LEARNING BY DOING
WALDORFSCHOOL IN ARNHEM
What is craft?
“How can architecture stimulate the social and spatial connection between learning and making, and strengthen the connection of children with nature around them.”
BRICK: fascinated by the ability to make a building component out a pile of dirt.
What did I discover?
- Time consuming process, no need to hurry.
- difficult market
- back in time, no innovation.
Craft is democratic.
It’s not only about talent.
You need also patience,
Hard work, routine and experience.
urge to perform rooted in society. Focus education on competences, performance and intellectual development of the child. Hurried fast and efficient transfer knowledge.
anthroposophical
regular education and creative edu-
cation.
WALDORFSCHOOL
Learning with head, hand and heart

Head: consciousness, sense.
Heart: emotions and feelings
Hands: create and forms.
- closed anthroposophical culture
- architecturally inaccessible and self-absorbed.
- incomprehension of outsiders > distance.
- Locations in the city, travel to be around nature.
“How to design a Waldorfschool that can stimulate the social and spatial connection between learning and making more accessible architecture.”
II PROGRAM AND SITE
Jaartafel
feesten
enz.
THE SITE
What would be the best place for a waldorf school?

Natural environment to emphasize the relation between man, plants and animals. The development of flora, passing of seasons, experienced closely.
THE SITE
Meinerswijk, Arnhem.

Map of Arnhem + Meinerswijk
KAART MET ARNHEM NIJMEGEN?

VRIJE SCHOOL NODIG IN ARNHEM.
The Site
Meinerswijk, Arnhem.
Map of the site
THE SITE

how is it used?

- recreational area
- buffer zone water
- Natural environment
NAP kaarten
Water, floodplain area
3 times a year

THE SITE
Water as an organising element

8.75 NAP
10.90 NAP
9.75 NAP
12.75 NAP
How do you approach foto collage?
Current site and immediate site plan
Almost from scratch/ open context. but iconic building -> brick factory.
Tijdslijn

how to emphasize this transition from home to school?
0-7 protected, playful learning
7-14 adventure
14-21 individual vs collective.
How stuff works
PROGRAMMATIC COMPONENTS

Place for making
Kindergarten
Primary school
Secondary school

FOTO MIDDELBARE
LANDSCHAPPELIJKE INPASSING
How to place buildings in the landscape?

WATER kaart wat waar

Multiple buildings around an inner courtyard.
Buildings position according to water/age.
Between the buildings there is a free space that is locally paved there are pathways, sidewalks and playgrounds arise. But the meetings and play can as well happen on the pavement as on the grass.
**WALDORFSCHOOL**

making of things

MOET NOG MOOIER!!!!

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Gives children the Time to stand still, give attention to the actions and a product or object. Also good when learning something to give time to sink in.
Everyone has their own building but they can look at each other with views from windows. When they change classes they cross the courtyard and are aware of the other buildings and students.
LICHTER

Defining characteristics:
- Closed
- Save and protected
- Friendly
- Small scale

Border within ensemble protection
herkenbare omgeving
Safe
Impressie of foto? Er is geen foto van Speelom-geving

Defining characteristics:
- Adventurous
- Open to nature
- Collective

Border within nature
natural border, sloot
there is a boundary but view is
without boundary
adventure
curiosity
LANDSCHAPPELIJKE INPASSING
Secondary school

Defining characteristics:
- Open
- Social and meeting
- Big scale

No border
everything is a place to walk meet and play
Defining characteristics:
- Public arrives
- Waterfront
- Making back in factory
- Iconic
- public

Hard border with environment.
Looking to outside from border uplifted
A building is most often thought of as something which turns inward - toward its rooms. People do not often think of a building as something which must also be oriented toward the outside.
building architecture emphasize the rhythm of nature and the day.
How to emphasize the difference between inside and outside world on different scales. Cross borders on different scales. From context to inner courtyard, from courtyard to school, from hallway to classroom. The students give the teacher a hand and the day starts.
Besides the classroom there is the outside of the classroom. Everyone has their own classroom, building but they meet in the hallway/greenhouse or in the courtyard/playground.

UPDATE!!!!!!!
KINDER GARTEN
Save

collonade

Transition slowly goodbye parents until inside building.
THRESHOLDS
Kindergarten
greenhouse as multi purpose room
brede overgang van speel naar lokaal moment
om stil bij te staan. teacher starts lesson.
plek om buiten te leren
Greenhouse open during playtime.
OMGEVING SPEELPLEIN
open central circulation
brede overgang van free time naar lokaal moment om stil bij te staan
inside to outside direct
Internal gallery street. between classes and during break walking and flaneren.
OMGEVING EN HATCH
Floor heating ground floor
radiator first floor
program:
Library
workshops
library top floor
MOOIER!!

History and use
Wat is goed aan de steenfabriek?
TEXTUUR DAK EN ANNOTATIONS
GRIDLIJNEN KORTER

facade
problems:
no circulation inside possible
daylight
size vaults

OLD FLOOR-PLAN!!!!
OMGEVING + HATCH VLOER
BRICK FACTORY

OMGEVING

section
One typical iconic building.
How to emphasize identity of the place with new architecture
Integrated ensemble and communicate with the existing while still advertising the buildings as own entities?
Strategy: New building with respect to old.

I wish to make the new Waldorf school a rich and intense place at the same time as preserving a sense of the site’s industrial past as well as the attractive, if slightly melancholy, character of its present condition.
The existing structures that I have chosen to keep, keep in their entirety, applying a light touch to their restoration that brings into focus their epic scale as well as their history.

The new structures that I propose are pragmatic, and share a tectonic and material sympathy with the existing. This is not a game of new and old, but rather about making a powerful new whole.
Strategy: new structures can achieve an equivalent formal and material presence. The strategy for working in and around the historic building of the site is one of material transformation and typological continuity.
MATERIAL
brick in existing

structural > vault
thick > heath
outer layer.
with other materials
Harmony with existing
Distinctively new but evidently spawned from the existing and reacts to that environment.
Repetition and Variation
Repetition of material ideas and details in slight variation
Old techniques combined with new.
Roof as a structural element
Icon
tie project together
Roof as a landscape element
Architectural expression
Distinctively new but recognizable from origin.
Repetition of material and details in variation to tie design together.
Colour
To keep colour of the existing but with new material.
DOUGLAS red colour Charred wood. Shou sugi ban.
Shingles
glass open character of the ground floor
The plinth connected to square

UPDATE + MOOIER!!!
KLEUR?
THEME III: CONNECTING EXTERIOR TO INTERIOR
KLEUR IN ELEVATION
+ GUTTER SECTION!

GOED SCHALEN
WITBALANS + PERSPECTIEF
Relationship with the location.
To emphasize the particular views
Enable or prevent interaction be-
tween inside and outside.
relationship of human beings to
nature.
A massive wall gives way to a glazed wall, merging inside and outside. This creates the impression of a two way spatial continuum between inside and outside.
A french window matches the human propositions. It is a transitional element. A bay window with a niche is similar.
KLEUR IN ELEVATION + GUTTER SECTION!
FACTORY

workshop
tekst
opsomming
oid
OPENINGS
Dormer windows

KLEUR IN ELEVATION
+ GUTTER SECTION!
The plane of the glazing within an opening can be positioned further inwards or outwards, creating a space on the inside or a plastic depth on the outside while reflecting both the polarity of the different window planes and the intermediate spaces they create.
QUESTIONS?
III MATERIAL
MATERIAL

Intentions
Physical ervaring met materiaal staat centraal. Zintuigelijke ontwikkeling door contact met materiaal. Eigenschappen van materiaal laten zien.
Architectural identity:
stacking
pattern
Surface
size
joint
with other materials
Building of things will be shown literally. Bricks are stacked on top of each other, timber beams are imposed and timber plates cover the whole thing. The act of building will be tangible visible. Details tell the children a small story about architecture.
grijs watersysteem