

Cities, Communities and Homes: Is the Urban Future Livable?

- **Paper / Proposal Title:**

The transformation of the tenement apartment blocks of the Dutch cities

Sustainability, renovation with user preferences, and gentrification of three to five storey tenement apartment blocks of the interbellum and the post war period in Amsterdam, Rotterdam, Den Haag and Utrecht.

- **Format:**

- Written paper
- Conference presentation

- **Author(s) Name:**

Dr.ir. Leo Oorschot

Team: Beyond the Current Research Group: Dr.ir. Thaleia Konstantinou, ir. Sabira El Messlaki, dr.ir. Tim de Jonge, dr.ir. Leo Oorschot

Backing group Beyond the Current: Prof. Vincent Gruis (supervisor), Prof. Thijs Asselbergs, Prof. Wessel de Jonge, dr. Clarine van Oel,, ir. Tjaling Homans, ir. Lidwine Spoormans

- **University or Company Affiliation:**

Beyond the Current Research Group

- Delft University of Technology
- Faculty: Architecture and Built Environment
Department: Architectural Engineering and Technology
Section: Heritage & Architecture
&
Department: Management in the Built Environment
Section: Housing Management

- **Abstract (300 words):**

Beyond the Current is a Delft University of Technology based research group that deals with the transformation of tenement apartment blocks of housing associations in the Dutch city regions from the interbellum and post war period.

Increasing the energy efficiency of the housing stock is one of the largest challenges in the built environment today. Particular the housing stock with the lowest rent (0 – €592,22) and tenants with a low income. It is estimated in 2016 that there are about 480.000 apartments in these tenement housings blocks.

Parameters of this transformation are: CO₂ reduction, gentrification of the neighborhood, transformation with respect of architectural characteristics, providing affordable houses, and user preferences of the apartments.

In the Netherlands tenants have a strong position. More than 70% of the tenants must agree with the transformation. Furthermore there are other mayor problems to solve. these challenges are:

Firstly, the transformation must be done with the tenants in the apartment. Otherwise the transformation will be too expensive. Tenants have rights on all kind of compensations costs. Because tenants are in the apartments the construction possibilities inside the apartments is limited.

Secondly, the transformation can only be done with a production flow of three to four dwellings above each other. That's is because of the vertical technical infrastructure in the apartment block.

Third, the transformation is always limited to the income and maximum rent category of tenants. If the transformation is too expensive the dwellings going to an another category, and are not affordable anymore.

Fourth, many heating and ventilation installation techniques are developed for new houses. The existing housing stock is not really taking into account designers of smart installations.

This article describes the transformation strategies of tenement apartment blocks in Amsterdam, Utrecht and Den Haag developed by the beyond the Current Research Group.

- **Author(s) Biography (200 words each):**

Leo Oorschot is an architect, urbanist and researcher from The Hague, The Netherlands. He studied architecture and urbanism at Delft University of Technology, Architecture and Built Environment. His Ph.D. *Conflicts about the City Images of The Hague - from*

Willemspark to Spuiforum 1860-2010 (www.amazon.com) deals about the growth and transformations of the modern city The Hague, and the conflicts between stakeholders about the image of the city. Currently he works at atelier PRO architecten and Delft University of Technology, Architecture and Built Environment, Heritage and Architecture.