

Caring Nature-based Transition of Public Space

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Urban Challenges



Source: Malmö Cloudburst Plan 2017, Foto Stig-Åke Jönsson, TT



90 new rental properties in Värnhem
Kvarteret Lärkrådet 16 som det kan komma att se ut. Illustration: FOJAB arkitekter

The Three Objectives

Översiktsplan för Malmö 2023



Malmö as a regional engine for green growth and employment



The city as a cultural and democratic living environment



A close, dense, green and functionally mixed city

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Nature-based Solutions

To solve environmental and societal challenges.

'Blue-green Solution (BGS) increase the quality of life of urban inhabitants'



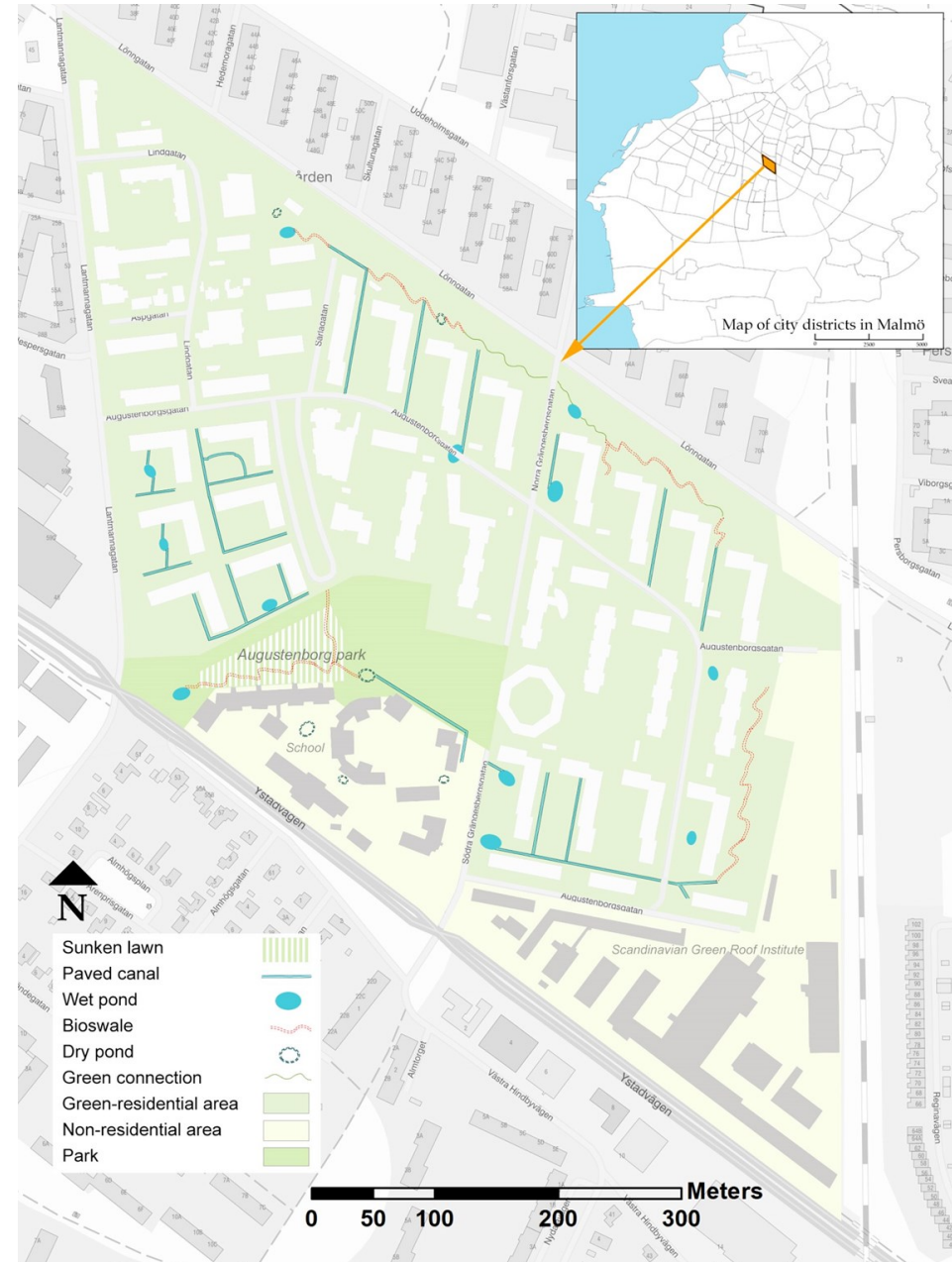
~~'Blue-green Solution (BGS) increase the quality of life of urban inhabitants'~~

What do BGS really do?





Augustenborg municipal plan illustrations 1947.
Copyright: Malmö stadsbyggnadskontor.



Map of Eco-city Augustenborg showing BGS in urban open space.

The main objective

- To understand in what ways Stormwater BGS participate in various everyday life situations.

How

- Investigating the interactions between humans and the outdoor environment with BGS in day-to-day situations.
- Mixed-Methods





Examples of the public space shifts in Augustenborg. Photos by Henrik Thoren on 1 September 2014.

Research environment:

Urban Design – STS – Everyday Life

Research questions

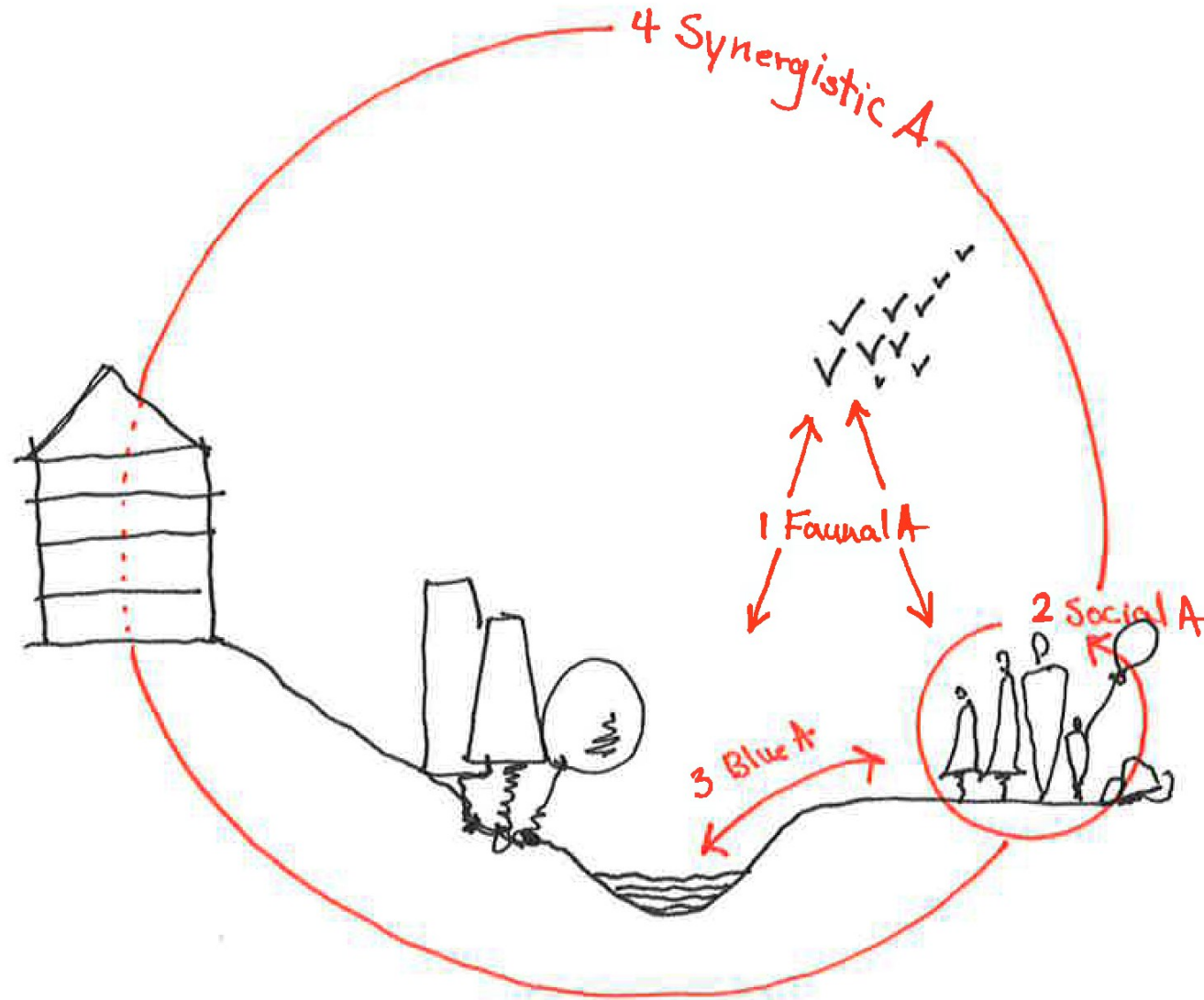
- What are the important aspects of an environment with BGS regarding their use?
- How can the co-effects of BGS be studied in relation to their temporality?
- How can everyday users' expectations and concerns be considered in the design process of BGS?



Theoretical framework:

- Actor-Network Theory
- Affordance Theory
- Matters of Care



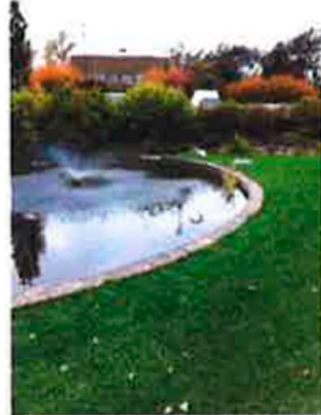


Four kinds of Affordance around blue-green solutions

“Assume that you will move to another residential area. The new apartment is the same size as your present apartment and you have the option to choose between two similar residential areas: Area 1 and Area 2. The only difference between the residential areas is the way they handle the rainwater.”



Area 1 involves a solution located under the ground which is not visible from above. Here, underground pipes are used to manage rainwater. The pictures show examples of how this can look from above.

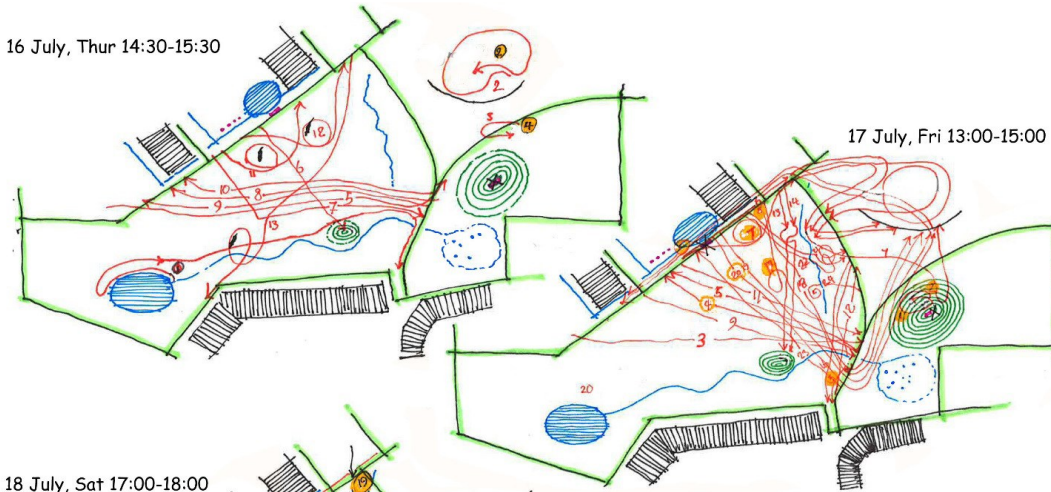


Area 2 uses visible solutions with canals and ponds (similar to those in Augustenborg) to manage rainwater. The pictures show examples of how this system can look.

Blue-green spaces: Recreational Use, Preference, Willingness to pay

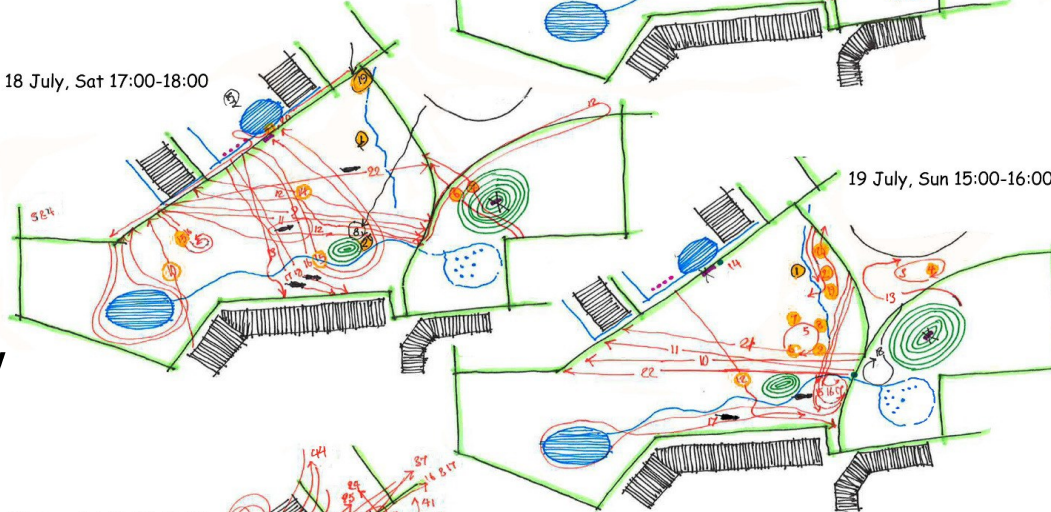
Figure 3. Photomontage question asking the respondents about their neighborhood preference for living with or without BGS. Photographs by Misagh Mottaghi.

16 July, Thur 14:30-15:30



17 July, Fri 13:00-15:00

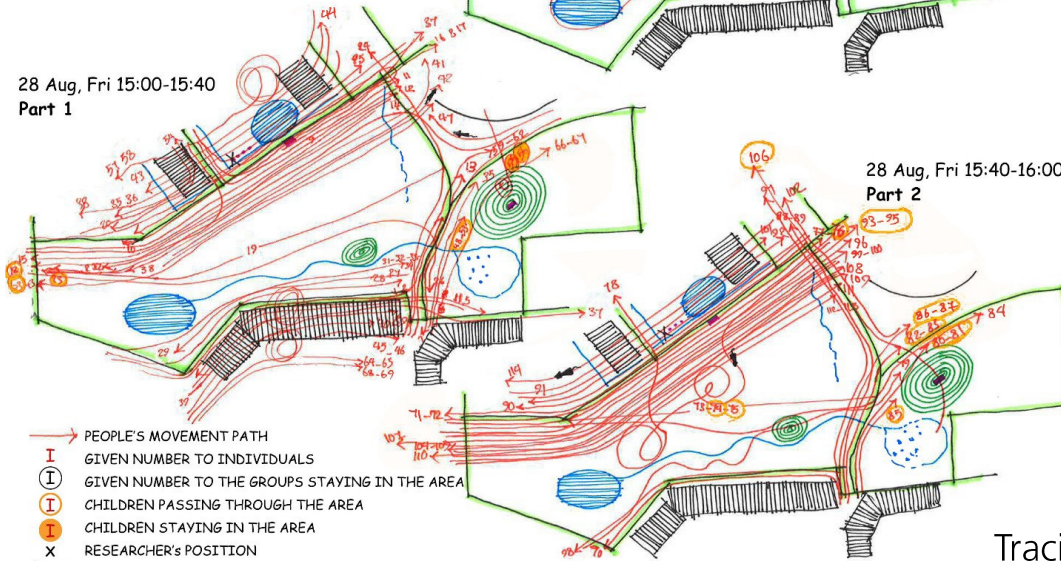
18 July, Sat 17:00-18:00



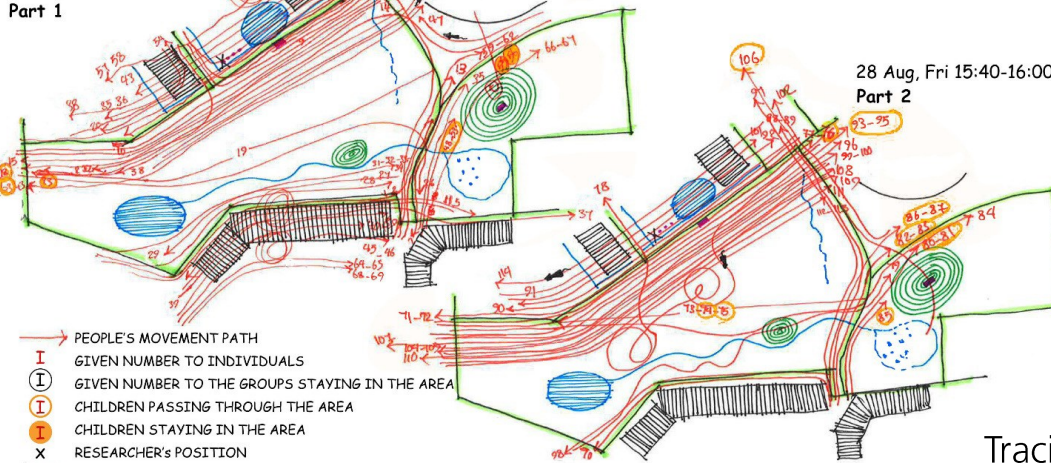
19 July, Sun 15:00-16:00

BGS and Possibilities to Play

28 Aug, Fri 15:00-15:40
Part 1



28 Aug, Fri 15:40-16:00
Part 2



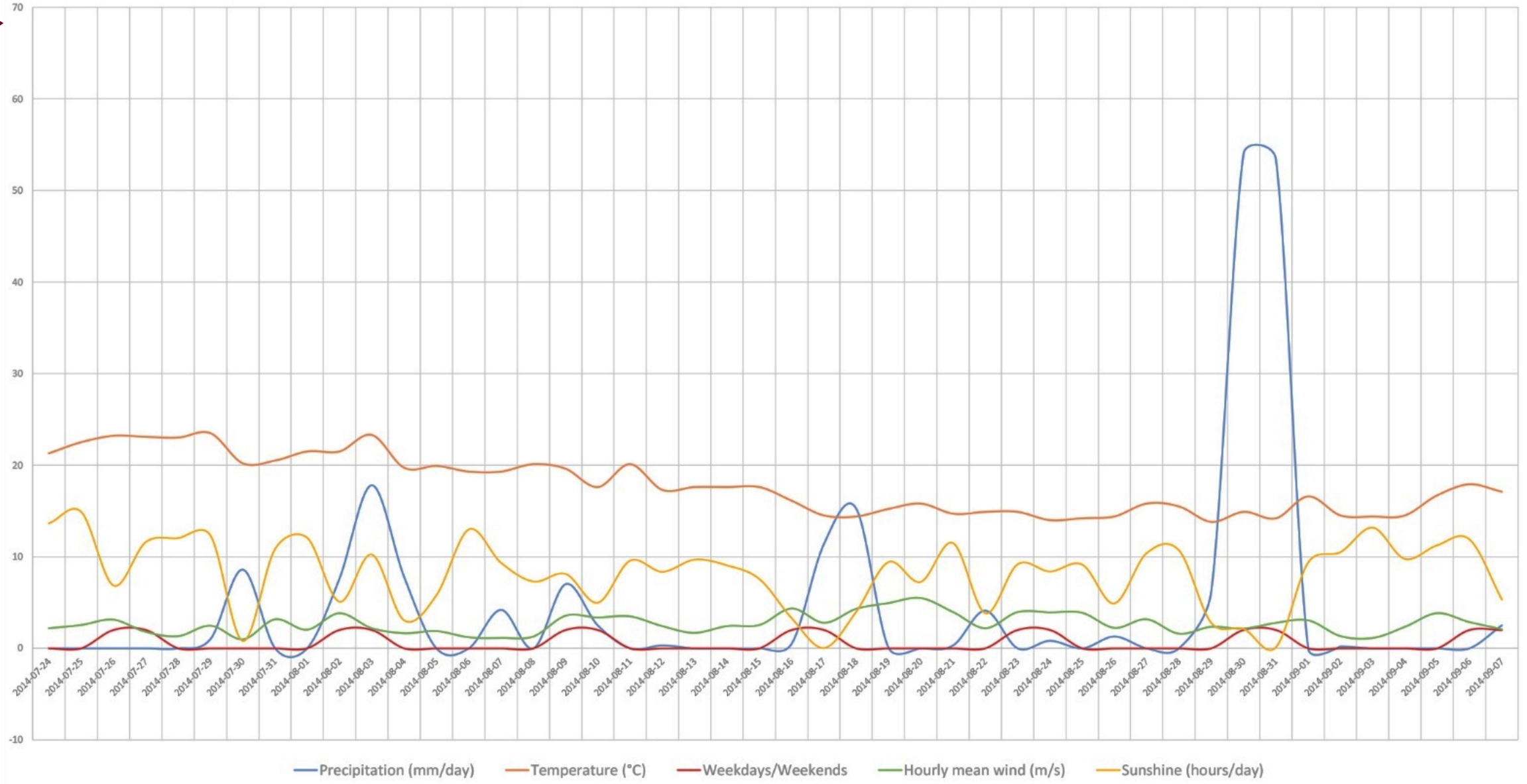
- PEOPLE'S MOVEMENT PATH
- I GIVEN NUMBER TO INDIVIDUALS
- ⊖ GIVEN NUMBER TO THE GROUPS STAYING IN THE AREA
- ⊙ CHILDREN PASSING THROUGH THE AREA
- ⊕ CHILDREN STAYING IN THE AREA
- X RESEARCHER'S POSITION
- ⊗ DOGS



D Rhythms & Territorial Negotiations

- '[someone] put a suitcase in the bushes, and we just [thought]: what's going on? An hour later someone came and collected a suitcase, then I called the police and then [later] they cut down all the bushes.'
- 'aquatic plants were sometimes weeded out by mistake by maintenance workers. During dry spells, aquatic plants were simply difficult to distinguish from the weeds'
- 'Last year I was close to reporting MKB [Malmö's housing agency, which owns the area] for animal cruelty because they had fish in the ponds. The water level dropped so much that they were [squeezed tightly] at the bottom, and it's not OK'
- 'A lot of baby birds have been picked up from these gutters, they are designed completely wrong for birds, ducklings... I have also seen dead ducklings lying here, just these, they are so deep that they don't [manage to] come up, we picked them up.'





The diagram illustrates some ongoing rhythms in Malmö in August 2014. The lines are based on data from SMHI (and the calendar), and these rhythms were the same for any urban area in Malmö, regardless of the presence of BGS.

Remarks

- Possibilities vs. Performance
- BGS as New Becomings
- Heterogeneous Places and Collectives

- Care with Urban Design-Urban Design with Care

Contextual long-term approaches for re-thinking, re-planning, re-designing, re-assessing, re-creating, re-considering, repairing, re-... the environment.



Management of Public Space & Matters of Care

- MPS is required as an efficient tool for adapting the environment to needs, addressing 'matters of care', and embedding BGS in/as public spaces in urban settings.
- Also, 'matters of care' is a useful lens to include users' perspectives and everyday life experiences in the long-term management of nature-based spaces to support both users and nature.



Thank you!

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SCIENCE AND
EDUCATION
**SUSTAINABLE
LIFE**