

Design of the Urban Fabric Research Group

Birgit Hausleitner, Arie Romein & Egbert Stolk
2 September 2015 9:15-10:30 - IO Bernd Schierbeek

Urban Fabrics

Urban fabrics relates to the **physical urban environment** (elements, materials, form, scales, density, networks), and to its psychological, socio-cultural, ecological, managerial and economical structures.

The Urban Fabric Research Group studies the relations between these tangible and intangible structures in different contexts, grounded in **the Dutch tradition of urbanism**. Its aim is to foster a sustainable and vital urban environment.

Dutch tradition of Urbanism

- Designing across scales (from street to region)
- Integrating urban design and urban planning (stedebouw)
- Explorative in nature (expressed in drawings and design methods)

Who are we?

- Urbanists (urban designers & planners/*stedebouwkundigen*)
- Working from different perspectives on the urban fabric.



Design perspective

We understand urban fabrics from a *design perspective*, that is, as the result of a sequence of design decisions taken by latent/professional designers at various scales.

In order to understand these processes we study urbanism practices and projects, urban territories and how individuals/groups design in a complex setting.

In order to understand the urban fabric itself, we investigate the dynamics that gave rise to existing urban fabrics on two levels.

- First, by studying (the sequence of) actual interventions and their implications for human activities.
- Second, by studying the dynamics of design processes before actual realisation.

Design perspective

The knowledge gained from studying the processes and the structures that manifest urban fabrics, allows us to anticipate or stimulate changes by (evidence informed) design.

In general, we study and promote two design strategies: the application of design patterns and the use of scenarios.

- By using design patterns extracted regularities in the urban fabric can be made operational for design purposes.
- By using scenarios possible and desirable futures can be explored, supporting the design of adaptive and prospective environments.

Investigations of UF

The main research questions of the Urban Fabrics Research Group are:

- How can (re)designing the urban fabric contribute to improving the sustainability and vitality of the urban environment for our and future generations?
- How do the physical environment and the intangible structures interact?
- What are the dynamics of the urban fabrics and how does this relate to different design strategies?
- How can patterns and scenarios support and structure design processes in a multi actor setting?
- How can new knowledge responding to the above questions help us generate new or improve existing design tools, improving urban design & planning practice and education?

This is the context of the research group as a whole!

Graduating with us

Graduation projects can have a variety of starting points, like a specific location or theme, a theory, a design goal and/or the qualities you want to achieve. From this starting point we ask you to take into account the following elements:

- The scale and location of the project, at least taking into account the eye-level perspective.
- The approach for the project, for example: an environmental psychology approach, an urban sociological approach, a typo-morphological approach, or a spatial-economical approach;
- The role of design activities in your project: as a method of inquiry, as a way to generate hypotheses and/or as a way to reach goals;
- The role of target groups, other disciplines, and governance in order to gain an understanding of designing in a multi-actor setting;
- The methods and tools that are used for designing and analysing the urban fabric in relation to the above activities.

This is what we expect you to contribute to the research group as a whole!

Some examples

Common properties:

- Clear methodology
- Using urban morphology as a base
- Focus on environmental and/or socially relevant issues

Iren Koomen

Street Smart: A Social Learning Perspective on the Restructuring of Oud-Charlois



Martijn Lugten

Re-sil(i)ence – design patterns for an aircraft noise abating spatial environment



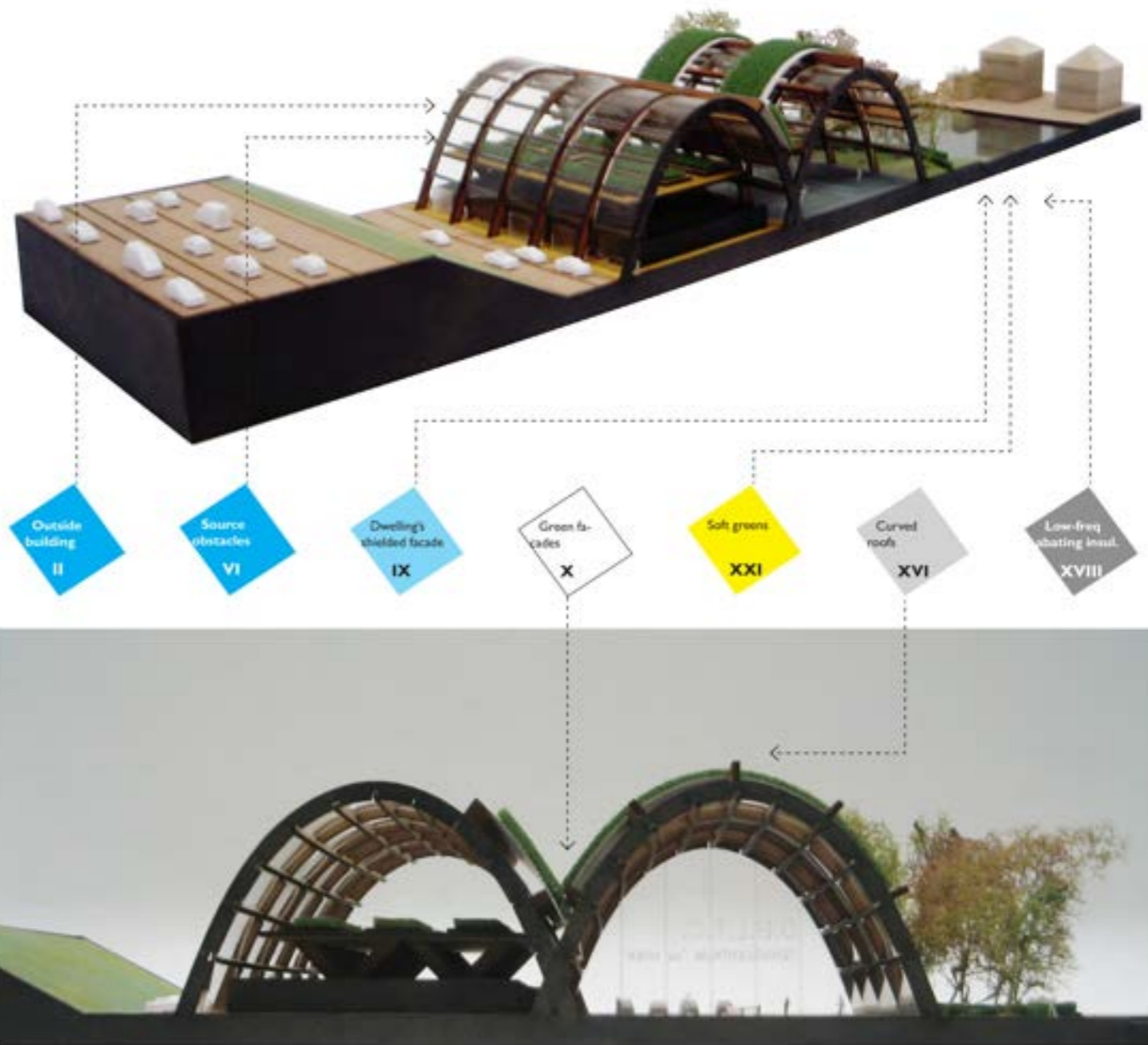
SST noise

- Regions with incidental sound pressure levels surpassing 65 dB by stationary and taxiing aircraft. The pattern is well applicable here.
- Regions with incidental sound pressure levels surpassing 65 dB with peak intensity between 20 and 40 Hz due to starting aircraft. The pattern is good applicable here but mind the low-frequent peak intensity.
- Frequency of flight facilitated per runway: High to Low
- Regions with L_{den} above 55 dB. The pattern is very well applicable here, these are the areas facing most disturbance.



CA noise

- Regions with incidental sound pressure levels surpassing 65 dB by crossing, ascending and descending aircraft. The pattern is well applicable here.
- Regions with L_{den} above 55 dB. The pattern is very well applicable here, these are the areas facing most disturbance.
- Frequency of flight facilitated per runway: High to Low



Kate Andrusenko

Versatile London.
Water resilient
urban design in fast
changing
conditions.



Maria Kritsioudi

Living with the others

Spatial transformations towards liveability of cities of social diversity: the case of the Schilderswijk, The Hague.



Overview of lectures

Week 1.2 - Wednesday 9 September - 8:45-10:30 - IO-Bernd Schierbeek:

Liveability and public space in the happy city

[Maurice Harteveld](#)

Joint component: Introducing patterns as method

Week 1.3 - Wednesday 16 September - 9:15-10:30 - IO-Bernd Schierbeek:

Imagination and work in the happy city

[Egbert Stolk](#), [Birgit Hausleitner](#)

Joint component: Discussing evidence informed and imaginative methods

Week 1.4 - Wednesday 23 September - 8:45-10:30 - IO-Bernd Schierbeek:

Regeneration in the happy city

[Paul Stouten](#)

Week 1.5 - Tuesday 29 September - 13:45-15:30 - BK-B:

The cool and happy city

[Frank van der Hoeven](#), Alexander Wandl (joint lecture urban fabrics and urban metabolism)

Introduction of data driven projects

Week 1.5 - Wednesday 30 September - 8:45-10:30 - room to be announced:

The Good Work Life

Marta Relats, [Birgit Hausleitner](#) (joint lecture urban fabrics and complex cities)

Please check: <https://urbanfabrics.weblog.tudelft.nl>
for regular updates on our program after week 5!

