

# **Human / Non-Human Public Spaces**

*Card set*

This card set enables you to explore the Human / Non- Human Public Spaces design perspective. It provides actionable insights on how to design for neighborhood resilience, by strengthening human and non-human communities in an integral way. The cards can be flexibly used during different stages of a design process.



**The Introductory card** introduces the design perspective, proposing three important conditions for neighborhood resilience to emerge: agency, connectedness, and diversity.



**The Concept cards** describe these three conditions in more detail and how they apply to both human and non-human communities.



**The Example cards** describe projects and initiatives that illustrate the design perspective, while also providing actionable design strategies.

# Introduction

**Increasingly, cities are perceived as complex social-ecological systems in which humans and non-humans live interdependently. During the Covid-19 pandemic these interdependencies became apparent, particularly on the scale of the neighborhood; people were thrown back upon their neighborhoods and learned to revalue their local community and environment. Existing connections enabled collective action in response to the pandemic.**

Public spaces played an invaluable role in these developments. While initially considered a risk and a potential source of infection, soon public spaces came to serve as places to escape lock-down confinement, enabling people to maintain many of the activities that make up their daily lives. Green spaces were revalued for their restorative qualities, countering social isolation and stress. Also, when looking at

future crises, such as climate change and biodiversity loss, urban public space will play an important role in mitigating and adapting to various negative impacts.

With the Human / Non-human perspective, we explore how designers can contribute to public spaces that strengthen both human and non-human communities. It provides designers, policymakers and community organizers with a set of concepts and strategies that help to understand the conditions for such resilience to emerge, while also suggesting directions for action. The design perspective is intended to engage designers and professionals of various disciplines: it invites spatial designers and urban planners to contribute to human and non-human communities in more integral ways; it invites social designers and community workers to think in 'nature-inclusive' ways; and it invites ecological designers and applied ecologists to think in more 'human-inclusive' ways.

# Three conditions for resilience to emerge

A resilient community is able to withstand, adapt, or transform in the face of shocks and stressors. This ability cannot be directly designed into a neighborhood or community; rather, designers can contribute to the conditions that allow for resilience to emerge or evolve. The Human / Non-Human design perspective proposes three conditions that are essential for both human and non-human communities:

## AGENCY

A community can only be resilient if its members – old and new – have the capacities, motivation and opportunities to act as individuals and collectives towards communal needs and concerns. It is also important that their voices and perspectives are heard in local design and decision-making processes.

## CONNECTEDNESS

A community can only be resilient if its members are able to build strong and stable connections. For this, it is important that various actors can encounter one another over longer periods of time.

## DIVERSITY

A community can only be resilient if it can rely on the diverse contributions that individuals and collectives can make. To identify and create conditions for this diversity, it is important that designers create inclusive settings and solutions.

# Agency

A community can only be resilient if its members – old and new – have the capacities, motivation, and opportunities to act as individuals and collectives toward communal needs and concerns. It is also important that their voices and perspectives are heard in local design and decision-making processes.

## HUMAN

Human agency means having the skills, knowledge, opportunities, and motivation to initiate or play a role in improving the neighborhood. Leveraging these resources strengthens a sense of empowerment and establishes the foundation for resilience in times of crisis.

### Appropriating public space

EXAMPLE CARD *'Geveltuintjes': citizens greening the streets*

### Careful democracy

EXAMPLE CARD *'Barcelona's superblocs*

### Building skills and knowledge

EXAMPLE CARD *T-uit-west: growing a tea brand, Urbaniahoeve's urban foodscapes and Australian bushcare programs*

## NON-HUMAN

Non-human agency means having spaces to settle, to display natural behaviors, and to receive the right forms of care in a human-dominated ecosystem. Non-humans need to be recognized as agents and have their voices represented and integrated in local developments.

### New microhabitats

EXAMPLE CARD *'Geveltuintjes': citizens greening the streets and T-uit-West: growing a local tea brand*

### Foregrounding non-human perspectives

EXAMPLE CARD *Ministry of Multispecies Communication*

### Enabling non-human regeneration

EXAMPLE CARD *Australian bushcare programs and Urbaniahoeve's urban foodscapes*

# Connectedness

A community can only be resilient if its members are able to build strong and stable connections. For this, it is important that various actors can encounter one another over longer periods of time.

## HUMAN

Human connectedness means having access to places and activities to encounter one another, to get to know each other, to identify shared interests and concerns, and to build longer-term relations and trust. The resulting networks form a basis for collective action.

### Shared activities and goals

EXAMPLE CARD *T-uit-west: growing a tea brand, Australian Bushcare programs and 'Geveltuintjes': citizens greening the streets*

### Rhythm and continuity

EXAMPLE CARD *T-uit-west: growing a tea brand and Australian Bushcare programs*

### Space for encounter

EXAMPLE CARD *Barcelona's superblocks*

### Locally situated action

EXAMPLE CARD *Ministry of Multispecies Communication*

## NON-HUMAN

Non-human connectedness means having the possibility to migrate and disperse, to encounter one another, and to exchange and communicate. This requires habitable spaces to be connected, within and outside the neighborhood.

### Ecological stepping stones

EXAMPLE CARD *'Geveltuintjes': citizens greening the streets*

### Green corridors

EXAMPLE CARD *Barcelona's superblocks*

### A contiguous biotope

EXAMPLE CARD *Urbaniahoeve's urban foodscapes*

# Diversity

A community can only be resilient if it can rely on the diverse contributions that individuals and collectives can make. To identify and create conditions for this diversity, it is important that designers create inclusive settings and solutions.

## HUMAN

Human diversity refers to the diversity of skills, networks, knowledge, cultures, and perspectives that a community is constructed of and has at its disposal. For recognizing and making these diverse resources productive, creating open and inclusive conditions are essential.

### **Involving multiple local stakeholders**

EXAMPLE CARD *Urbaniahoeve's urban foodscapes*

### **Tailored and inclusive public spaces**

EXAMPLE CARD *Barcelona's superblocs*

### **Embracing cultural capital**

EXAMPLE CARD *T-uit-West: growing a local tea brand*

## NON-HUMAN

Non-human diversity refers to the variety of species in a community and the functional roles that they contribute. Such diversity contributes to resilience when each species is sufficiently present and when functional roles are fulfilled by multiple species.

### **Prioritizing locally native plants**

EXAMPLE CARD *Australian Bushcare programs* and *'Geveluintjes': citizens greening the streets*

### **Recognizing non-human plurality**

EXAMPLE CARD *Ministry of Multispecies Communication*

### **Diverse plant typologies**

EXAMPLE CARD *Urbaniahoeve's urban foodscapes*

## 'Geveltuintjes': citizens greening the streets

### PROJECT

Local governments throughout the Netherlands and Belgium are stimulating residents to create 'geveltuintjes' – narrow façade gardens on the street-side of apartments. Citizens can remove tiles up to a certain distance from their facade and use this space for planting. In this way, citizens can play an active role in greening their street and neighborhood.

### CONNECTEDNESS

#### Shared activities and goals

While façade gardens are often initiated by individual households, they can trigger more collaborative efforts on a street or neighborhood level. Jointly creating a greener environment can give a shared sense of pride and achievement. Caring for the gardens invites further collaboration and brings about spontaneous encounters among neighbors.



PHOTOS 1-2 GROENEMORGEN, 3 CHRIS LAWTON

### CONNECTEDNESS

#### Ecological stepping stones

A façade garden can serve as a valuable stepping stone for non-humans to migrate. With multiple façade gardens in a street, larger green areas in the neighborhood can become connected.



## PROJECT

## 'Geveltuintjes': citizens greening the streets

## AGENCY

**New microhabitats**

A single façade garden is seemingly modest in its contribution to non-humans. However, for plants, insects, and birds they can provide valuable microhabitats. By selecting appropriate plants, avoiding pesticides, and allowing spontaneously emerging wild plants to settle in, a small façade garden can provide food and shelter for various non-humans.

## AGENCY

**Appropriating public space**

'Geveltuintjes' allow residents to appropriate a small part of the street they are living in. In this way they can make their own contribution to a greener and more livable neighborhood and build a sense of ownership and control.



PHOTOS 1-2 GROENEMORGEN, 3 BOUDEWIJN BOON

## DIVERSITY

**Prioritize locally native plants**

In comparison with non-native plants, locally native plants are more likely to create the right conditions for other non-humans and thereby contribute to biodiversity. It is these plants that a variety of insects depend upon. These insects, in turn, provide a valuable food source for birds and other non-humans. Some municipalities promote biodiversity by allowing residents to turn in their tiles in exchange for native plants, which are grown by a local grower.

## T-uit-West: growing a local tea brand

PROJECT

Social design agency *The Beach* is located in the Amsterdam Nieuw-West district, where they empower local residents to connect, collaborate and pursue their ambitions in a designerly way. In their project 'T-uit-West' three tea gardens are created as places for people to gather and grow plants, create products, and share their knowledge and stories connected to tea. These activities eventually convert to creating a collection of tea mixtures, which are branded and sold locally.

AGENCY

### Building skills and knowledge

The community develops and exchanges various skills and knowledge concerning plants, gardening, processing, and the beneficial effects of herbs. Furthermore, various design skills are developed through workshops and practice, for example, concerning packaging and branding design.



PHOTOS THE BEACH

CONNECTEDNESS

### Shared activities and goals

Various activities, such as tea ceremonies and product making workshops, bring together local residents to build new relations. The tea gardens serve as local hubs for these gatherings. As the project proceeds, activities center around the branding and selling of a final collection of tea mixtures, creating a shared sense of pride and achievement.

## PROJECT

**T-uit-West: growing a local tea brand**

## CONNECTEDNESS

**Rhythm and continuity**

The community meets on a weekly basis, either in one of the gardens or at the home base of the project. Action and reflection alternates: one week, the group attends the garden or engages in making, while in the other week the group converses, reflects and learns together. This regularity allows the group to bond and build trust and develop a sense shared ownership of the gardens and the tea mixtures they are developing.

## AGENCY

**New microhabitats**

The tea gardens are designed based on the preferences of the human participants. The result for each garden is a combination of herbaceous plants, including native and non-native species, such as lemon balm (*Melissa officinalis*), marigold (*Calendula officinalis*), and dandelions (*Taraxacum officinale*). The leaves, nectar and pollen of these plants provide valuable food sources for a variety of insects; dandelions, for example, are known as one of the most visited flowers by solitary bees.



PHOTOS UNSPLASH

## DIVERSITY

**Embracing cultural capital**

The Amsterdam Nieuw-West district hosts residents with a variety of cultural backgrounds. As a result, a plurality of people is involved in the activities of T-uit-West, sharing their knowledge and experiences concerning plants and their benefits, tea rituals and ceremonies, as well as techniques for processing tea. This cultural diversity forms the backbone of collaborative learning and feeds the next stages of the project.

## Australian Bushcare programs

### PROJECT

Bushcare groups are groups of volunteers that get together to regenerate particular patches of urban green. They are common in Australia and are usually a part of a local council or a National Parks & Wildlife Service program.

### CONNECTEDNESS

#### Rhythm and continuity

Activities of bushcare programs are organized on a regular basis. This includes weekly, biweekly, and monthly gatherings for weeding, planting, and seed collection, depending on the season. This offers continuity to volunteers, allowing them to stay connected and build long-term relations. Furthermore, yearly events are organized, such as tree planting days and plant giveaways, in which a larger community of citizens gathers, and in which new connections can form.



PHOTOS 1 DAVID NOBLE, 2-3 CITY OF HOBART BUSHCARE

### AGENCY

#### Enabling non-human regeneration

By the removal of non-native species and the planting of native species, native non-human communities are given the space to regenerate, including various plants, birds, mammals, and invertebrates.

PROJECT

**Australian Bushcare programs**

AGENCY

**Building skills and knowledge**

Bushcare programs depend on knowledgeable volunteers, who are familiar with ecological processes, plant identification, as well as various regeneration strategies. Therefore, an important aim of bushcare programs is to educate, and various workshops and trainings are organized accordingly. Larger events, such as tree planting days, convey these skills and knowledge to a wider community.

DIVERSITY

**Prioritize locally native plants**

Central to bushcare programs is the removal of non-native plants and promoting the settlement of native species. Weeding is an important way to make space for native species, while for more degraded landscapes planting days are organized. Another common activity is seed collection, of which the seeds are propagated at a local nursery, to be planted out later.



PHOTOS CITY OF HOBART BUSHCARE

CONNECTEDNESS

**Shared activities and goals**

Bushcare programs are a way for residents to get involved with the local community. They provide the shared goal of bushland regeneration and involve activities such as weeding, planting and collecting seeds in local green places.



## Ministry of Multispecies Communications

### PROJECT

Through a fictional narrative involving a future government agency called 'The Ministry of Multispecies Communications', this project aims to shift human-centered perspectives towards empathizing with non-human species with whom we share our cities. The ministry recruits citizens to take part in training programs, in which they design masks that represent non-humans and wear these to take their perspective while walking through their neighborhoods. In this way, participants get to explore how future urban spaces can be designed to the benefit of various non-human species.

### Foregrounding non-human perspectives

By designing and wearing masks of a bee, bat or plant, people are encouraged to perceive their neighborhood from various non-human perspectives. It is a first step towards recognizing non-humans as agents that can be considered in local developments. Particular concerns may be in focus, such as how changes in the built environment may affect non-humans, or how urban data networks may benefit them.

PHOTOS 1 RACHEL CLARKE, 2 SERAY IBRAHIM - MINISTRY OF MULTISPECIES COMMUNICATION



## PROJECT

**Ministry of Multispecies Communications**

## CONNECTEDNESS

**Locally situated action**

The project enables groups of local residents to connect with their neighborhood in a new way. Familiar places are explored from non-human perspectives, while also new places are discovered.



PHOTOS SERAY IBRAHIM - MINISTRY OF MULTISPECIES COMMUNICATION

## CONNECTEDNESS

**Shared activity and goals**

The masked walks are an activity in which local residents undergo a shared experience, and, as a result, a shared perspective on their local neighborhood. This shared perspective may form the basis for further collaborative action.

## DIVERSITY

**Recognizing non-human plurality**

The project recognizes that cities are home to a variety of non-human species. The materials used during the activity, including masks and info cards, are aimed at accounting for this diversity. Each participant was asked to represent a particular species, allowing them to represent each voice in the various dialogues that emerged.

## PROJECT

# Barcelona's superblocks

Barcelona superblocks are a 3 x 3 cell of nine city blocks, designed to radically create space for public greenery and soft mobility. Within the nine city blocks, spaces for cars are reduced by half. Barcelona aims to have 70% of its streets to be made available for mixed use, thereby hoping to achieve their ambitions for sustainable mobility, improved air quality, reduced noise pollution, traffic safety, active lifestyles, social cohesion, and biodiversity.

## CONNECTEDNESS

## Space for encounter

Currently, around 60% percent of Barcelona's public spaces are occupied by private vehicles, while more than half of the journeys made in the city are by foot. In response, Barcelona superblocks prioritize pedestrians, with its internal streets and squares designed as places where people can meet, whether for cultural, economic, and social exchange. As a result, new and stronger connections can form.



PHOTOS CURRO PALACIOS - AJUNTAMENT DE BARCELONA

## DIVERSITY

## Tailored and inclusive public spaces

Integral to the Superblock plan is its flexibility, enabling each superblock to be tailored to the particular local context. Through tactical urbanism, public spaces are redesigned and evaluated, making sure that they are catered to the needs of diverse community members, including children, youth, elderly, women, and persons with disabilities.



## PROJECT

**Barcelona's superblocks**

## CONNECTEDNESS

**Green corridors**

The superblock plans build on various earlier plans, including the *Barcelona green infrastructure and biodiversity plan 2020*. This plan proposes to create green corridors that connect various green areas within and outside the city's neighborhoods. The corridors allow for pedestrians and cyclists to move around the city easier, safer, and healthier and they provide crucial passages and corridors for a wide variety of non-humans.



PHOTOS CURRO PALACIOS - AJUNTAMENT DE BARCELONA

**Citizen participation**

Throughout the years, the Barcelona government has received support as well as resistance while implementing the superblock plans and its preceding pilot projects. Resistance was faced when the government ignored some of the needs of local residents. Support grew when citizens could clearly understand the plans and experience its benefits. The government now aims to communicate the plans and their benefits more clearly, as well as increase citizen participation.

## AGENCY

PROJECT

## Urbaniahoeve's urban foodscapes

Urbaniahoeve's foodscapes are food-producing biotopes in the city, accessed and maintained by multiple stakeholders. Since 2009, two foodscapes are developed in the Netherlands: *Foodscape Schilderswijk* in The Hague and *Foodscape Wildeman* in Amsterdam Nieuw-West. Not to be confused with a community garden, Urbaniahoeve considers their foodscapes as 'landscape architectural food system infrastructure', which ultimately could become the dominant form of public green space in a city.

DIVERSITY

### Involving multiple local stakeholders

*Foodscape Schilderswijk* relies heavily on a range of partners that are involved, each having different roles and levels of engagement. For example, enthusiastic local residents function as initiators of new locations and as practical support in planting activities; high school students and their biology teacher prove adept in setting up and maintaining an orchard bed; and the municipality's department for public green space can provide technical assistance.



PHOTOS URBANIAHOEVE

AGENCY

### Enabling non-human regeneration

Part of Urbania's approach is a soil-building methodology, in which various local waste streams are used for mulching. Materials can include cardboard, wood chips from municipal pruning, mycelium spawn from a local fungi grower, and coffee grounds from local businesses. By building the soil, and not tilling it, a living soil community builds up, which in turn provides nutrients and other services for other humans and non-humans.

## PROJECT

**Urbaniahoeve's urban Foodscapes**

## DIVERSITY

**Diverse plant typologies**

Urbaniahoeve developed and implemented a variety of planting typologies in their foodscapes, including 'freestanding espalier fruit beds', 'herb carpets', 'wildly attractive edges', and 'foraging forest'. Each of the resulting plant communities make distinct contributions to the larger biotope and ecosystem.



PHOTOS 1 RACHEL CLARKE, 2 URBANIAHOEVE

## AGENCY

**Building skills and knowledge**

The programs of Urbaniahoeve comes with various opportunities for people to build new skills and knowledge. Some workshops are aimed for 'community up-skilling', in which participants learn about planting, pruning, and creating a rich soil. Many of these skills allow interested local residents to better take care of their local green spaces.

## CONNECTEDNESS

**Create a contiguous biotope**

One of the design principles of Urbaniahoeve is to "connect project locations to form a contiguous biotope". By adding a herb carpet around a tree planter, filling the edges of enclosed spaces with bushy and flowering plants, and considering tree planters as connectors between different gardens, each intervention is considered a contribution to a larger connected biotope.