New scripts for old buildings

Tineke van der Schoor  (c.van.der.schoor@pl.hanze.nl)
1. Theoretical framework
   - STS and buildings
   - Obduracy
   - Scripts

2. Case studies
   - Project Energy Efficient Restoration
   - Method
   - Analysis of cases: four examples

3. Discussion
   - Obduracy strengthening strategies
   - Future research
• Cities as ‘socio-technical artefacts’
• Design by society:
  – Norms, values, assumptions are reproduced in products of design
• Design thinking as ‘politics of hope’
The stability (or obduracy) of buildings, in the sense that they are continually surviving threats from natural or man-made origin; as well as their architectural-historical form, including traces of earlier use(r)s, are a function of the interaction of heterogeneous elements, such as building codes, new functions, economic pressures, cultural values, the weather, heritage philosophies, and traditions; these elements are related and mutually influence each other in the form of a network.

(paraphrase of Michel Callon, 1980)
‘Champions of obduracy’

- Networks of heterogeneous actors
- Building as ‘actant’
- Historical buildings as champions of obduracy
- Positive sides of obduracy
- A symmetrical view of lock-in or obduracy
- Scripts materialized in layout of building
Script Analysis & restoration

What do scripts do?

- Choreograph action
- Reproduce class- and gender roles
- Produce relation user - designer
- Produce relation user – heritage agency/ energy company

Script analysis

- How re-design overlays earlier scripts
- What is the obduracy of original scripts
- Building history described as a series of scripts
- User-resistance: how to do things differently

‘script analyses is to put on paper the text of what the various actors in the settings are doing to one another. The de-description, usually by the analyst, is the opposite movement of the in-scription by the engineer, inventor, manufacturer, or designer.’
Energy Scripts

- Distribution of heat, light and power in a building
- Co-choreographs functional use
- Invites or discourages energy use
Energy Efficient Restauration

- Hanze University of Applied Sciences Groningen
- PhD at Utrecht University
- SIA RAAK-MKB funded project

- “Energy efficient restoration”
- 4 themes:
  - Case studies
  - Energy Characteristics
  - Innovative Energy Concepts
  - Sustainable project development

- Participation:
  - 40 participating enterprises, owners and governmental organisations
  - 50 participating students
  - 25 case study projects
Elements of case studies

- Inspection of the building
- Archival research
- Investigation of ‘building history’
- Procedures: Licensing & listing
- Interview Restoration-Architect
- Interview User
- Interview Energy advisor
- Interview Heritage board
- Energy use data
- Technical data
- Case study report
- Cross-case analysis
Conserving identity and energy

Identity
- Historical values
- Local identity
- Works of art

Energy
- Energy efficiency
- New functionality
- User comfort
Case Studies

- Public Library, Franeker
- Prison, Veenhuizen
- Military Barracks, Nieuweschans
- Villa, Driebergen
- High School, Groningen
- Social housing, Maastricht
- Hospital, Utrecht
- Station building, Kolham
- Castle, Ermelo
- Auditorium, Groningen
- Church, Pieterburen
- Farm, Kloosterburen

Variety in building types
Variety in (new) functions
Variety of localities in the Netherlands
Military Barracks

Nieuweschans

- Original script:
  - military and prisoners
  - 2 houses, office, prison cell, garage

- New script:
  - artists
  - Gallery, B&B, artist’s studio, living quarters

- Design strategies used:
  - Recompartamentalization
  - Radical upgrade of less valuable parts
Horse stables

Eerde

• Original script
  – Domestic servant, horses
  – House, stables

• New script
  – Elderly lady, officeworkers
  – Living quarters, office

• Design strategies used:
  – Radical upgrade
Public Library

Franeker

- Original script:
  - Catholic youth
- New script:
  - Public library
  - Offices, shops
- Design strategies used:
  - Careful inscription
  - Radical upgrade
Villa Diederichs
Driebergen

• Original script:
  – Villa

• New script:
  – Energy neutral villa

• Design Strategies used:
  – Radical upgrade
  – Preserve compartments
Obduracy strengthening strategies

Design strategies
- Smart use of original layout
- Radical upgrade of less valuable parts
- Inscription of energy efficiency in new design

Continuity with the past
- Stress historical values
- Original design
- Embeddedness in wider environment

Negotiation strategies
- Maintain good relations with heritage board
- Bring in energy experts in early stage

Network expansion
- Involving the public
- Sponsors and subsidies

OVERVIEW OF STRATEGIES
Outlook

• Further development of concept of energy scripts
• Symmetrical perspective on obduracy
• Understanding strategies for change and conservation of buildings

Views and experiences welcome!
Questions?

Tineke van der Schoor (c.van.der.schoor@pl.hanze.nl)