Factory farmed communities.
Knowledge district in Amsterdam Buitenveldert.
INTRODUCTION
Summary of presentation

1. Introduction: DSD Re-figuring Amsterdam, research question

2. Urban analysis: Amsterdam South Axes

3. The site: Amsterdam Zuid/Buitenveldert, problem statement

4. Strategy of intervention: Counter-gentrification

5. Program: The education market

6. Architectonic configuration

7. Materialization
Prologue 1
Timeline of the city in 4 metatopics of investigation

- NETWORK
- MORPHOLOGY
- PUBLIC SPACE
- SOCIO-TYPOLGY

Cross references analysis researching the "paradigm shifts" in the modes of production.
The recent financial crisis is the episode in the evolution of capitalism. The third model of urban development (Neoliberalism) is facing the crisis of its founding principles.
PROLOGUE
About Amsterdam metropolitan area
The historic core, the network, the system

South axes: Zuidas as a node of the network connecting Schipol Airport and Amsterdam Old city core
The shift towards the Neoliberal economy has caused the dismission and redevelopment of various districts of the city.
About Amsterdam metropolitan area

The North-South Axes

The armature upon which the South Axe project is developing is the new metro line Noor-Zuid
About Amsterdam metropolitan area
Map of land value in the Stadregio Amsterdam

The modes of production determines the land value and thus the spatial distribution communities.
THE SITE: AMSTERDAM ZUID/BUITENVELDERT
Why the Buitenveldert?
The Buitenveldert has been a detached part of the city since its planning.
About Amsterdam Buitenveldert
Location of the district according to Amsterdam

The Buitenveldert is a hot spot in the center of the economic flow of the South axes.
About Amsterdam Buitenveldert
The Buitenveldert: Amsterdamse Bos and Amstel park

The Buitenveldert is Squeezed between two unproductive green areas of historical relevance and symbolism
About Amsterdam Buitenveldert
Field investigation of the local conditions
About Amsterdam Buitenveldert

- "Zuidas" in development
- Large scale street sections, high traffic volume
- High rise buildings as dumps
- Not protected bicycle paths
- No crossing points for pedestrians
- Empty and wide sidewalks, no people
- "No man's land"
About Amsterdam Buitenveldert

- Zuidas in development
- Large scale street sections, high traffic volume
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- No crossing points for pedestrians
not productive green lawns

no hierarchy car-pedestrian

large scale street sections
About Amsterdam Buitenveldert
A project for a modern industrial city

The Buitenveldert and the Zuidas represent two distinct socioeconomic projects on the city.
About Amsterdam Buitenveldert
Multifunctional and sub-enclavic district

- Vu MEDIC CENTER
- Vu UNIVERSITY
- Vu BOTANIC GARDEN
- NORD-ZUID METRO LIJN
- SPORTPARK BUITENVELDERT
- GIJSBRECHT VAN AMSTEL PARK
- APOLLO BUURT
- RAI

Education district, Economic district, Elders district, Green district

- Retail
- Schools
- Roads
Some data about the district community:

- **11,250 Houses**
- **19,020 Inhabitants**
- **11,000 Families**
- **60% single person housing**
- **16% families with a children**
- **1.6 person per house**
- **21% is Western alloctones**
- **16% of immingrant**

The population in the district is changing rapidly.
About Amsterdam Buitenveldert
The increasing land value in the district

The presence of capital speculation is leading to an increase in the housing market prices.

http://www.gisdro.nl/WONINGWAARDE/, last accessed February 16, 2011
13,000 highly skilled migrants entered the Netherlands since the introduction of the Highly Skilled Migrants Scheme in 2004.

**THE PROFILE:**
- Age: _18-30y : 50% _30-40y : 33%
- Sex: 75% male, 25% female
- Country of origin: China, USA, India
- Education: 80%, Master degree or Phd. Dutch or Int. renamed university

**TARGET SECTOR:**
- Knowledge industry:
  - ICT
  - BUSINESS SERVICES
  - TRADE
  - INDUSTRY

**THE TOOL:**
MODERN MIGRATION POLICY (SINCE 1/1/2009)
- Reduced tax rates
- 1 year special VISA
- Stimulation of entrepreneurship
- Social welfare assistance

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About Amsterdam Buitenveldert
Agents of gentrification: The neoliberal city and the neoliberal worker

The expat center is a 'one stop service' for high skilled immigrants, the preferred workers of the entrepreneurial and creative city.
About Amsterdam Buitenveldert

Problem statement

1970’s BUITENVELDERT
Economic model: Industrial
Spatial pattern: low density + low rise, green area
City users: blue collars, low skill work, low income

2011 ZUIDAS CBD
Economic model: post Industrial (neoliberalism)
Spatial pattern: high density, high rise, mixed use
City user: Whitecollars, high skill work, high income

1. two different models of socio-economic production
two different and opposed visions on the city development

2. proximity to the Noord-Zuid metro line + Zuidas CBD
reconnection to the compact city fabric

3. increase in land value
increase in speculative practices, low income groups forced to displacement

4. local meets global, no glocal
increasing distance between local community needs and global actors needs

Amsterdam Zuid/Buitenveldert paradigm of how, two distinct economic modes of production come “vis à vis” in a same space and time. It is an intriguing site where the local communities with their consolidated needs, rights and rituals are forced to confront with new, “global actors” planning their agenda for the construction/use of new spaces of speculation.
URBAN STRATEGY
Urban strategy: counter-gentrification
The Vu knowledge district is made center of the Buitenveldert district

students: +/- 36000
staff: +5000

The campus has a critical mass able to influence the area
Urban strategy
Comparison local conditions/ purposed conditions

The urban strategy seek to mitigate the impact of the new CBD on the local population and their needs by relocating the campus within the core of the district.
Urban strategy
Shifting the dynamics of the district: 3 scales of interaction

The influence of the university involves the different actors in the area.
Could a particular vision(program) and the architecture it is embedded in be the space where such a confrontation could be furtherly stimulated in this district?
Urban strategy: proposal
Gisbrecht van the Amstel park
Urban strategy
Gijsbrecht van the Amstel park

Gijsbrecht Van de Amstel park: from unproductive park to productive garden
Urban strategy proposal
Gijsbrecht van de Amstel park

Gijsbrecht van de Amstel park: a threshold splitting the district in two separate entities.
PROGRAM
Program

The original program stresses the “corporate identity” of the campus

FACULTIES AT VU UNIVERSITY
* Earth and Life Sciences
* Human Movement Sciences
* Economics and Business Administration
* Sciences
* Medicine
* Theology
* Arts
* Centre for Educational Training, Assessment and Research
* Psychology and Education
* Law
* Social Sciences
* Dentistry/ACTA
* Philosophy and Education

PUBLIC FACILITIES + SPORT FACILITIES
• De VU
• De VU-MC
• De VU Hortus Botanicus
• Sportpark van SC Buitenveldert
• De Schoolwerktuinen
• Tennispark Popeye Goldstar
• Scoutinggebouw

OLD program: 848.000m2

NEW program: 848.000m2

The original program is recalculated in order to accommodate the same amount of green areas of today.
The new program preserves the same amount of green areas as today.
The botanical garden of the Vu university, rather than being suppressed as from original program is instead made the core of the project transforming the park into a productive area able to deal with the productive forces of the neoliberal development model.
Program
The university organizes the faculties according to the Botanic Garden

**FACULTY 1: PLANTS AND ECONOMY: Economy, Law, Business Adm.**
- flowers
- bulbs
- cash crops

102,000 m²
- Flower market
- Seedsbank
- Seeds exchange
- Keukenhof “to Go”

**FACULTY 2: PLANTS AND PEOPLE: Social Sc., Psychology, Education**
- Vegetable
- Fruits

65,475 m²
- Vegetable Market
- Readymade-food
- Elderly daycare center
- Restaurant

**FACULTY 3: PLANTS AND MEDICINE: Medicine, Dentistry, Human Mov.**
- herbs
- seeds
- flowers

47,570 m²
- Aphotecarius
- Laboratories
- Spa/baths

**FACULTY 4: PLANTS AND SUSTAINABILITY: Earth+Life Sciences**
- endangered plants
- carnivoral plants
- parasite plants
- Climatic Solarhouse
- Volkstuinen
- Vegetable Market
- Seedsbank

37,650 m²

**FACULTY 5: PLANTS AND ARTS: Arts, Theology, Philosophy**
- flowers
- herbs

30,600 m²
- Exhibition Halls
- Workshops
- Library
- Theatre

**FACULTY 6: PLANTS AND ICT: Exact Sciences**
- detox plants

22,920 m²
- Virtual Herbaria
- Mediatequa
- Mechanical Crane

Six thematics drive the principles for the distribution of the program in the plot area
DESIGN PARAMETERS
“Not a real landscape, but like an exquisite painting”

Anonymous, Garden carpet, 17th century, Iran

Plinio il Giovane (Plinius the Young), describing the garden of villa Tusci (Florence)
Architecture:
Step 1: Mitigation of the physical borders

The calculation of travel times determined the necessity of densifying the road network. This allows an augmented permeability of the urban blocks.
Architecture:
Step 1: new road network proposal

At the centre of the infrastructural network is the socioproductive functions of the program are placed

Proposed networks of roads and paths

- Pedestrian bridges
- Botanic promenade
- Market promenade
- University patio
- Special/Public Function

At the centre of the infrastructural network is the socioproductive functions of the program are placed
Architecture:
Step 3: stimulate social interaction
Step 4: stimulate economic revenue: cultural and educational facilities

The promenade of gardens has the function of distribution and landmark for the orientation within the perimeter.
Architecture:
Step 4: stimulate economic revenue: cultural and educational facilities

The educational facilities and the residential facilities have the function of framing the area.
Architecture:
Step 5: framing the area

Stimulate attractivity

From open park to Hortus conclusus

The frame gives a spatial definition of the area and define a clear sign of rupture to the existing urban fabric.
Architecture
Step 5: framing the area

The context function as device for the determination of the boundary
ARCHITECTURE
Architecture
axonometric explosion of building components

The frame gives a spatial definition of the area and define a clear sign of rupture to the existing urban fabric
Architecture
masterplan in the context
Architecture
Door East/West, productive areas entrances
Architecture
Main door, Campus plaza
MATERIALIZATION
Materialization:
Hardware and software elements in the VU campus

H
container wall

S
Ed. Box option A

H
vierendeel truss

S
Ed. Box option B

S
containers
Materialization:
Hardware and software elements in the VU campus
Materialization:
Hardware: The vierendeel truss, primary space framing structure, climatic solarhouse
Architecture

Area 2 Educational spaces, options A+B
Materialization:
Hardware: the spaceframe filled with living and working activities
Materialization:
Hardware: The vierendeel truss, artic climate solarhouse (tundra)
Materialization:
Hardware: The vierendeel truss, artichoke climate solarhouse (tropical climate)
Materialization:
Hardware and software elements in the VU campus
Architecture
Area2 Educational spaces, options according height

1x 2x 3x
floors

h=5 h=10 h=15
height

different function requires different internal heights
different floor heights are than combined in variable boxes solutions

A: h=5
B: h=10
C: h=10
D: h=15

Section cc

Architecture
Area2 Educational spaces, options according height
Architecture
Area2 Educational spaces, options A+B

A
3 stories: Labs, Office, Departments

B
1 storie: Lecture Halls, Meeting, Industrial hall
**Materialization:**
Hardware and software elements in the VU campus
Materialization:
Container shelves structure, cross section section
Materialization:
Container shelves structure, technical plan
Materialization:
Container shelves structure, plug in system for housing and living units
Materialization:
Hardware; container shelves structure.
Materialization:
Hardware: Container wall/shelves structure

The container shelves are the host the variable number of possible containers connected to the university.
Materialization:
Software: Flexible and self sufficient housing and working units
**Materialization:**
Software: typologies of containers and their use

Option A: goods/books deposit

Option B: startup company (VU related)

Option C: student housing

The containers as modular and flexible model for the production of alternative working and living spaces
Materialization:
Software: option C student housing unit

The containers self-sufficient units plugged to the container shelves structure by electricity and sewage
ECONOMIC IMPLEMENTATION
Urban strategy
Economic model: Exchange of land ownership

Vu University exchange land with municipality

Municipality gives concession of NEW land to VU

VU sells land to Gemeente Amsterdam

PPP MODEL

Zuidas receive financing from Private firms for future development.

UNIVERSITY
SOCIAL FACILITIES
HORTUS BOTANICUS
DISTRICT ASSOCIATIONS

Stimulate attractivity and tourism via oriented activities and special events (EX. “Keunkenhof to go”, Floriade 2012 spin off)

Vu Campus, VU Hotrus Botanicus, Stadsteel Zuid, District associations. A model for a sustainable Public Private Partnership.
Implementation
West Entrance: Flower market and flower gardens
Implementation
Flower market and flower gardens cross section

Stadsteel Zuid
Association of Allotment Gardeners BVV
the land is rented to locals
BVV rent tools/boxes/houses
VU support for seeds/bulbs + Knowledge
Dutch Allotment Organisation AVVN
Locals
Locals
Locals
Implementation
Implementation
Plants and society: Potager (French Kitchen)
Implementation
Economic sustainability, rentable Volkstuinen

Kitchen Gardens: to grow vegetables
rent € 140.00 / year

Allotment Gardens + toolbox: no stay overnight
rent € 275.00 / year

Allotment Gardens with small house (28m², form April to Sept.)
rent € 455.00 / year

Implementation

East entrance: Volkstuinen and greenhouses
Implementation
East entrance: Vegetables market
Conclusions

The project of the Knowledge district stresses the importance of the **market of education** in influencing the dynamics of a community, especially in an economic system based on immaterial commodities such as knowledge and information.

3 main functions:
- **Social function**: interaction between local and global actors,
- **Economic function**: transforming unproductive green areas in a productive garden
- **Cultural (productive) Function**: diffusion of accumulated and codified knowledge

It aims to be the **place where knowledge, and informations are exchanged and shared internalized** by the different social actors involved in its functional program.

The interaction between university, developers, and community, will hopefully nurture the district life, giving birth to hybrid forms of **“productive figures”** (locals + globals).

The project, starting from a social and spatial integration purpose makes of the local and global **Human capital** the point to the creation of **emerging economic meanings**.