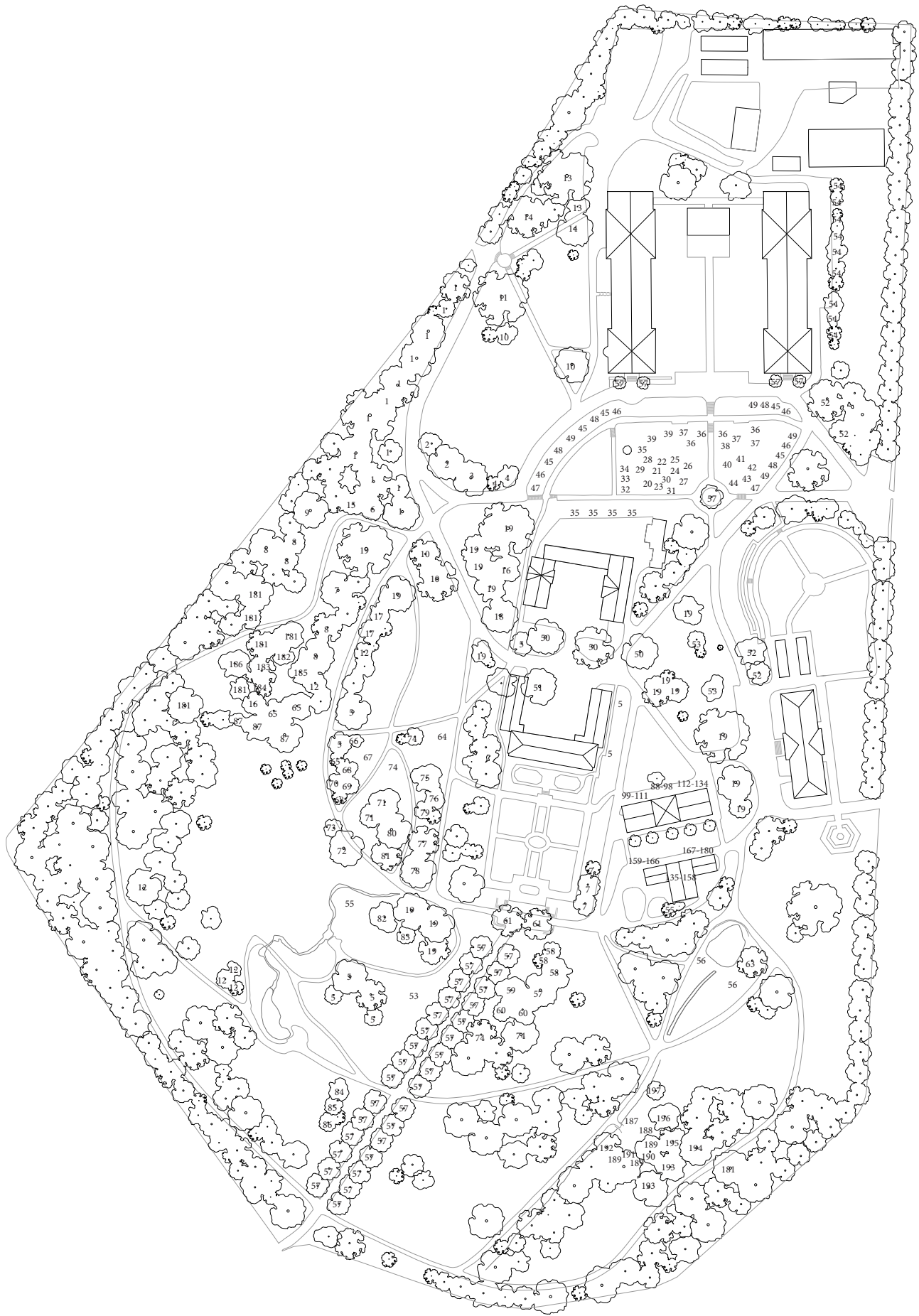


Botanical Gardens have seen a revival as scientific institutions due to the emergence of the conservation of plants worldwide. Their importance is growing due to the existing collections and the scientific knowledge they possess in the propagation of plant species.

The Botanical Garden in Oslo has a collection of more than 6.600 different plant species from around the world. A large part of these plants are endangered and preserved outside of their natural environment. This diploma is introducing a new building for research and learning that is representative for the scientific work performed in the garden. If we see the whole garden as a large research field, the house for the plants should have a stronger presence as an important part of the story of the garden.

During the process I have been looking at the whole garden as a site, choosing the placement of the new building through a series of volume studies and analysis of the site.



EXPLORING THE GARDEN

- 1 Prunus Avium
- 2 Prunus Serrulata
- 3 Malus purpurea
- 4 Malus profusion
- 5 Betula pendula
- 6 Phellodendron amurense
- 7 Aesculus hippocastanum
- 8 Metasequoia glyptostrodoidea
- 9 Corylus Avellana
- 10 Fagus sylvatica
- 11 Fagus sylvatica 'Atropunica
- 12 Pinus Koraiensis
- 13 Larix decidua
- 14 Abies magnifica var. shastensis
- 15 Picea jazoensis
- 16 Picea sitchensis
- 17 Sequoiadendron giganteum
- 18 Fraxinus excelsior
- 19 Acer platanoides

#### OLDEMORS HAGE

- 20 Dianthus plumarius
- 21 Artemisia Abrotanum
- 22 Iris pseudacorus
- 23 Paeonia officinalis
- 24 Rudbeckia laciniata
- 25 Physostegia virginiana
- 26 Bergenia cordifolia
- 27 Helianthus pauciflorus
- 28 Geranium x magnificentum
- 29 Lilium lancifolium
- 30 Lythrum salicaria
- 31 Saponaria Officinalis
- 32 Iris sibirica
- 33 Hemerocallis lilioasphodelus
- 34 Primula 'Dorothy'
- 35 Crataegus Monogyna

#### FRUKT LUNDEN (lave træer, max 3,5 meter)

- 36 Malus Domestica Sävstaholm
- 37 Prunus domestica 'Victoria'
- 38 Prunus cerasus 'fanal'
- 39 Humulus lupulus

#### ROSE LUNDEN (lave busker, max 2 meter)

- 40 Centifolia Major
- 41 Alba Maxima
- 42 Alba chloria
- 43 Borboriana
- 44 Rosa Pimpinellifolia

- 45 Hydrangea paniculata
- 46 Kerria Japonica
- 47 Berberis thunbergii 'Atropurpurea'
- 48 Berberis Aggregata var. prattii
- 49 Spirea x bumalda 'Anthony Waterer'
- 50 Tilia platyphyllos 'laciniata'
- 51 Carpinus betulus
- 52 Picea abies
- 53 Syringa vulgaris
- 54 Sorbus aucuparia
- 55 Ginkgo biloba
- 56 Salix purpurea 'Nana'
- 57 Quercus robur 'fastigiata'
- 58 Juglans regia ssp. regia
- 59 Gleditsia triacanthos
- 60 Cladrastis kentukea
- 61 Tilia cordata
- 62 Aesculus hippocastanum
- 63 Populus trichocarpa
- 64 Magnolia kobus var. kobus
- 65 Catalpa speciosa
- 66 Calycanthus occidentalis
- 67 Magnolia acuminata
- 68 Magnoliakobus var. borealis
- 69 Magnolia x Soulangeana

- 70 Viburnum lantana
- 71 Thuja occidentalis 'holmstrup'
- 72 Corylus colurna
- 73 Chamaecyparis pisifera
- 74 Hippophae rhamnoides
- 75 Toxicodendron verniciflua
- 76 Ptelea trifoliata
- 77 Phellodendron japonicum
- 78 Phellodendron sachalinense
- 79 Cornus florida
- 80 Gleditsia triacanthos var. intermis
- 81 Picea pungens 'glauca globosa'
- 82 Taxus baccata 'overeynderi'
- 83 Pinus pumila
- 84 Prunus serotina
- 85 Prunus maaackii
- 86 Ostrya virginiana
- 87 Stewartia pseudocamellia var. koreana

#### PALMEHUSET

##### EVOLUSJONS ROMMET

- 88 Cibotium Schiedei
- 89 Cycas Taiwaniana
- 90 Queen sago- Cabacas cycas
- 91 circinalis
- 92 Araucaria cunninghamii
- 93 Agathis robusta
- 94 Cedarus libani
- 95 Dicksonia antarctica
- 96 Podocarpus Macrophyllus
- 97 Laurus azorica
- 98 Wollemia nobilis

##### MIDDELHAVET

- 99 Citrus sinensis
- 100 Quercus suber
- 101 Cinnamonum camphora
- 102 Laurus nobilis
- 103 Ceratonia siliqua
- 104 Eucalyptus globulus
- 105 Olea europea sub sp. africana
- 106 Strelitzia reginae
- 107 Ficus carica
- 108 Pistacia lentiscus
- 109 Sideroxylon marmulana
- 110 Strelitzia nicolai
- 111 Camellia sinensis

##### ØRKEN KLIMA

##### AFRIKA

- 112 Crassula ovata
- 113 Aloe chabaudii
- 114 Gasteria disticha
- 115 Aloe dichotoma
- 116 Aloe vera
- 117 Adromiscus maculatus
- 118 Euphorbia triangularis
- 119 Haworthia altilinea
- 120 Aloe volkensii
- 121 Euphorbia heptagonia

##### AMERIKA

- 122 Mammillaria sartorii
- 123 Ferocactus wislizeni
- 124 Agave sisalana
- 125 Abromeitiella brevifolia
- 126 Cleistocactus strausii
- 127 Echiveria pulvinata
- 128 Opuntia cardiosperma
- 129 Armatocereus rauhii
- 130 Agave striata
- 131 parodia magnifica
- 132 Agave filifera
- 133 Echinopsis tubiflora
- 134 Opuntia ficus- indica

#### VICTORIAHUSET

##### VICTORIA ROMMET

- 135 Pavonia multiflora
- 136 Gossypium ssp
- 137 Petrea volubilis
- 138 Erythrochito brasiliensis
- 139 Pandanusutilis- Skrupepalme
- 140 Azolia caroliniana
- 141 Pentas lanceolata
- 142 Synsepalum dulcificum
- 143 Spathiphyllum wallisii
- 144 Clusia minor
- 145 Hamelia patens
- 146 Cotus Neulumbo nucifera
- 147 Echinodrus muricatus
- 148 Rhizophora mangle
- 149 Barleria cristata
- 150 Hibiscus greveanus
- 151 Piper nigrum
- 152 Zingiber officinale
- 153 Stephenotis floribunda
- 154 Rivina humilis
- 155 Aristolochia macroua
- 156 Brunfelsia americana
- 157 Cinnamonum zeylanicum
- 158 Victoria cruziana

##### AFRIKA ROMMET

- 159 Carica papaya
- 160 Catharanthus roseus
- 161 Pachypodium lamieri
- 162 Coffea arabica
- 163 Seadoxus puniceus
- 164 Musa sp.
- 165 Sorghum bicolor
- 166 Calvoa orientalis

##### EPIFYTT ROMMET

- 167 Vanila planifolia
- 168 Dendrobium thyrsoflorum
- 169 Ascocentrum miniatum
- 170 Billbergia decora
- 171 Ananas comosus
- 172 Dendrobium spectabile
- 173 Guzmania lingulata
- 174 Corytoplectus capitatus
- 175 Styliidium debile
- 176 Pothos scandens

##### moser:

- 177 Dionaea muscipula
- 178 Sarracenia sp.
- 179 Pinguicula moranensis
- 180 Tillandsia usneoides
- 181 Pseudotsuga menziesii f. casia
- 182 Pinus nigra ssp. nigra
- 183 Picea pungens 'glauca'
- 184 Picea engelmannii
- 185 Pinus strobus
- 186 Juglan regia ssp. regia
- 187 Acer sieboldianum
- 188 Magnolia sieboldii
- 189 Fargesia murielae 'jumbo'
- 190 Phyllostachys aureosulcata
- 191 Phyllostachys propinqua
- 192 Salix Triandra
- 193 Acer pseudoplatanus
- 194 Acer campestre
- 195 Acer trautvetteri
- 196 Acer rubrum
- 197 Populus tremula





HIGHTS OF THE TREES





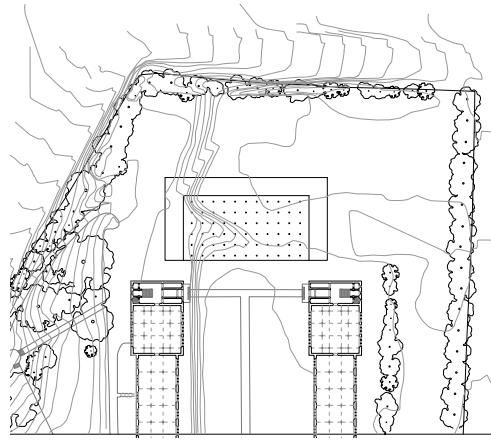
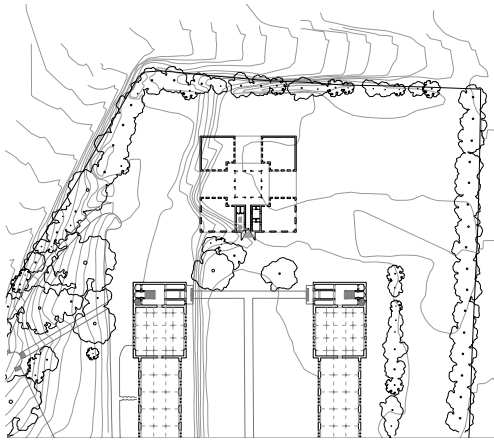
A SERIES OF UNFINISHED AXES



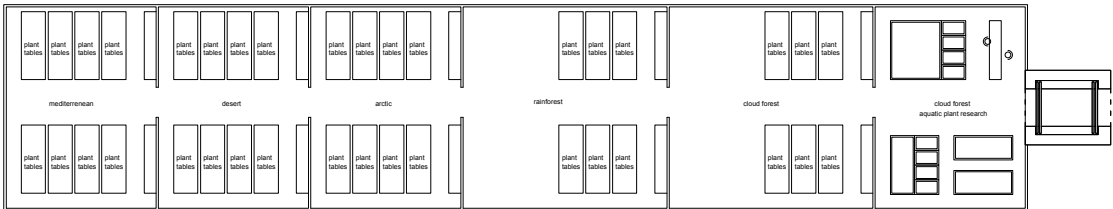
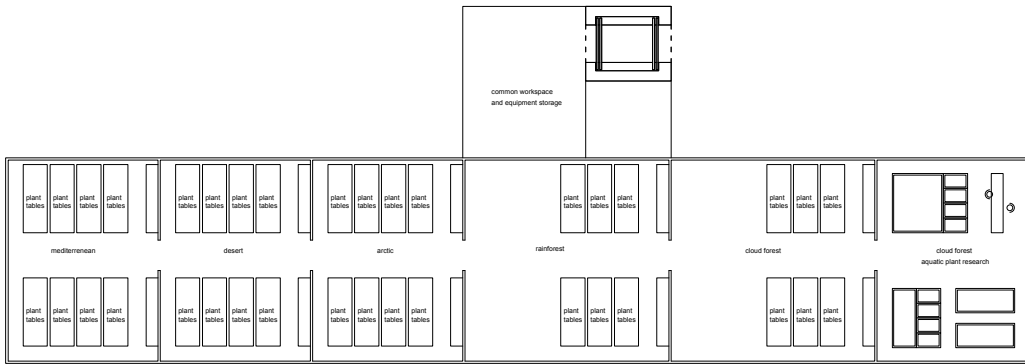
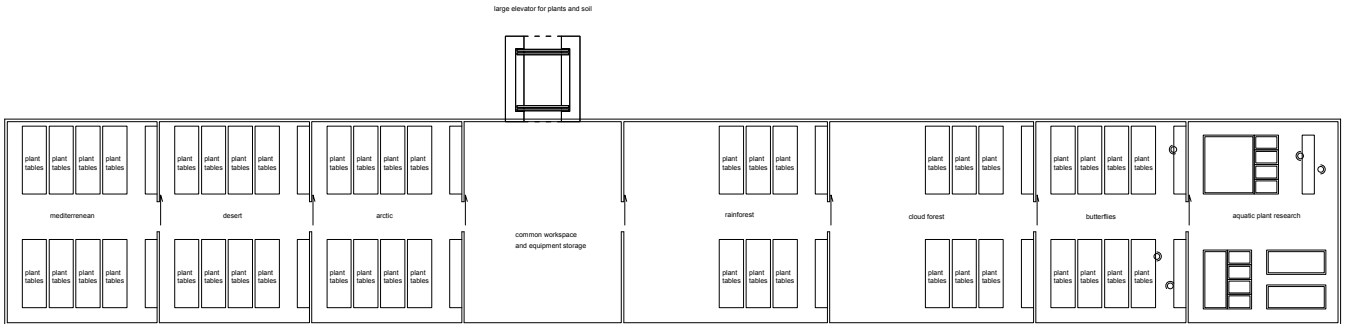




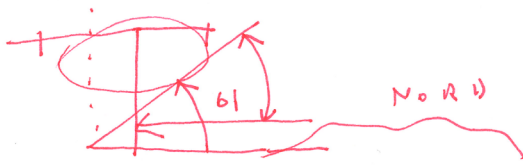
snitt C-C



# FIRST PLANS







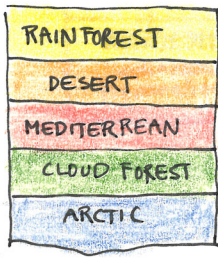
	TROPICAL RAINFOREST	CLOUD FOREST	MEDITERREAN	DESERT	ARCTIC
IDEAL ORIENTATION	SOUTH or SOUTHEAST	EAST?	can be EAST, WEST or even NORTH	SOUTH or SOUTHEAST	NORTH
AMOUNT OF LIGHT					
TEMPERATURE	<del>R: 1 UNSTABLE</del> Day: 27°C - 33°C Night: 2°C - 5°C 25.4	13°C - 23°C STABLE	Summer: 25°C - 40°C winter: 3°C - 18°C STABLE	Day: 20°C - 45°C Night: -3°C - 18°C STABLE	Summer: -10°C - +20°C Winter: -50°C - 0°C UNSTABLE
MATERIAL					
ATMOSPHERE	Humidity: 77-88% hot and wet	Humidity: up to 100% hot and warm humid/moist	Humidity: 40-70% warm and dry	Humidity: 10-30% hot and dry	Humidity: less than 20% cold and dry
BIOME. PLANT COMMUNITY	FOREST (four layers) Emergent: upper canopy: lower canopy: shrubs, small trees, plants forest floor: bushes & herbs	FOREST mosses, climbing ferns, orchids.	FOREST, WOODLAND SAVANNA, SHRUBLAND CHAPARRAL?	DESERT cactus, bushes, low trees	TUNDRA moss, dwarf scrubs, herbs, grasses, lichens (fungus).
PLANT SIZE	emergent → 30m upper canopy → 18m very tall! to very low lower canopy → 18m	low land → tall vegetation → less wind high land → short vegetation → more wind	varying	low	Very low!
WIND					

brutte  
visioner

COLD AIR CARRIES LESS MOISTURE  
THAN WARM AIR.  
OLAFUR ELIASSON  
TOKUJIN YOSHIOKA

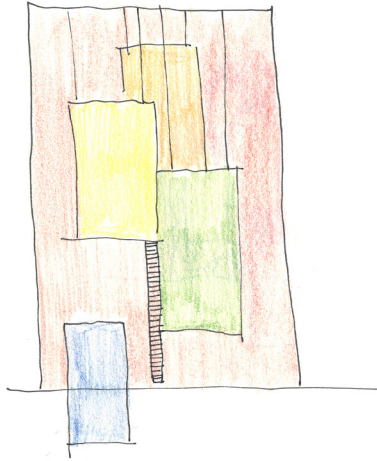
PIET UDOLF  
DIETER KINAST  
GÜNTHER VOGT

inversion  
- det som er ute  
kommer inn.

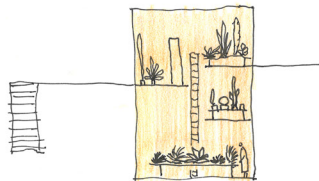
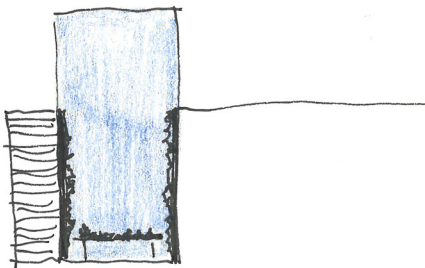
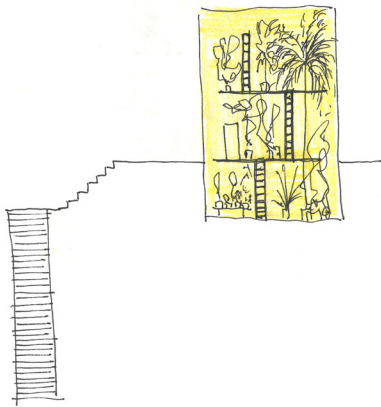




# CLIMATE IN CLIMATE



TRAPPEKJØNNE / MIDTEN  
SOM OGSÅ HENGER FRA TAKET.



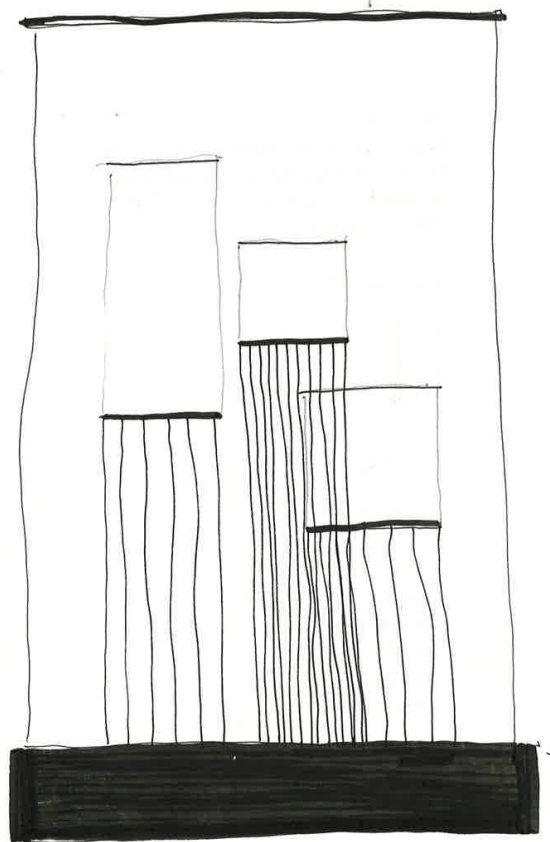
hurst for de fjerne vekstene er plassert over bakken, fjernet og separert fullstendig fra sin opprinnelige natur og alt annet natur. Den eneste naturen blomstene har å forholde seg til er den arkitekturen skaper for dem.

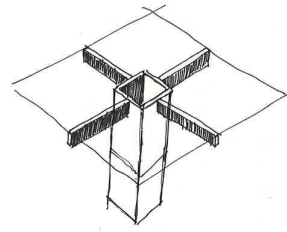
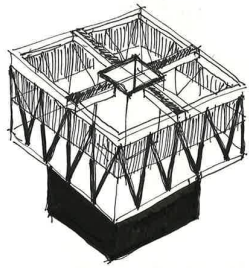
#### Klima inni Klima som konsept.

- Hvorfor er dette et bra konsept for oppgaven min?
- Hvorfor er ideen om de "hengende", bokserne en bra ide?

Et konservatorium er et bygg som er hundre prosent kunstig, det eneste naturlige elementet i et slikt bygg er plantene som lever inni. Å løfte disse rommene opp fra bakken understreker det kunstige aspektet ved omgivelsene. Alt fra hvordan du beveger deg inni bygget til uttrykket og måten plantene stilles ut på understreker dette faktumet. Plantene er løftet opp fra bakken og plassert på aluminiums bord.

Et konservatorium er et bygg som skal skape de riktige forholdene for å ta vare på noe. I dette tilfelle står planter fra fem ulike verdensklimatemer i fokus og kunnskapen om hvordan å ta vare på dem er igjen. Miljøene i bygget er kunstige, men skal så godt de kan prøve å etterligne en natur. Måten plantene er plassert på i rommet understreker det fravelse fra naturen. Plantene står i pottes på skyvbare aluminiumsbord, de plantene som er for store står i pottes på gulvet. Plantene er hele tiden løftet opp fra bakken og plassert i en kunstig natur. Denne kunstige naturen er i høyest grad bestemt av arkitekturen.





STRUCTURAL HOLLOW COLUMN

KØBSET ER KRÆFTTÆRE EBN  
 ALLE DE ANDRE VÆGGE. VIL  
 ALLTID VÆRE ET SMÅT ELEMNT  
 I HVER NÆSTE SAMBYGGET

KØBSET ER ALLTID  
 KRÆFTTÆRE EBN DE ANDRE  
 VÆGGE.

KØBSET SKAL IKKE  
 FÆSTVÆRES SOM SÆVTTEK.

