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AESOP ANNUAL CONGRESS

Space for Species:

Redefining Spatial Justice

BOOK OF ABSTRACTS

84364

Design Framework for Neighbourhood Resilience: Combining human and other-than-human perspectives into an integrated approach

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The current Covid-19 pandemic has underlined the importance of urban public spaces in achieving health and social well-being (Dobson, 2021; Poortinga et al., 2021), prompting policymakers and urban planners to rethink their approach to the design of these spaces. They now propagate adapting urban public spaces more directly to human needs (Suurenbroek et al., 2019), often at a neighbourhood level, while also embracing a more-than-human perspective that includes the well-being of the natural ecosystem at large (Maller, 2020; Houston et al., 2018). The latter becomes imperative as other shocks and stressors, such as climate change and biodiversity loss, are impending, straining urban spaces and their residents to show resilience in times of complex challenges. “Learning from Covid-19”, a need emerged for new design approaches for public spaces, contributing both to social and ecological resilience.

This paper presents results from the research project "From Prevention to Resilience". It moves beyond merely responding to the pandemic by designing social and physical barriers in public space to prevent the virus from spreading. Instead, it seizes the opportunity to explore how an integrated design approach to public space could contribute to social and ecological resilience (Boon et al., 2021). The project, funded by the Dutch organization for health research and care innovation, is a collaboration between the chairs of Spatial Urban Transformation and Civic Interaction Design (AUAS) and an international partner consortium.

This paper builds on our compiled database of design strategies addressing the Covid-crisis, expert sessions with a Community of Practitioners, and interviews with Dutch spatial design firms and municipalities. It first introduces a "Design Framework for Neighbourhood Resilience" and its core concepts. Next, it validates this framework through a research-by-design approach. Spatial and social design agencies applied the framework in real-life design cases in Amsterdam and allowed for its empirical grounding and practice-based development. Ultimately, the paper defines a design framework that builds resilience for the well-being of all urban inhabitants and initiates a dialogue between disciplines to address resilience integrally when designing public spaces and forms of civic engagement.

Keywords: Design Framework, Social Resilience, Ecological Resilience, Other-than-human Residents, Well-being, Covid-19 Pandemic

References

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TRACK 9 PROGRAMME

TUE, July 26

Title of the session: Crises, disasters, pandemic Chairs: STEFANO COZZOLINO, Layla Zibar, Tiit Tammaru		
Session 1	Presenter's name	Presentation title
Time: 10.00 - 11.30		
10.00-10.22	Mohamed Saleh	Navigating the (Un)Grounded Tension between Spatial Change and Fixity
10.22-10.44	Yael Savaya	Adaptability, responsibility and care: reframing planning theories
10.44-11.08	Sara Altamore	Designing the Just City: the promising life of the small urban spaces
11.08-11.30	Eva Duivenvoorden	The values of managing public space – exploring managers' perspectives beyond planning and design

Title of the session: Geographies, distribution, planning Chairs: TIIT TAMMARU, Layla Zibar, Stefano Cozzolino		
Session 2	Presenter's name	Presentation title
Time: 12.00 - 13.30		
12.00-12.22	Lasse Schytt Nørgaard	Who thinks about regional space?
12.22-12.44	Stefan Fina	Unequal Estonia: Regional disparities and their consequences on socio-spatial justice
12.44-13.08	Oana Garbasevski	The spatial and social structure of income inequality in Germany
13.08-13.30	Matej Nikšič	Public facilities planning: The models of spatial distribution for the sustainable city on the case of Kranj, Slovenia

Title of the session: Action, adaptability, design Chairs: LAYLA ZIBAR, Tiit Tammaru, Stefano Cozzolino		
Session 3	Presenter's name	Presentation title
Time: 14.30 - 16.00		
14.30-14.48	Redento Recio	Towards a 'just' (re)settlement: Interrogating grassroots agency in precarious 'post-disaster' contexts
14.48-15.06	Johanna Lilius	Injustice as a future crises? Experiences from spatial planning in Hamburg, Copenhagen, Oslo and
15.06-15.24	Yaara Mann	Working from Home after Covid-19 - the changing relationship between spatial planning and gender inequality
15.24-15.42	Eduarda Marques da Costa	Social support services for elderly in Portuguese cities – challenges for local planning in post-pandemic times
15.42-16.00	Sába Schramkó	Design Framework for Neighbourhood Resilience: Combining human and other-than-human

WED, July 27

Title of the session: Digitalization, densification, justice Chairs: STEFANO COZZOLINO, Layla Zibar, Tiit Tammaru		
Session 5	Presenter's name	Presentation title
Time: 10.00 - 11.30		
10.00-10.30	Ines Boavida-Portugal	Tourist Digital Imprints: Towards a Sustainable Smart City
10.30-11.00	Mohamed Saleh	Transformed Proximity Conditions: Exploring the Relational Dynamics of Control and Recognition in (Virtual) Public Spaces
11.00-11.30	Vera Götze	Comparing patterns of densification in Utrecht and Bern: A method to evaluate the redistributive effects of land policies

Title of the session: Spatialities, right to the city, displacement Chairs: TIIT TAMMARU, Layla Zibar, Stefano Cozzolino		
Session 6	Presenter's name	Presentation title
Time: 12.00 - 13.30		
12.00-12.30	Didem Turk	Tale from Tigris River. River Right as Human right: The Cases of Hasankeyf and Hevsel Gardens, Turkey
12.30-13.00	Damla Isiklilar	Reading New Urban Practice in Syrian Neighborhoods in Ankara Through Forced Migration
13.00-13.30	Anna Wilczyńska	Blue infrastructure study in Warsaw. Typology and perception.

Title of the session: Public spaces, sustainability, circularity Chairs: LAYLA ZIBAR, Tiit Tammaru, Stefano Cozzolino		
Session 7	Presenter's name	Presentation title
Time: 14.30 - 16.00		
14.30-14.48	Eveliina Harsia	Enhancing cultural diversity and inclusion in participatory knowledge building through social design – Case Kontula Mall, Finland
14.48-15.06	Rani Mandelbaum	Size Does Matter: Justice versus Equality in Urban Green Space Policy in Beersheba Israel
15.06-15.24	Nathalie Blanc	CIVIC ACT 2 : local public action and collective mobilization in the Great Paris, the place of socio-environmental inequalities
15.24-15.42	Tanu Priya Uteng	[RESHARE] Resource sharing in residential buildings: Innovative approaches to shared, circular mobility and space solutions as a gateway for smart consumption
15.42-16.00	Salvatore Siringo	Informal Migrant Settlements Between Irregular Condition and Right to The City. New Challenges For Planning in Cross-Border Euro-Mediterranean Contexts

THU, July 28

Title of the session: Citizens, conflict, justice Chairs: STEFANO COZZOLINO, Layla Zibar, Tiit Tammaru		
Session 9		
Time: 10.00 - 11.30	Presenter's name	Presentation title
10.00-10.22	Elena Dimitrova	Inclusive planning: expert claims, citizens' expectations, and implementation challenges to socio-spatial justice
10.22-10.44	Robert Barbarino	Creating an "in-between": The post-migrant perspective in participatory urban development
10.44-11.08	Cansu Sonmez	Enriching or Violent? Ambivalent Experiences throughout Displacement and Resettlement in South-eastern Turkey.
11.08-11.30	Verena Gerwinat	Living together in Dortmund-Hörde: Upper middle-class newcomers and long-established working-class residents in a neighbourhood of contrasts

Title of the session: Transport, logistics, planning Chairs: TIIT TAMMARU, Layla Zibar, Stefano Cozzolino		
Session 10		
Time: 12.00 - 13.30	Presenter's name	Presentation title
12.00-12.22	Merten Nefs	Beyond global gains and local pains - spatial inequality of hinterland logistics
12.22-12.44	Xavier Bach	Towards a moped-style scooter regulation that favours social and spatial equity: Findings from semi-structured interviews from Barcelona's mobility ecosystem
12.44-13.08	Laura Mark	Socio-spatial justice through public participation? How different socioeconomic groups perceive measures from a mobility planning process in Hamburg
13.08-13.30	Manon Marguerit	Being a lesbian in parisian transport: self-representation confronting gender-based violence



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Design Framework for Neighbourhood Resilience

Bridging human and other-than-human perspectives in urban design

Sába Schramkó, Junior Researcher

Co-authors: Prof. Frank Suurenbroek, Prof. Martijn de Waal, Boudewijn Boon, Giulia Gualtieri, Bianca Andaloro

*University: Amsterdam University of Applied Sciences
Research groups: Chair of Spatial Urban Transformation
& Chair of Civic Interaction Design*

*26th of July, 2022
AESOP Annual Congress
Space for Species: Redefining spatial justice*

Partner Consortium



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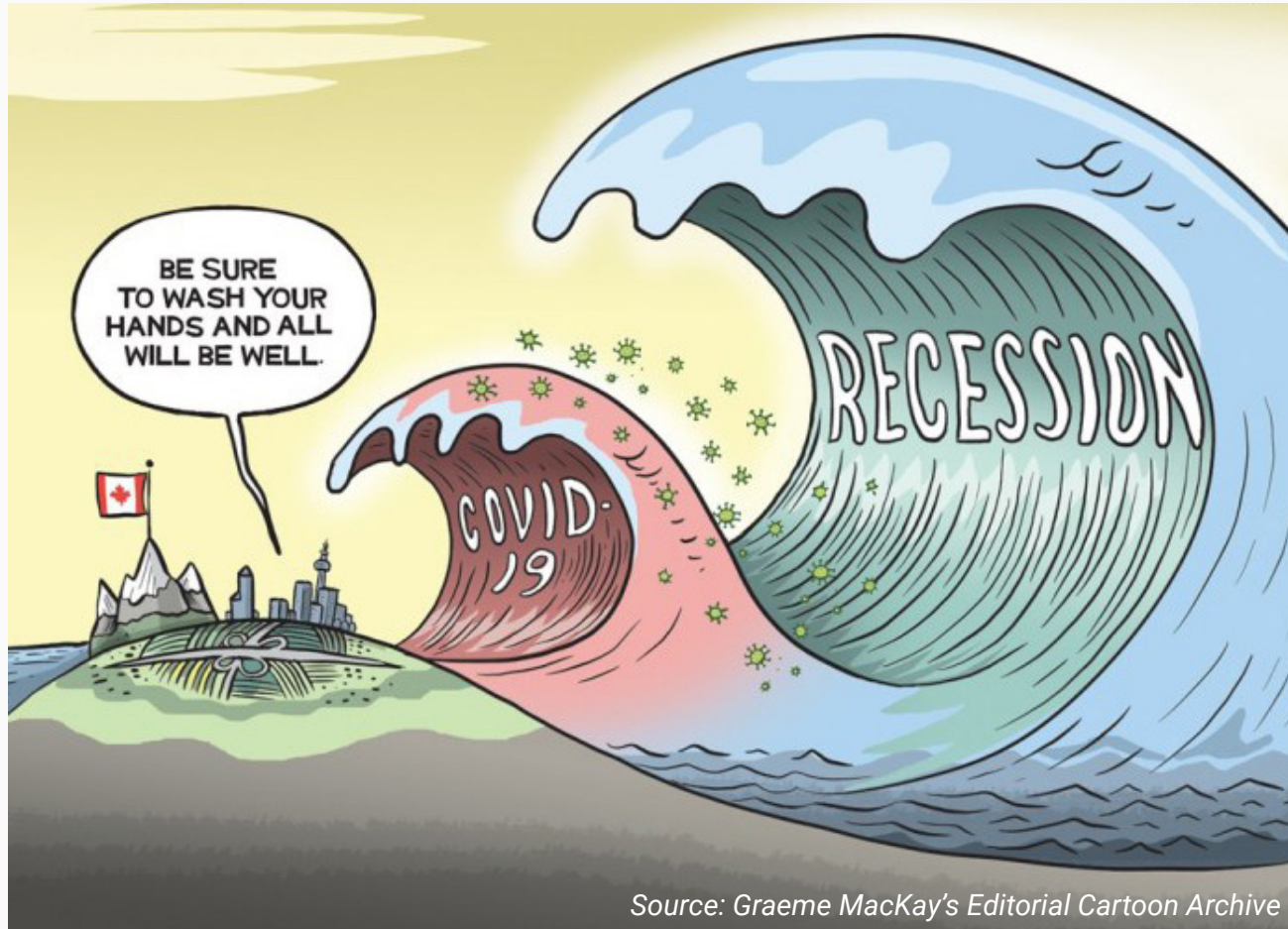


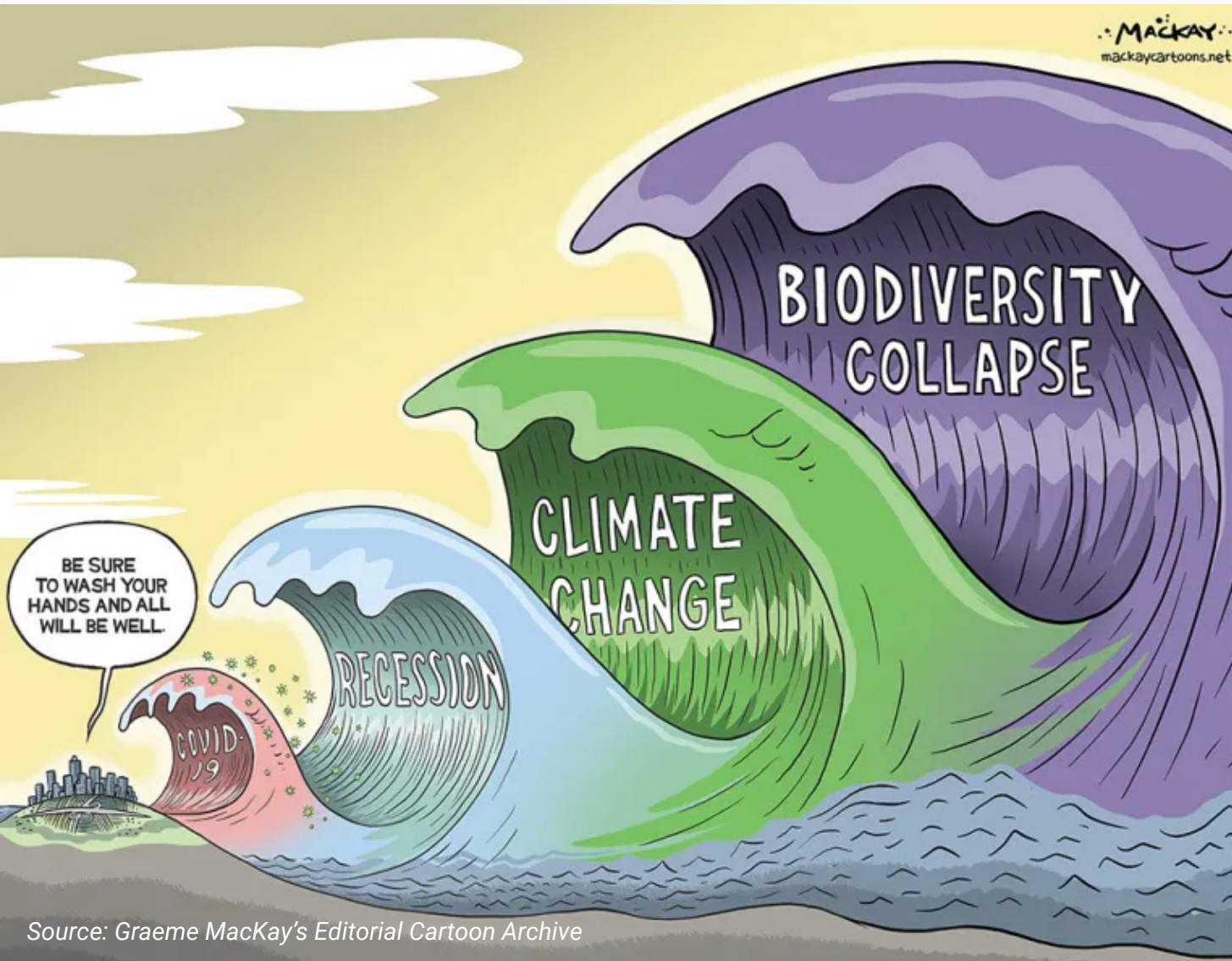
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From Prevention to Resilience





How can urban design help in anticipating or responding to the impacts of such crises?

Learning from the pandemic

LOCAL NETWORKS



Source: Project for Public Spaces

- Resilient responses from local networks
- Value of existing local networks (Boonstra et al. 2021)

URBAN GREEN SPACES



Photos at the courtesy of Ada Kotynska and Lukasz Kotynski. Photographer: Adriana Kotynska

- Escaping isolation
- Moving activities to outdoor areas

NEIGHBOURHOOD

*as important spatial
and social unit*

How can spatial designers contribute to neighbourhood resilience?

*(considering lessons learnt from the pandemic and
anticipating climate change and biodiversity loss)*

Design Framework for Neighbourhood resilience

*Goal: Outline a program of possibilities for urban designers
to promote resilience in urban neighbourhoods*

Design Framework for Neighbourhood resilience

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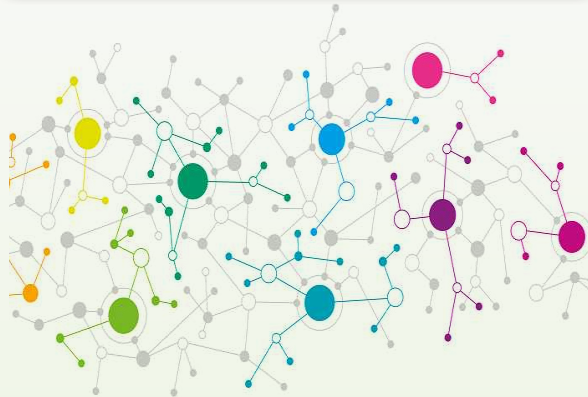
**HUMAN
COMMUNITIES**
*(i.e. local residents and
businesses)*

*Integral
Solutions*

**OTHER-THAN HUMAN
COMMUNITIES**
*(i.e. biotic other-than-humans:
flora and fauna)*

Why consider other-than-human communities?

INTERCONNECTED



Source: aed-sicad.de

- Shifting away from a human centric perspective (Maller, 2021)
- Cities as ecosystems with interdependencies where social and ecological are entangled

INCLUSIVE



Source: bbc.co.uk

- Consider other-than-humans as worthy of consideration and care in their own right

PRAGMATIC



Source: [cnu.org /SFgate](http://cnu.org/SFgate)

- Humans rely on ecosystem services created by other-than-humans
- Integrally addressing climate change and biodiversity loss

Literature on (social, urban, ecological) resilience

- The Routledge Handbook of Urban Resilience (Burayidi et al. 2019)
- City resilience framework. The Rockefeller Foundation and ARUP
- Sustainability and panarchies (Gunerson et al. 2002)
- Vitaliteit van buurten en maatschappelijke veerkracht. Den Haag: Kwaliteitsinstituut Nederlands Gemeenten (Gremmen, 2016)
- Resilience by design (Lee, 2016)
- Resilience as the ability of a system to cope, adapt or transform in the face of shocks and stressors (e.g., Béné et al. 2012)
- Cities being recognized as ecosystems in and of themselves, providing habitat to various species (e.g. Reumer 2014; Maller 2021)
- First Guide to Nature Inclusive Design (Stiphout, 2019)
- Making Urban Nature (Vink et al. 2018)

Design research

LITERATURE

- Social and community resilience
- Ecosystem resilience

DESIGN EXAMPLES

inform qualities

**creative
process**

inform practical design strategies

FRAMEWORK

3 levels of abstraction

1. Aspects of resilience
2. Design strategies
3. Design examples

Boon et al. (2021). Generating and disseminating intermediate-level knowledge on multiple levels of abstraction: An exploratory case in media architecture.

HUMAN
COMMUNITIES

AGENCY

CONNECTION

DIVERSITY

RHYTHM

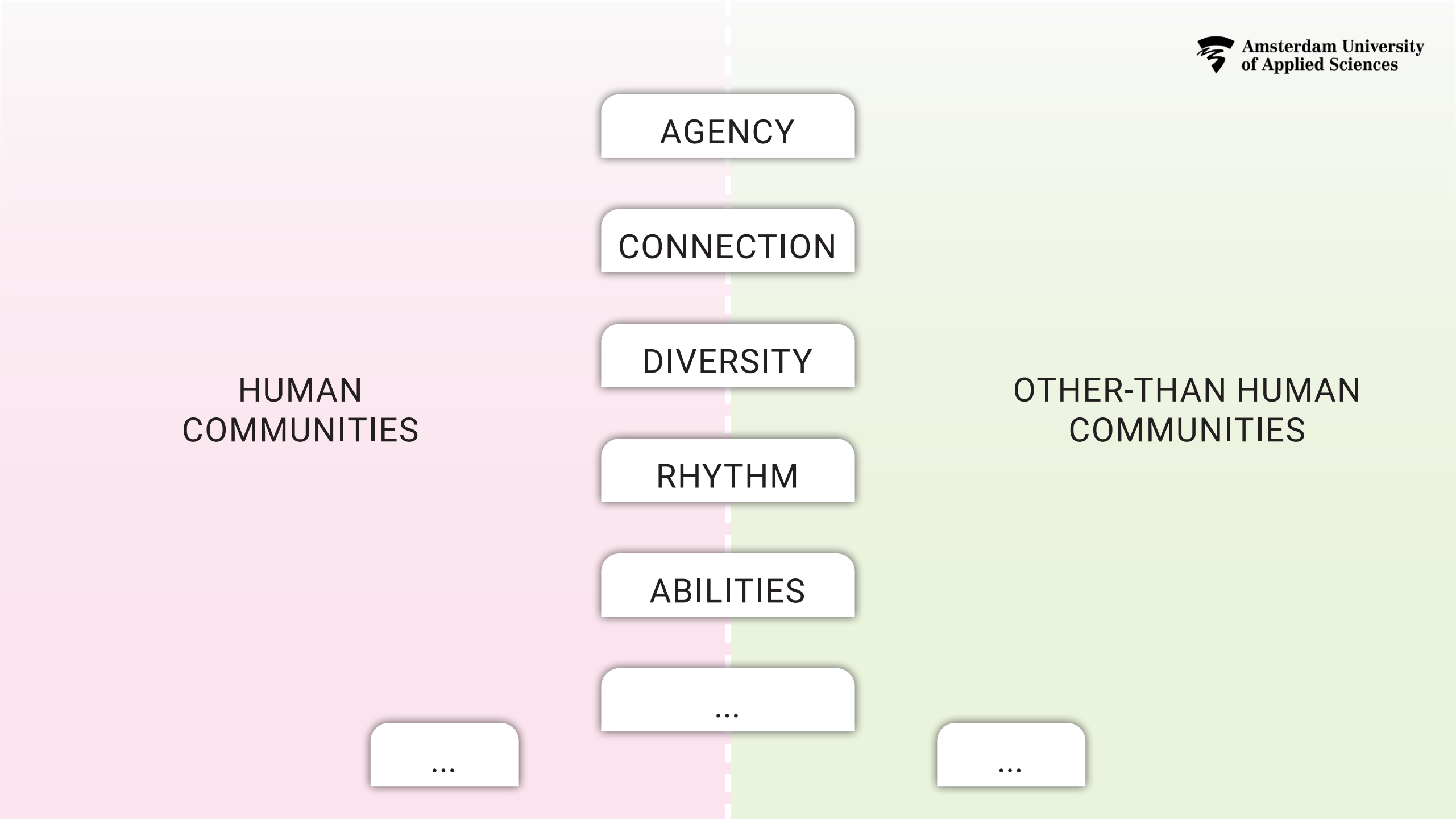
ABILITIES

...

...

OTHER-THAN HUMAN
COMMUNITIES

...



*...express a level of **agency**.*

Residents need to be able to act in line with their shared needs and interests.

*...build and maintain relevant **connections**.*

Residents need to be able to encounter one another to form a community.

*...communities in which a **diversity** of residents can contribute in their particular ways. Residents need to find their niches in which these contributions can be made.*

*...allows residents to take part in **rhythms**, which offer continuity in the relations and their shared efforts. Residents need to create these rhythms or synchronize with ones already present.*

*...relies on the **abilities** of residents to contribute to their community. Residents can use these abilities as resources for anticipating and responding to shocks and stressors.*

...

HUMAN COMMUNITIES

- Qualities intended as practical directions designers can work with
- Qualities bridge human and other-than-human perspectives and stimulate finding synergies
- Thereby invite professionals from diverse fields of expertise
- Not inherently good or bad, a matter of degree
- An open thinking model to address neighbourhood resilience

OTHER-THAN HUMAN COMMUNITIES

...

Façade gardens (Geveltuinen)



Source: rotterdamsweerwoord.nl



- Narrow garden strips directly in front of façades
- Municipalities allow them
- Residents organise themselves to green up their neighbourhood

Source: grootsneek.nl

Façade gardens (Geveltuinen)

- Residents are allowed to shape a piece of public space in front of their homes
- Creating own façade gardens fosters a sense of ownership for the street

AGENCY

- Provide a shared goal and a platform to share interests
- Shared experiences build connections and create the foundation for local networks

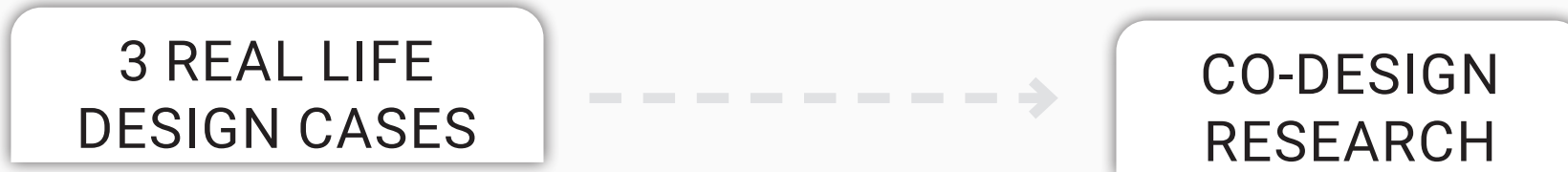
CONNECTION

- Form ecological stepping stones or neighbourhood level ecological corridors
- Allows encountering other residents they depend on, to migrate, forage, reproduce

DIVERSITY

- Planting the right species to contribute to biodiverse urban ecosystem (species diversity, genetic diversity)
- Response diversity, ecological redundancy

Design research: evaluating the framework through empirical design cases



- Design agencies used the framework when addressing real life design challenges

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Preliminary insights

1. Central qualities resonate with experts from diverse professional backgrounds and the framework feels complete
2. Social issues are seen as too big and are prioritized
3. The framework calls for a new design expertise
4. Key question:
What does designing for other-than-humans add to the existing urban planning discourse on nature-based solutions?

Reach out with questions or insights!

Contact: Sába Schramkó

s.k.schramko@hva.nl

Download the Framework

resilientpublicspaces.nl

Agency

*Neighborhood resilience requires its residents to express a level of agency.
Residents need to be able to act in line with their shared needs and interests.*

- Appropriate elements of public space
- Feel a sense of ownership
- Have a say in local developments
- Showing leadership

- Able to settle in a neighbourhood
- Perform their particular behaviours
- Receive appropriate forms of care
- Be represented in local developments

Connection

*Neighborhood resilience requires residents to build and maintain relevant connections.
Residents need to be able to encounter one another to form a community.*

- Access to places & activities for encounter
- Shared goals and interests
- Sense of belonging
- Basis for collective action

- Able to migrate
- Encounter other residents that they depend on
- Exchange and communicate
- Relevant connections

Diversity

A resilient neighborhood requires communities in which a diversity of residents can contribute in their particular ways. Residents need to find their niches in which these contributions can be made.

- Open & inclusive mindset
- Feel welcome (age / culture / ...)
- Diverse views and contributions
- Varied set of possible responses to shocks / stressors

- Forming a biodiverse ecosystem (species diversity)
- Forming a genetically diverse population
- Response diversity & ecological redundancy

Rhythm

A resilient neighborhood allows its residents to take part in rhythms , which offer continuity in the relations that they build and in their shared efforts. Residents need to create these rhythms or synchronize with those that are already present.

- Daily, weekly, monthly, yearly
 - Strengthening and maintaining connections
 - Stable basis for collective action
 - Long-term efforts
- Able to follow seasonal rhythms
 - Acts of foraging, migration, reproduction, without rhythms being disturbed
 - Equipped to deal with urban rhythms

Abilities

A resilient neighborhood relies on the abilities that residents can contribute to their community. Residents can use these abilities as important resources for anticipating and responding to shocks and stressors that their community is facing.

- Existing skills & knowledge
 - Building new skills & knowledge
 - Matching these to relevant situations / efforts
- Adapt and thrive in urban setting
 - Abilities that serve the community
 - Select / attract species according to relevant abilities