Solving housing shortages by transforming buildings into comfortable homes

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How to find out what students, starters, and other new households of transformed buildings need to create a home environment with a comfortable climate without losing meanings attributed to the home?

**Users:**
- Students
- Starters
- Refugees
- Other new households

**Building guidelines**
- Safety
- Comfort
- Quality

**Indoor climate**
- Health
- Control

**Meanings**
- Social
- Experiences
- Activities
- Continuity
- Happiness
- Appropriation
- Security
- Identity

**Literature review**
Vacant buildings are transformed to provide quick housing, but it is not sure whether this provides a comfortable home, both from an indoor climate and a meaning making perspective.

**Identified important factors:**
- Daylight entry
- Sound insulation
- Thermal insulation
- Quality of materials used

**Differences between buildings (B + C)**
1. Buildings transformed for longer periods have a higher quality level
   - Daylight entry
   - Sound insulation
   - Thermal insulation
   - Quality of materials used

2. Buildings in better locations and better shape are for the buying market
   - Central or more valuable area
   - Depth and height of building

3. Temporary/rental ->
   - No incentive to adjust or invest

Current regulations and standards appear inadequate to function for temporary transformation projects. Especially the user-perceptive suffers, as can be seen from the factors that are present in the lower segments of transformed buildings.

**Future directions**
It is currently not known what users need from a building to function as a **comfortable home**.

**Users** would be more satisfied, **owners** would have more knowledge beforehand on what to do with their building to have it used, and **designers** would be better able to design the fixed elements to fit the temporary elements adjusted to the user’s wants and needs.

It is necessary to develop a way of **measuring meanings attributed to the home** including the **relationship with the indoor climate** for different types of buildings used for living.

**Method**
- **A) Literature review** in comfort, architecture, psychology discipline
- **B) Review of governmental reports** of transformed buildings in the Netherlands:
  1. Original function of the building
  2. Changes made for comfort
  3. Arguments to decide on the users
- **C) Case studies** based on the target group and location:
  1. How the different stakeholders were brought together
  2. How the users were chosen
  3. Any situation specific factors
  4. The expected and real outcome of the completed process

**Case studies**
- Factory • students
  - Nurse flat • students
  - Nurse pavilions • international students
  - Care-home • seasonal workers
  - Assisted living
  - Faculty building • students
  - Assisted living • refugees (20/1)
  - Bank office • medical students
  - Office • buyers
  - Investors
  - Container studio • students
  - Refugees (1/1)

**Conclusions**

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