2050:
replacement parts

Hana Marisa Mohar
2050
How can future airport-city amenities perform as an interface between global demands and local urbanity?
Chapter 1:

AIRPORT CITY
What is the future of airports?
A new urban form which exists to serve the needs of companies whose business model depends on access to transportation.
The Airport City (1978)

Spruce Creek, Florida (1978)

Spruce Creek, Florida (1978)  Incheon airport, Seoul (2001- )
AIRPORTS AND CAPITAL

40–60% non-aeronautical revenue
AIRPORTS AND CAPITAL

40–60% non-aeronautical revenue

0.5% of the volume of world trade is transported by air
35% of the global trade by value

volume vs. value
what is this city made of?
rise of global amenities?

24/7 global services
Amsterdam
biggest high-cost state of art
Schiphol Corridor
2050
Airports will become like train stations
Chapter 2:

CAMPUS
How urban is campus?
airport city campus
program driven
monofunctional
airport CITY?
hermetic
for profit
FAKE URBANITY!
sincere and contextual!?
too fargmented!
self referential
The campus as a megabuilding
Chapter 3:

MEGA STRUCTURE
What is the future of hospitals?
extreme
specialisation
general hospital
general hospital

specialized hospital

hub hospital
efficient, process based architecture
**katagogion**  
"a hotel for visitors"

**asclepeion**  
healing temple, sacred to the god Asclepius, the Greek god of medicine

**valetudinarium**  
military barracks hospital

**xenodocheion**  
a hostel or hospital, usually specifically for foreigners or pilgrims

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*Ancient Greece*  
katagogion in Epidauros  
The Asclepeion at Pergamon

*Ancient Rome*  
The Asclepeion at Pergamon

*Byzantium*  
The Xenodocheion of Pamphilia, 520 ad
cloister infirmary  
modern hospital

city hospital  
air and sunlight guide the plan disposition

the cross  
big hospitals with smaller wings

panopticum  
new interpretation of patient-oriented architecture

church and hospital in Cues, Germany, 1447
Ospedale Maggiore in Milan, 1456
Hospital de los Reyes in Santiago di Compostela, 1501
Hospital de la Sangre in Seville, 1546
Ospedale Maggiore in Milan, 1456

MIDDLE AGES
15TH CENTURY
18TH CENTURY
cloister infirmary
modern hospital

city hospital
air and sunlight guide the plan disposition

the cross
big hospitals with smaller wings

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church and hospital in Cues, Germany, 1447

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Hospital de los Reyes in Santiago de Compostela, 1501
Hospital de la Sangre in Seville, 1546

Ospedale Maggiore in Milan, 1456

MIDDLE AGES

15TH CENTURY

18TH CENTURY
comb and rack
modern hospital

pavillion
air and sunlight guide the plan disposition

megastructure
big hospitals with smaller wings

campus
new interpretation of patient-oriented architecture

Royal Herbert hospital, 1447
Sanatorium Zonnekrui, 1928
Woodhull hospital NYC, 1968
Erasmus medical centre, 1970

19TH CENTURY
1920S
1970s
2018
**comb and rack**  
modern hospital

**pavillion**  
air and sunlight guide the plan disposition

**megastructure**  
big hospitals with smaller wings

**campus**  
hospitals grow building by building

19TH CENTURY  
Royal Herbert hospital, 1447

1920S  
Sanatorium Zonnestal, 1928

1970s  
Woodhui hospital NYC, 1968

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19TH CENTURY
1920S
1970s
2018
**city hospital**
air and sunlight guide the plan disposition

Ospedale Maggiore in Milan, 1466

**megastructure**
bиг hospitals with smaller wings

Woodhul hospital NYC, 1908
Woodhull hospital, NYC, 1982
grid
| program |
optimum area
closing towards highway
opening to the canal
connecting to the city
Schiphol organ factory 2050

80,000 m²

New Venice hospital 1965

40,000 m²
biomanufacturing and distribution of organs
transplantation surgery
research and conference
organ production and dispatch logistics
organ production and dispatch logistics
surgery and diagnostics

public passage and conference

organ production and dispatch logistics
amenities

surgery and diagnostics

public passage and conference

organ production and dispatch logistics
examination wards

amenities

surgery and diagnostics

public passage and conference

organ production and dispatch logistics
private rooms

examination wards

amenities

surgery and diagnostics

public passage and conference

organ production and dispatch logistics
hospital hallway
production chain
people mover
two worlds
machine
facade
section
Fewer but more complex hospitals
Chapter 4:

ORGAN FACTORY
Future of the human body?
ideology
of constant
technological
innovation
bioproduction process = approx. 7 weeks

1. cell extraction

2. cell growth (3 weeks)

3. skeleton printing (1 week)

4. tissue layering (1 week)

5. incubation (2 weeks)
organ production
patient stay = approx. 4 weeks

1. admission

2. diagnostics and prep (1 week)

3. surgery (1 day)

4. post-op care (2 weeks)

6. recovery (1-2 weeks)
Hello Robin.
You are on your way to
CELL ECTRACTION™

3 min
modularity & adaptability
Sistem of standardized and arbitrary spaces