Compact living or space for ageing comfortably?

Contemporary architectural thinking for the Nordic frail ageing process.

Jonas E Andersson

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Gothenburg 25-28 May 2014 • 22nd Nordic Congress of Gerontology 22NKG • Workshop S8: From institutional care to special housing – a change of labels or distinctly different?

housing for older people: ordinary housing (HCS) and special housing (RCH)

<table>
<thead>
<tr>
<th>Population</th>
<th>Denmark 5 560 628</th>
<th>Finland in 2011 5 375 276</th>
<th>Iceland in 2011 318 452</th>
<th>Norway in 2011 4 920 305</th>
<th>Sweden in 2011 9 415 570</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age group 65 years and older</td>
<td>934 186</td>
<td>16,8%</td>
<td>940 673</td>
<td>17,5%</td>
<td>39 170</td>
</tr>
<tr>
<td>Age group 65–79 years old</td>
<td>706 200</td>
<td>12,7%</td>
<td>682 660</td>
<td>12,7%</td>
<td>28 342</td>
</tr>
<tr>
<td>Age group 80 years and older</td>
<td>227 986</td>
<td>4,1%</td>
<td>258 013</td>
<td>4,8%</td>
<td>10 827</td>
</tr>
</tbody>
</table>

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From institutional care to special housing – a change of labels or distinctly different?

architectural angle on ageing and buildings

exterior appearance versus inner experience of space

modern role of architects – experts on the fit between human needs and spatial requirements.

Source: Andersson, JE, 2011: Architecture and Ageing, on the interaction between frail older people and the built environment. Sch Architecture, KTH.
Sweden, architectural competitions and social reforms 1870-2012

1918 - Poor Law

1948 - age pensions
Old people’s homes

1956 - home care services

1982 - 1st version of Social Services Act

1992 - the ÅDEL reform and increased municipal responsibility

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Spatial prototypes for ageing:

Ordinary housing
- Pensioners’ dwellings
- Housing with services

Special housing
- Old people’s homes
- New old people’s homes
- Nursing homes
- Residential care homes

Source: Andersson, JE, 2011: Architecture and Ageing, on the interaction between frail older people and the built environment. Sch Architecture, KTH.

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in contrast to other types of buildings – no antique model housing for older people is a result of the development of the modern welfare society in the Nordic countries, the increased level of personalized space can be paralleled with increased level of decommodification according to the welfare triology theory


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new building materials

new building techniques (heating, sanitation, toiletry, ventilation)

healthy buildings part of improved public health and medicine

part of the professionalization process of the architecture profession

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Denmark, architectural competitions and social reforms, 1870-2012

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2 main prototypes: one with institutional and rational characteristics and one with homelike and residence-like characteristics

Ordinary housing
Ældreboliger, alderdomshjem

Special housing
Alderdomshjem
Pensionistboliger
Plejehjem
Leve-bo miljoer


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ett värdigt boende
ett tillgängligt hem

a personalized home environment

en værdig bolig
en tilgængelig hjem

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HEM hem⁴, sbst. n., o. adv.; ss. sbst. best. hemmet; pl.

[fsv. he(e)m, n., boningsort, bostad, värld, hember, m., värld, he(e)m, hempen, hiem, adv., till bostaden, motsv. fd. hem, sbst. o. adv., d. hjem, sbst. n. o. adv., isl.heimr, sbst. m., heim, adv., nor. heim, sbst. m. o. adv., got. haims, f., by, fsax. hēm, n., fht. heim, sbst. m. o. n., hus, hemort, heim, adv., t. heim, sbst. n. o. adv., feng. häm, sbst. m. o. adv., eng. home, sbst. o. adv.; av ovisst urspr.; jfr fpreuss. caymis, by, lett. zims, by, lit. kaimas, by (jfr KAJMAN), kémas, by, bondgård (möjl. lånade från germ. spr.);

I) sbst. 1) (†) bebyggd jordeggdom l. tomt; fastighet; gård; hemman.
2) om (förhyrd l. med äganderätt bebodd) gård l. bostadslägenhet ss. stadigvarande boningsort
   a) (i sht i högre stil) i vissa allittererande förbindelser; särsk. (i äldre ex. svårt att skilja från 1 slutet) i sammanställning med hus; äv. i sammanställning med härd;
   b) med tanke företrädesvis på inredning, möbler o. d.; äv. övergående i bet.: bohag
   c) med särskild tanke på hushållsgöromål
   d) motsatt: offentlig lokal l. institution, ss. fabrik, skola, kyrka o. d.
   e) i utvidgad l. bildl. anv. [HEM.sbst.adv l.6.e.α]

α) om bostad där ngn tillfälligtvis slagit sig ned (...)benämning på olika anstalter l. inrättningar avsedda att omhändertaga personer vilka icke kunna försörja sig l. som sakna hem l. av olika anledningar icke kunna vistas i sitt hem; äv. om vissa pensionat o. d. (särsk. för personer som behöva vila l. läkarvård);

3) [jfr motsv. anv. i eng.] (foga br.) spelt. i brädspelet ställe (fält) varifrån man börjar spelet. Talongen (i triktrak) kallas äfven hus (hem) och bör .. utgöras av den ene spelarens venstra, den andres högra hörnpil.

4) (i sht i högre stil) fast boningsort; hemort, hembygd, hemland.

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Genius loci, place, space


Install the emotional experience of home, but two types of home appear:

1. The personalized home

2. The rational home concept (institution)

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A theoretical model, called the habitation model for describing different habitats in architectural space comprising five interrelated types of habitats:

1. the appropriate habitat (centre),
2. the individual habitat,
3. the institutional habitat,
4. the assisted habitat.

Collectively, these habitats suggest the constituents of the appropriate housing for the ageing society.


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Architectural competitions Denmark, Norway, Sweden

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Danmark: nationellt forskningsprojekt *Trivsel og boligform*, 2004-2008

Kilde: Møller, K.; Knudstrup, AM.; 2008: Trivsel & plejeboligens udformning. Syddansk Universitetsforlaq

Modelprogram for plejeboliger
www.erhvervsstyrelsen.dk/file/87759/modelprogram_for_plejeboliger.pdf

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Norway: new recommendations for the realization of new housing for older people

www.husbanken.no

A holistic approach that includes the decision and planning process

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Sverige: national investment in housing for the ageing population ’Bo bra på äldre dar’ 2010-2012

Supervised by the Swedish Institute for Assistive Technology, SIAT, and channeled into approximatively 70 different projects on aspects concerning housing for older people.

3 architectural competitions in 3 Swedish municipalities.

Gävle kommun:
Refurbishment/ extension of existing pensioners’ dwellings along modern demands on accessibility and usability.

Burlöv kommun:
Development of a new residential area around an existing 18th century manor estate.

Linköpings kommun:
Infill project of a new residential care home adjacent to an existing suburban area from the 1950-60s.


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Finland: Quality recommendations that vouch for a safe and secure ageing with improved eldercare services

Ministry for Social Affairs/ Social- och Hälsövårdsministeriets 2013:15

Recommendations for housing within the ordinary stock of flats:

- Promote the independent living by foreseeing older people’s need and open for adjusting housing along the current guidelines concerning accessibility and usability

Recommendations for special housing with eldercare

- Residents’ room, corridors and communal space along with exterior space shall be accessible and safe
- Each new resident in a residential care home shall individual rooms equipped with a bathroom, exceptions can be made if the resident wishes to share a room with another person,
- Increase the possibility for older couples to continue to live together and develop alternative types of housing for this alternative since the number of older couples will increase
- Spatial requirements coordinated with the residents’ quality of life and flexible usages by the care staff
- Increased possibility to access the outdoor environment

Gullkronan, architectural competition, Folkhälsan and City of Helsinki 2013. Winning proposal CoolKrona by Huttunen-Lipasti-Pakkanen architects Oy: 7-8 storey building for people above 55 years. Average flat size 75 kvm, number of flats ca 70, and commercial space, and protected outdoor environment.

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1. A dignified housing concept for ordinary housing:

Denmark, Finland, Norway and Sweden:
- Exploration of the homelike aspects and requirement of a personalized home

2. A dignified housing concept for special housing for frail older people:

Denmark and Norway:
- Exploration of the homelike aspects and requirement of a personalized home

Finland, Norway and Sweden:
Exploring homelike aspects in an institutional setting


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Denmark: Kredsens Hus, fremtidens aeldreboliger på Frederiksberg, Frederiksbergs Kommune.

Norway: Omsorgsbustader i Åmot, Vinje Kommune.

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Finland: Arkitektävling om nya lösningar för äldreboenden, Uleåborg Kommun m fl.

Sweden: Framtidens äldreboende, Micasa Fastigheter i Stockholm AB, Stockholms Stad.
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A personalized home environment is an accessible and usable environment.
From institutional care to special housing – a change of labels or distinctly different?

**DANISH:** Bygningsreglemente BR10, SBI anvisning 230, frekvens "tilgængelighed og anvendelse"

<table>
<thead>
<tr>
<th>Danish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anvendelse: 95 ggr</td>
<td>Usability: 95 hits</td>
</tr>
<tr>
<td>Tilgængelighed: 7 ggr</td>
<td>Accessibility: 7 hits</td>
</tr>
<tr>
<td>Tilgængelighed og anvendelse: 1 ggr</td>
<td>Accessibility and use: 1 hit</td>
</tr>
</tbody>
</table>

**SWEDISH:** Boverkets Byggregler, BBR, frekvens "tillgänglighet och användbarhet"

<table>
<thead>
<tr>
<th>Swedish version</th>
<th>English version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Användbarhet: 32 ggr</td>
<td>Usability: 35 hits</td>
</tr>
<tr>
<td>Tillgänglighet: 86 ggr</td>
<td>Accessibility: 39 hits</td>
</tr>
<tr>
<td>Tillgänglighet och användbarhet: 13 ggr</td>
<td>Accessibility and usability: 27 hits</td>
</tr>
</tbody>
</table>

Begreppen införda i svensk bygglagstiftning 1966

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**Accessibility** - buildings or parts of buildings means that people, regardless of disability, age or gender, are able to gain access to buildings or part of buildings, into them, within them and exit from them. NOTE:

**Accessibility** includes ease of independent approach, entry, evacuation and/or use of a building and its services and facilities, by all of the building's potential users - with an assurance of individual health, safety and welfare during the course of those activities.

**Usability** - characteristic of the built environment which can be used by everybody in convenience and safety.


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Whenever using the concept of accessibility, statements must be based upon valid and reliable information gathered in three steps:

1. The **personal component** (description of functional capacity in the individual or group at target, based on knowledge on human functioning).
2. The **environmental component** (description of barriers in the environment at target, in relation to the norms and standards available).
3. An analysis juxtaposing the personal component and the environmental component: **description of accessibility problems**.

Whenever using the concept of usability, statements must be based upon valid and reliable information gathered in four steps:

1. The **personal component** (description of functional capacity in the individual or group at target, based on knowledge on human functioning).
2. The **environmental component** (description of barriers in the environment at target, in relation to the norms and standards available, but also based on user evaluation).
3. The **activity component** (description of activities to be performed by the individual or group at target, in the given environment).
4. An analysis integrating the personal, environmental, and activity components (description of usability problem: **description of the extent to which human needs, based on individual or group preferences, can be fulfilled in terms of activity performance in the environment at target**).

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sensory aspects in architecture

Barrier-free concepts (1960s)
Inclusive Design (1960s)
Universal Design (1980s)
Design for all (1990s)
Universal design – universiell utformning
Konventionen om rättigheter för personer med funktionsnedsättning, 2006

Vitruvius’ architecture concepts

Firmistas – construction and techniques
Utilistas – usefulness or the meaning of the fit between the user and the architectural space
Venustas – aesthetical appearance
Thak for listening...

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