“A workable understanding of how our psychosomatic organism ticks, information on sensory clues which wind its gorgeous clockwork or switch it this way or that, undoubtedly will someday belong in the designer’s mental tool chest”

RICHARD NEUTRA
PERSONAL FASCINATION
in relation to architecture
ENVIRONMENTAL PSYCHOLOGY

PERSONAL FASCINATION
in relation to architecture
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in relation to architecture
THE ASSIGNMENT
Complex Projects - TU Delft
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AMSTERDAM 2050
12% UNEMPLOYED VS. 5.4% NATIONAL
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22.8% LOW INCOME vs. 10% NATIONAL
12% UNEMPLOYED VS. 5.4% NATIONAL

22.8% LOW INCOME VS. 10% NATIONAL

10.7% WELFARE SYSTEM VS. 4% NATIONAL
Arrestatieteam haalt verwarde man van dak in Zuidoost

Inwoners van Zuidoost lijken niet bereid het stadsdeel te verlaten voor gedeeltelijke gezondheidszorg. Daarom opende Arko, door werk politiek Carra van Hout. Heeft van Zuidoost, topmensen van woningverhuurders, heftige zorgen tegen te maken, voor bovengenoemde groepen die in 'groepe' voorstellen komen te staan.

Eigen GGZ-poli voor zorgmijders Zuidoost

De keuze van een GGZ-politie voor met de bemoeiing met de voor het district Nieuw-West ligt, is zoals in de politie, in de lucht. Heeft van Zuidoost, topmensen van woningverhuurders, heftige zorgen tegen te maken, voor bovengenoemde groepen die in 'groepe' voorstellen komen te staan. Deze politie voor de zorgmijders Zuidoost

Het Parool

Meer overlast door mensen met psychische problemen

Veel mensen met psychische problemen merken dat ze in Zuidoost worden met name door de politie geraakt. Heeft Van Zuidoost, topmensen van woningverhuurders, heftige zorgen tegen te maken, voor bovengenoemde groepen die in 'groepe' voorstellen komen te staan.
The **jobs more likely to be taken over by robots** include those in the transportation and storage (56%) sectors, as well as manufacturing (46%) and retail (44%).
The paradox of work is that many people hate their jobs, but they are considerably more miserable doing nothing.
RESULTS
Of unemployment

77% STRESS
64% ANXIOUS
61% VULNERABLE
54% USELESS
The problem with needing highly specialised roles is that it will isolate parts of the population who are unable to continuously adapt and retrain. “We can’t all be knowledge workers, so there will be a lot of unemployment – and perhaps no impetus to help these people.

... The future of work will soon become “the survival of the most adaptable”
PROBLEM STATEMENT
Future of Amsterdam Zuidoost
Citizens of Zuidoost will face mental health problems caused by the effects of unemployment and the lack of being capable to adapt. Not having a purpose will cause stress and anxiety, and a loss of sense of self and identity.
RESEARCH

Mental Health & Environmental psychology
Which architectural and environmental elements can contribute to successful brain restoration and thus, add up to the wellbeing of the users?
LITERATURE

TYPOLOGIES

RESEARCH
Two types
LITERATURE

CONCLUSIONS
FEELING OF BEING AWAY

INVOLUNTARY ATTENTION OR FASCINATION: ONE’S GAZE IS DRAWN TO SOMETHING UNUSUAL

CONCLUSIONS

Literature research

CONTEMPLATIVE ARCHITECTURE
RELIGIOUS

MUSEUM

LIBRARY

ARCHEOLOGICAL SITE

TYPES OF CONTEMPLATIVE ARCHITECTURE

Typologies that stimulate de-stressing and thus brain restoration
KUNSTHAUS BREGENZ (Zumthor)

NELSON ATKINS MUSEUM OF ART (Steven Holl)

ZOLLVEREIN (SANAA)

VIEW: nature

FLOOR: natural/ light colour
CONCLUSIONS

Typology research
AMBITION
Preferred effect of design
an inclusive public space that provides an optimal, stress reducing environment, and stimulates self-inspection and self-reflection
STRATEGY
How will I accomplish the stated ambition?
INCLUSION
Strategy
FUNCTIONS WITH LOW THRESHOLD AND COMMUNAL FUNCTIONS

REFERENCES TO ARCHITECTURE OR TRADITIONS OF OTHER CULTURES

CREATING A LANDMARK TO ATTRACT VISITORS

JOB CREATION - COMMUNITY INVOLVEMENT AT CONSTRUCTION
WELLBEING

Strategy
NO DIRECT LIGHT
Indirect
Shaded
Diffuse

LARGE SCALE

SOBER INTERIOR
Emptiness

NATURE AND VIEWS ON NATURE
CONCEPT

Gradient
CONCEPT
Schematic design concept
PEOPLE
Cultural characteristics
130 Ethnicities 100+ Religions

PEOPLE
Cultural characteristics
Food: Sharing & Cooking
Sport
Religion
Culture specific activities
(like birdsinging competitions)

PEOPLE
Social adhesives
LANDSCAPE
Site Choice
PAVILIONS
Architectural Design
EXTRAVERT  |  INTROVERT

PAVILIONS
Gradient
COOKING PAVILION
Extravert, social activity
MATERIALISATION

Accoya wood
Why is this so sustainable and durable?
PERFECT FIT FOR CIRCULAR ECONOMY
Cradle2Cradle certified

SUSTAINABLY MANAGED FORESTS AND PLANTATIONS
fast growing and renewable wood species

HIGHEST DURABILITY CLASS
Lasts over 50 years

CAN BE UPCYCLED AT END OF LIFE
re-used after 50 years

PERFECT FIT FOR CIRCULAR ECONOMY
Cradle2Cradle certified
ASSEMBLING
Japanese technique
ASSEMBLING
Japanese technique
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ASSEMBLING
Japanese technique
RAMMED EARTH (STAMPLEEM)

Materialisation
Superior thermal mass

Temperature and noise control

Strong and durable

Easy maintenance

Fire proof

Sustainable, reusable and available close to location

Forms a barrier for mobile signals (stress free!)

**BENEFITS**

*Why rammed earth?*
Superior thermal mass
Temperature and noise control
Strong and durable
Easy maintenance
Fire proof
Sustainable, reusable and available close to location
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BENEFITS
Why rammed earth?
INTERIOR
pre-cast rammed earth panels

EXTERIOR
pre-cast rammed earth blocks

RAMMED EARTH (STAMPLEEM)
Implementation
How are these panels and blocks made?
STRUCTURE
Assembled
HEALING THROUGH CURATED THERAPY BY MAN-MADE STRATEGIES FOR MENTAL HEALTH

THE UNCURATED AND UNCONSCIOUS HEALING BY EXPOSING THE SENSES TO NATURE
HAMMAM
INDOOR POOL
Water = 32 ° Celcius

OUTDOOR POOL
Water = Minimum 15 ° Celcius

HOT BATH
Water = 42 ° Celcius

COLD BATH
Water = 14 ° Celcius
Separate watersystems for Hammam and Tower because of very different needs. The tower can rely more on natural methods because of its orientation and natural elements around, whereas the Hammam need a very mechanical and specialised system. The ventilation system can be combined, the air for in the hammam can also be pre-warmed by energy from the heat pump. This won’t be enough so more energy needs to be added.

Every floor has an installation space connected to a large vertical shaft. Toilets and other piping are also connected to this.

The fresh air will be supplied through the north-south vents and be exhausted mechani ally, through the exhausts in the toilets and/or kitchens and through the vents transporting fresh air from north to south or the other way around. In winter, the accumulated warm air in the buffer of the south facade will provide warm air, and in summer the north facade will provide cold air.

Installation spaces for heating and cooling of water and air warmth will be extracted from hammam damp, and will be re-used to warm again.

A heat pump under water (35m deep) will use the lake to store energy. This works like a battery. The constant 5 degrees can be used to make a coolant change phase. The energy that comes free can be used to cool down or warm water for the building.
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Anna Estee van Oers
THE SELF OBSERVATORY
15/12/2017

FACADE
Building technology

Bufferzone between fabric and rammed earth
TRANSPARENT BUT GIVES INDIRECT LIGHT TO INTERIOR

EFFECT DURING NIGHT

EFFECT DURING DAY

CLOSE UP
Protects rammed earth inner facade from erosion by rain and wind

Durable and 100% recyclable

Easy maintenance: resistant to mold and dirt

Shades and creates diffuse light

Lightweight

BENEFITS
Why glassfibre textile?
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Why glassfibre textile?
PROGRAM
RESEARCH & DESIGN

Conclusions
NO DIRECT LIGHT
- textile facade
- detailing in a way that light usually comes from high up

LARGE SCALE
- my projects has a large scale in two directions. The horizontal distance is over 300m and the tower is over 100m. Both scales can be experienced well.

SOBER CALM INTERIOR
- almost all materials are natural and everywhere the same
- whenever there's a vie outside this is "blocked" by the opaque facade, this provides a more calm and foggy view

NATURE AND VIEWS ON NATURE
- the entire project is located in a natural environment. The pavilions have vies on water or nature and the routes through the park provide this too. The tower is isolated in the lake and to go there one has to 'enter' the water.
FEELING OF BEING AWAY

IN Voluntary Attention Or Fascination

Isolation

A Building For Contemplation
Thank you.
1. 100mm Rammed earth interior wall panels
2. 180mm Insulation
3. 200mm Rammed earth, postal blocks
4. Tray by 600mm Accoya wood
5. Fibreglass textile facade
6. 3.5T Hume
7. Ventilation supply
8. Triple glazing (Mil++)
9. Suspended ceiling attached to wooden beams spanning structural beams
10. C1F Floors (200mm)
11. Insulation
12. Jupiter Roof heating (Dry)
13. Floor finish
14. Roof finish
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