THE POWER OF ARCHITECTURE

Hennu Kjisik
Architect SAFA, Dr.Tech., professor
Harris-Kjisik Architects and Planners, Helsinki
University of Oulu

Göteborg November 2012
REMEMBER!

- Design costs = 0.1 units
- Capital cost = 1 unit
- Maintenance costs (first 25 y) = 100 units
- Running costs (first 25 y) = 400 units
REMEMBER ALSO…

A hospital complex consists of:

13% industrial space
36% office space
27% hotel space
24% hospital space (hot floor)

Ref.: Bouwcollege, Utrecht
What went wrong?

- Too many norms and regulations
- Short-sighted thinking - "for me, just now!"
- No understanding for lifecycle costs
- Insufficient knowledge of the past
- Too much specialisation and mystification
- Not enough high-quality architecture
Ancient Greece

- ”Healing environment”
- Fresh air, views, daylight
- Fine arts, drama etc. cultural activities
- Activation of patients
- Generic buildings
Renaissance

- Relationship with the surrounding city
- Generality and modularity
- Sustainable architectural quality
Tuberculosis sanatoria

• “Healing environment”
• Experimentation and innovation
• High level of social consciousness and responsibility of the designers
"The Heroic Era"
1960s and 1970s!

- Flexibility, adaptability, agility, modularity
- Technical innovations – interstitial floors, "Plug-in" solutions
- Hospitals in the avant-garde of architectural trends
OPPORTUNITIES AND ASSETS

• The City / Hospital analogy
• Ambulatory solutions
• Future proofing
FUTURE PROOFING
(“Future proof – not future ready”)

- flexibility
- adaptability
- extendability
- modularity
- back to the “heroic years”

- generality
- sustainability
- elasticity
- more generous dimensioning
- “open building”/ the INO-project
THE MODULES

OBSERVATION
(TREATMENT CENTRE)

CONSULTATION / EXAMINATION
(CONSULTATION CENTRE)

DOCTOR'S CONSULTATIONS
(KNOWLEDGE CENTRE)

FRESH AIR AND OPENNESS
(NURSING CENTRE)
EXT. CONTINUOUS COMMUNAL
WINTER-GARDEN

INTENSIVE OBSERVATION
(NURSING CENTRE)
EXTERNAL OBSERVATION &
LOGISTIC CORRIDOR

PRIVACY AND INDEPENDENCE
(NURSING CENTRE)
EXT. PRIVATE BALCONIES
PAPERLESS WIRELESS WALL-LESS BEDLESS!
"Care - Cure - Core"

• Varying requirements
• Only 25% is "hospital", the rest is just any old "building"
• The relationship between generic and specialized space
• Does everything need to be in the same place?
HEALTH CARE 2025-
Building(s) for the future

International architectural competition 2007
Organiser: Bouwcollege (Netherlands Board for Health Care Facilities)

1st prize ex aequo
Motto ”Fair care – Care Fair”
Harris-Kjisik Architects Helsinki and Aalto University SOTERA Institute
the city-island ELYSIADAM

1. RIETVELD
district
27 000

2. BIJVOET
district
27 000

6. VAN DOESBURG
district
27 000

5. OUD
district
27 000

3. VAN EESTEREN
district
27 000

4. DUIJKER
district
27 000

main ASCLEPIEION

BRIDGES /
CONNECTIONS

ADMINISTRATION
+ INTENSIVE
COMMERCE
the region
the city
the buildings – central hospital
the buildings – community care hospital
Tarkastelualue 3 vuodeosasto 1:150

POTILASHUONEET 23-27 m²

HOTAIJEN TYÖTILA

OLESKELUTILA

RUKKAILUTILA

Nykysen vuodeosaston tilat on kunnostettu niin, että kaikki potilashuoneet ovat yhden hengen huoneita.
ORDERLY DESIGN
Different elements of the building well-mixed and clearly defined. Clean and crisp architectural character.

MODERN BUILDING
Clean modern lines, well proportioned and attractive. Not designs for business.

CONSISTENT STYLE
Every detail, designed with the same architectural character.

SIMPLE ADMINISTRATION
All main offices on one floor in 100,000 sq. ft. Planning, engineering, and sales offices in separate, efficient, easily accessible locations.

OPEN LOBBIES
Will use elevators, lobbies instead of corridors.

SOUND PROOFING
Solid building or not airtight due to isolation of their main rooms from foot traffic by means of partitions.

RATIONAL CONSTRUCTION
Continuous gable on roofs, one floor to give possibility of any kind building. Dual performance of structural and running small stores if required.

DUCTS FOR POWER WIRING
Ducts for power wiring in first removable sections. Ducts free of exposed wires and air conditioning, tenancy, and heating and cooling of buildings.

CHEERFUL ATMOSPHERE
Sunlight filled with light through wall of glass bricks. Clean surfaces and bright colors. Purposeful efficiency gives confidence to the patients.

CONCEALED PLUMBING
All pipes hidden in ducts, not obvious. Accessories for maintenance on addition, protected from frost. Face of buildings clean and tidy.
<table>
<thead>
<tr>
<th>RANK 08</th>
<th>RANK 07</th>
<th>PRACTICE</th>
<th>COUNTRY</th>
<th>INCOME (US$ MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>HKS Inc</td>
<td>US</td>
<td>92.0</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>Perkins &amp; Will</td>
<td>US</td>
<td>64.3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>RTKL Associates</td>
<td>US</td>
<td>62.3</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>Perkins Eastman</td>
<td>US</td>
<td>62.0</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>HOK</td>
<td>US</td>
<td>61.4</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>NBBJ</td>
<td>US</td>
<td>60.9</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>Cannon Design</td>
<td>US</td>
<td>59.1</td>
</tr>
<tr>
<td>8</td>
<td>—</td>
<td>Stantec Architecture</td>
<td>Canada</td>
<td>49.4</td>
</tr>
<tr>
<td>9</td>
<td>17</td>
<td>Nikken Sekkei</td>
<td>Japan</td>
<td>43.9</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
<td>Zimmer Gunsul Frasca Architects</td>
<td>US</td>
<td>38.0</td>
</tr>
</tbody>
</table>
"The rules of hospital design left less freedom, and it became regarded as a building type that was worthy and dull, more or less lost to architecture”

Peter Blundell-Jones, 2002

"Aalto, Corbusier and Lubetkin placed health care firmly at the heart of the Modernist agenda. If they were practising in Britain today would they simply walk away?"

Isabel Allen, 2003
GOOD IDEA FOR COST EFFECTIVENESS, FAIR PROCUREMENT AND HIGH QUALITY:

ORGANIZE ARCHITECTURAL COMPETITIONS, PREFERABLY OPEN AND INTERNATIONAL
WHAT IS A GOOD DESIGN COMPETITION LIKE?

• It is completely open to all-comers
• No pre-registration is required
• The submission does not include anything to do with money (building costs, fees etc.)
• The prize money is sufficient to attract the best
• The programme is logical, the required documents are clearly defined
• The process is COMPLETELY anonymous
• The Jury has a sufficient number of architect members (including some well-known ones) but also representatives of all user groups, major civil servants and local politicians
"There is a myth that healthcare architecture is so highly specialised that only the initiated can enter. You may not need experience but you do need staying power”

Richard Burton, 2004

"Universal design issues – circulation, legibility, space, light – all are still of paramount importance. Technological and environmental requirements are simply components in the age-old architectural discipline of marrying function to form”

Isabel Allen, 2003
CARE AND CURE 2025

THE BED IS NO LONGER THE MAIN FOCUS!

Optimal physical accessibility and optimal ergonomics are taken for granted

• Solving social and cultural accessibility is in the forefront
• Environmentally sustainable development is taken for granted
• Socially, culturally and economically sustainable issues are in the forefront
IN 2025 IT HAS ALSO AT LAST BEEN UNDERSTOOD THAT...

• ...more attention should be given to architectural quality
• ...hospitals should be located in city centres and not beyond ring roads out in the bush
• ...best way to save in running costs is NOT to save in investment costs and particularly NOT in design costs
THANK YOU

AND LET ALL OUR ENVIRONMENTS BE HEALING FROM NOW ON!