HEALTH PROMOTING HOUSING AND URBAN PLANNING

Prof. Eli Støa, Dept. of Architectural Design and Management



Source: Frandsen et al (2009): *Helende Arkitektur.* Aalborg Universitet



HEALTH PROMOTING HOUSING AND URBAN PLANNING

- State-of-art: Relations between housing / urban planning and health
- Ongoing research at NTNU/AB
- Relevant future issues

Source: Frandsen et al (2009): *Helende Arkitektur.* Aalborg Universitet





RELATIONS BETWEEN HOUSING / URBAN PLANNING AND HEALTH

Risks

- Low material standard (moisture, overcrowdedness, worn-down structure etc)
- Poor socio-economic environment (low income communities)
- Air pollution, noise, lack of green areas
- Low physical activity level

Promotive issues

- Daylight, fresh air, privacy
- Active everyday life (complexity, variation and challenges)
- Social arenas
- Access to nature, green areas and services

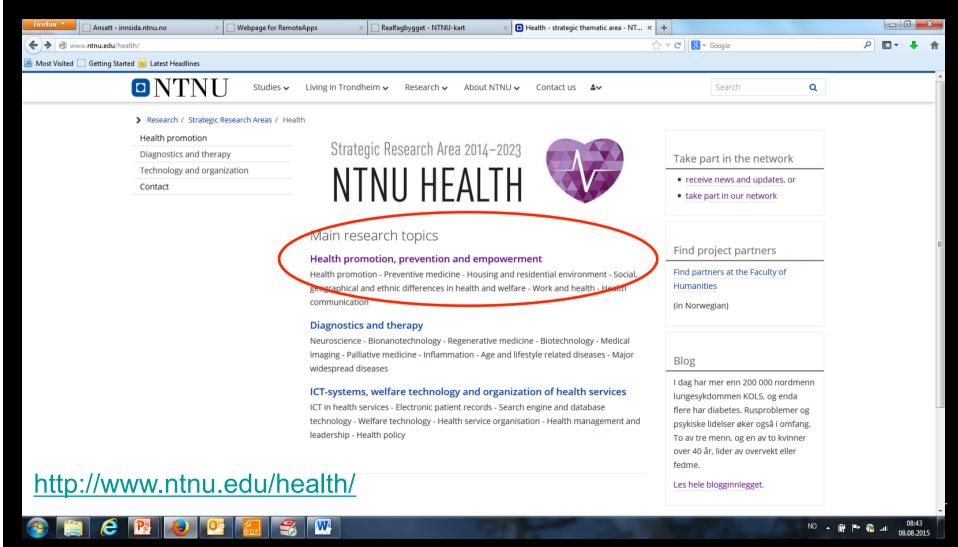


Strategic Research Area 2014–2023

NTNU HEALTH



HEALTH – ONE OF 4 STRATEGIC AREAS AT NTNU





HEALTH PROMOTION, DISEASE PREVENTION, ENPOWERMENT

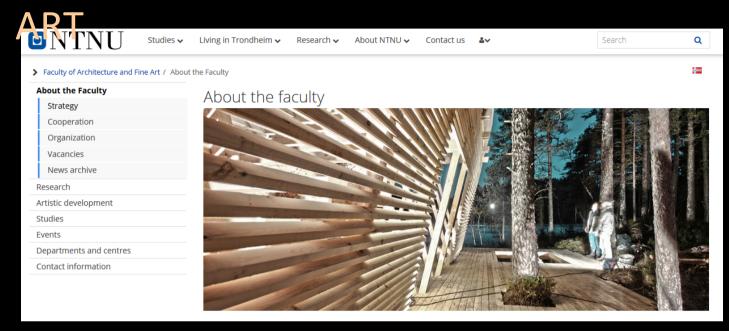
Relevant knowledge areas:

- Housing and neighbourhoods
- Social, geographic and ethnical inequalities in health and welfare
- Access to nature and social spaces

«We need to understand how various technological and physical structures may support public health»



NTNU/AB: FACULTY OF ARCHITECTURE AND FINE



https://www.ntnu.edu/ ab/faculty

Strategic focus areas

- Cities of the future
- Sustainable architecture
- •Architecture and health
- Art and culture as a pillar of society
- Innovative learning



ARCHITECTURE AND HEALTH: ONGOING RESEARCH

Preventive, promoting and healing built environment

Research topics

- Housing qualities for vulnerable groups
- Architectural qualities in Healthcare buildings
- Active Design in public buildings and urban settings
- Inclusive architecture / universal design
- Environmental aesthetics / light and colors
- Sustainable urban development / transport
- Climate changes and health



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Housing qualities for vulnerable groups – effects on well-being and mental health

Focus on homeless people – asylum seekers

Architectural design

 Dignity, identity, empowerment, attachment, safety, privacy, social life, meaningful activities

Urban planning / localisation:

 Safety, social activities, stimulating environment, respect, inclusion / integration



Veiskillet – housing for previous drugabusers and criminals, Moholt, Trondheim. Architect: Bård Helland (2005)

Meaning of architectural quality



Hauge and Støa (2009): "Here you get a little extra push": The meaning of architectural quality in housing for the formerly homeless – a case study of Veiskillet in Trondheim, Norway. Nordic Journal of Architectural Research

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Morgenbladet 26.7.2013

What Buildings do: The Effect of the Physical Environment on Quality of Life of Asylum Seekers

Interdisciplinary research project funded by the Norwegian Research Council and UDI for the period 2012-2016

Research questions:

- How do housing quality, localization, and outdoor environments influence asylum seekers' well-being, mental health, conflict level and the relationship to the local community?
- How may localization and physical planning influence the local community where the asylum centres are established



Sunndalen, Nustadbo, Ringsaker (2013)

Poor housing conditions for asylum seekers

Negative consequences for the residents' everyday lives and for important aspects of well-being and mental health

Privacy, identity / loss of social status, loss of control, social interaction and in some cases also safety

'Otherising' of asylum seekers is framed through the way they are housed

Overcrowding - Technical and aesthetical decay - Location

Decentralised asylum centres may support processes of integration and normalization, but:

If houses stand out due to technical /aesthetic standard and overcrowdedness, the differences between housing for 'them' and 'us' may become even more evident

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Poor housing conditions are read by the residents as signs showing their inferior status in society:

«...you only want to feel worthy, you know... to be someone in society» (male 29)

«Why don't you want us?» (male, 22)

HEALTH PROMOTING HOSPITAL ARCHITECTURE:

The St Olav's Hospital as best practice case study



Ongoing post doc project: Johan van der Zwart

St.Olav's hospital: Patient centered care as a guiding principle (Aslaksen, 2003):

- •Center Model, which structures the hospital into several smaller clinical centers
- •Organised as a 'medical Neighborhood' in a structure of city blocks, as a part of the city's public realm
- •Use of only single patient rooms throughout the hospital, organized in 'sengetun' (bed-courtyards) to minimize walking distances and the number of movements for the nursing staff

Photos: Røe Kommunikasjon - Stein Risstad Larssen.

Source:

http://www.inclusivedesign.no/case-studies/ architecture-st-olavs-hospitalarticle175-123.html#sthash.uLTnRI7s.dpuf



HEALTH PROMOTING HOSPITAL ARCHITECTURE:

The St Olav's Hospital as best practice case study





Three potential perspectives:

(NB: preliminary outline)

- **1.Hospital as social construct:** How do patients and employees experience, perceive and appreciate the hospital's communal and public areas
- **2.Hospital as infrastructure:** How efficient is the architectural layout of the building in relation to the clinical processes?
- **3.Hospital as built environment:** How are experience and expertise translated to the decision making on size and location of patient rooms?

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Photos: Røe Kommunikasjon - Stein Risstad Larssen.

Source:

http://www.inclusivedesign.no/case-studies/ architecture-st-olavs-hospitalarticle175-123.html#sthash.uLTnRI7s.dpuf





ACTIVE DESIGN

Ongoing activities

•GNIST activity center. Build up reference project data base through 20 studentprojects. Develop network

Planned activities

- •«Guidelines sportfacilities» run by Siat in cooperation with Bjørke Arkitektur
- •POE of Trond Club house with emphasis on informal activities and as social arena
- •Pilot project in cooperation with designers sociologists, NIF and Siat

Cooperation

- ·Siat, Center for Sports facilities and technology
- Norwegian Sports Federation (NIF)
- •Bjørke Arkitektur AS
- Nice Industridesign AS

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Club house for the sportsclub Trond

v/ Bjørke Arkitektur AS and the sportsclub Trond.

SOURCE: STEFFEN WELLINGER

POTENTIAL FUTURE RESEARCH

Health promoting residential environment for an ageing

population: Creating neighbourhoods and outdoor areas offering and supporting varied and challenging physical, social and mental everyday activities. Proposal for NTNU/HEVET

Health promoting nursing homes for people with dementia:

Interdisciplinary research proposal under development with one work package focusing on architecture. Potential research questions (NB: preliminary):

- •In what ways does the physical environment support the social organization and management of a nursing home?
- •How can the physical environment be used to support 'Person centered' care?
- •How can architecture reduce feelings of insecurity, anxiety and support the sense of being at home?
- •How can user knowledge be translated into specific/local design solutions?

Dementia Village 'De Hogeweyk' in Weesp, Netherlands

Architects: Molenaar&Bol&VanDillen

architekten, Vught

Photo: Madeleine Sars, Eindhoven

Source:

http://www.detail-online.com/architecture/topics/dementia-village-de-hogeweyk-in-weesp-019624.html

