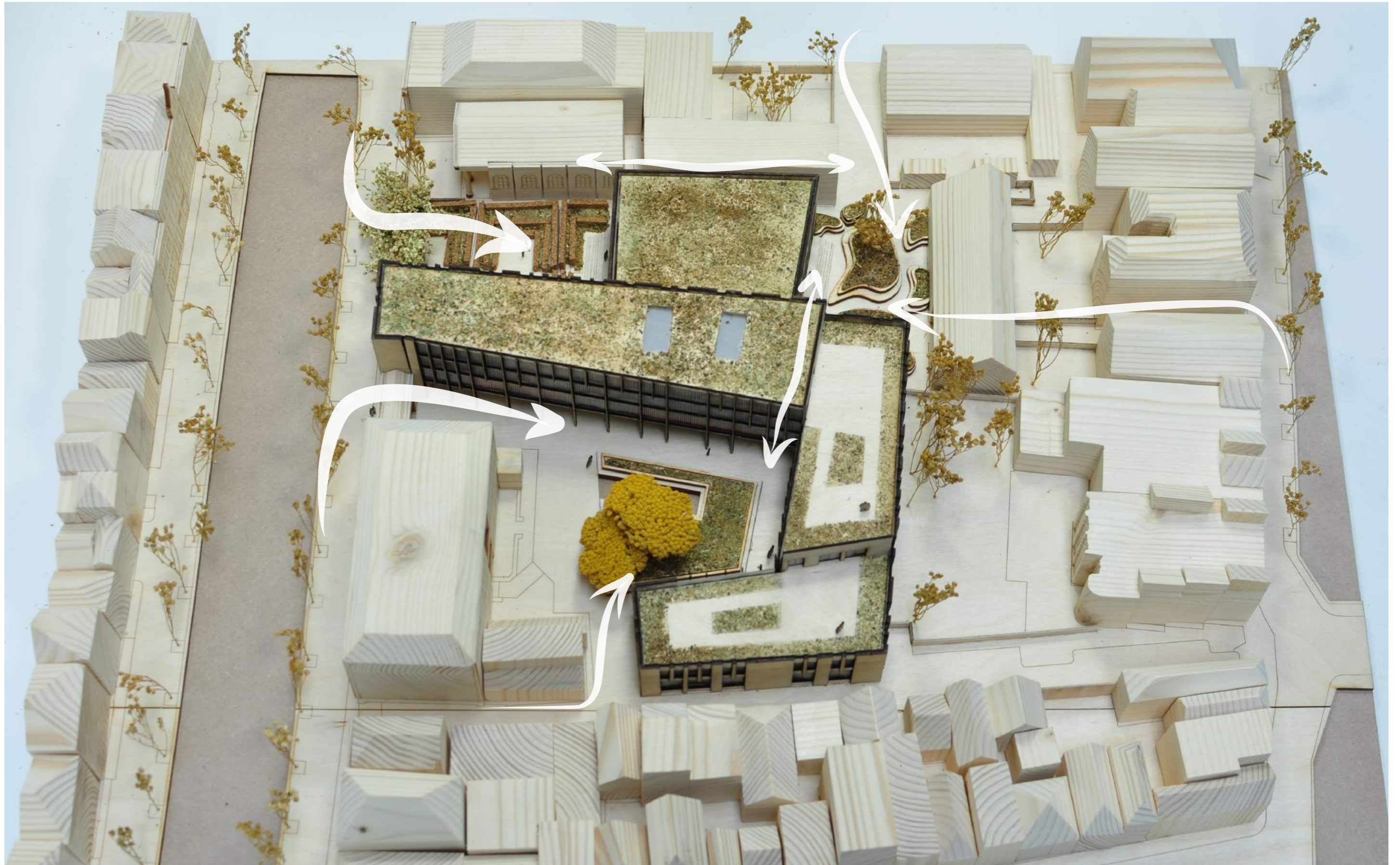
proposal to contribute to the city

Urban design proposal
1:750



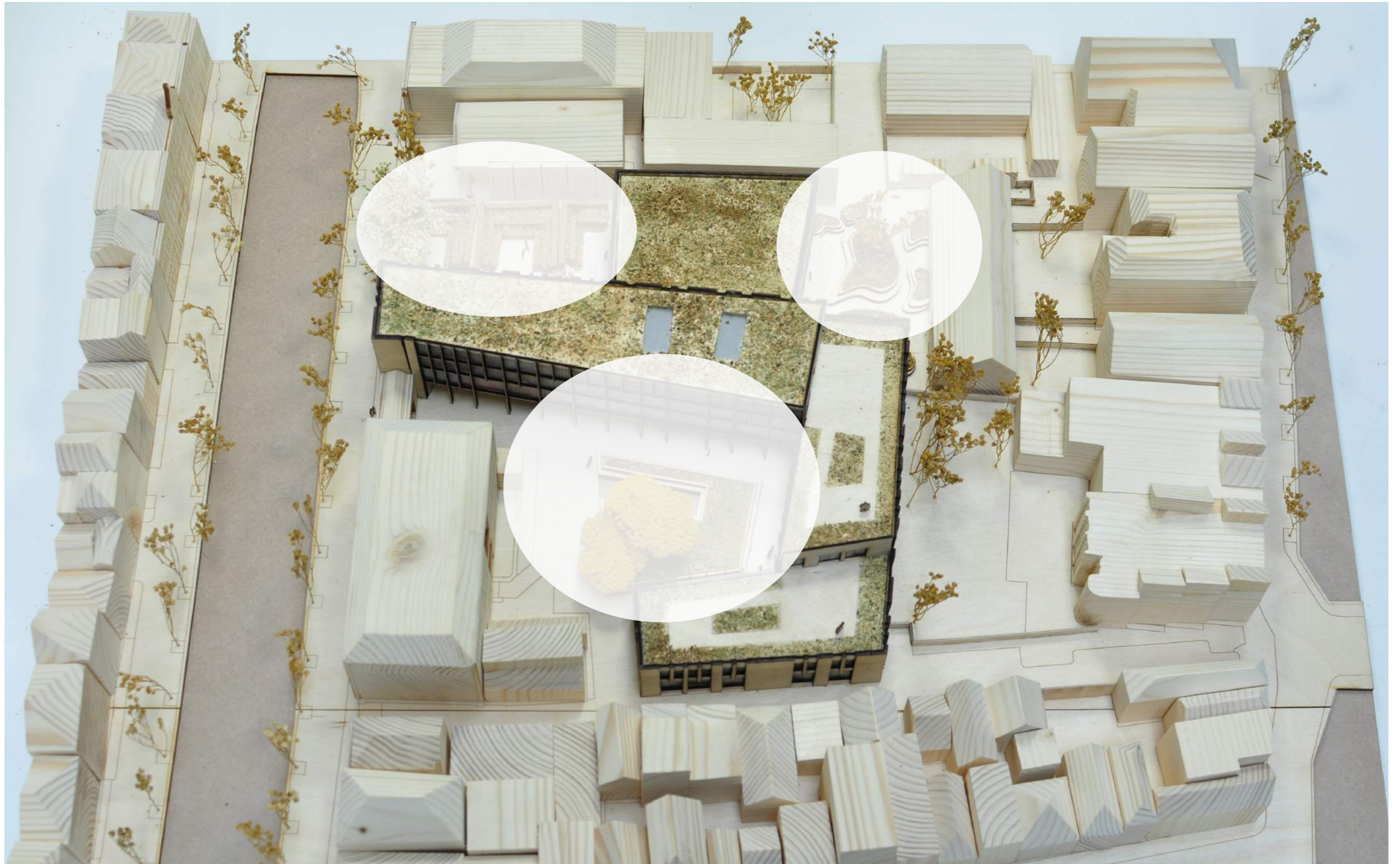
Permeable structure

interconnecting public spaces



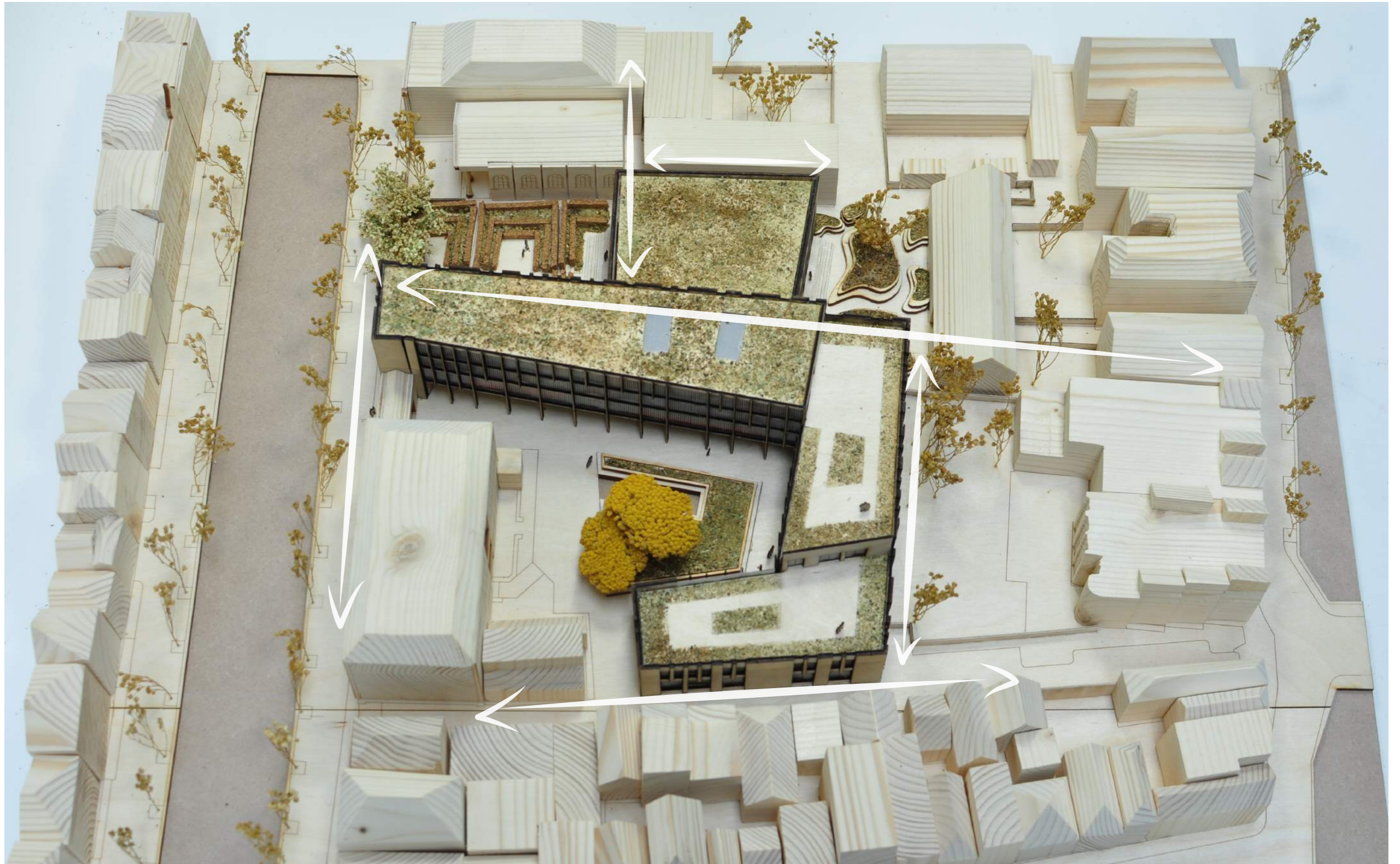
Public spaces

with different urban qualities



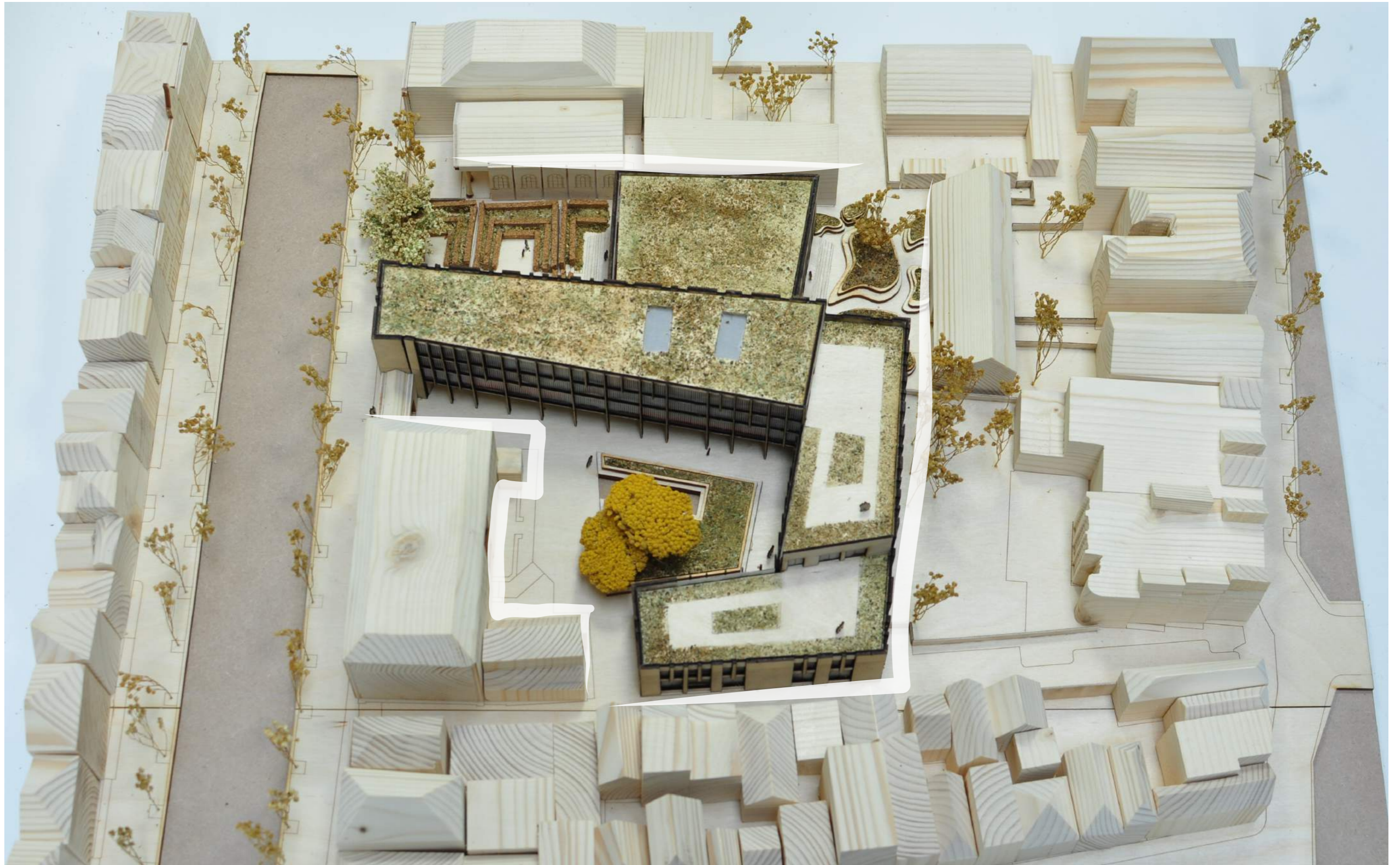
Directions

respond to the existing



Borders

defining the school world



Urban design

references for the exterior spaces



Public park

public // small //
soft // quiet sanctuary //
formal // natural // green

References:
Hofje van Heythuizen, Leiden



Schoolyard

public // large // visible //
strong // approachable gallery //
formal // urban

References:
Marecollege Leiden, 24H



Collective garden

collective // small // hidden //
soft // shared garden //
informal // natural // green

References:
Boston Schoolyard Initiative

Urban design

impressions for the exterior spaces



Public park

public // small //
soft // quiet sanctuary //
formal // natural // green



Schoolyard

public // large // visible //
strong // approachable gallery //
formal // urban



Collective garden

collective // small // hidden //
soft // shared garden //
informal // natural // green

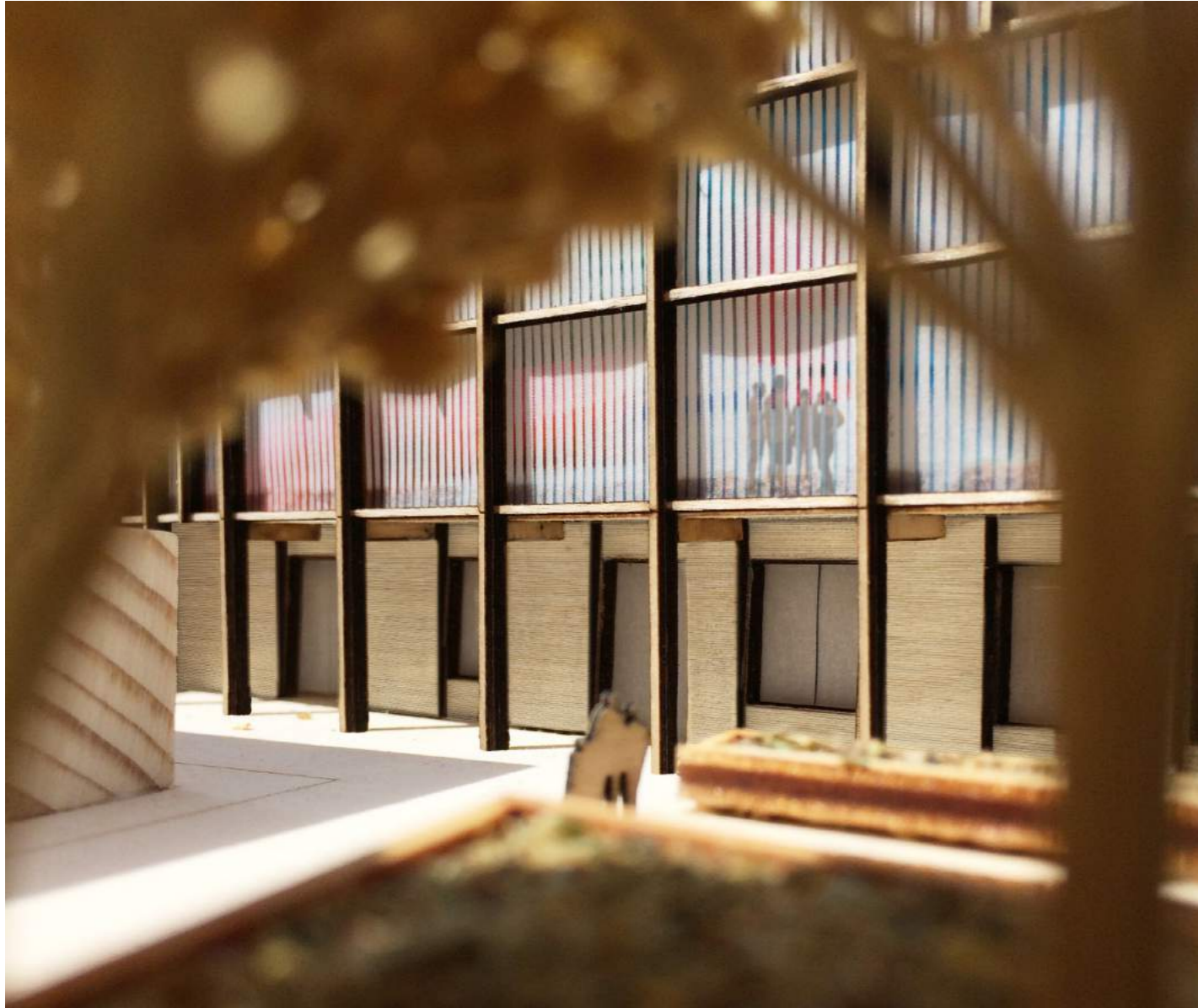
Public park

a quiet sanctuary



Schoolyard

surrounded by the craft gallery



Collective garden

growing a community



Design themes

*urban design // **nature** // reflection and personal development //
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*architectural design // **rhythm and movement** // daily rituals //
repetition and tradition // structure and freedom // rhythm and melody // metamorphoses*

Rhythm and movement

as the architectural core ideas



Sint Jansfeest - Waldorf School Tiliander Tilburg



Saint Martin's day - Waldorf School Ariege



Pinksteren - Waldorf School Michael Bussum



Christmas celebration - Waldorf School de Esch Winterswijk

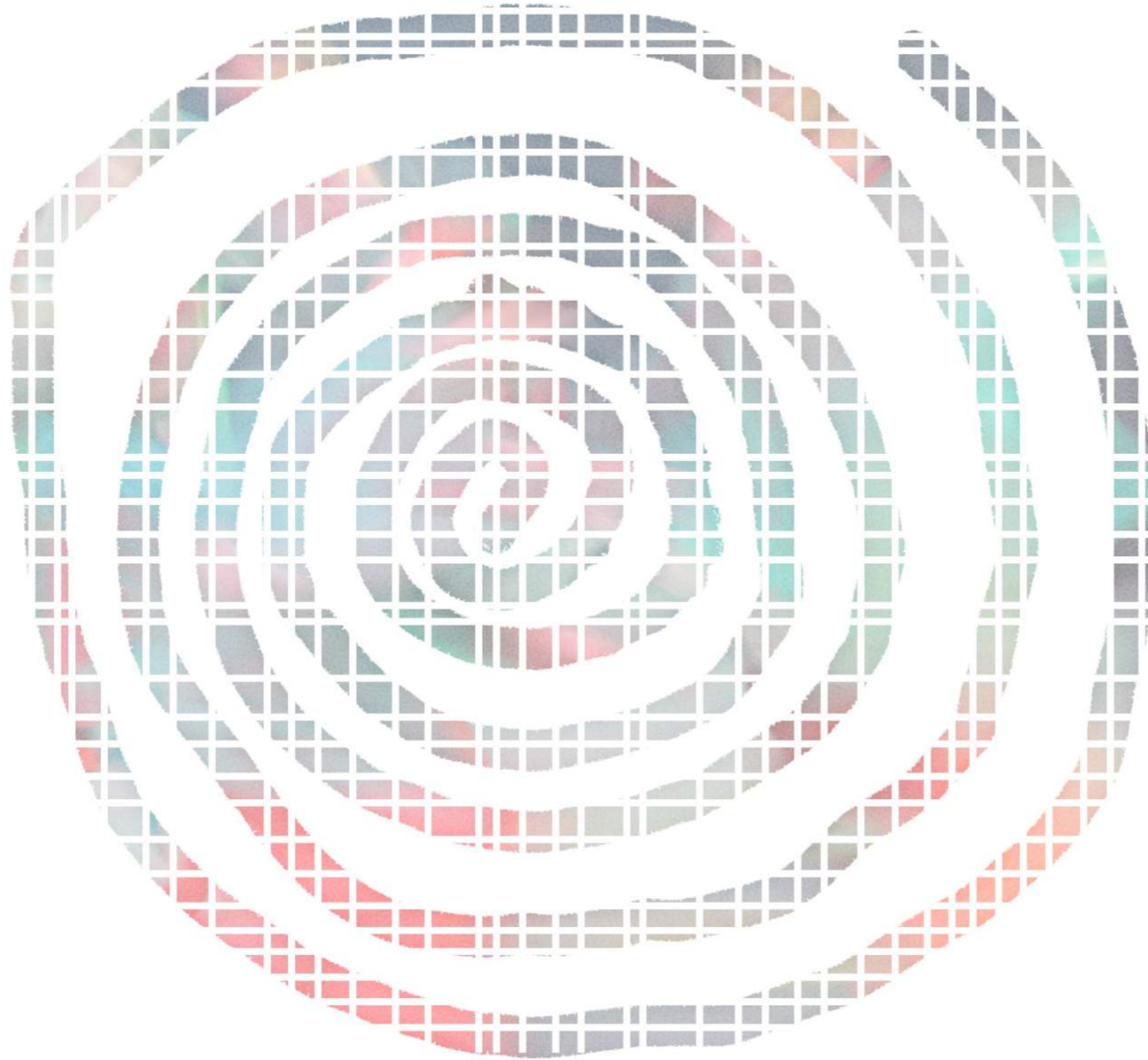
Rhythm and movement

as the architectural core ideas



Rhythm and movement

as the architectural core ideas



Reinterpretation *of the Delft facades*



Koornmarkt



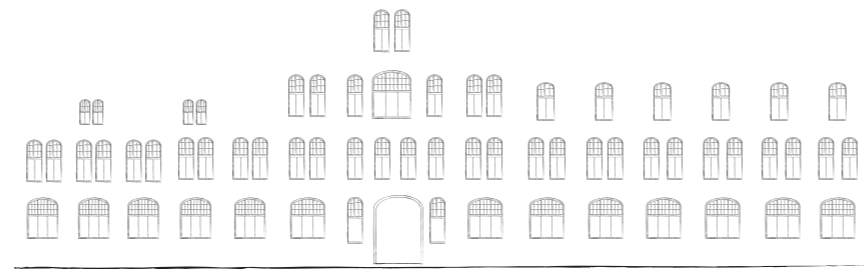
Science Centre



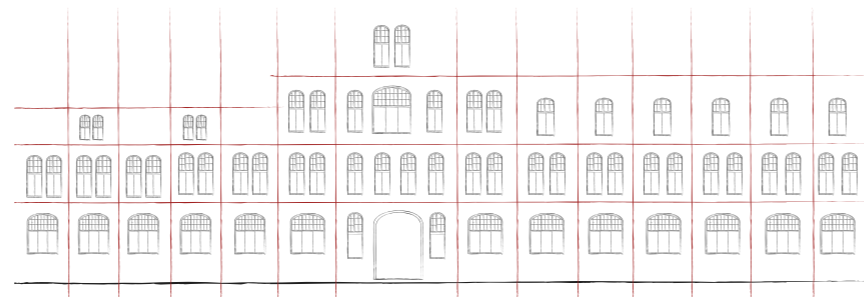
Waldorf School



Increasing windows



Segmented facades



Rhythm and movement

within music and architecture



*accentuated
bar*

*changing
melody*

Gradual transition

from public brick world to timber school world



public

decrescendo.

private

crescendo

public

Reinterpretation *of the Delft canal houses*



Rhythm and movement

as architectural core ideas



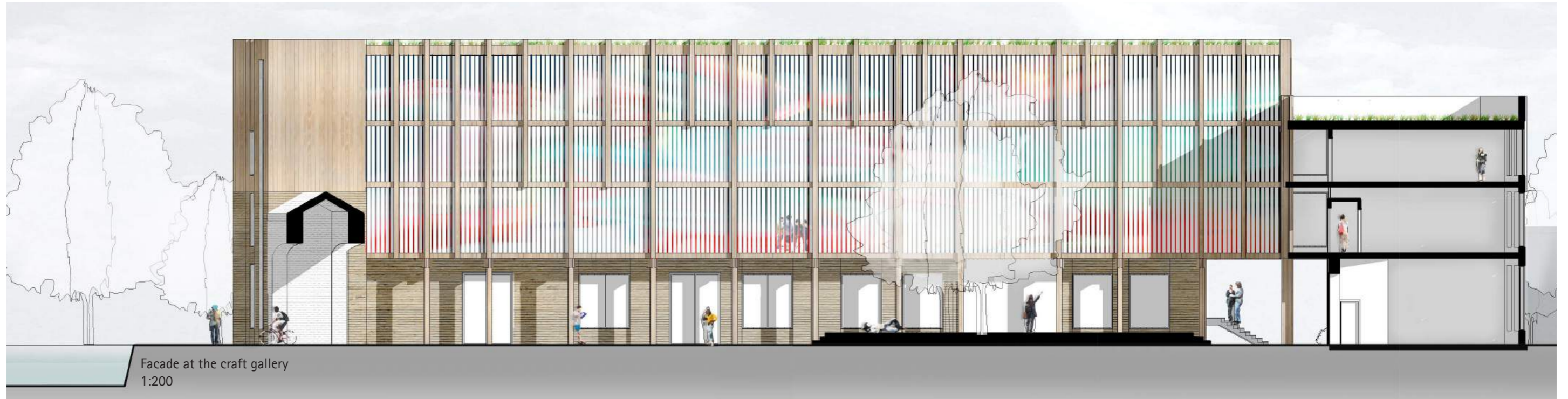
Facade at the Koornmarkt Canal 1:200



Facade at the public park 1:200

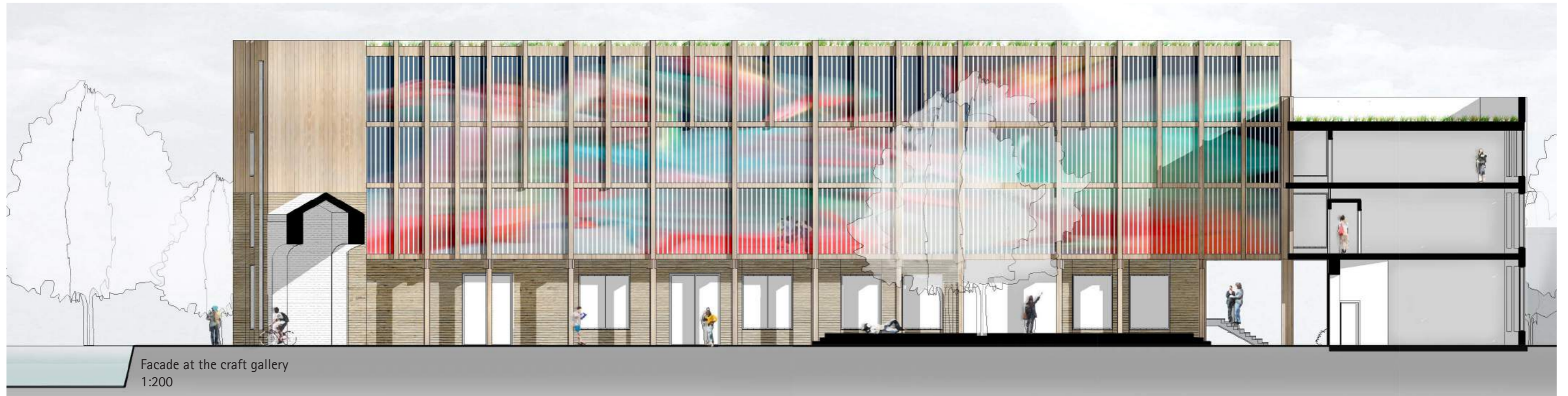
Rhythm and movement

as architectural core ideas



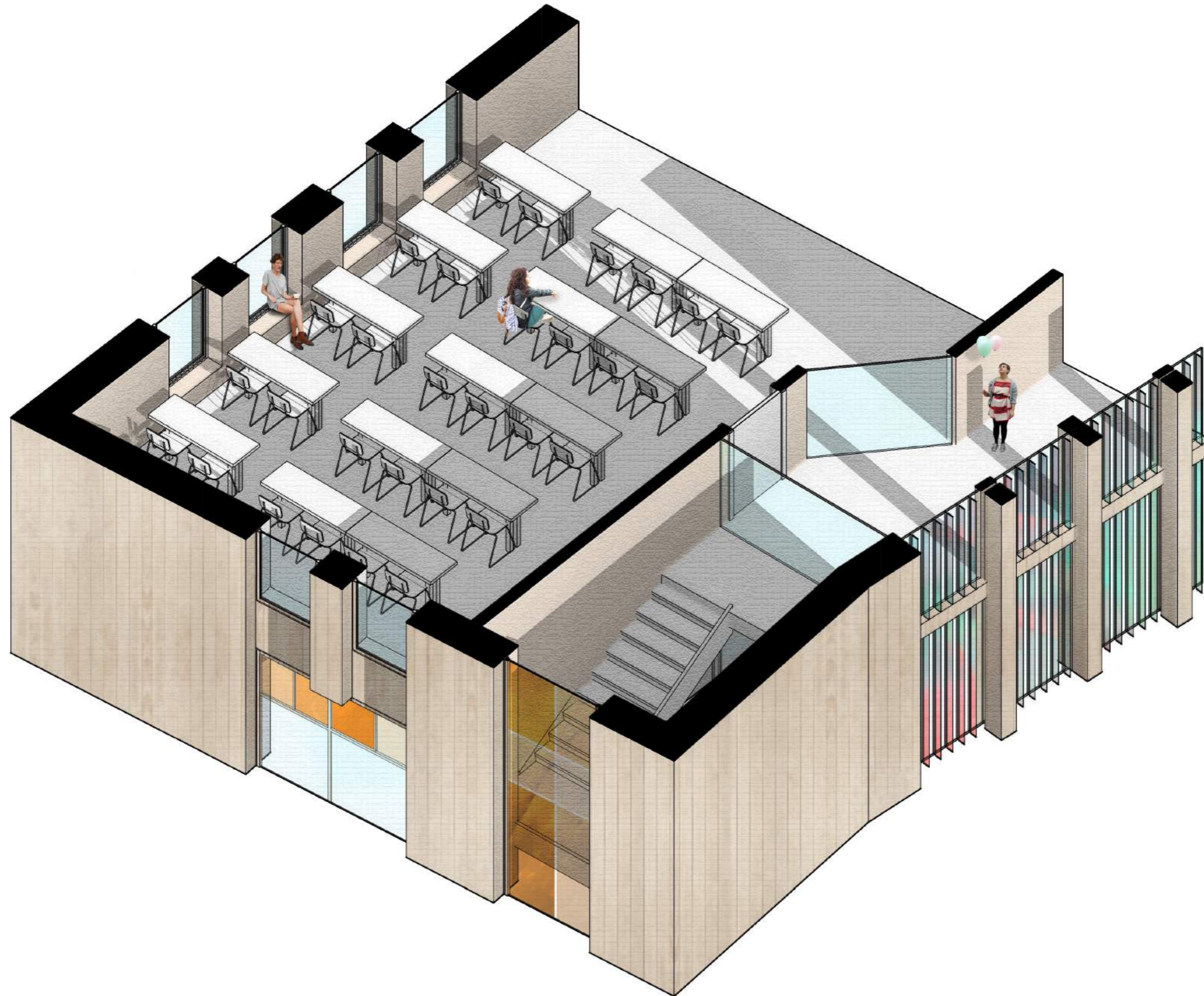
Coloured glass

adding colour to architecture



Two sides

with one language



Program definition

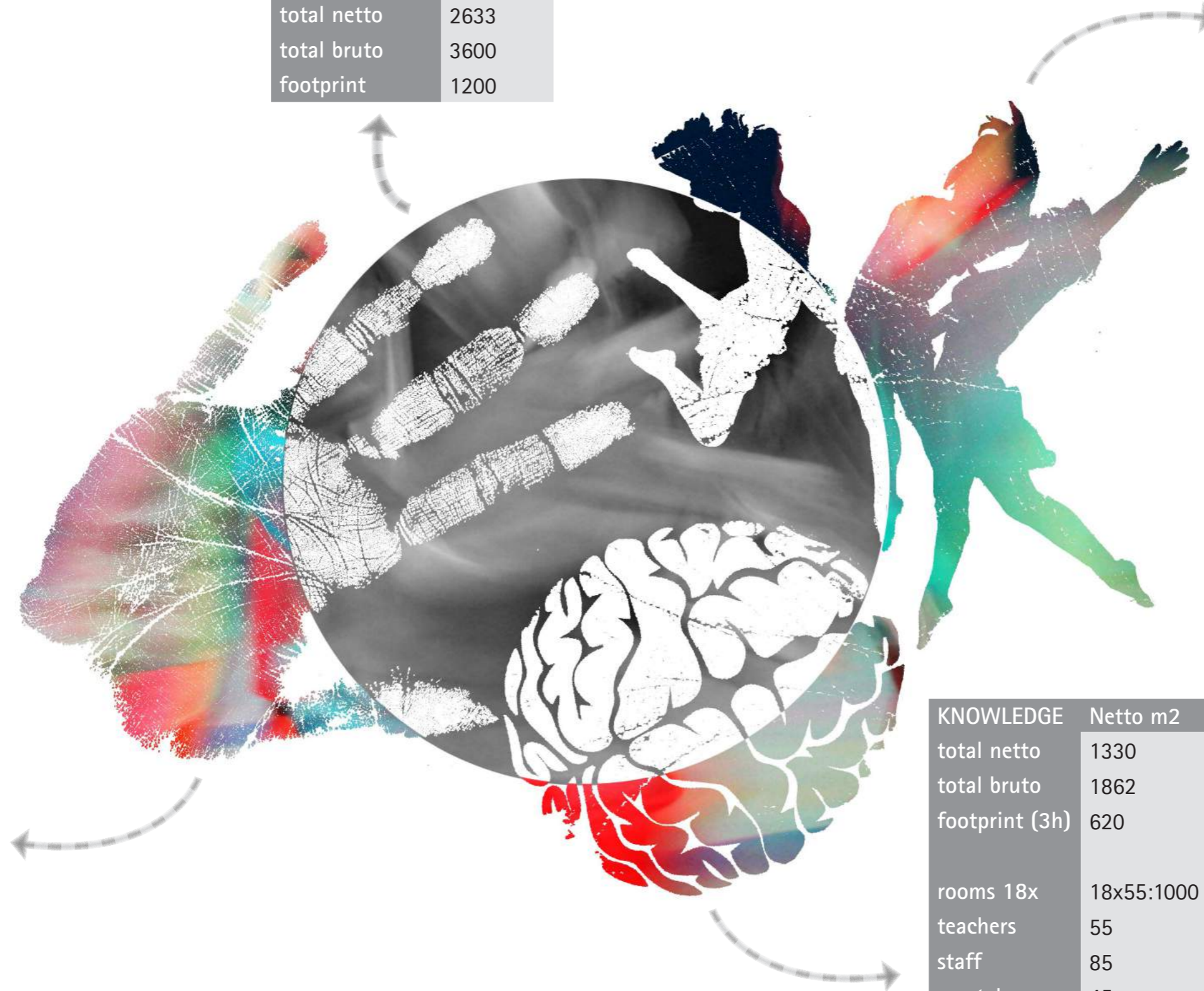
of the new secondary Waldorf School

SCHOOL TOTAL	m2
total netto	2633
total bruto	3600
footprint	1200

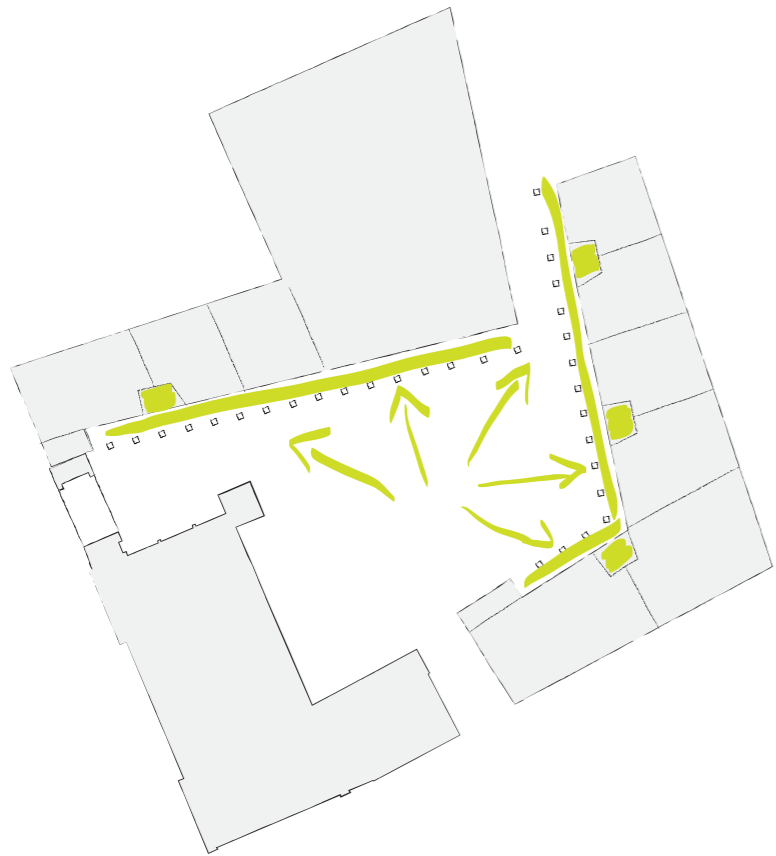
MOTION	Netto m2
total netto	675
total bruto	900
footprint (2h)	450
gym (2h)	308 (14x22)
storage	35
dressing	75
great hall (2h)	200
music	55

CRAFT	Netto m2
total netto	630
total bruto	840
footprint (3h)	280
wood	70
metal	70
cooking	70
textile	50
drawing	50
sculpting	70
glass	70
canteen	135
toilets 8x	45

KNOWLEDGE	Netto m2
total netto	1330
total bruto	1862
footprint (3h)	620
rooms 18x	18x55:1000
teachers	55
staff	85
caretaker	45
TOA	30
toilets 20x	115

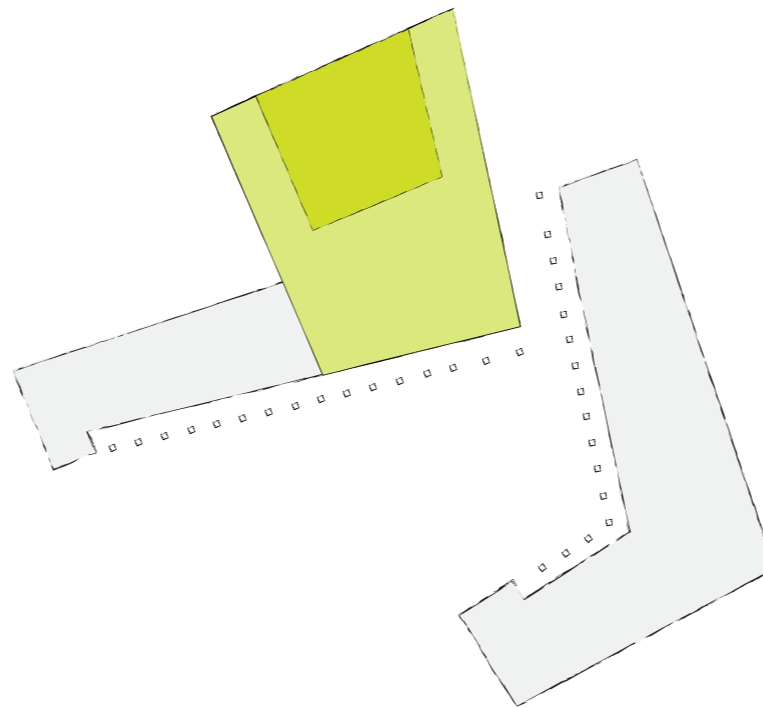


Formal principles *for the architectural plan*



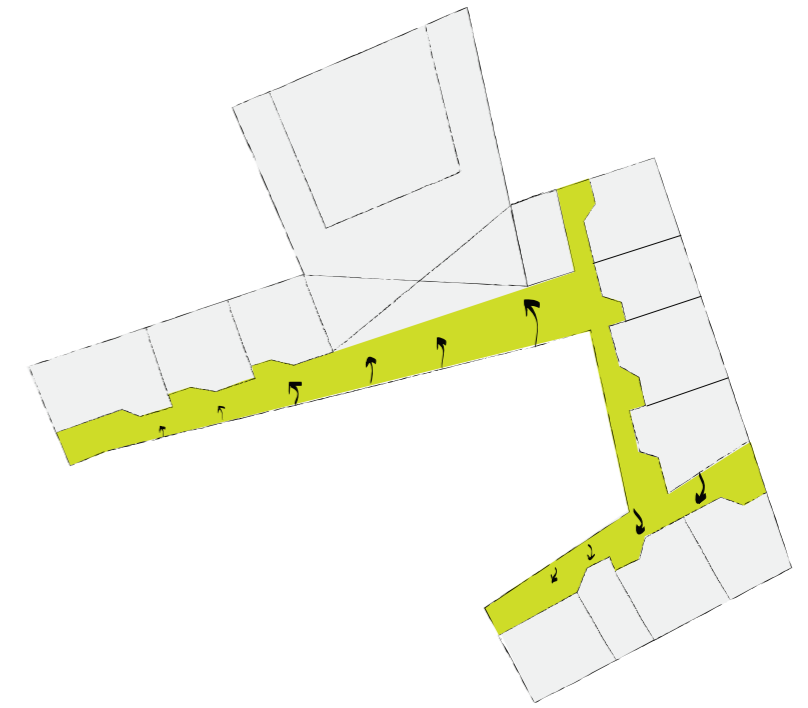
| Craft Gallery

- | *walkabout along the craft units //*
- | *ateliers are approachable for citizens //*
- | *directly connected to outside space //*



| Cornerstone

- | *special program on the intersection //*
- | *entrance and great hall as cornerstone //*
- | *large atrium as welcoming entrance //*

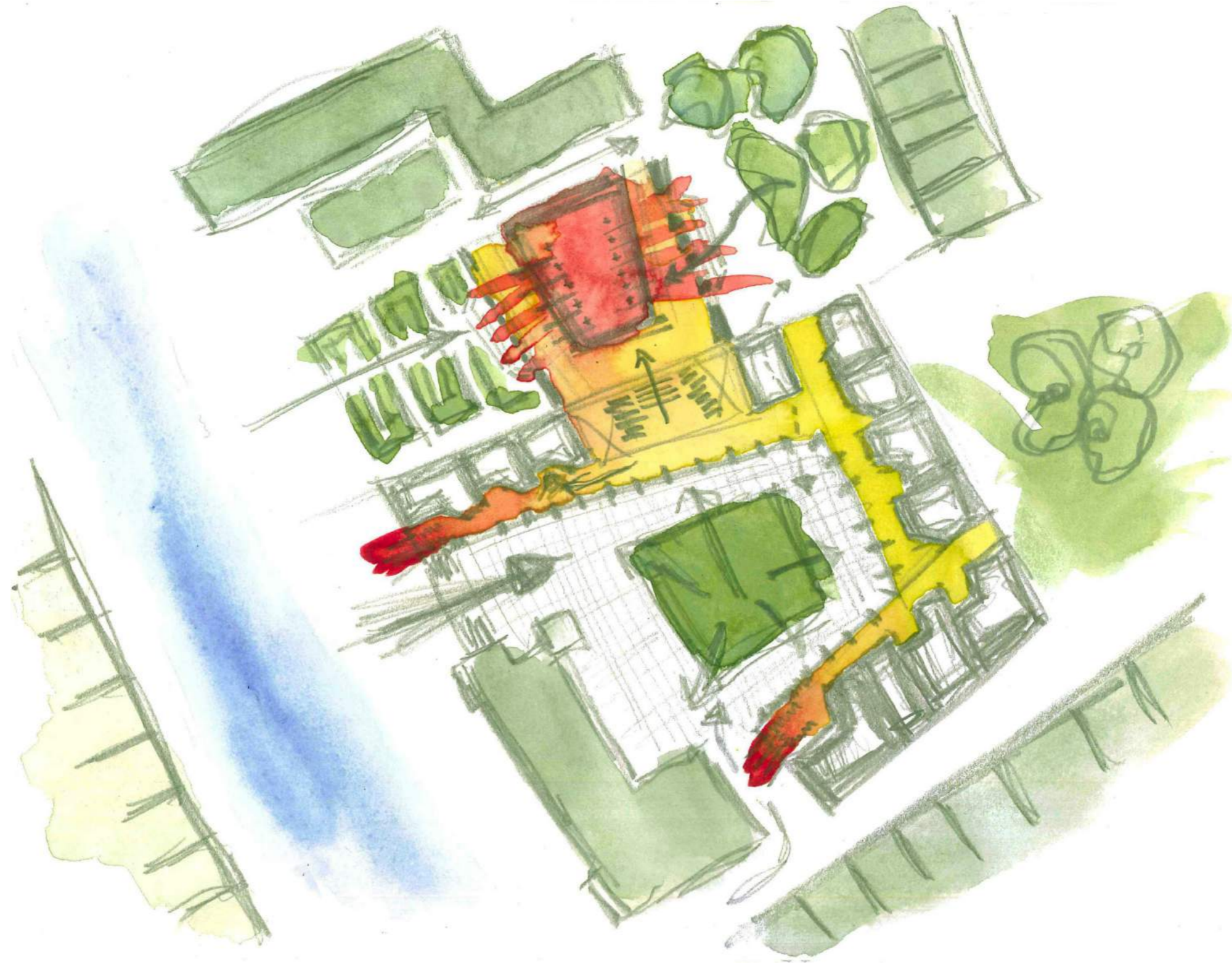


| Widening Wings

- | *wings are shaped by movement people //*
- | *enlarged space for casual encounters //*
- | *depth at classroom entrance for warm welcome //*

Design movements

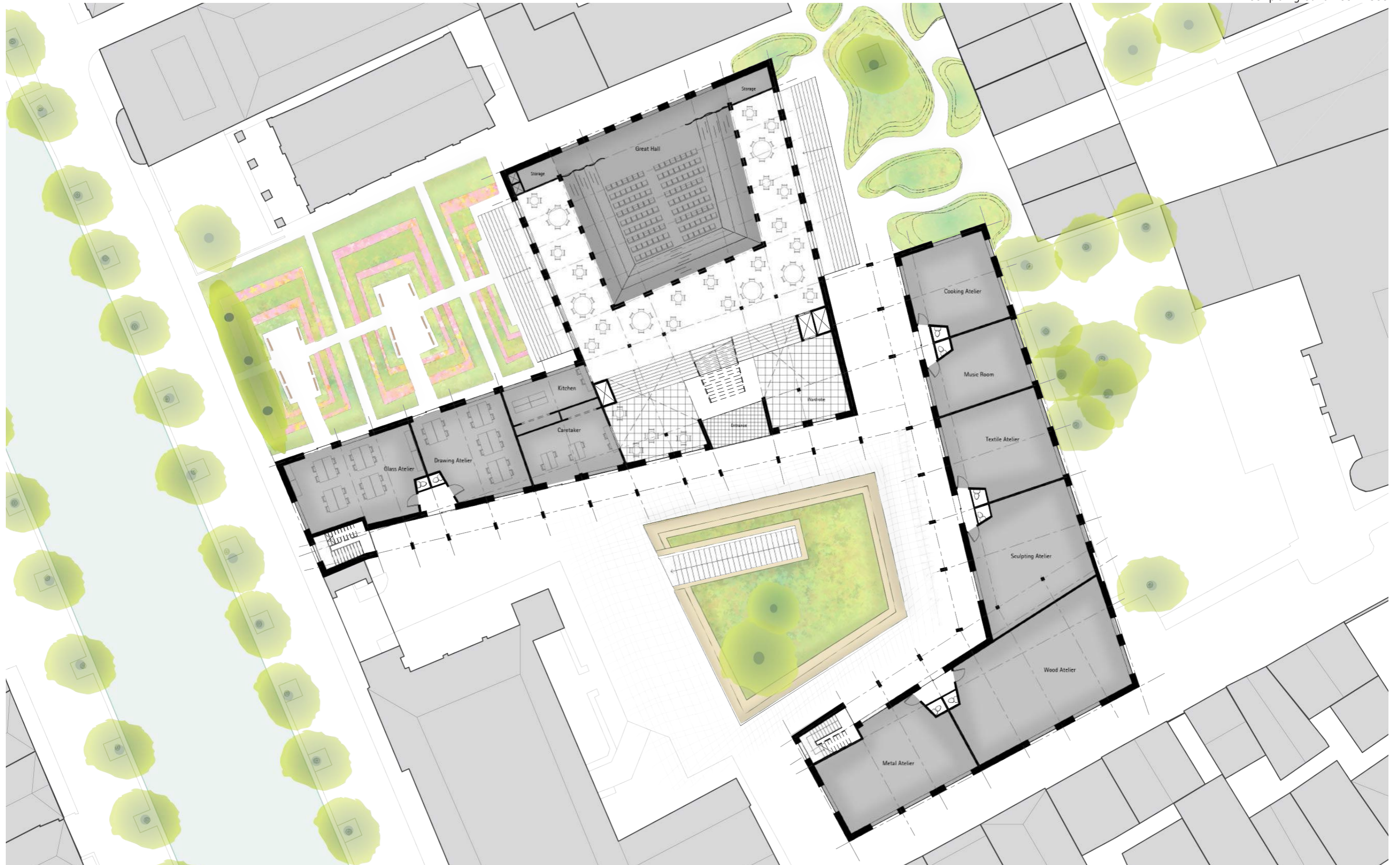
proposal for the new Waldorf School



Architectural design

the new Waldorf School

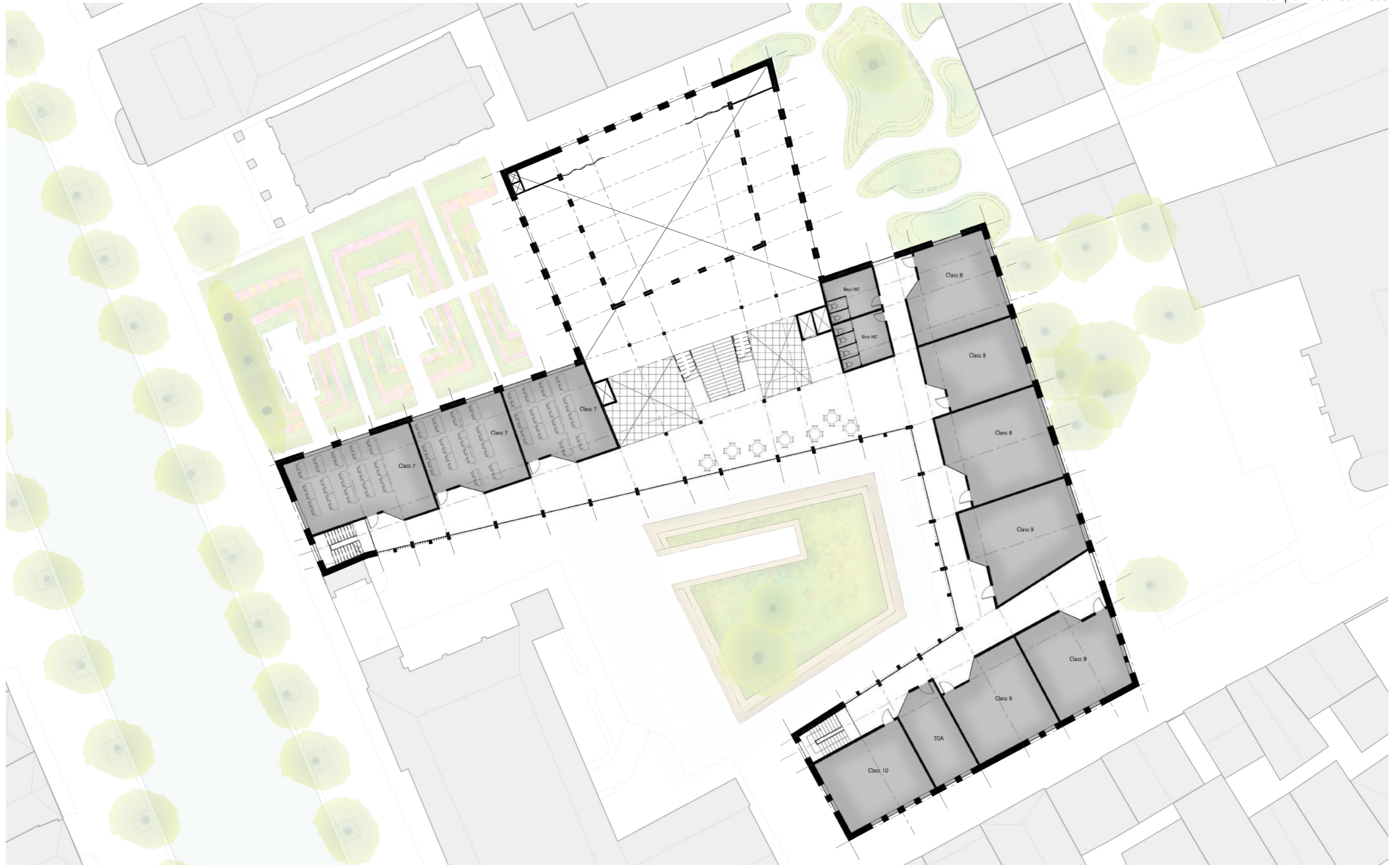
⌚ Architectural design proposal
floor plan ground floor 1:300



Architectural design

the new Waldorf School

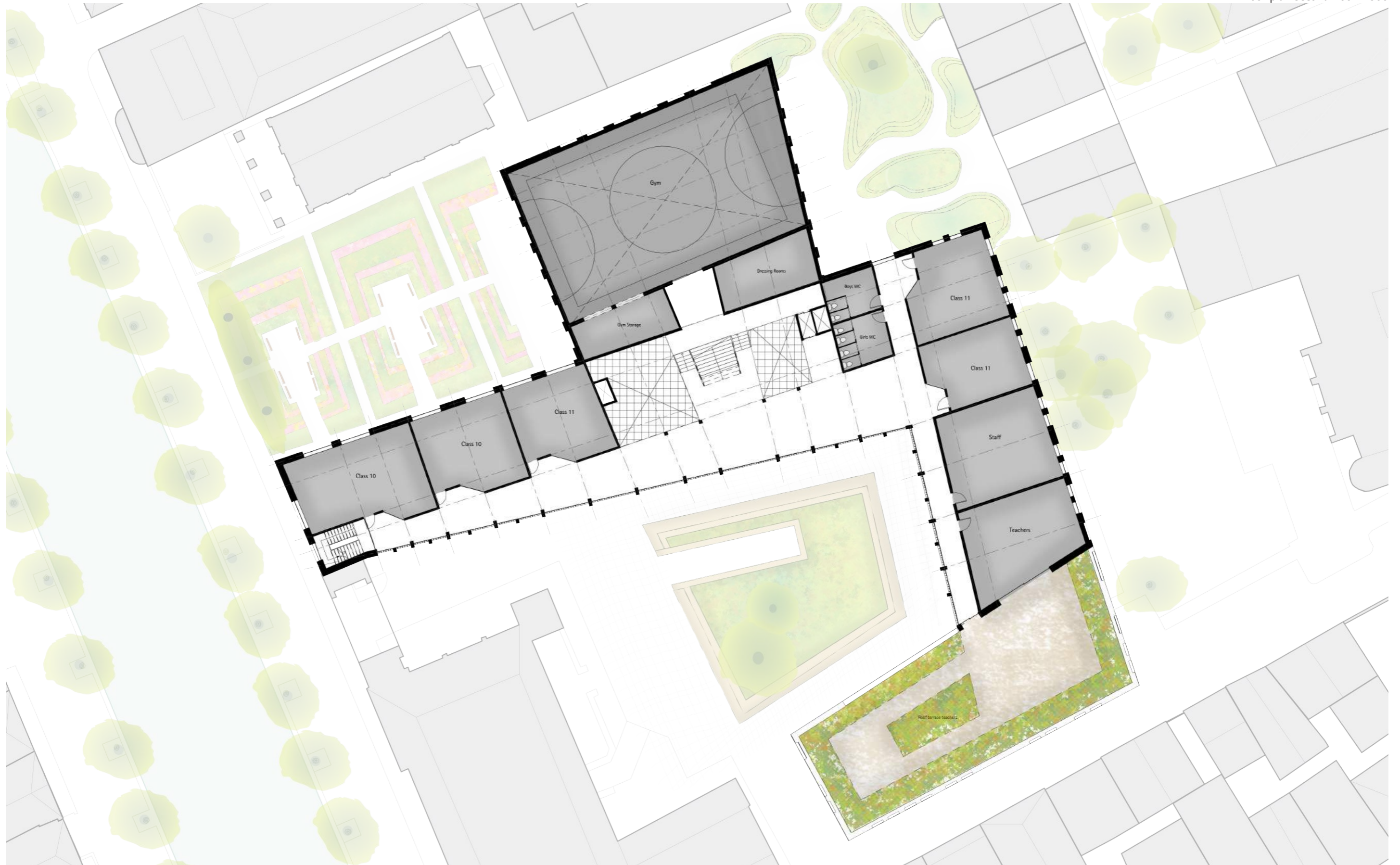
⌚ Architectural design proposal
floor plan first floor 1:300



Architectural design

the new Waldorf School

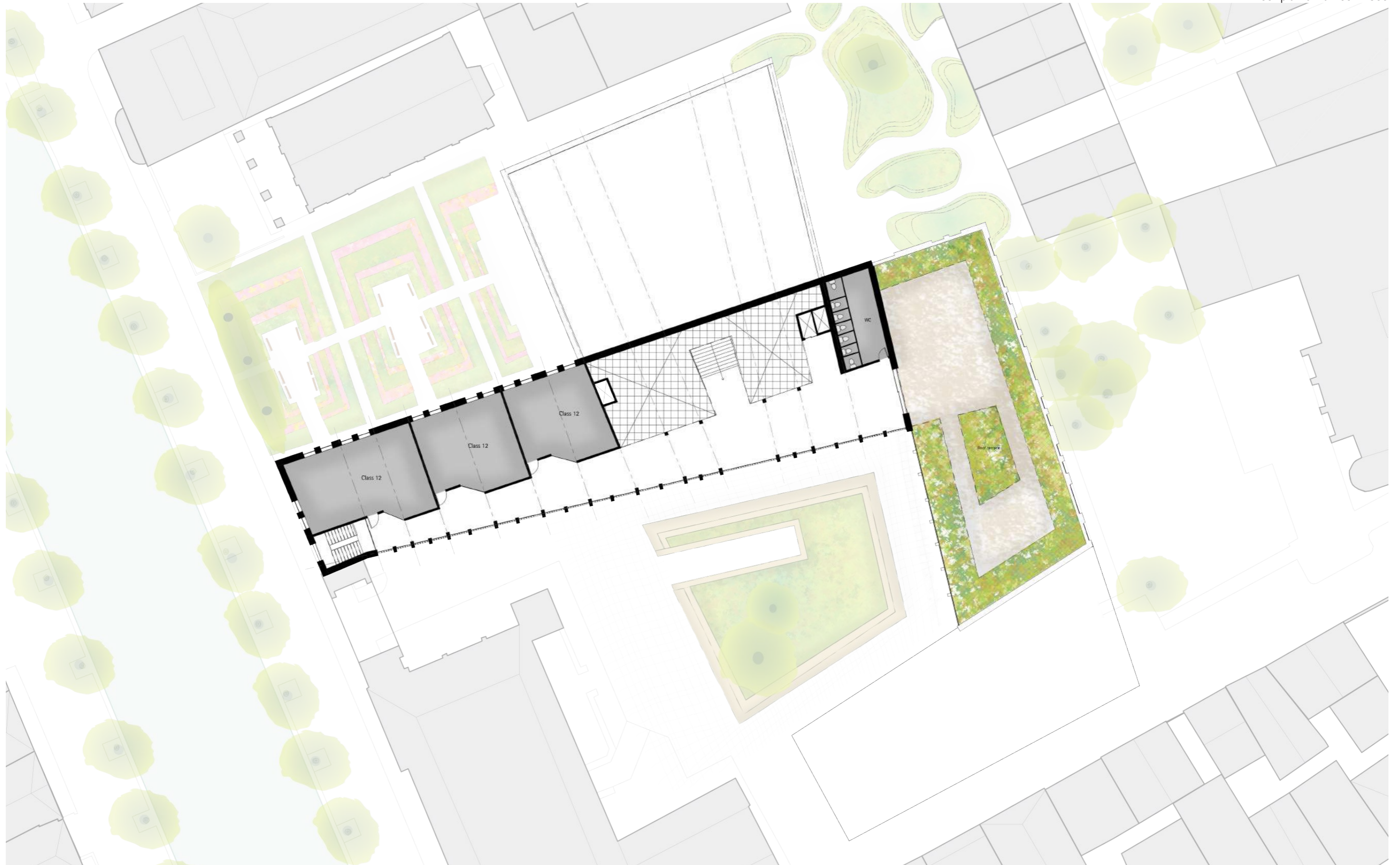
⌚ Architectural design proposal
floor plan second floor 1:300



Architectural design

the new Waldorf School

⌚ Architectural design proposal
floor plan third floor 1:300



Great hall

as the collective heart



Charlotte Fischer – Symphonie Eurythmie



Les Choristes – filmstill



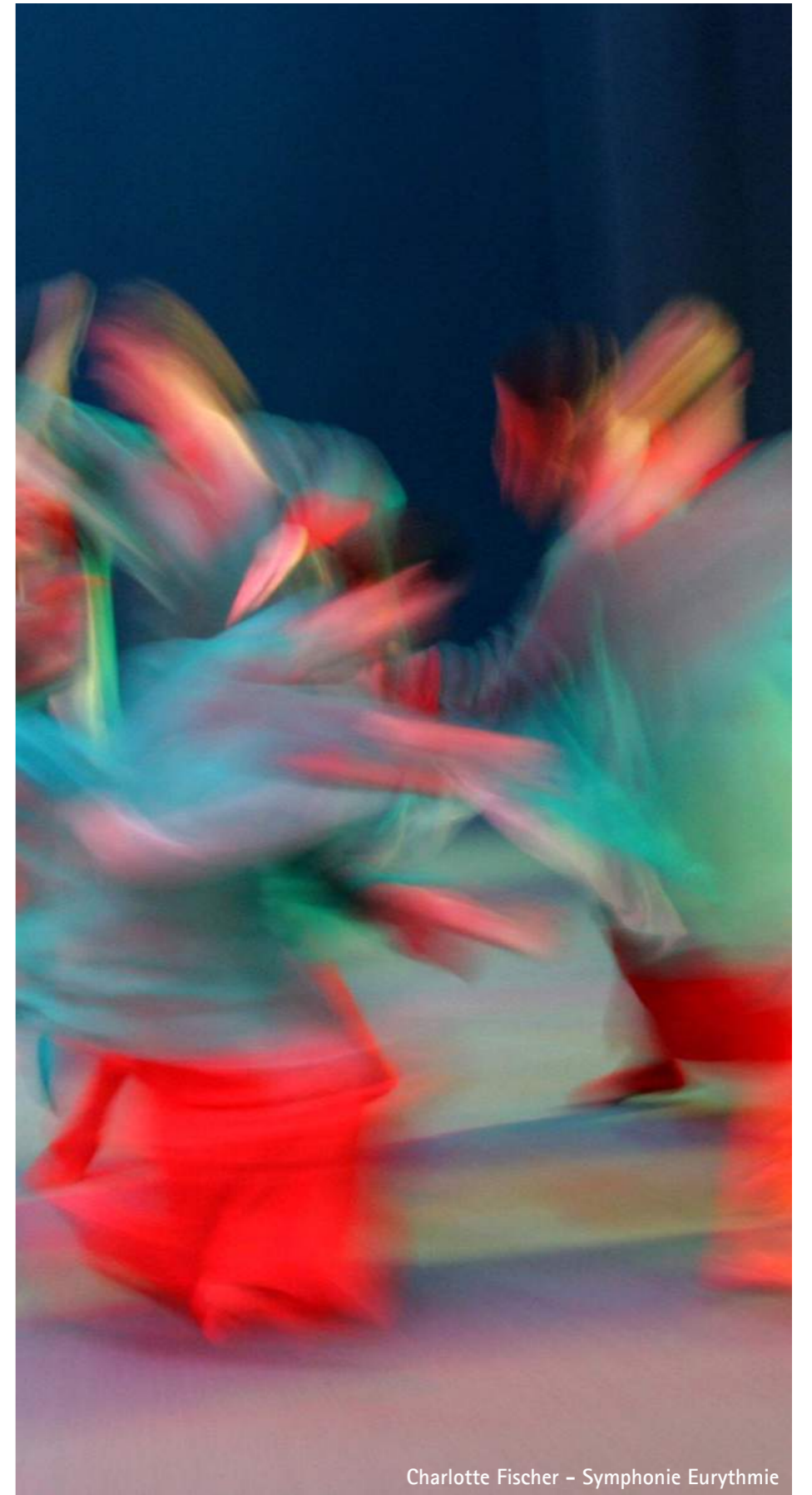
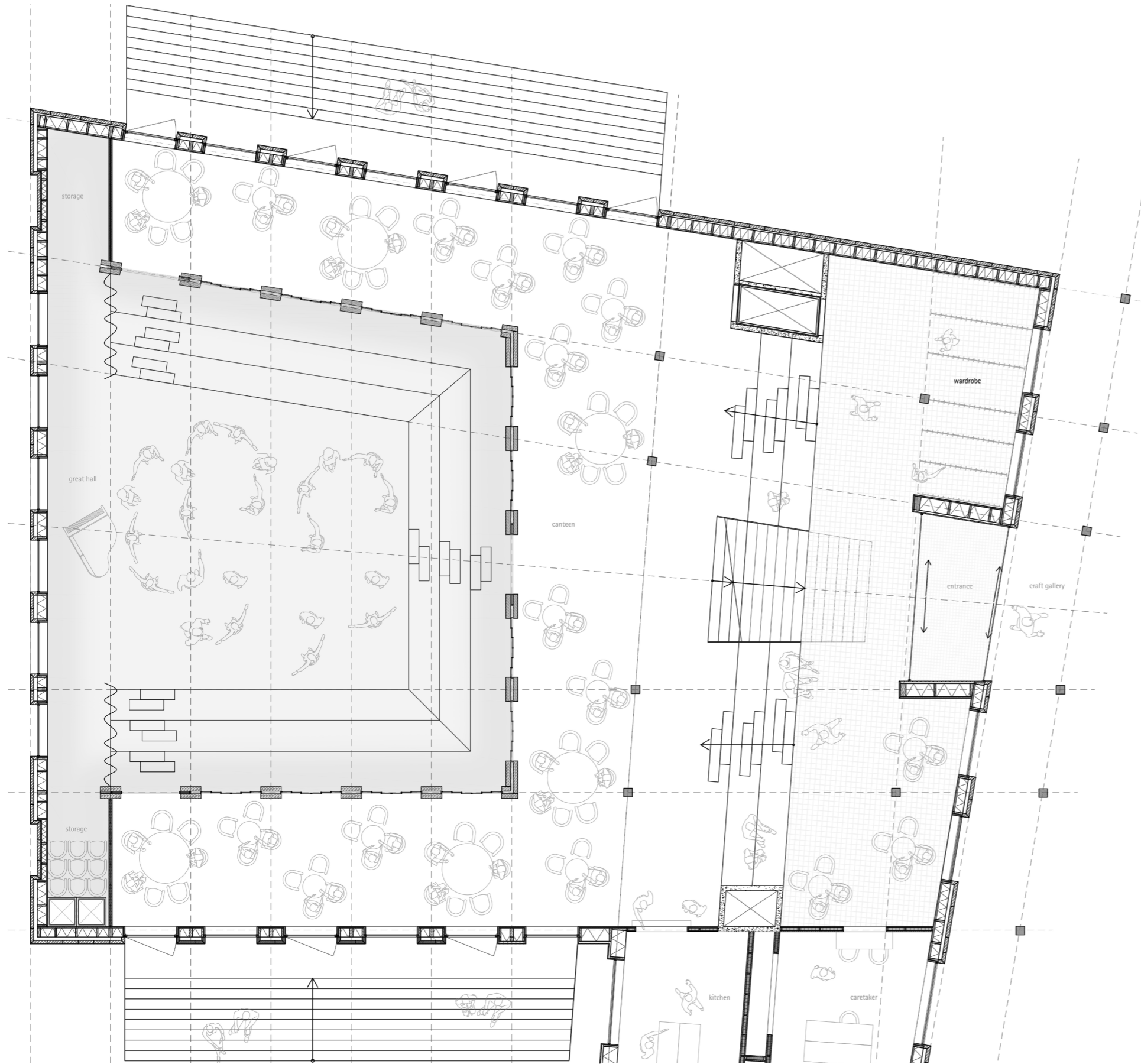
Midsummer play – Waldorf School Liechtenstein



Cultural evening – Waldorf School Zutphen

Small capacity

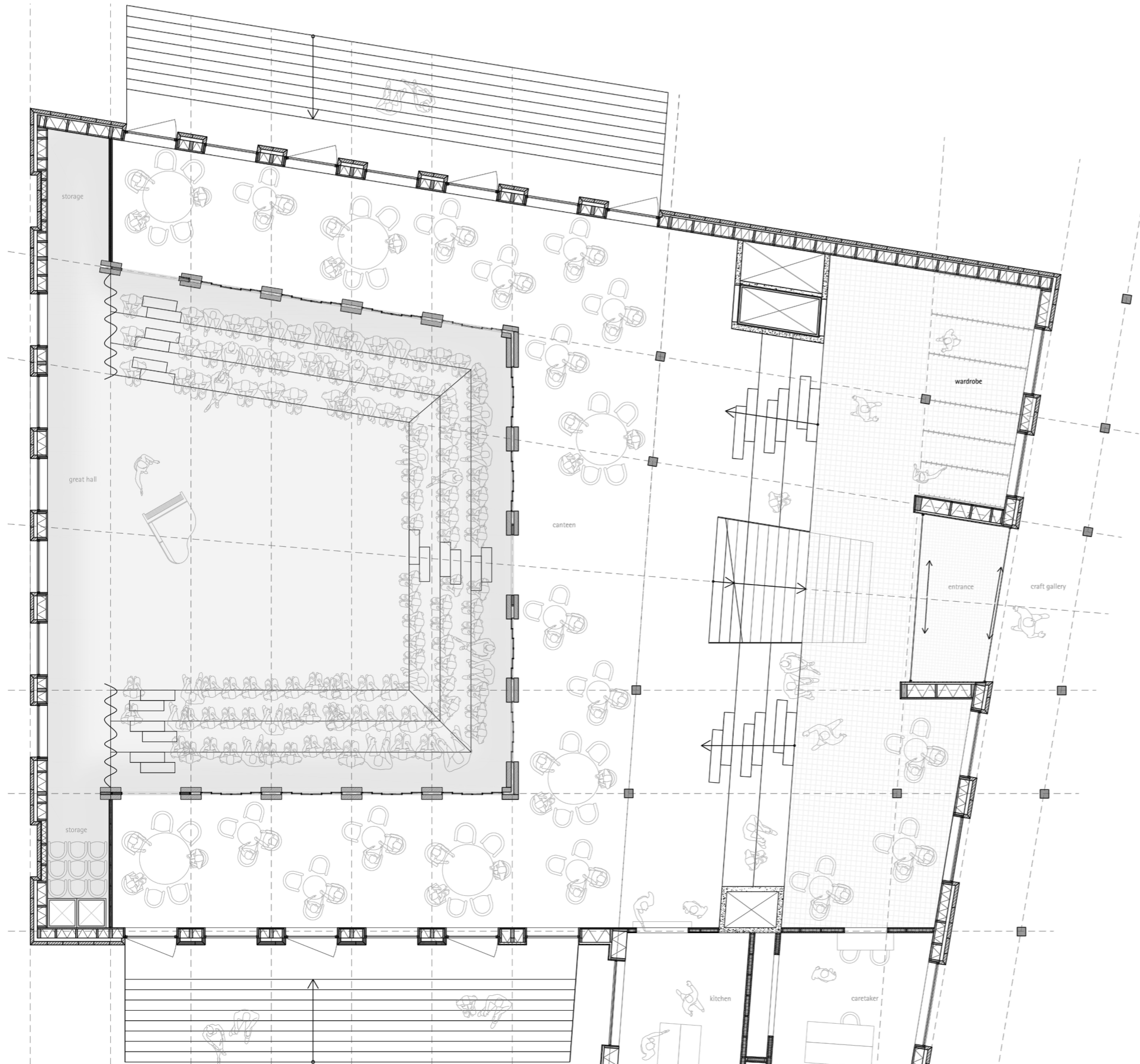
Eurythmics or drama with single class 1:130 ☹



Charlotte Fischer - Symphonie Eurythmie

Medium capacity

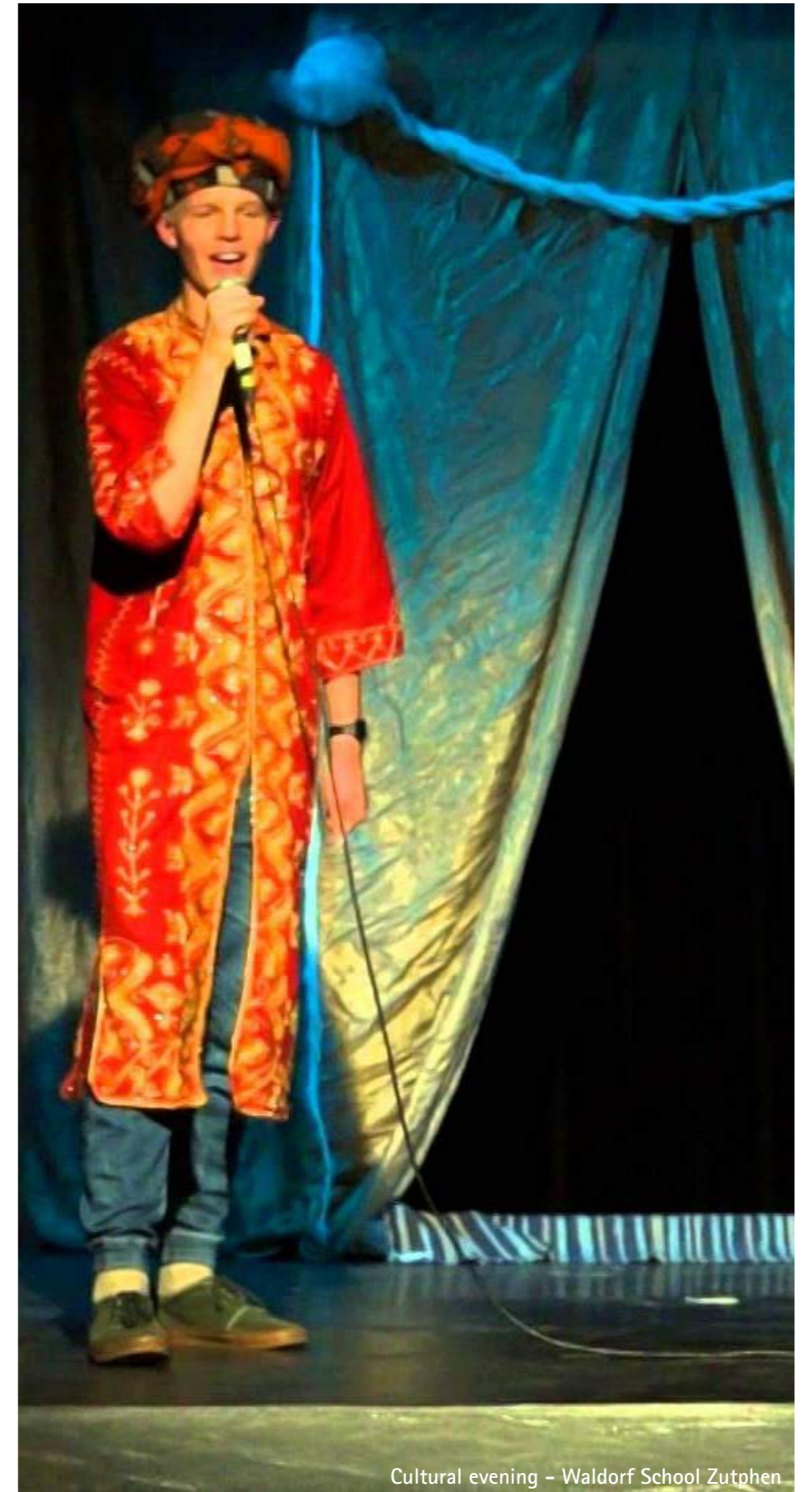
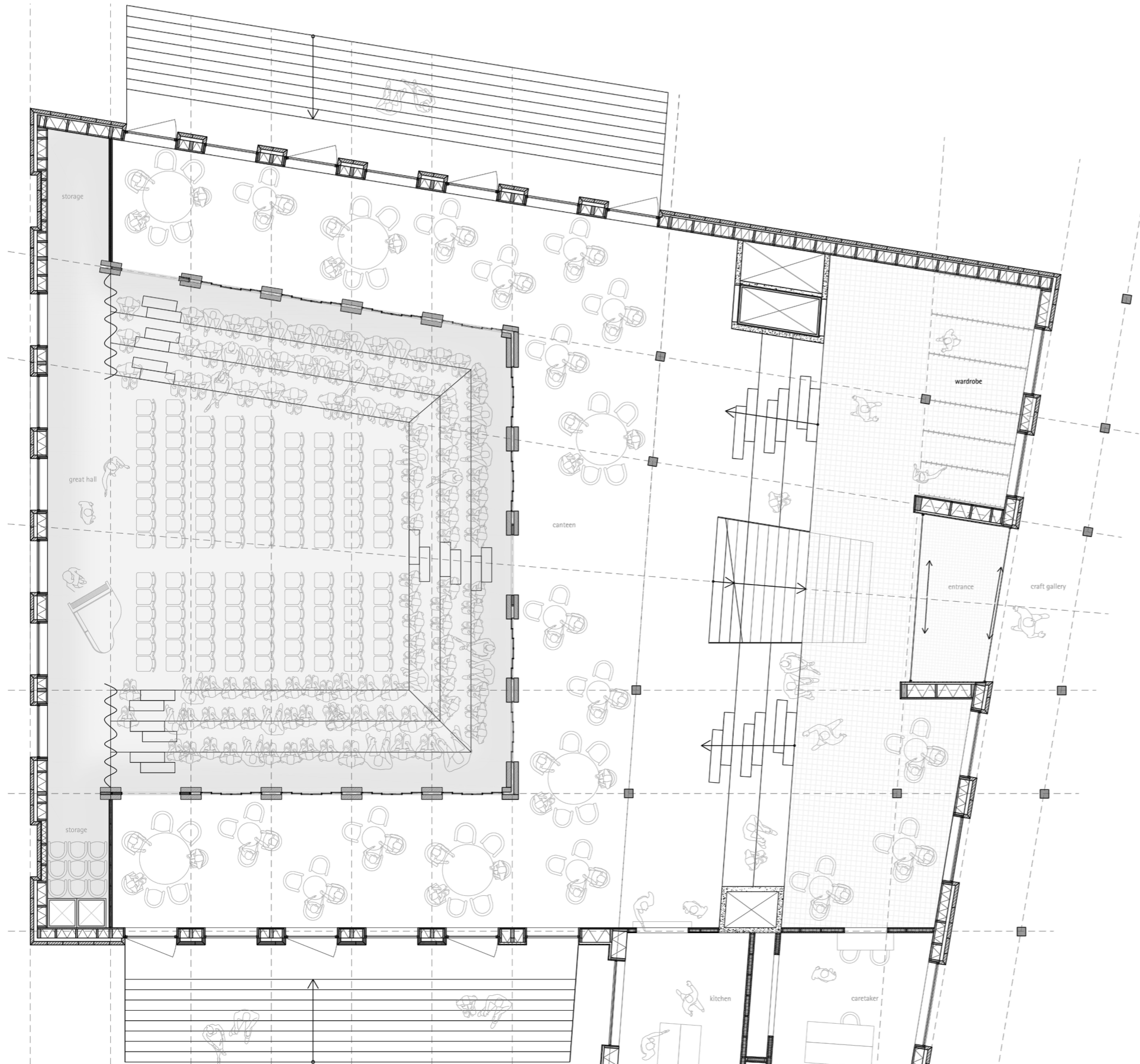
Choir rehearsals with 125 scholars ☹



Les Choristes - filmstill

Large capacity

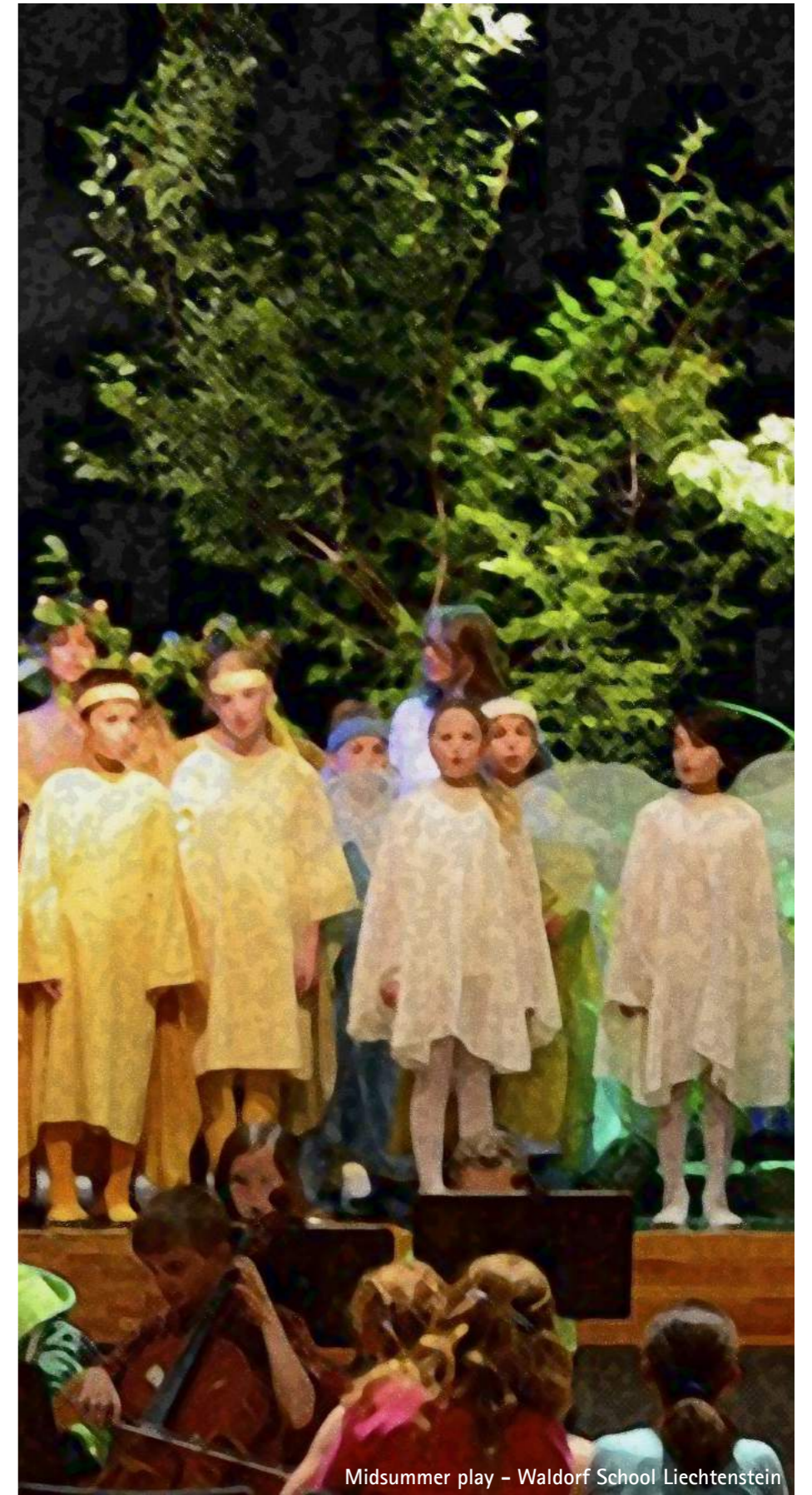
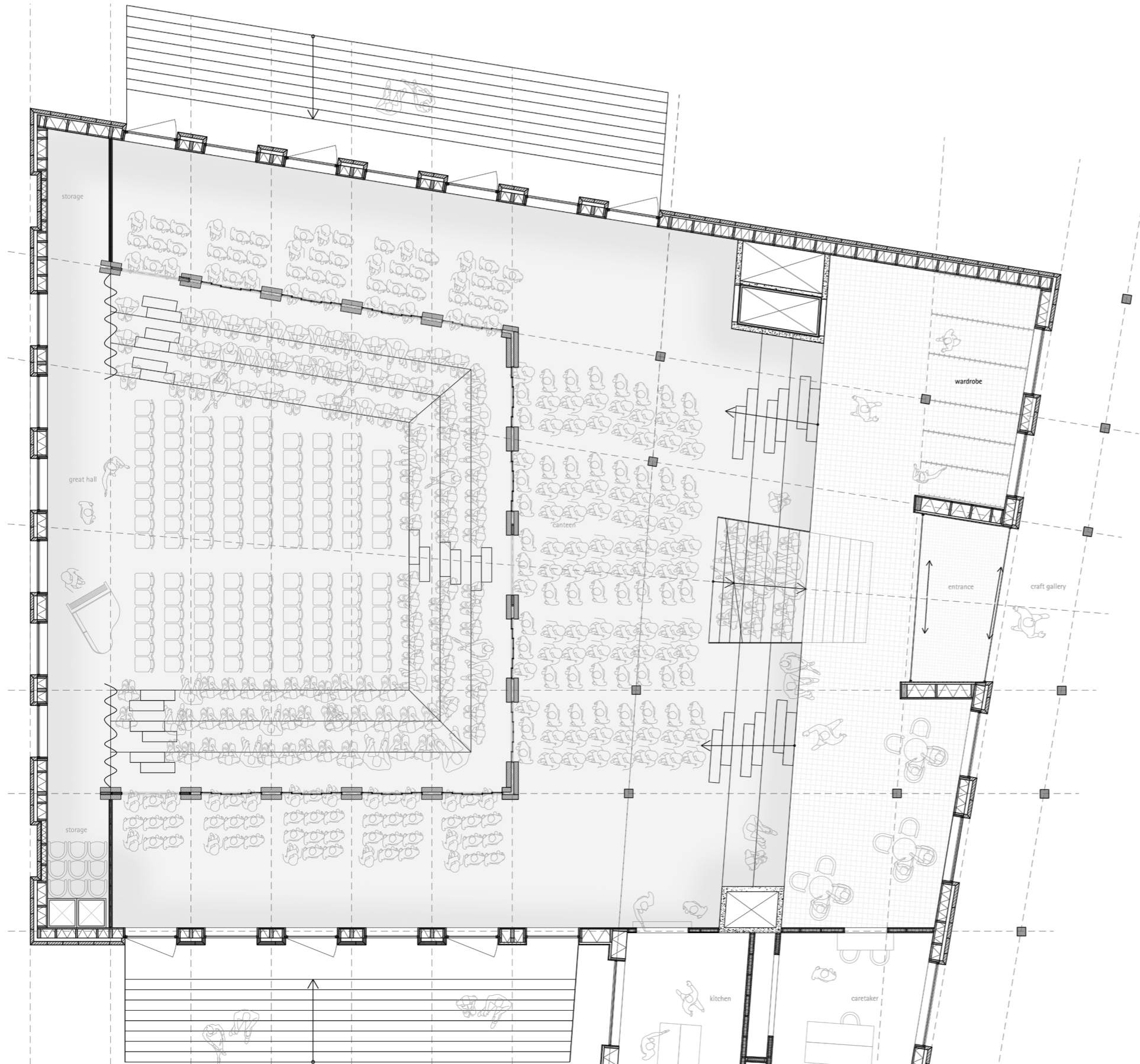
Theatre performance with half of the school ☹



Cultural evening – Waldorf School Zutphen

Maximum capacity

Seasonal celebration with whole school ☹



Midsummer play - Waldorf School Liechtenstein

Central space

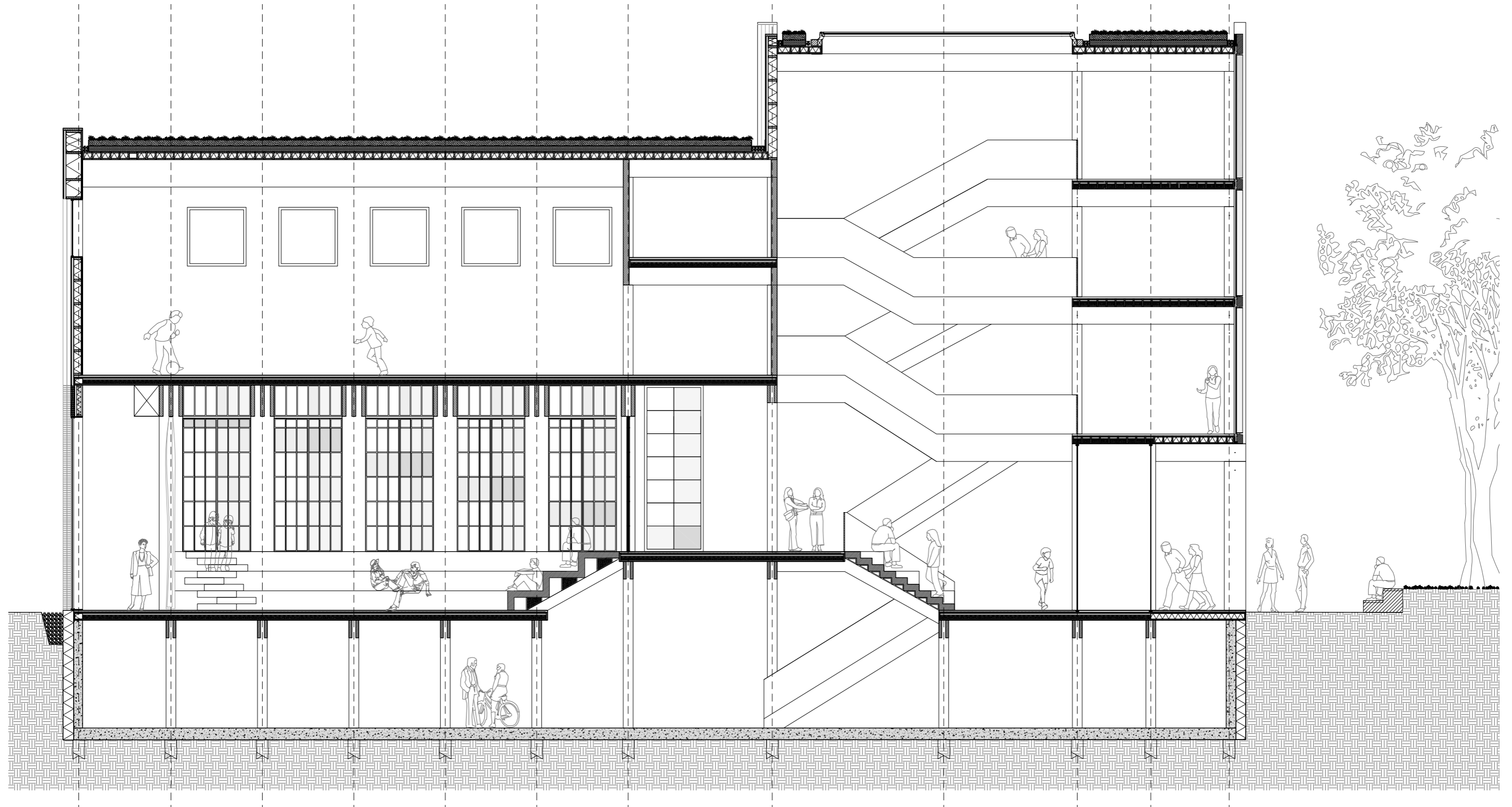
as social binding agent of the school



Herman Hertzberger - Primary school Arnhem

Entrance and great hall

longitudinal section 1:100



Great hall

as the collective heart



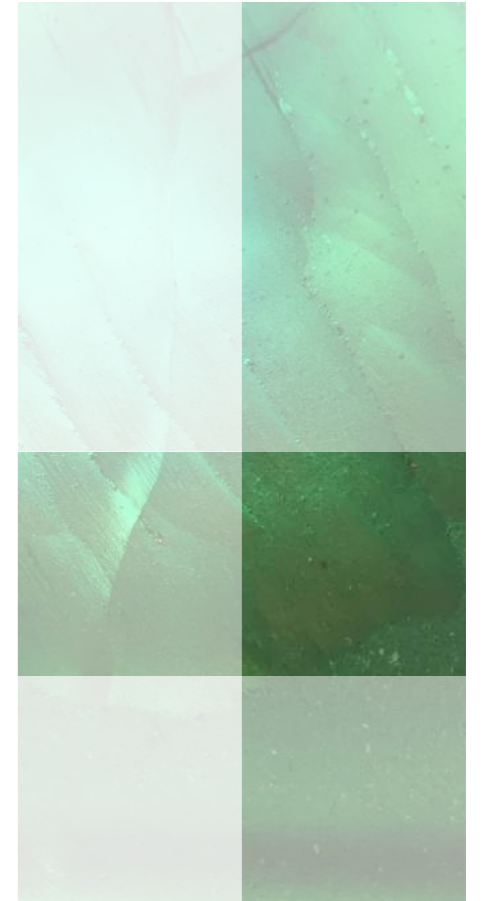
Great Hall

as the collective heart



Materiality

natural tones with colourful glass



Exterior

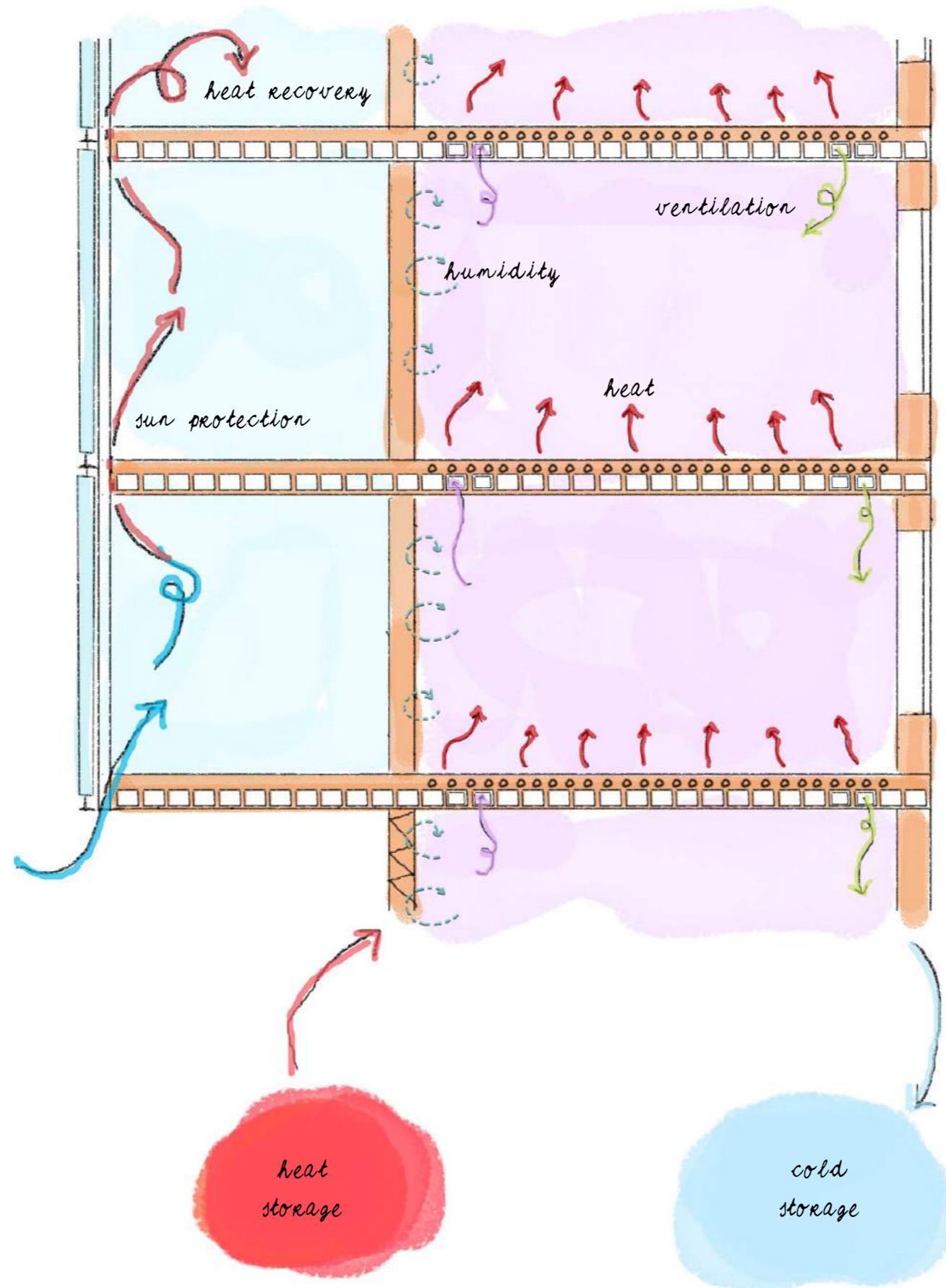
brick base // wood top // glass in fills
natural tones // colourful accents // harmonious combinations

Interior

solid clay plaster // rhythmic wood structure // glass details
natural tones // colourful accents // harmonious combinations

Climate design

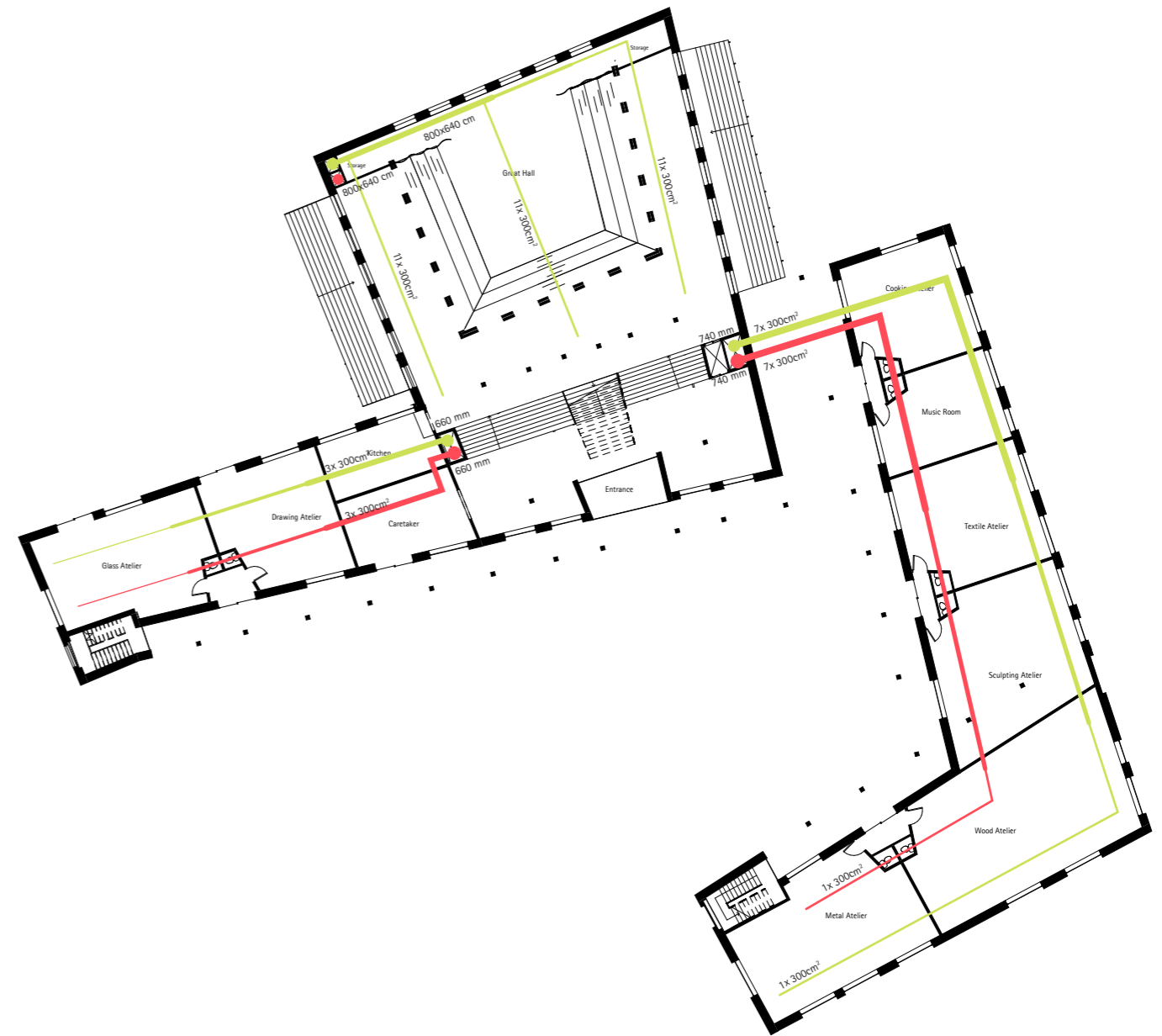
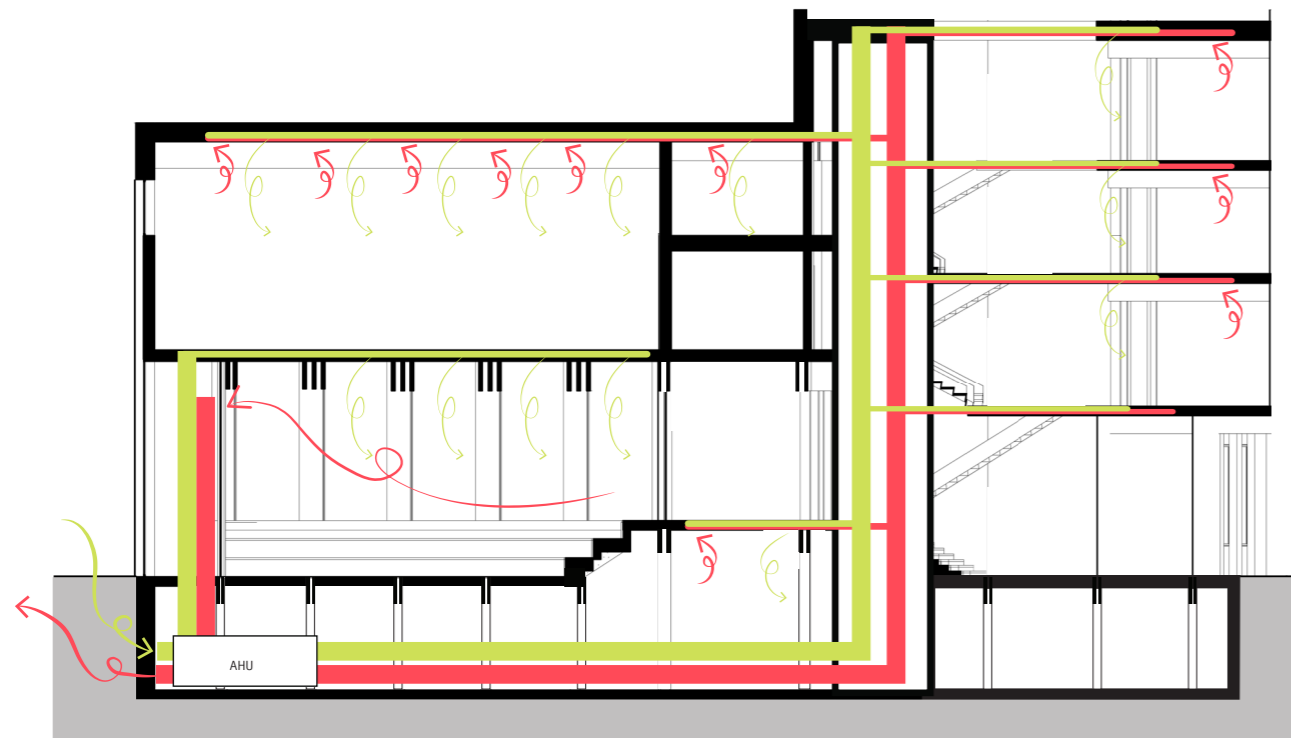
concept for ventilation and heating



Climate design

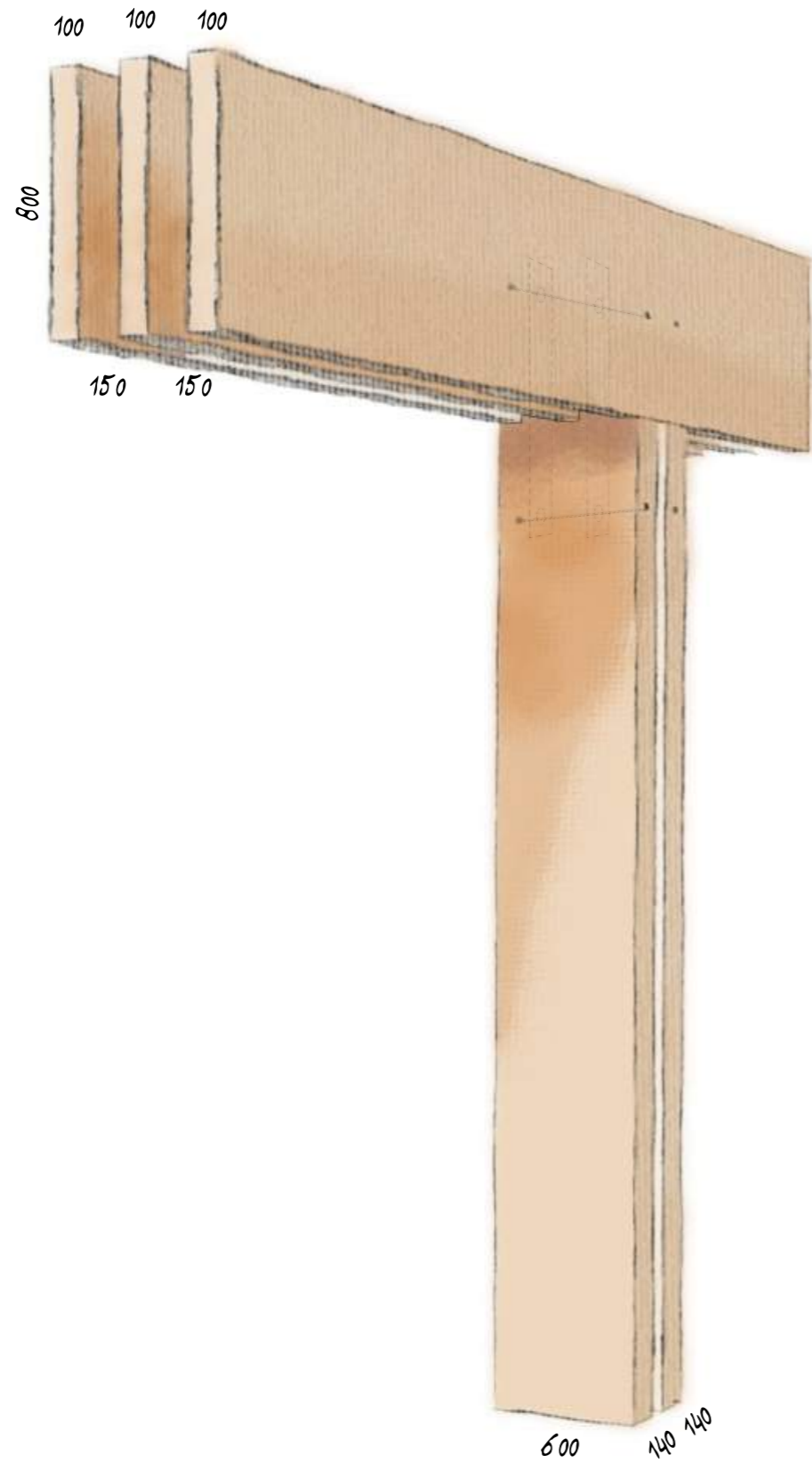
ventilation ducts

exhaust air duct
supply air duct



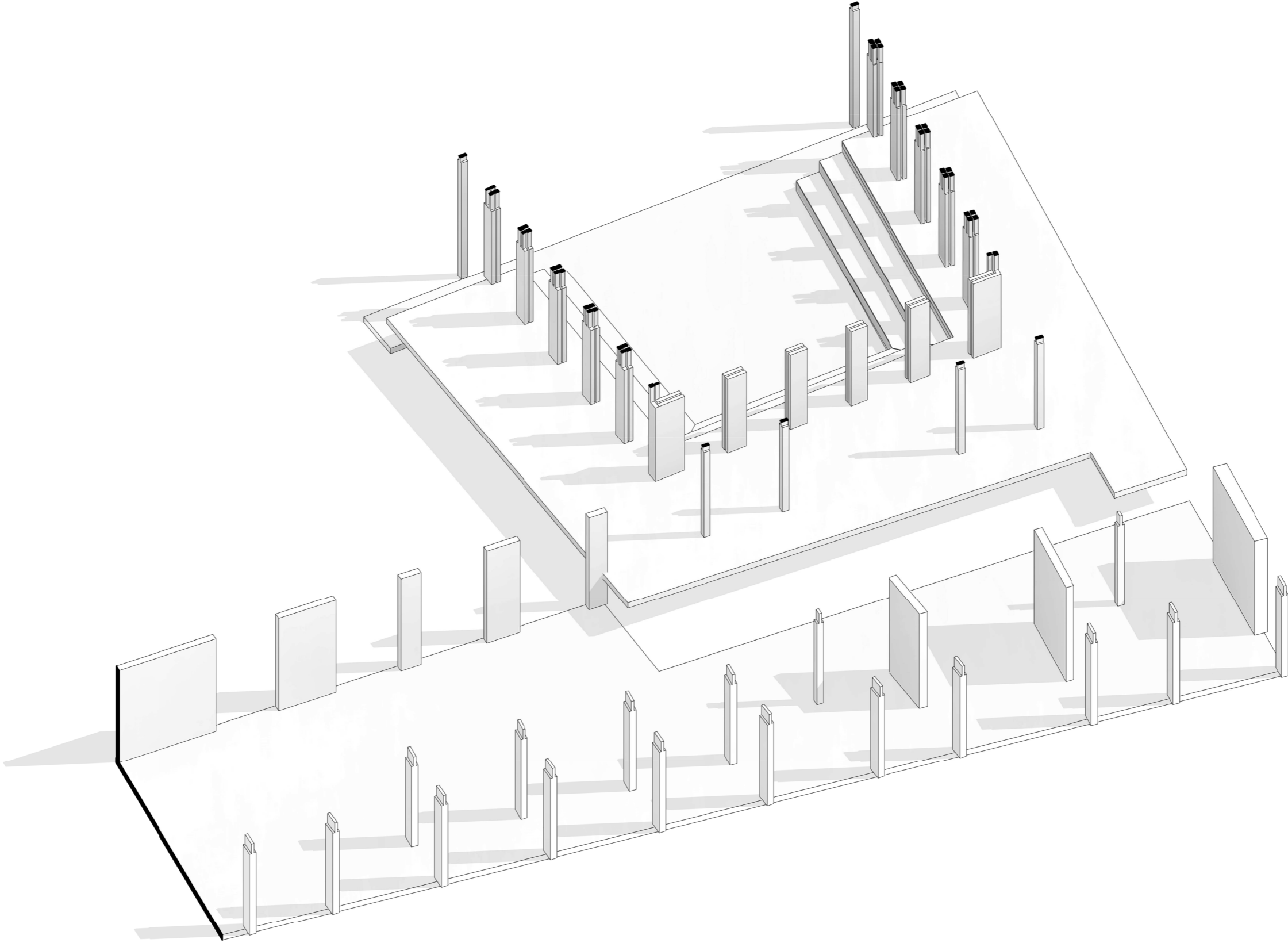
Structural design

creating rhythm in the school



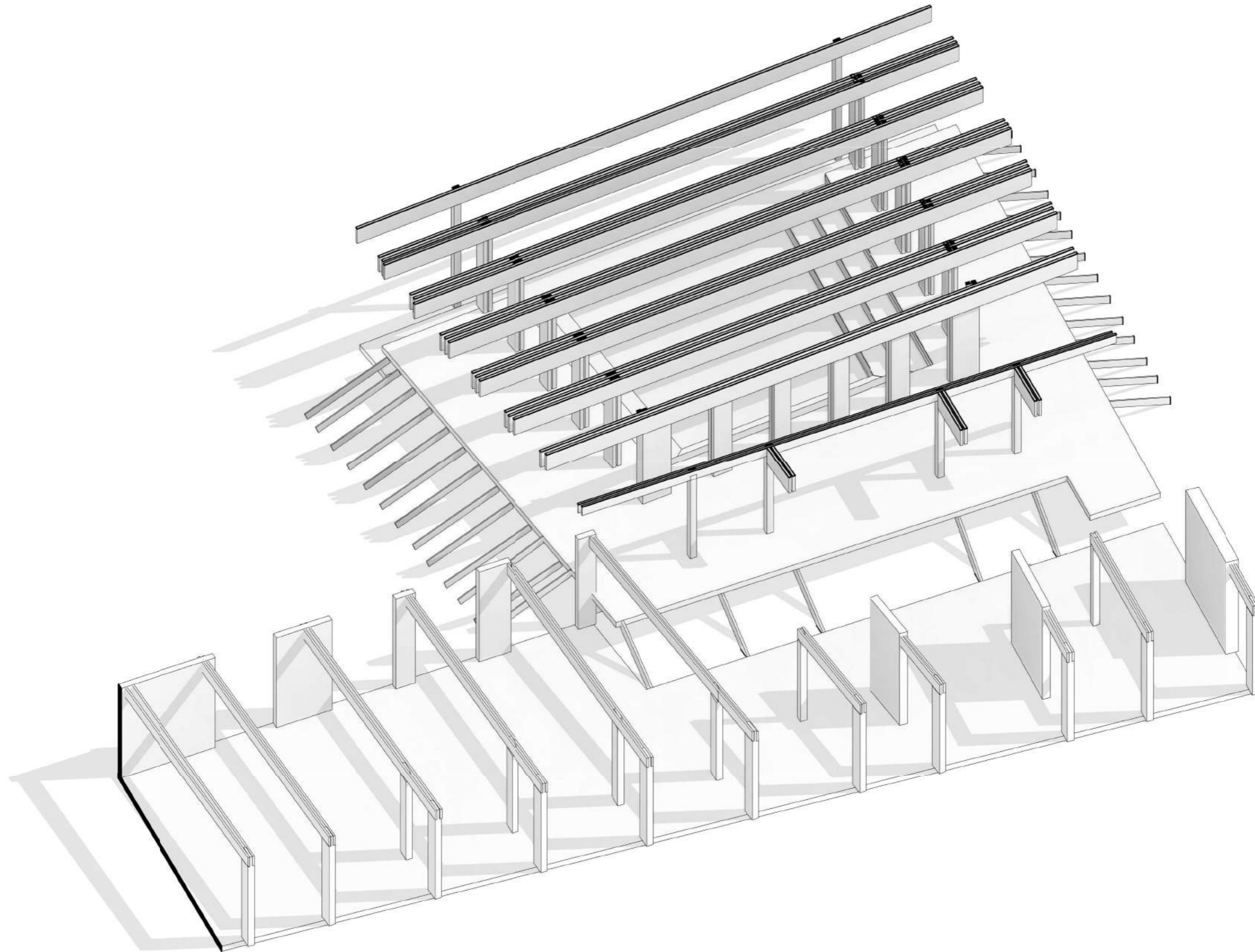
Order of construction

placing floors, columns and slabs



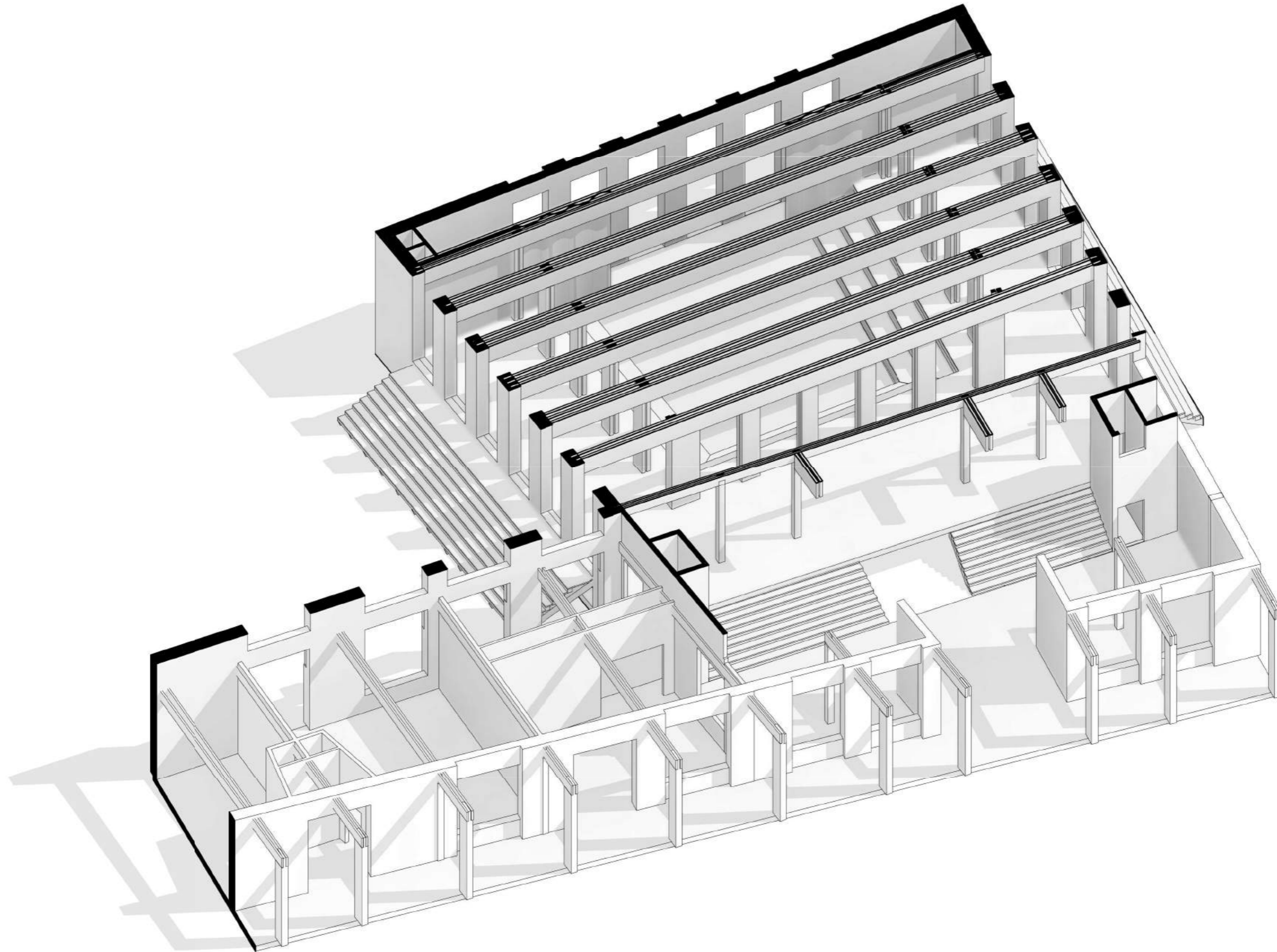
Order of construction

placing primary and secondary beams



Order of construction

placing facades, walls and stairs



Coloured glass

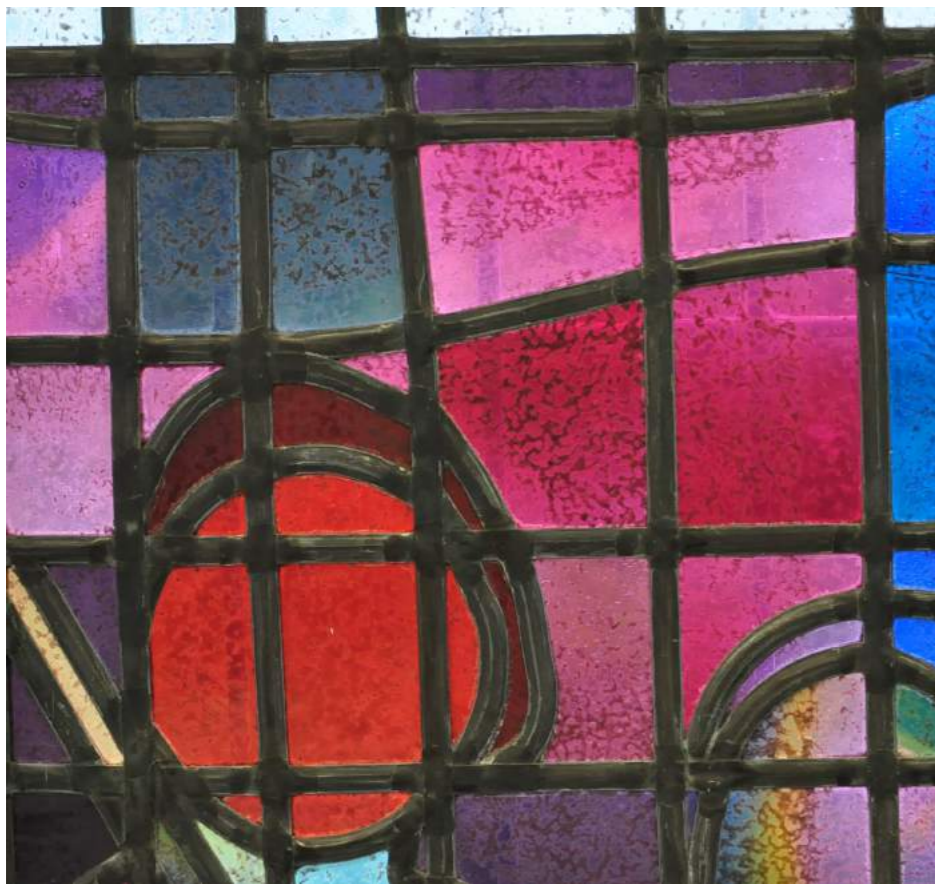
within modern architecture

*"Words,
musical tones,
and colours
posses the physical power
of calling forth soul vibrations."*

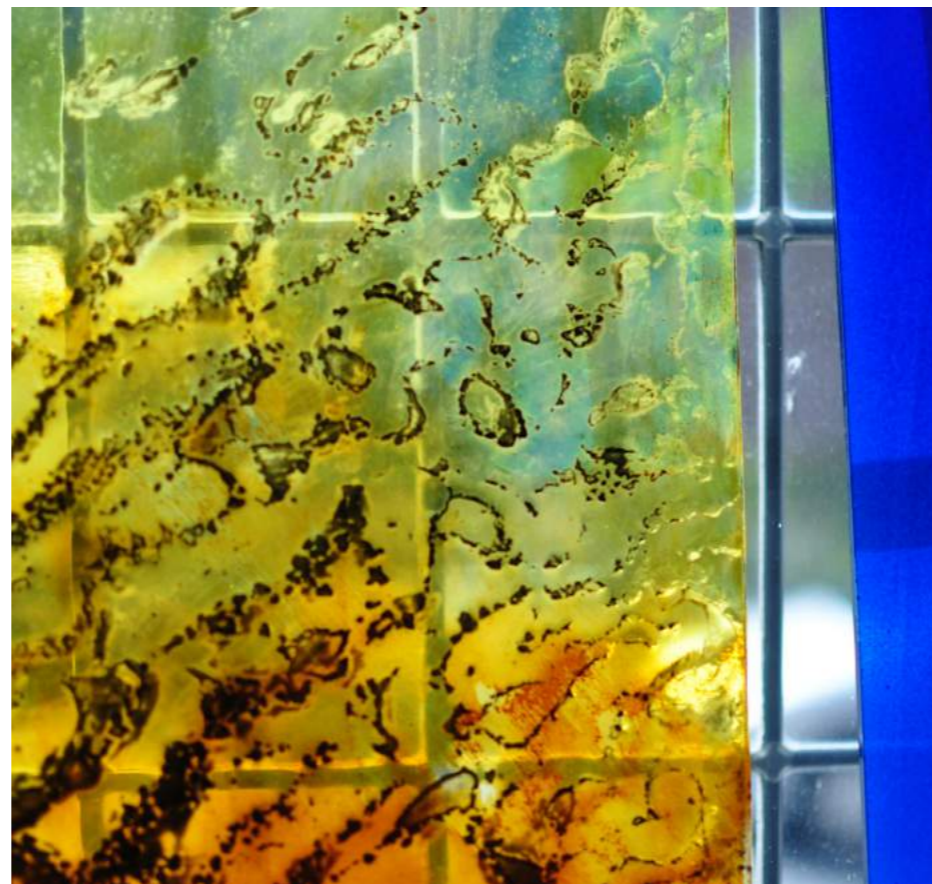
(Wassily Kadinsky)

Stained glass

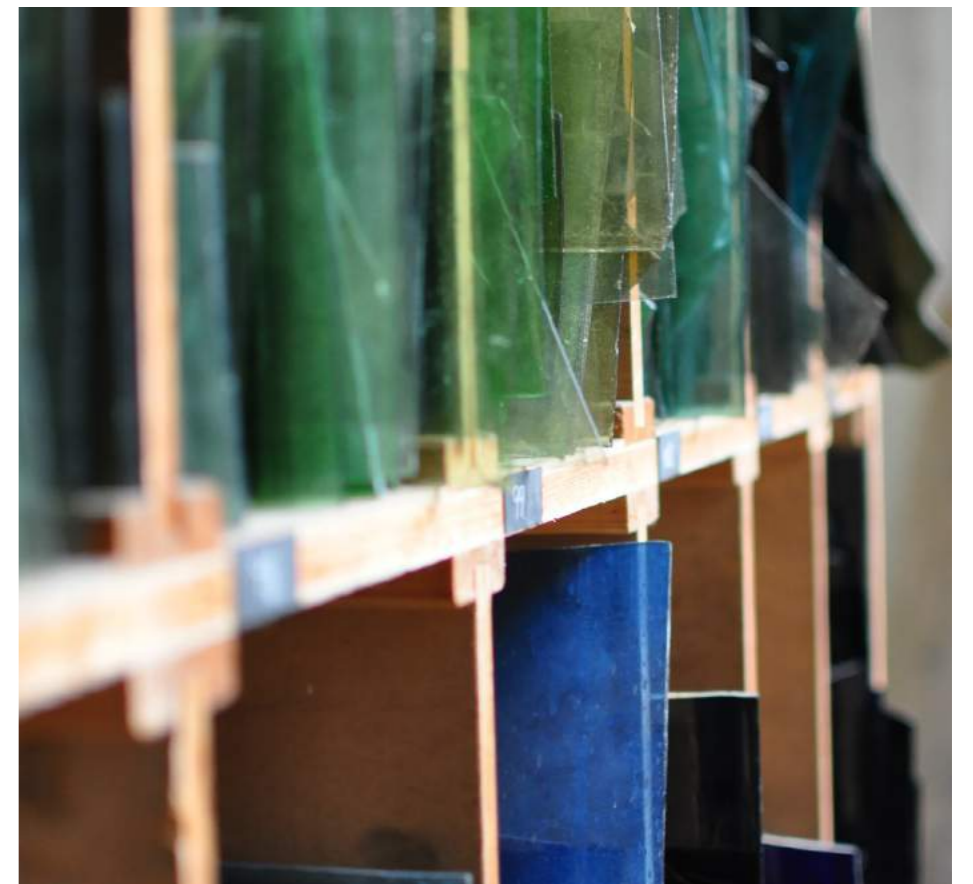
the original ideas



figurative colours and patterns



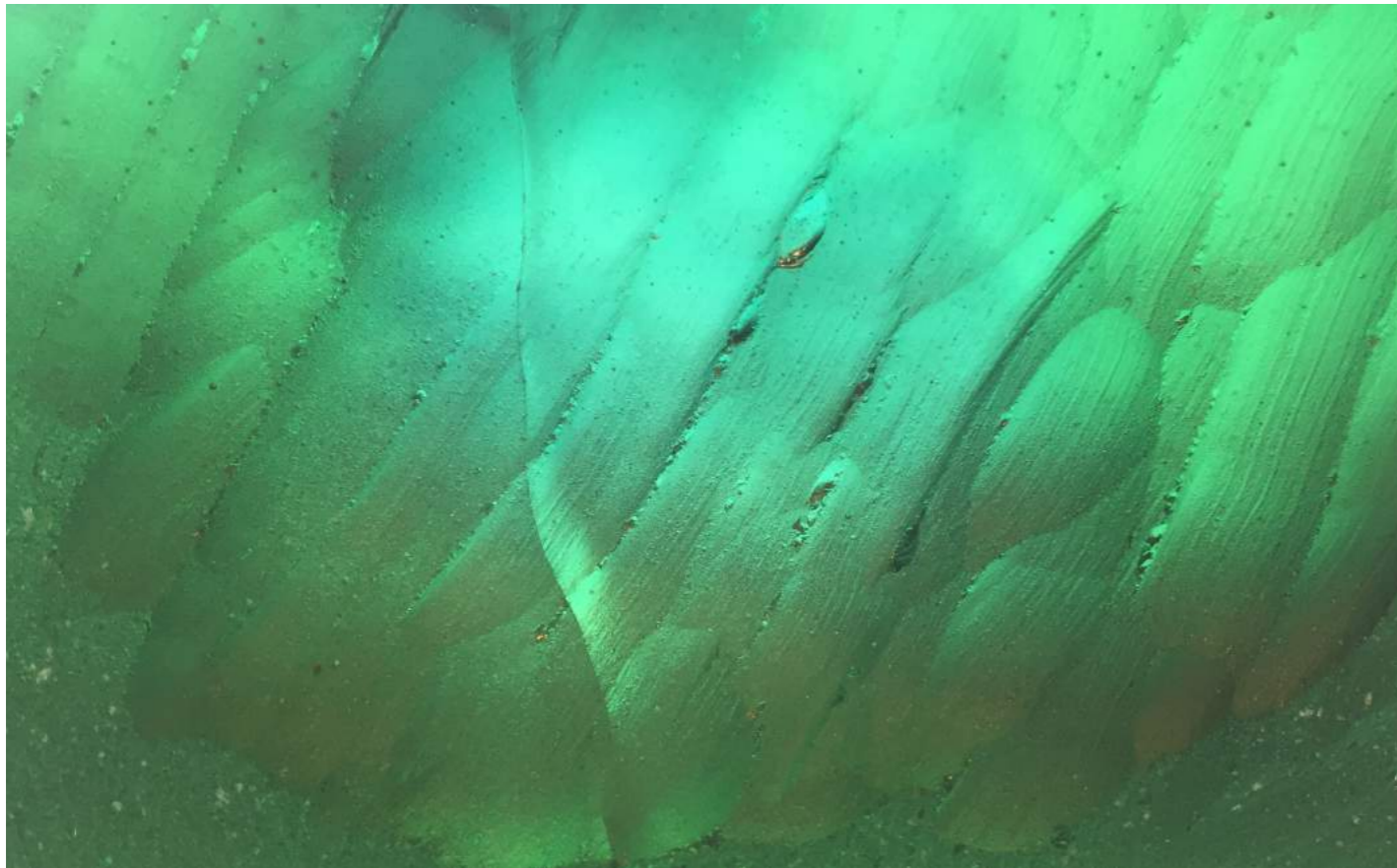
stains, depths and bumps



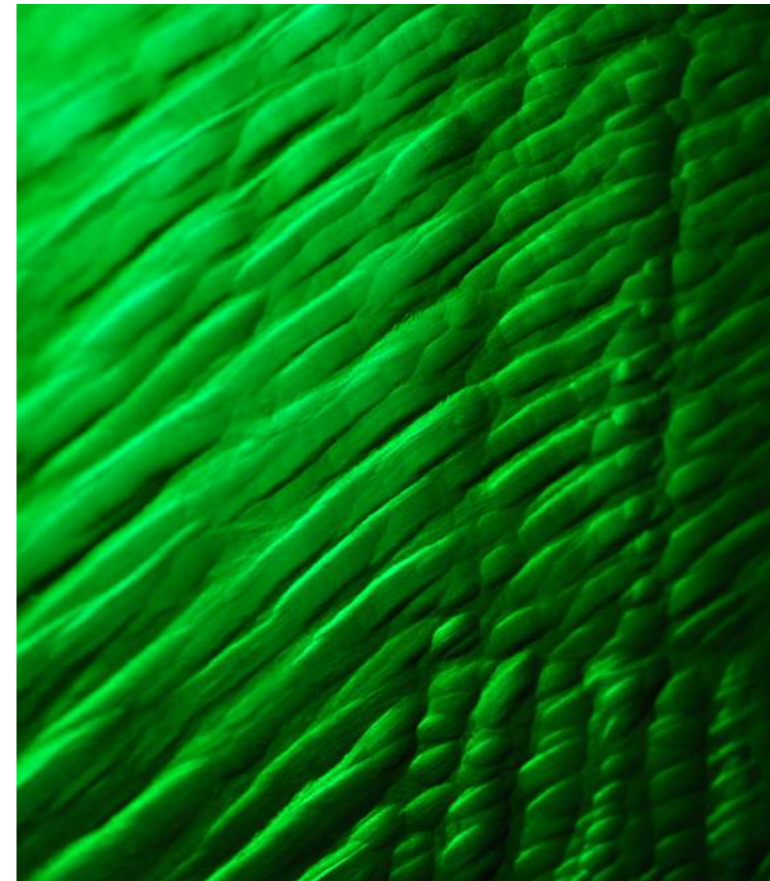
layers of single coloured glass

Stained glass

in anthroposophical architecture



carved glass sample

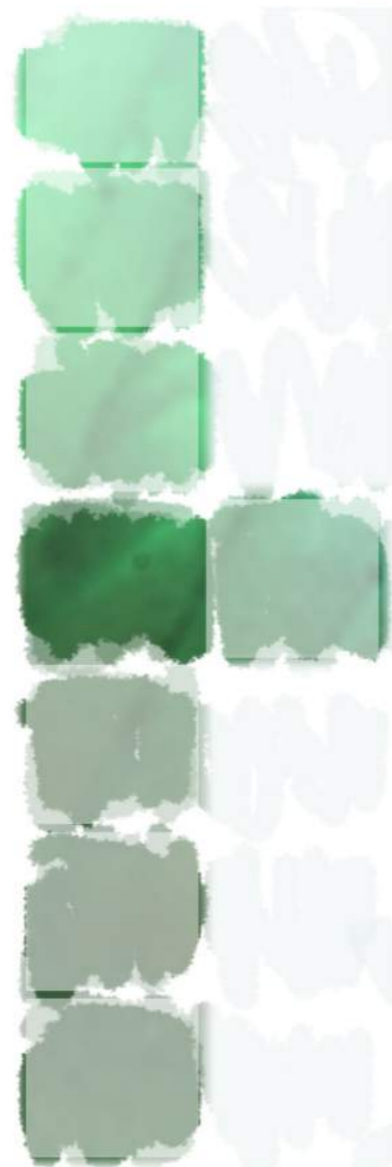
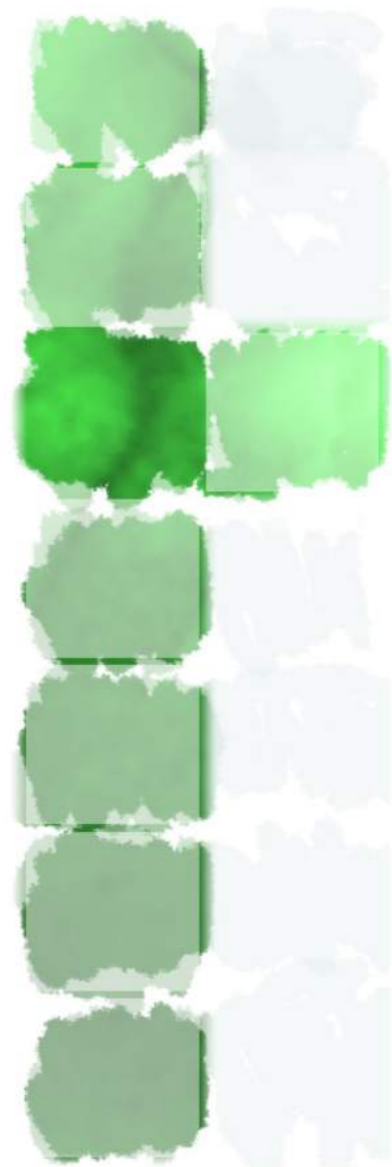


carved glass in goetheanum



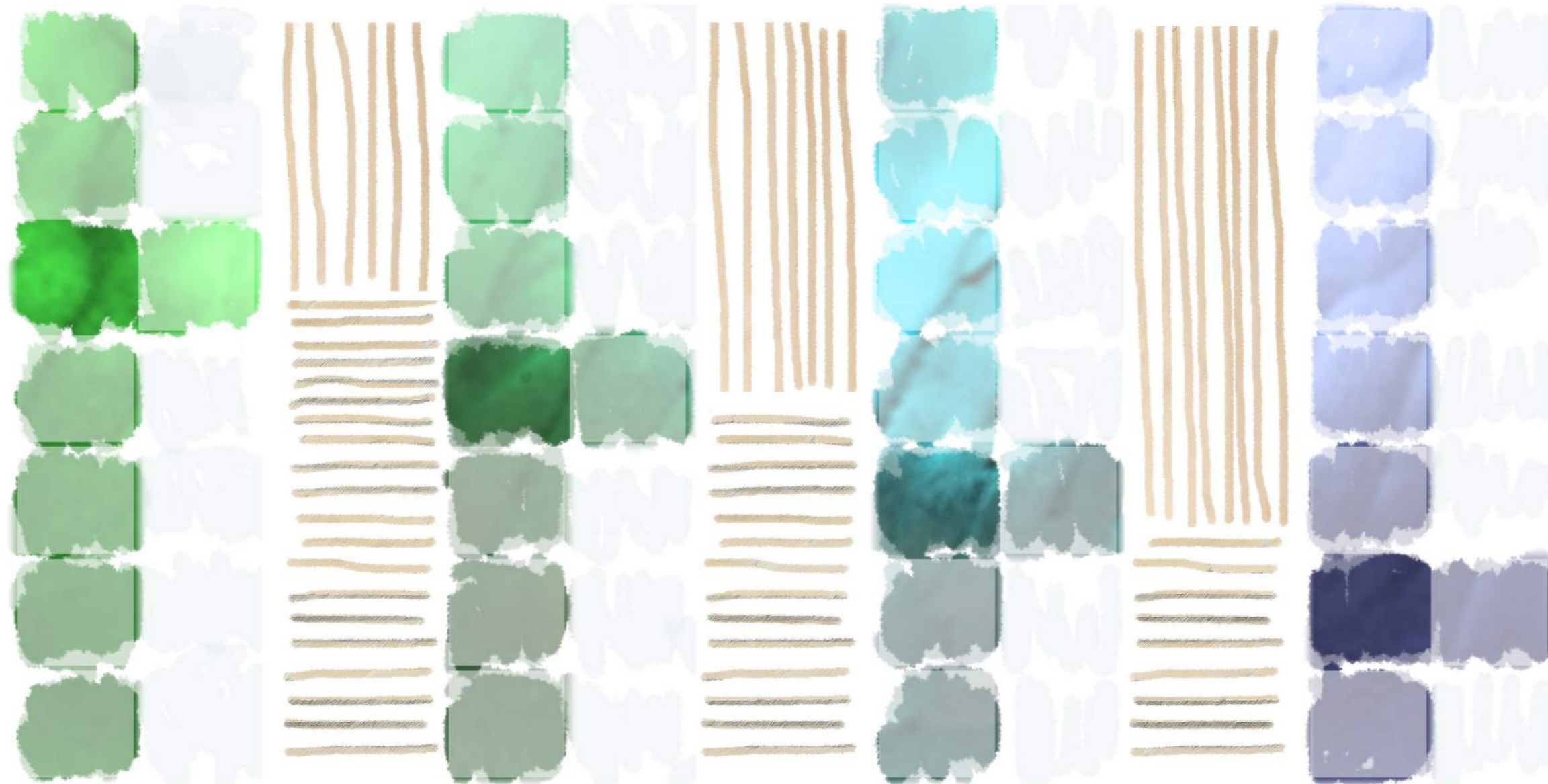
Coloured glass

giving colour to architecture

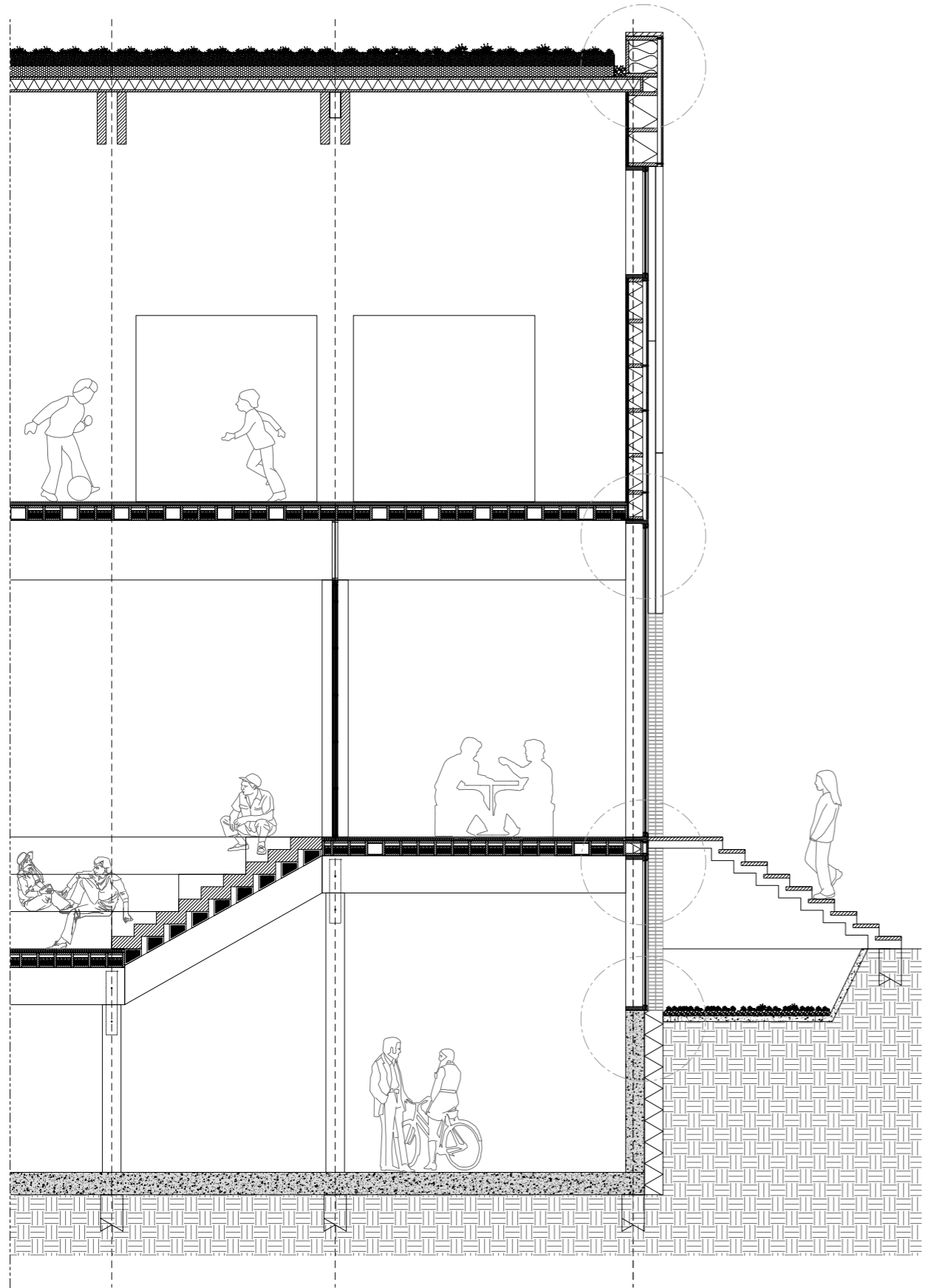


Coloured glass

giving colour to architecture

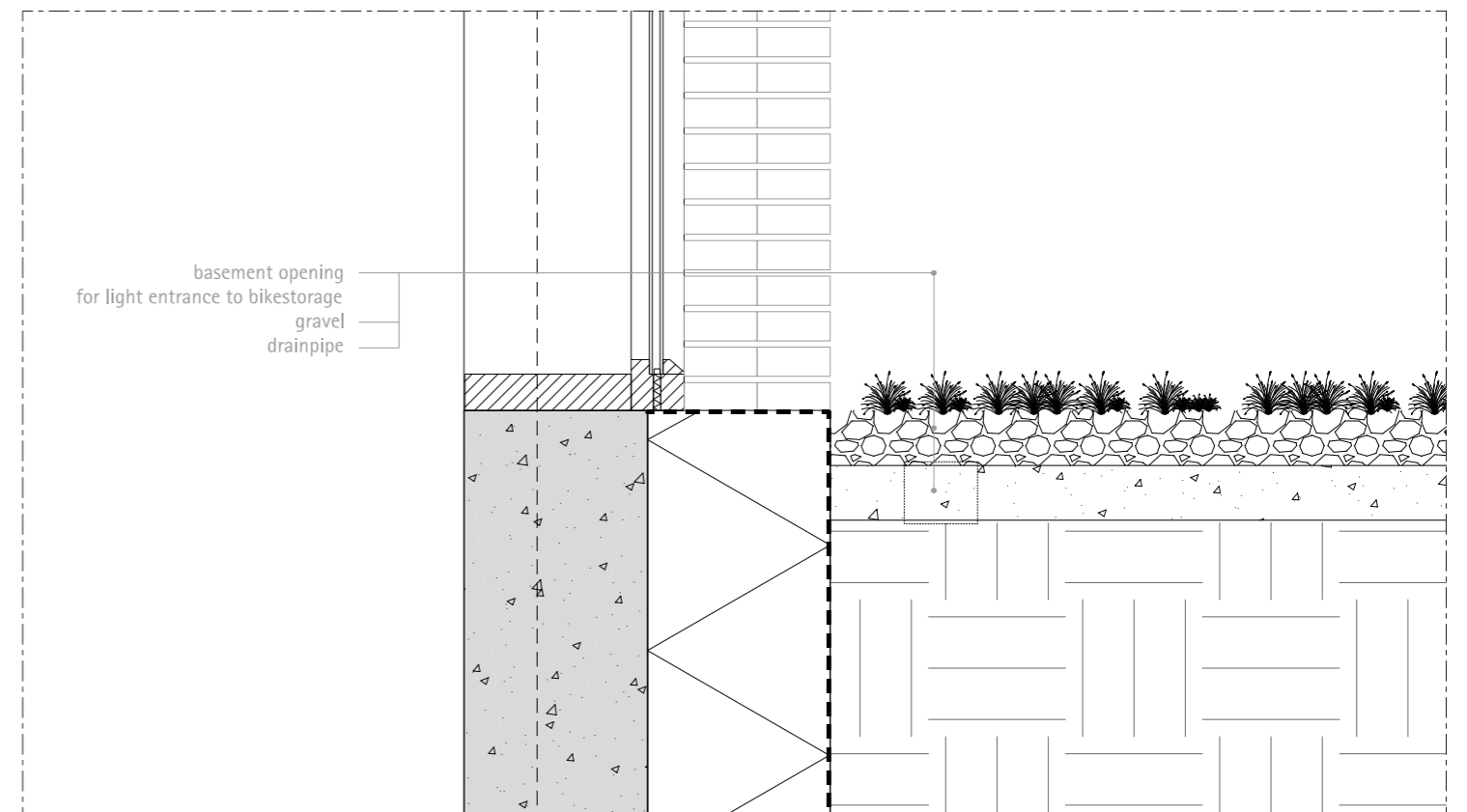
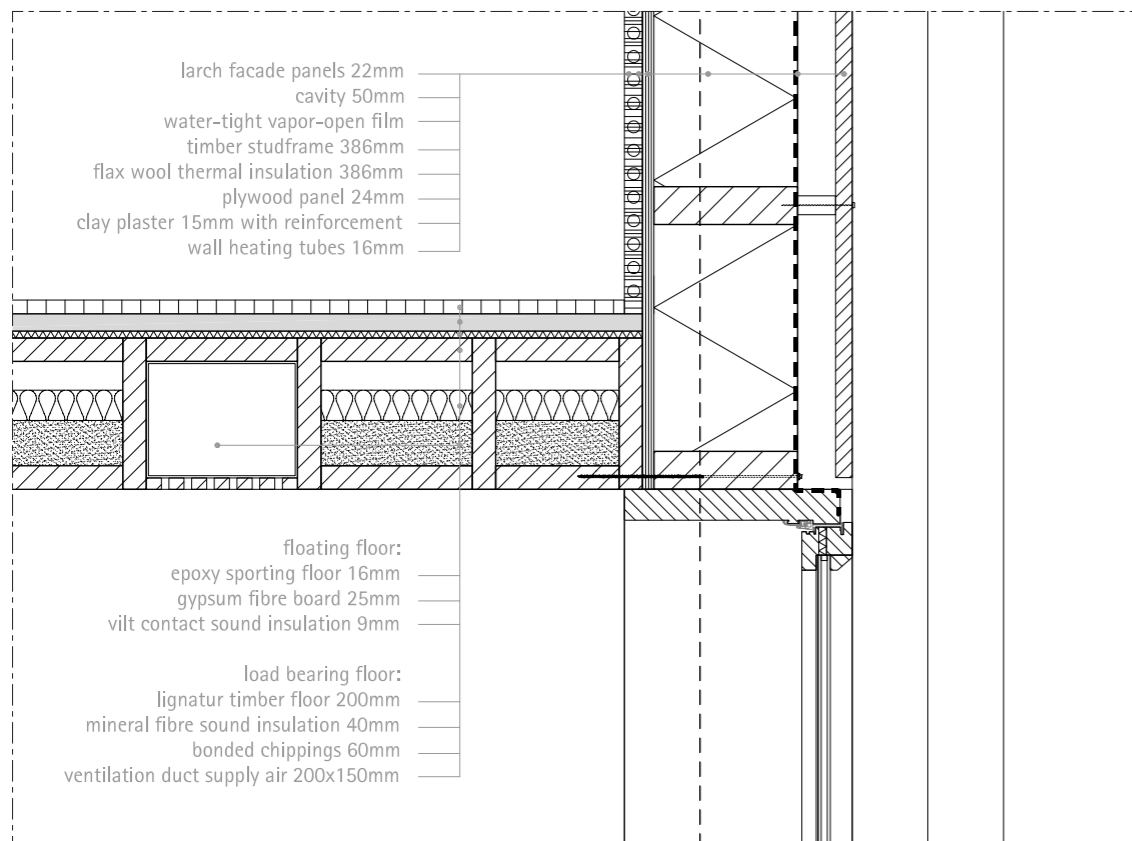
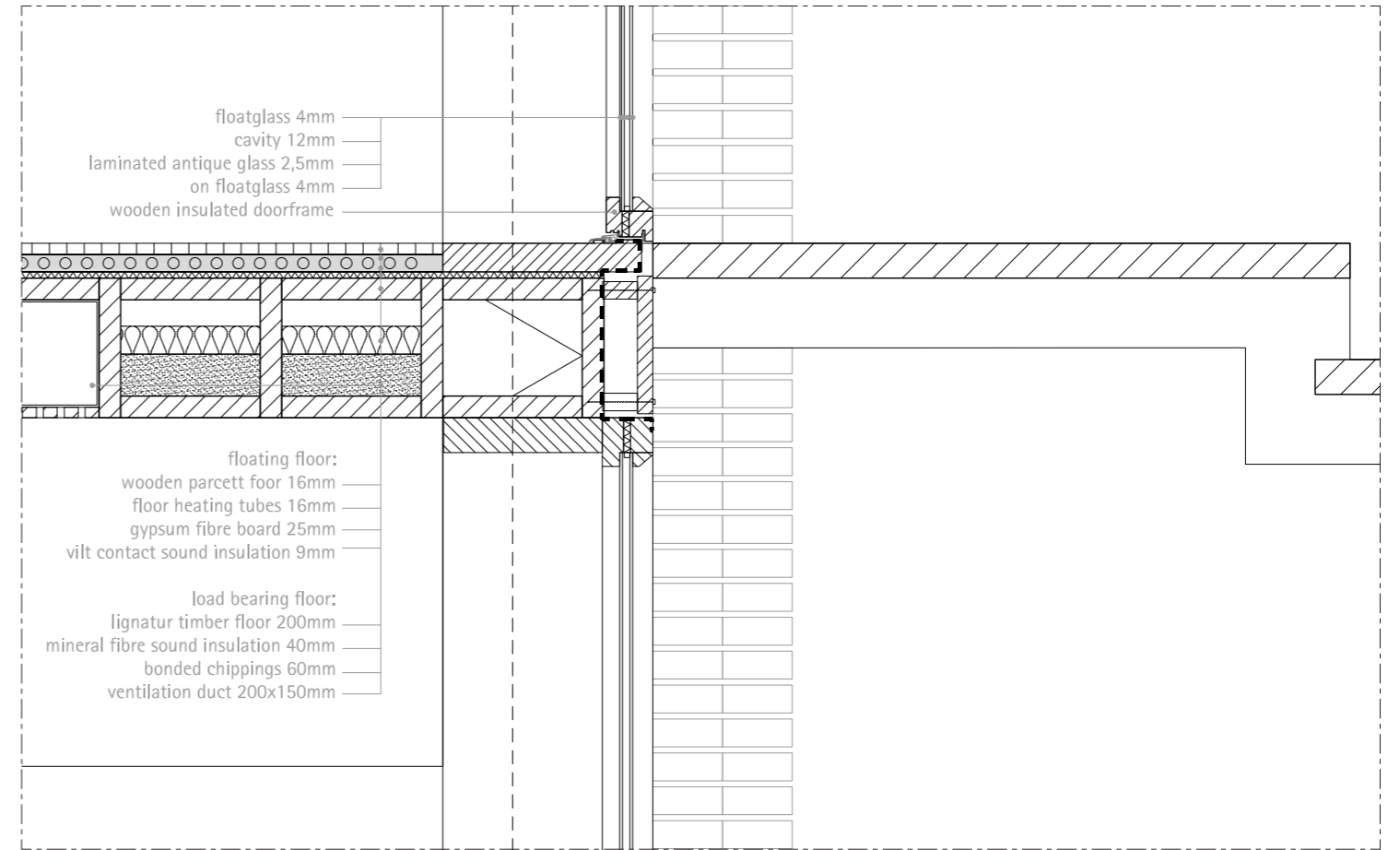
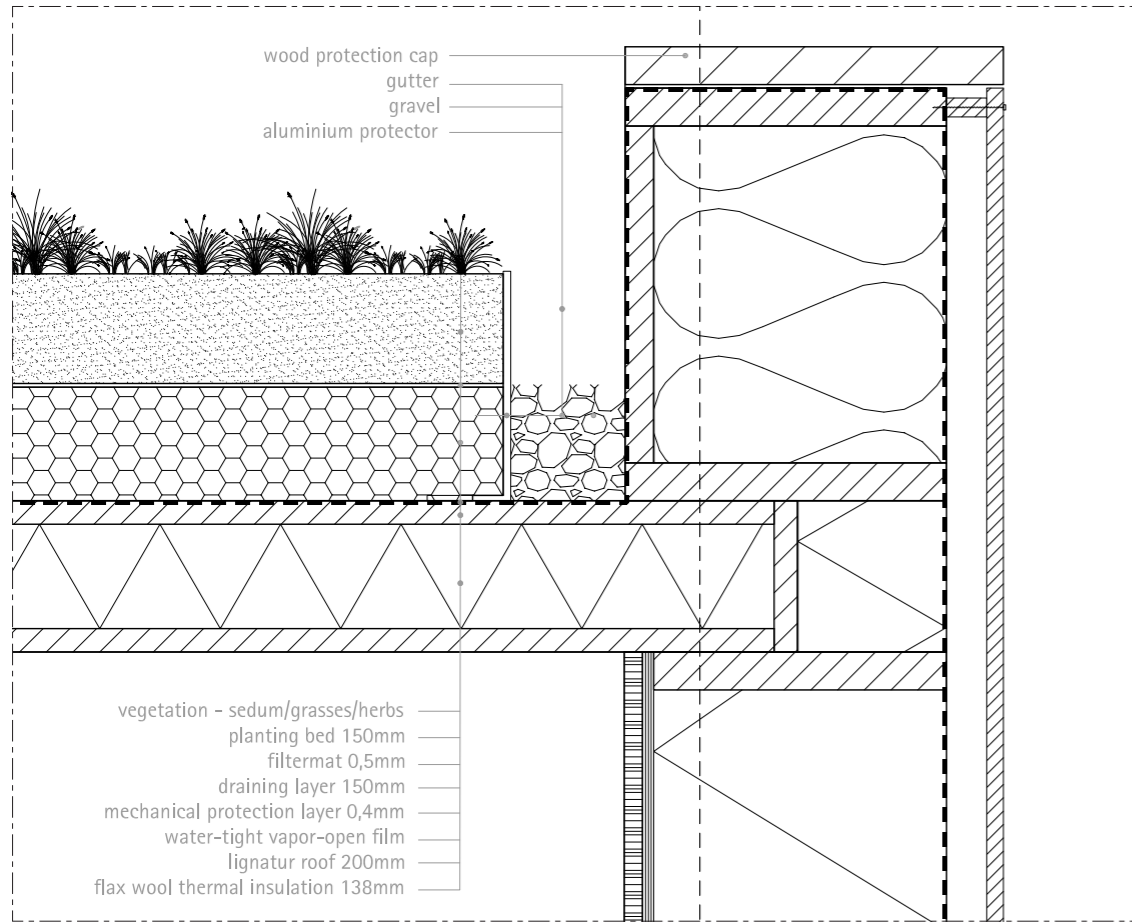


Facade segment *of the great hall 1:75*



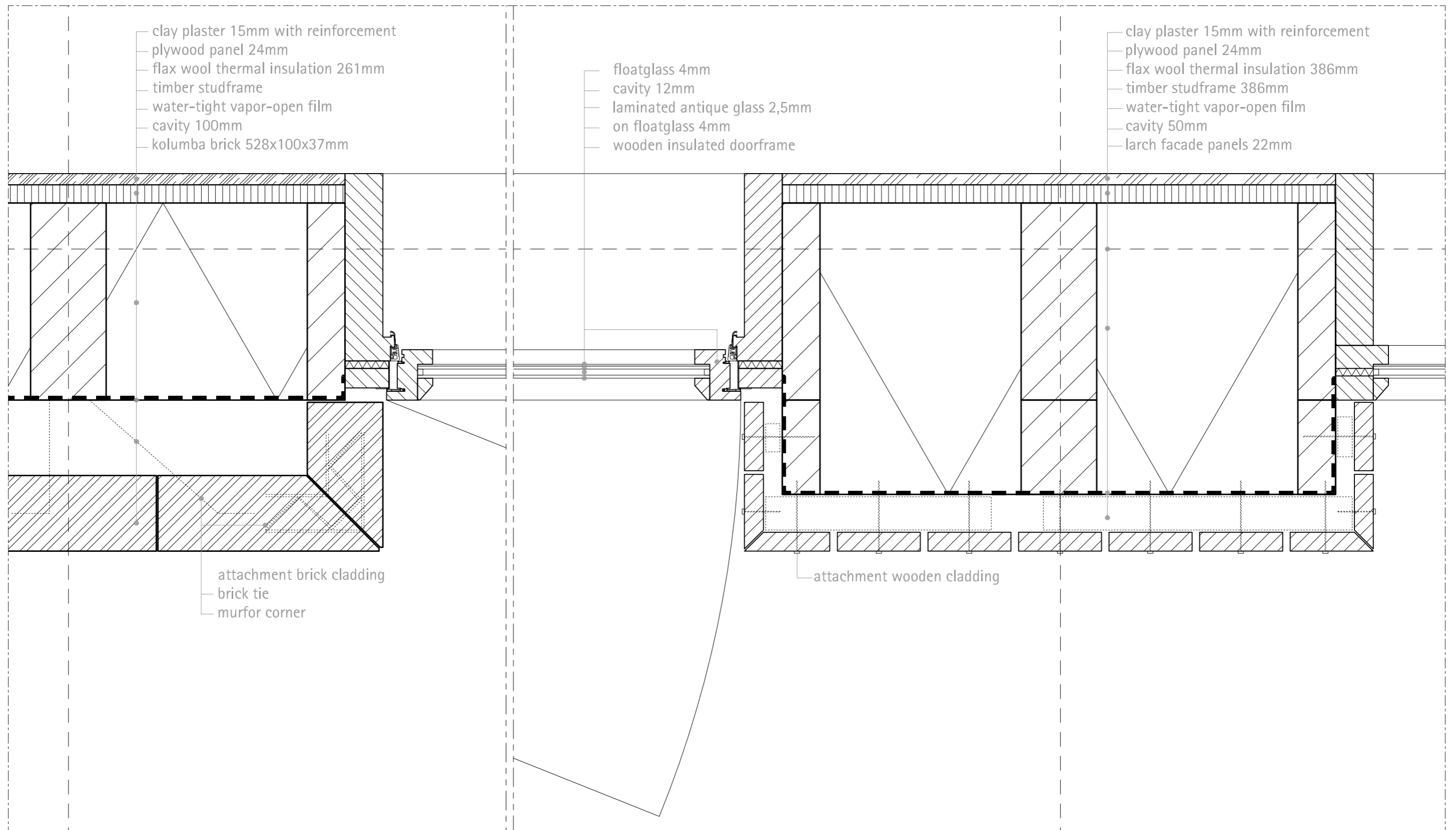
Facade details

of the great hall 1:10



Facade horizontal detail

of the great hall 1:5



Impressions

a day at the Waldorf School



Koornmarkt

school within existing canal tissue

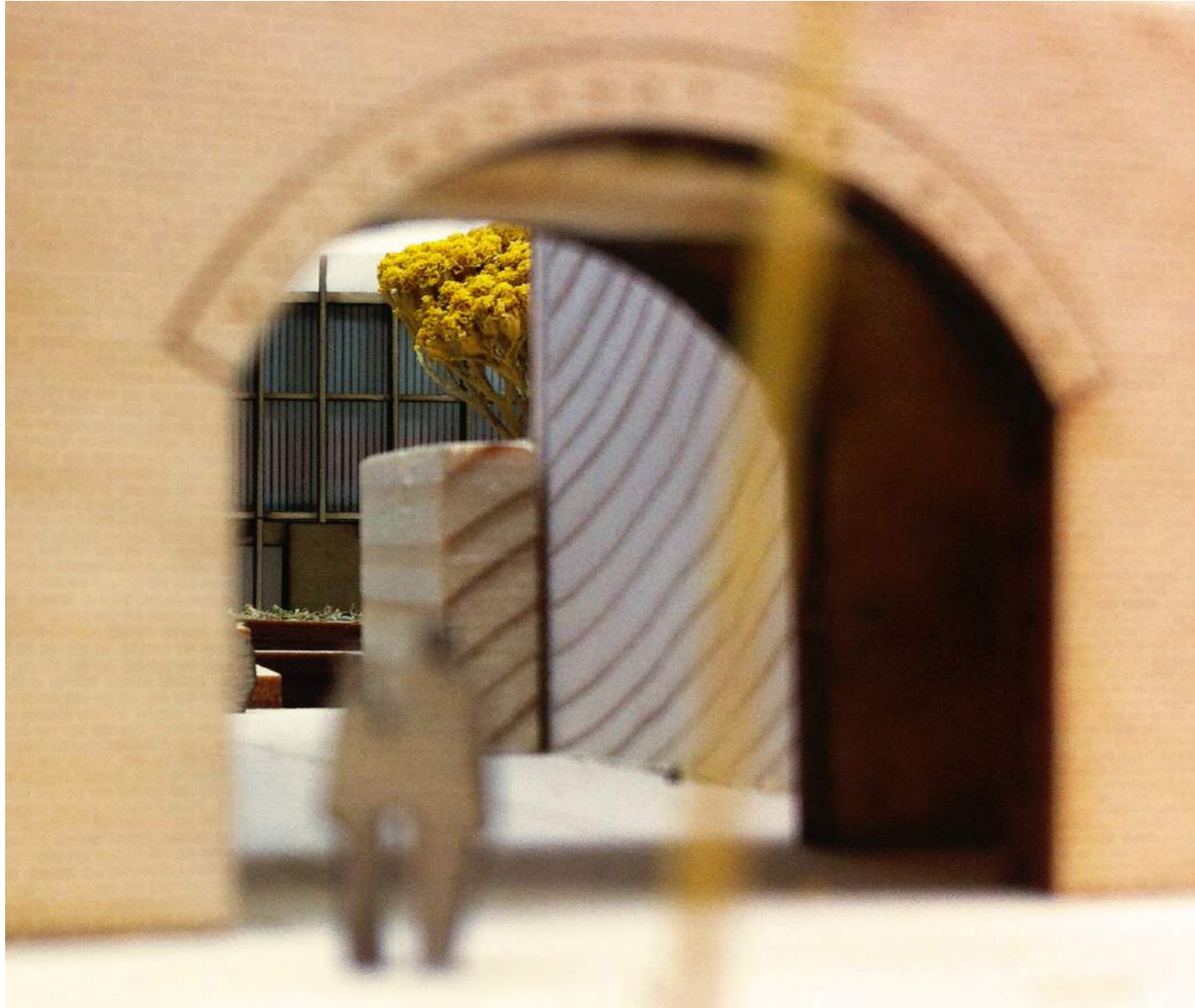


Arrival

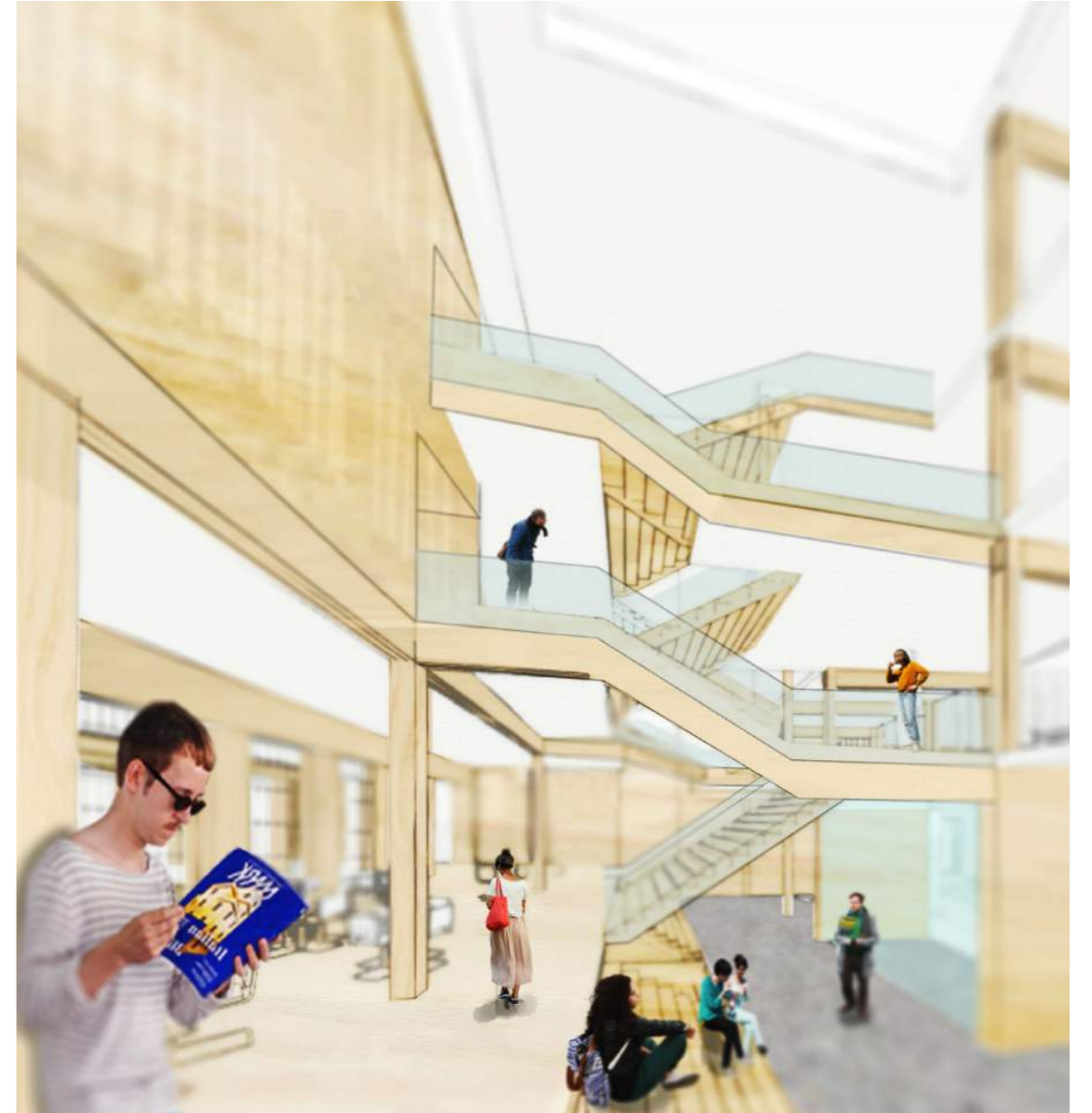
at the gate



Entering *the school world*



Entering *the building*



Entrance Hall

warm welcome



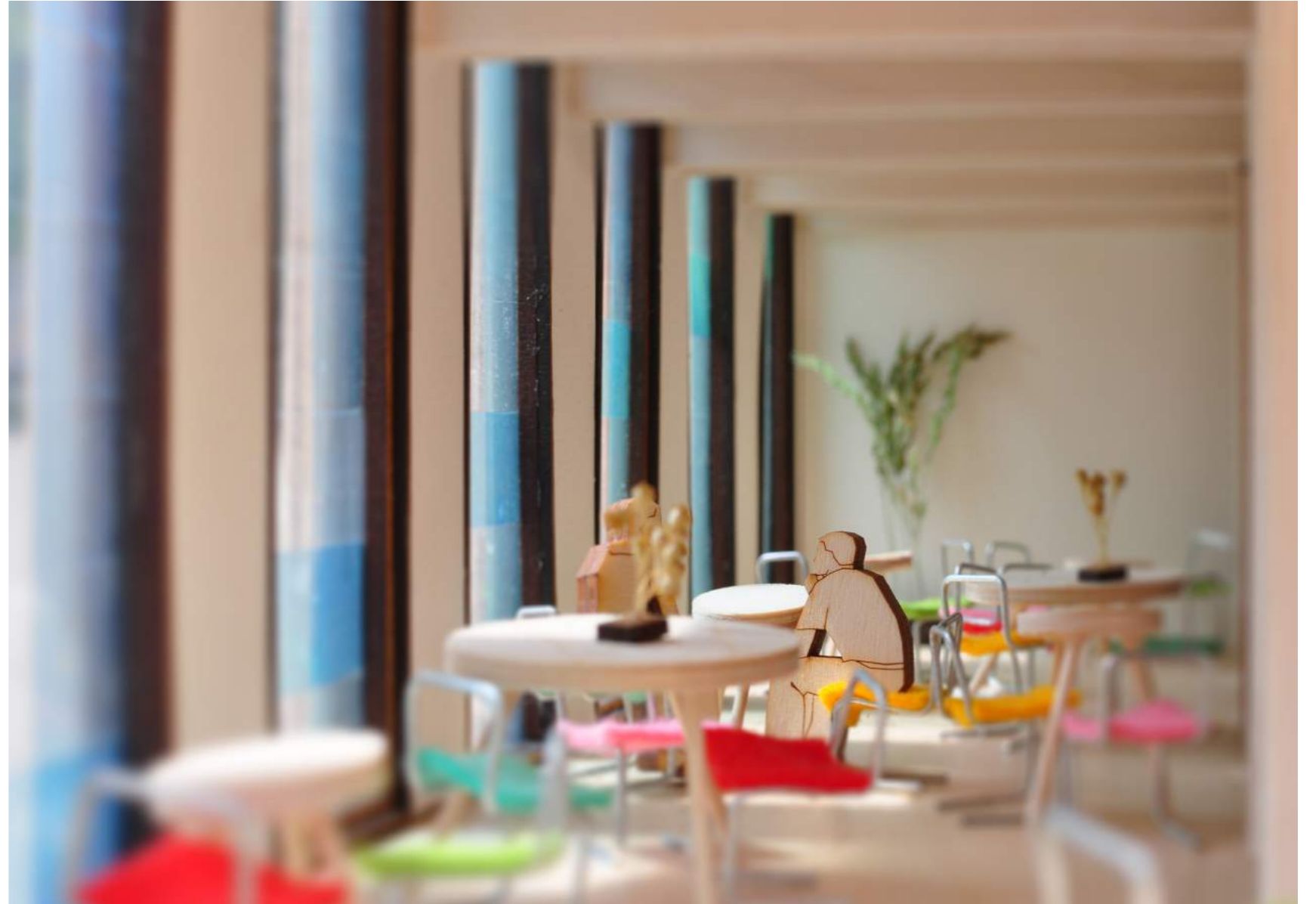
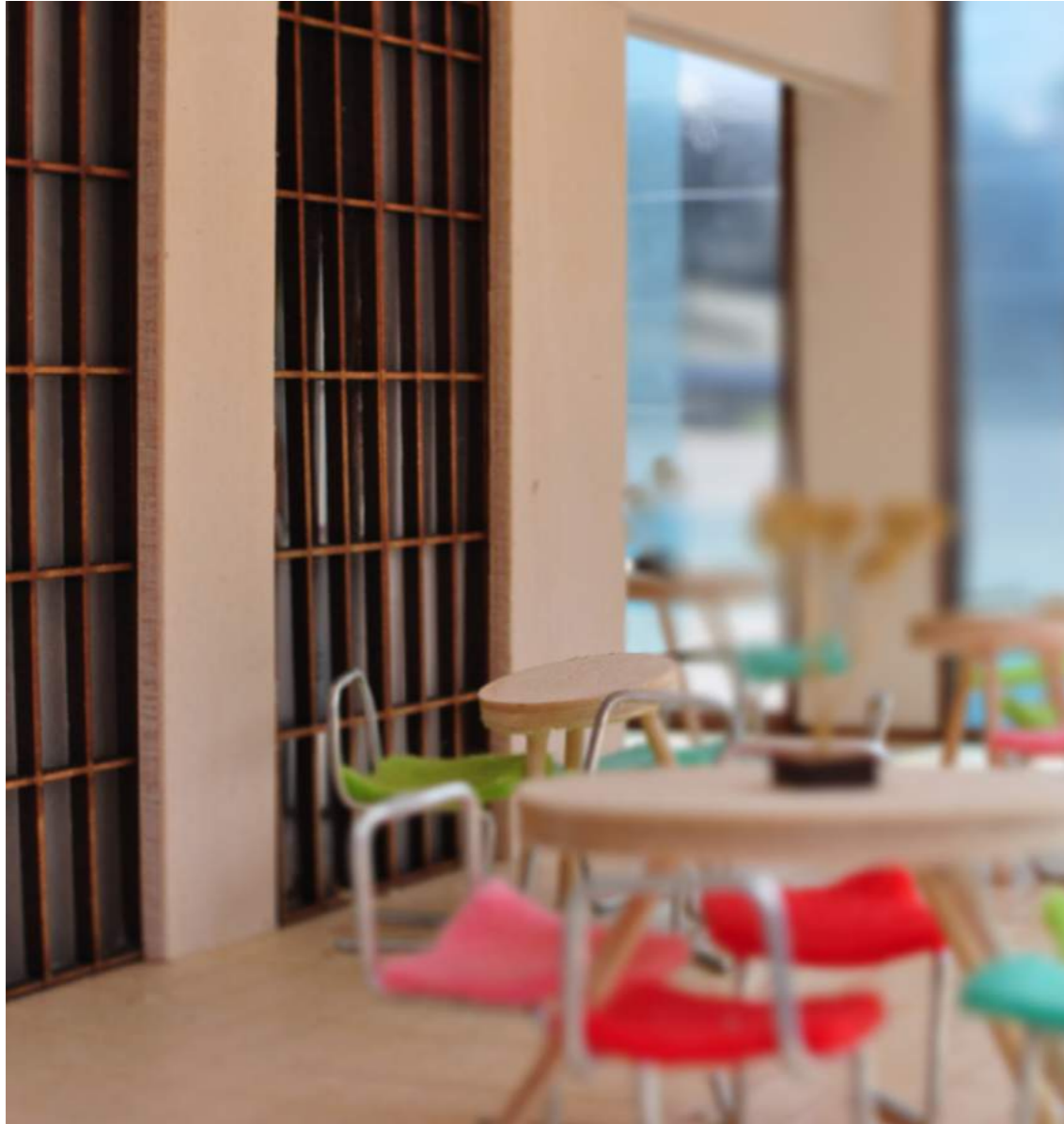
Corridor

towards the classrooms



Lunch

at the canteen



Lunch

at the canteen or outside



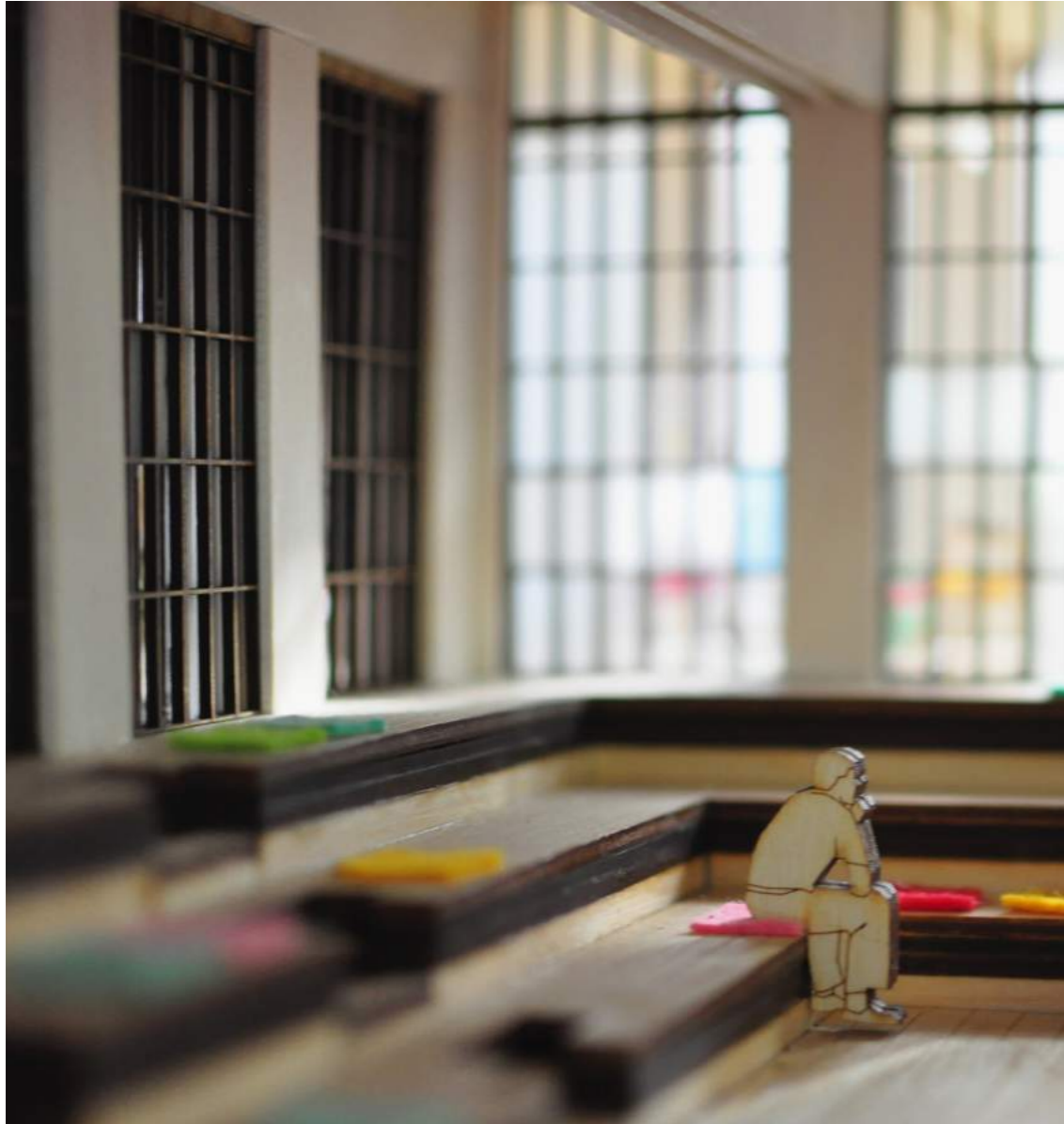
Great Hall

the collective heart



Great Hall

the collective heart



Afternoon

the school is out



the end

... questions?

