Driving Urban Transitions

EUROPEAN PARTNERSHIP

Towards Regenerative Neighbourhoods:

European Cases, Insights, and Initiatives

A Curated Compilation made by the Circular Urban Economies Transition Pathway in the Driving Urban Transitions Partnership (DUT).

Editors: Ann Maudsley and Björn Wallsten

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Anthropocene, regenerative neighbourhoods, human-nature connections, urban transformation

In the grand narrative of Earth's existence, spanning billions of years, humanity's emergence approximately 200 000 years ago is a brief and recent event in the history of the planet. If the lifespan of the planet would be translated into a 24-hour day, human life would only appear for the last three seconds (!). Yet, within this short period, human activities have left a significant imprint on the planet and have become the driving force behind the ecological and climate breakdowns of the planet.

Starting with the introduction and spreading of Judeo-Christian values 2000 years ago, humanity shifted towards the perception that mankind stands above all natural processes on the planet, which set the basis for anthropocentric worldviews, a contradiction to ancient belief systems[1]. The agricultural and industrial revolutions, fuelled by growing populations, spurred the rise of turbo-capitalist systems, particularly in the global north, which progressively disconnected societies from nature, creating an artificial schism between human civilisation and the nurturing natural environment. This detachment has proven increasingly harmful to planetary living conditions, highlighting the detrimental consequences of neglecting the benefits provided by nature. It is no longer possible to find places that are not experiencing the negative side effects of human activities anywhere on Earth. Welcome to the Anthropocene, a geological epoch proposed to signify the era where human influence on Earth's geological and environmental processes is paramount and unprecedented[2].

In the Anthropocene, the fate of the natural world and humans is inseparable. Human impacts have caused unprecedented environmental crises such as climate change, biodiversity loss and pollution. Overshooting of planetary boundaries[3] causes rapid changes to Planet Earth's life-supporting systems with the risk of reaching tipping points: irreversible shifts into new states, such as a hot-house Earth[4], where the capacity to sustain human and non-human life is no longer present. Amid the challenges of the Anthropocene, a profound recalibration of human perception becomes imperative. It demands a fundamental shift in societal paradigms – a recognition of humans as integral to the natural world. This transformative shift encompasses multiple dimensions, fostering a holistic understanding of our place within the intricate web of life.

1 White, L. (1967). "The historical roots of our ecological crisis". Science. 155 (3767): 1203–1207.

2 Szerszynski, B. (2012) "The End of the End of Nature: The Anthropocene and the Fate of the Human", The Oxforc Literary Review 34(2) 166-184.

3 Rockström, J., et al (2009). Planetary Boundaries: Exploring the Safe Operating Space for Humanity. Ecology and Society, 14(2). http://www.jstor.org/stable/26268316

4 The term "Hothouse Earth" describes a potential future state of the Earth's climate where global temperatures have become significantly higher than today, regardless of the reduction of human -made greenhouse gas emissions. This scenario is defined by self-reinforcing climate feedbacks, including the melting of the great polar ice caps, which reduces the Earth's ability to reflect sunlight, and the release of greenhouse gases from thawing permafrost, which can further contribute to warming. A hothouse Earth climate reality would lead to higher sea levels, more extreme weather events, and significant impacts on ecosystems, biodiversity, and human societies.

Besides all the turbulences the Anthropocene brings to the planet, the good news is that Planet Earth has the capacity to regenerate (to a certain degree). It's crucial to align human processes with nature's regenerative capacity, not just to conserve nature but also to ensure thriving for humans and other species. Drawing inspiration from natural processes, we should explore and redesign economic models, governance structures, and urban practices that support the Earth's ecosystem and promote social equity. Switching gear in the Anthropocene from degenerate models of human processes (and urban development for that matter) to regenerative ones that nurture life and planetary health is possible if human-nature connection points are leveraged for systemic change. There are five types of human-nature connection points which all interact:[5]

- **Material connections:** The physical and economic benefits derived from nature such as food, wood, building materials, water, shelter, medicine etc.
- **Experiential connection:** Direct interaction with natural environments and green spaces such as forests, meadows and parks.
- **Cognitive connection:** Knowledge, awareness and concerns individuals gain about nature through education, culture, and experiences.
- **Emotional connection:** The affective and psychological connections people have with natural environments such as empathy towards nature, peace, belonging and awe.
- **Philosophical connection:** Perspective humans have on what nature is, how they value it and why it matters, and how we ought to interact with it: to master, participate, or steward.

These connection points provide various degrees of 'weight' to lever systemic changes in the current systems (Figure 1). What is striking here is that the emotional and philosophical perspectives, the inner perspectives, are seen as having the largest leverage points to change the current regimes and systems. While discussions on urban sustainability too often circle solely around questions and challenges related to material and experimental connection points, regenerative urbanism turns its lenses towards nature-human integrity, caring, feeling of belonging to a greater whole by contributing to the inner (emotional and philosophical) connections. Regenerative urbanism invites us to overcome the perception of human superiority over nature, it is to radically change the worldview that humans are superior to all other non-human lifeforms.

5 Ives, C. D., et al (2017). Human–nature connection: A multidisciplinary review. Current Opinion in Environmental Sustainability, 26–27, 106–113. https://doi.org/10.1016/j.cosust.2017.05.005

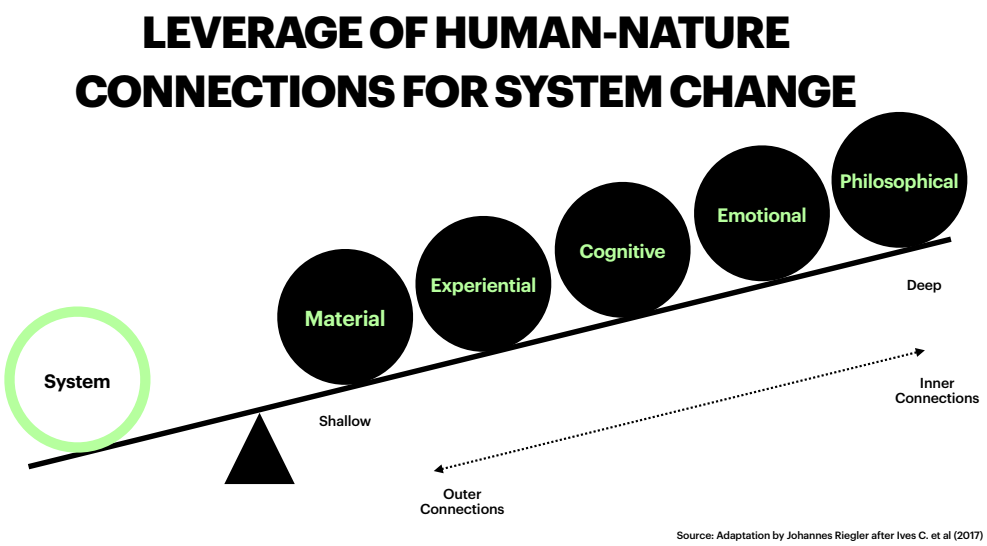


Figure 1: Leverage of Human-Nature Connections for System Change[6]

It bolsters community well-being and cultivation of resilient urban economies and it compels us to acknowledge that meaningful change must originate at the local level to yield significant global impact. Ultimately, it recognises how our intrinsic connection to nature transcends environmental imperatives.

For that reason, unlike traditional sustainability paradigms (doing less bad, reducing the negative social and environmental impacts), regenerative urbanism goes beyond mere preservation and mitigating environmental damage. Instead, it is actively striving to enhance ecosystems and the creation of public spaces that can drive robust and fair social change forward. It provides the basis for positive social and environmental impacts.

In essence, regenerative urbanism offers a transformative approach that not only addresses existing challenges but also fosters thriving neighbourhoods, communities and ecosystems, laying the groundwork for a prosperous future for generations to come.

6 Ives, C. D., et al (2017). Human–nature connection: A multidisciplinary review. Current Opinion in Environmental Sustainability, 26–27, 106–113. https://doi.org/10.1016/j.cosust.2017.05.005

Ann Maudsley

Ann holds a PhD in Architecture and Planning from the University of Melbourne, her hometown. Ann relocated to Europe, first moving to London, and then Sweden, where she is now based. Ann's scholarly, educational, and professional activities have taken place in universities and government institutions as well as in cultural sectors in Australia, the United Kingdom and Sweden. A focus of Ann's work has been the relationship between urban areas and nature. Ann now works as a Senior Research Officer at Formas, a Swedish Research Council for Sustainable Development, with European research and innovation programmes and partnerships, and particularly as one of the two Coordinators of the Circular Urban Economies Transition Pathway in the Driving Urban Transitions Partnership.

Johannes Riegler

Johannes is an urbanist and geographer based in Vienna, Austria, pulling together expertise and experience from multiple disciplines to transform cities in times of climate, biodiversity and other human-made crises. He is serving as a member of the Management Board for the Driving Urban Transitions Partnership, host and producer of the Cities Reimagined Podcast, and runs Anthropocene.City and is a validated URBACT expert. Johannes has conducted conceptual work on experimental urban governance models, particularly in the area of urban living labs, multi-actor processes and communicating complex urban-related topics to a broader public..

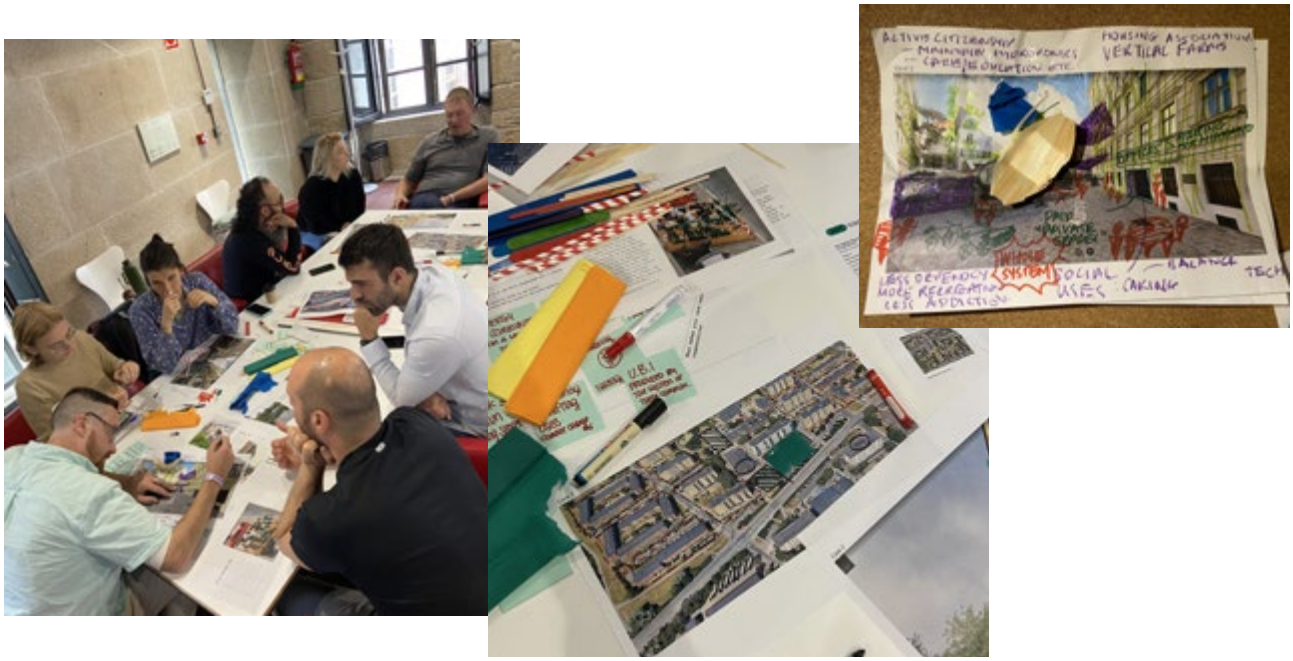
Björn Wallsten

Björn holds a PhD in Environmental Systems Analysis & Environmental Management from Linköping University, Sweden. Throughout his professional life, Björn has been concerned with questions on how natural resources become and are transformed in social processes, with a particular focus on urban infrastructure systems as the central interface between nature and society. Björn works as a Senior Research Officer at Formas, a Swedish Research Council for Sustainable Development, with European research and innovation programmes and partnerships, and particularly as one of the two Coordinators of the Circular Urban Economies Transition Pathway in the Driving Urban Transitions Partnership.

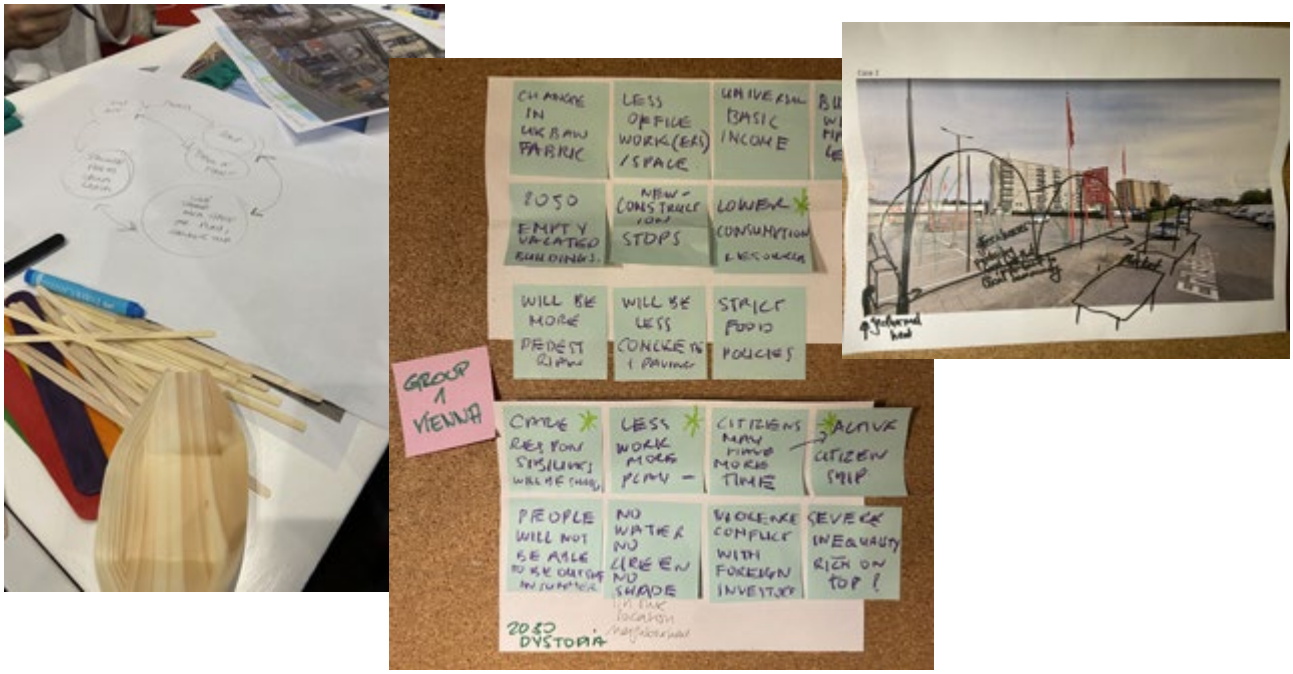
About This Publication

In this curated compilation of short, to the point, papers, we provide quick and insightful learnings of what regenerative urbanism implies at the neighbourhood scale of urban communities. We believe that a wide array of voices and perspectives enrich the discussion of this increasingly pivotal term and are happy to showcase a multifaceted collection of cases, stories, interviews, and argumentative pieces, that address different aspects of regenerative neighbourhoods in European cities today.

The compilation originates from the Circular Urban Economies Transition Pathway (CUE TP) in the Driving Urban Transitions Partnership (DUT)[1]. The aim of this transition pathway is to foster urban places, communities and neighbourhoods that not only sustain themselves but actively regenerate and enhance the well-being of their inhabitants and ecosystems. This is our regenerative paradigm and aspiration.



1 https://dutpartnership.eu/ The Driving Urban Transitions (DUT) Partnership is an intergovernmental research and innovation programme addressing key challenges of urban transitions. Our ambition is to shape and facilitate an innovation eco-system so that all urban actors can engage and benefit. With currently 67 partners from 28 countries the DUT Partnership addresses the challenges which European cities face in their endeavour to become sustainable and enhance the quality of life for their citizens. The DUT Partnership also contributes substantially to the European Union Mission: Climate-neutral and Smart Cities Mission of Climate-neutral Cities, the European Green Deal, and the Urban Agenda for the EU.



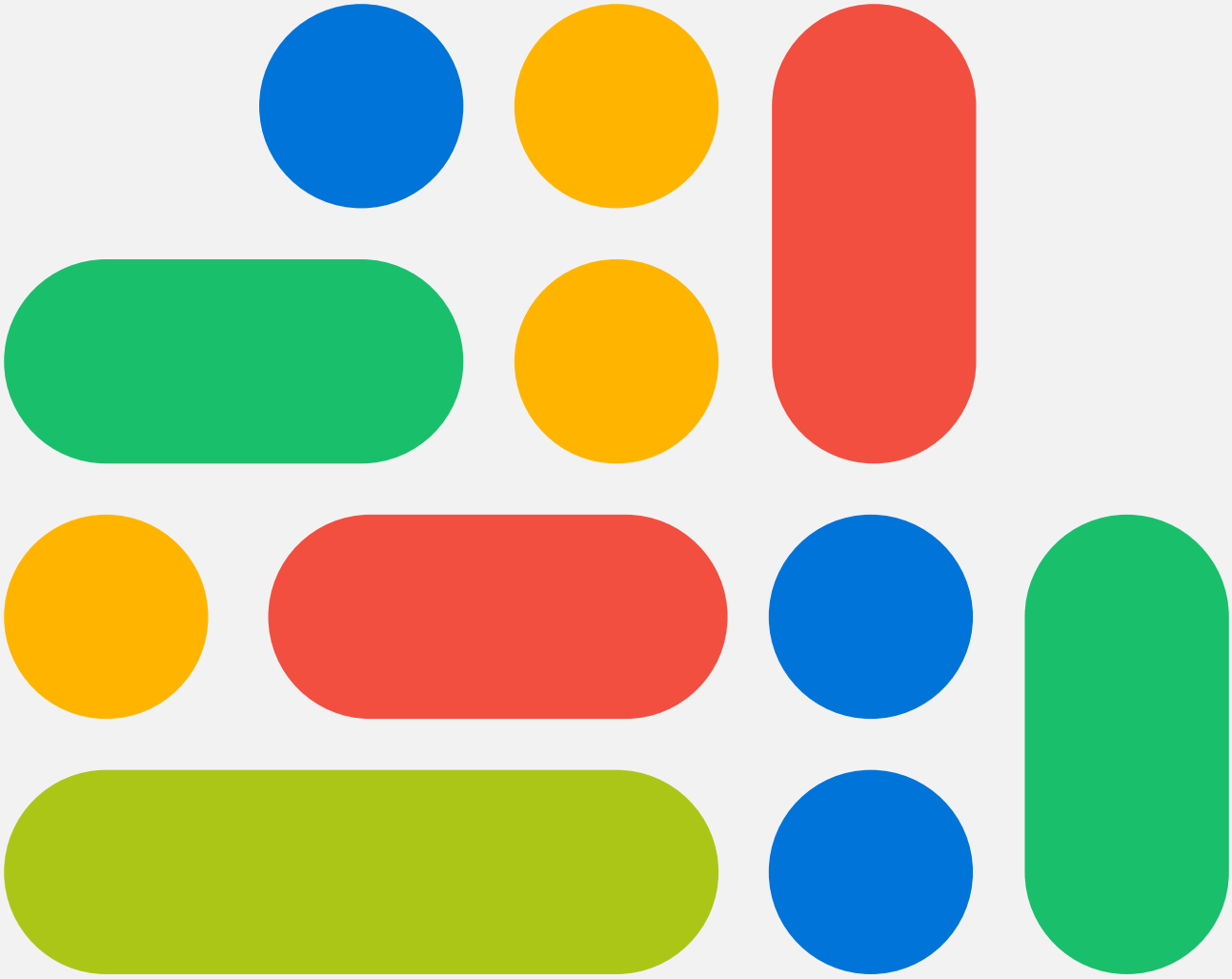
Our modus operandi is co-creation; we do things together with partners and projects, in a community of urban stakeholders throughout urban Europe. This co-creative spirit also permeates this compilation, which is the outcome of a continuous discussion that has taken place in a series of workshops and conference sessions over the last few years:

- "Unfolding Doughnut Economy dilemmas in the urban anthropocene", a Seed Session at the Nature of Cities-festival in February 2021
- "Unfolding Dilemmas of Regenerative Green Neighbourhoods" an AGORA Thematic Dialogue in June 2021
- "Visioning radically regenerative urban public spaces", an AGORA Conference Session at the Place-Making Week in Pontevedra in September 2022
- "Regenerative Neighbourhoods for African Urban Areas", workshop co-organized with ICLEI/Start in November 2022
- "Making Space for Regenerative Urbanism", an AGORA Thematic Dialogue in December 2022

In the fall of 2023, we launched a Call for Submissions to the participants from all these occasions and our community of urban stakeholders, to arrive at a collection of texts that showcase the so-far un-closed nature of regenerative urbanism as a concept, and how it can influence plans and designs of neighbourhoods of European cities.

Our intention is that texts in this curated compilation serve as access points for policymakers, practitioners, civil society organizations, innovators, the research community, and other stakeholders operating in urban settings. We hope they inspire you to think new thoughts, appreciate new sensations, and do things differently going forward!

Food for Thought



1

The Neighbourhoods of the New European Bauhaus as Boundary Objects for Sustainability Transitions

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Keywords:

Regenerative neighbourhoods, New European Bauhaus, European Green Deal, boundary objects, sustainability transitions, transition design, urban experimentation, SETS, place

In 2023, the European Commission proposed to dedicate the 6th Horizon Europe Mission to the New European Bauhaus, and specifically on its focus on neighbourhoods. Although the proposal was eventually rejected by the member states, the neighbourhoods initiative remains important, and only the format and extent of its implementation remains to be seen.

In fact, there are already examples of ongoing projects connected to the initiative independently from the Mission, such as NEBourhoods, a European Lighthouse Demonstrator in Munich-Neuperlach, and Soft Academy, a European Urban Initiative project in Tallinn (in which I am involved as an architect). But what is so particular about the neighbourhoods initiative that would warrant its presence in this position paper? After all, urban experimentation at the neighbourhood scale has been explored extensively in the urban transitions literature.[1] I propose that the initiative could have a unique place in this discourse due to its potential to align numerous and variegated living labs toward a shared, continent-wide transition trajectory. The word potential is important here, because the initiative is at its very beginning, and it is unclear how the NEB could oversee and coordinate the independent transformations. This combination of promise and uncertainty serves as the primary motivation for introducing the topic in this position paper, extending an invitation to transitions practitioners and scholars alike to contribute to shaping this evolving process in the upcoming years.

From a research viewpoint, the NEB neighbourhoods can be treated as a group of urban transformation case studies, each embedded in a unique context but propelled by a common, highly centralised initiative. This characteristic makes them appropriate for systematic comparison and theory building, an important item on the sustainability transitions literature research agenda.[2] There is a parallel to be drawn to the Transition Towns movement[3], although in the case of the NEB the geographical distribution is notably broader.

1 BROTO, V. C. & BULKELEY, H. 2013. Maintaining Climate Change Experiments: Urban Political Ecology and the Everyday Reconfiguration of Urban Infrastructure. International Journal of Urban and Regional Research, 37, 1934-1948.; BULKELEY, H., COENEN, L., FRANTZESKAKI, N., HARTMANN, C., KRONSELL, A., MAI, L., MARVIN, S., MCCORMICK, K., VAN STEENBERGEN, F. & VOYTENKO PALGAN, Y. 2016. Urban living labs: governing urban sustainability transitions. Current Opinion in Environmental Sustainability, 22, 13-17.; FRANTZESKAKI, N., BROTO, V. C., COENEN, L. & LOORBACH, D. 2017. Urban Sustainability Transitions, Taylor & Francis.; in Design Education, 2024// 2024 Cham. Springer Nature Switzerland, 128-143.; VON WIRTH, T., FUENFSCHILLING, L., FRANTZESKAKI, N. & COENEN, L. 2019. Impacts of urban living labs on sustainability transitions: mechanisms and strategies for systemic change through experimentation. European Planning Studies, 27, 229-257.

2 KÖHLER, J., GEELS, F. W., KERN, F., MARKARD, J., ONSONGO, E., WIECZOREK, A., ALKEMADE, F., AVELINO, F., BERGEK, A., BOONS, F., FÜNFSCHILLING, L., HESS, D., HOLTZ, G., HYYSALO, S., JENKINS, K., KIVIMAA, P., MARTISKAINEN, M., MCMEEKIN, A., MÜHLEMEIER, M. S., NYKVIST, B., PEL, B., RAVEN, R., ROHRACHER, H., SANDÉN, B., SCHOT, J., SOVACOOL, B., TURNHEIM, B., WELCH, D. & WELLS, P. 2019. An agenda for sustainability transitions research: State of the art and future directions. Environmental Innovation and Societal Transitions, 31, 1-32

3 SEYFANG, G. & HAXELTINE, A. 2012. Growing Grassroots Innovations: Exploring the Role of Community-Based Initiatives in Governing Sustainable Energy Transitions. Environment and Planning C: Government and Policy, 30, 381-400.

Another promising lens could be the investigation of the reciprocal relationship between high-level policy directives (such as the European Green Deal), partnership programs under Horizon Europe (such as Driving Urban Transitions) and transformative initiatives at the grassroots level. This inquiry could address various aspects of the transitions research agenda, including the connection between micro and macro level analyses, the contribution of urban experimentation to wider systemic change, and the relationship of grassroots innovation with regime organisations.[4] The latter is particularly interesting in this case because the NEB is facilitating bottom-up processes, while simultaneously serving as the primary institution for implementing EU-level policies (the European Commission). In this light, distinctions between top-down and bottom-up approaches, as well as the roles of landscape, regime, or intermediating actors, may need to be re-examined. Finally, the multiple case studies approach could be instrumental for examining how place matters for transition processes, one of the key research focuses of the geography of sustainability transitions.[5] Significantly, the potential for investigating place specificity lies not only in the comparison of different contexts, but also in the use of common (or at least similar) frameworks and guidelines as a constant, thus making place not just a variable, but *the main* variable.

From a practice viewpoint, NEB neighbourhoods can become testbeds for strengthening the synergy between the governance of transitions and the design of the built environment (architecture, urban design, urban planning) as means for effecting change. The reasons for a particularly strong design emphasis in this case is twofold: firstly, beauty constitutes one of the three fundamental pillars of the NEB[6]; secondly, the neighbourhoods are going to be transformed tangibly/materially by designer-led teams, informed by the pragmatic needs of the residents. Early impressions from the Soft Academy project indicate that multi-domain and multi-level[7] design is going to be needed to this end, including participatory visioning and scenario building, architectural design, landscape design, but also the (iterative) design of the transformation process itself, including upscaling possibilities and systemic impacts beyond the scope of the project.

4 Köhler et al., An agenda for sustainability transitions research: State of the art and future directions, 2019

5 COENEN, L., BENNEWORTH, P. & TRUFFER, B. 2012. Toward a spatial perspective on sustainability transitions. Research Policy, 41, 968-979.; HANSEN, T. & COENEN, L. 2015. The geography of sustainability transitions: Review, synthesis and reflections on an emergent research field. Environmental Innovation and Societal Transitions, 17, 92-109.

6 VAN REUSEL, H., BOUTSEN, D. & BAROSIO, M. The New European Bauhaus in Architecture Education? An Anthology for the Invisible. In: BLANCO LAGE, M., ATALAY FRANCK, O., MARINE, N. & DE LA O CABRERA, M. R., eds. Towards a New European Bauhaus—Challenges in Design Education, 2024// 2024 Cham. Springer Nature Switzerland, 128-143

7 CESCHIN, F. & GAZIULUSOY, İ. 2019. Design for Sustainability: A Multi-level Framework from Products to Socio-technical Systems, Taylor & Francis.

Transition design literature[8] has already provided insights and methodologies for such a designer-led steering of transitions, which could serve as a guide for teams that will tackle neighbourhood transformations on the ground. Furthermore, a process informed by transition design could be beneficial for a regenerative approach towards the neighbourhoods, since it tackles the design of social-ecological-technological systems (SETS)[9] as the highest level of systemic design. Despite the initial NEB call not officially framing transformation goals as regenerative, the equal emphasis on environmental and social sustainability, along with the acknowledgment of place-specific knowledge and the promotion of systemic design, creates an environment conducive to the development of regenerative solutions.

Ioannis Lykouras

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8 CESCHIN, F. & GAZIULUSOY, I. 2016. Evolution of design for sustainability: From product design to design for system innovations and transitions. Design Studies, 47, 118-163.; IRWIN, T. 2015. Transition Design: A Proposal for a New Area of Design Practice, Study, and Research. Design and Culture, 7, 229-246.

9 BUCKTON, S. J., FAZEY, I., SHARPE, B., OM, E. S., DOHERTY, B., BALL, P., DENBY, K., BRYANT, M., LAIT, R., BRIDLE, S., CAIN, M., CARMEN, E., COLLINS, L., NIXON, N., YAP, C., CONNOLLY, A., FLETCHER, B., FRANKOWSKA, A., GARDNER, G., JAMES, A., KENDRICK, I., KLUCZKOVSKI, A., MAIR, S., MORRIS, B. & SINCLAIR, M. 2023. The Regenerative Lens: A conceptual framework for regenerative social-ecological systems. One Earth, 6, 824-842.; RUEGER, E. H., CONSTANTINO, S. M., CENTENO, M. A., ELMQVIST, T., WEBER, E. U. & LEVIN, S. A. 2022. Governing sustainable transformations of urban social-ecological-technological systems. npj Urban Sustainability, 2, 10.

Approaches, Methods, and Visions

2

Community Land Trusts – a Land Governance and Ownership Model to Drive a Just Transition

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Keywords:

Community land trust, community-led housing, permanent affordability, inclusivity, circularity collective governance, land ownership, built environment, innovation, Brussels, Barcelona, Bridport

The challenge of a just transition

Community Land Trusts provide an innovative response to the challenges facing a just transition, starting with a new form of land ownership. Land underlies many of the challenges we face today – the lack of homes people can afford, lack of access to decent, quality community spaces and the degradation of our natural environment are all symptoms of land not serving a greater social purpose.

Across Europe, housing is increasingly unaffordable and out-of-reach for many people. Access to adequate, secure and affordable housing is an essential human right. Yet across Europe the cost of housing is rising at a much higher rate than incomes.[1] At the same time, the built environment consumes 40% of energy and contributes to 36% of greenhouse gas emissions in Europe.[2] However, in tackling these challenges, there is a lack of agency available to lower-income people in the operation of their housing, and the governance of their living environment.

The decisions we make to build, use, demolish and invest in our housing must be guided by their potential impact on both human rights and our planet's climate, as climate change can exacerbate existing inequalities. To ensure a just transition, decarbonization must also have the explicit aim of reducing inequality by prioritizing the needs of marginalized, low-income communities; this is a primary motive of Community Land Trusts.

Introducing Community Land Trusts

Community Land Trusts are nonprofit, democratic, community-led organisations. They develop and manage homes that are affordable to low and middle-income households, as well as other assets that contribute to thriving local communities. They act as long-term stewards of these assets, ensuring they remain permanently affordable.[3]

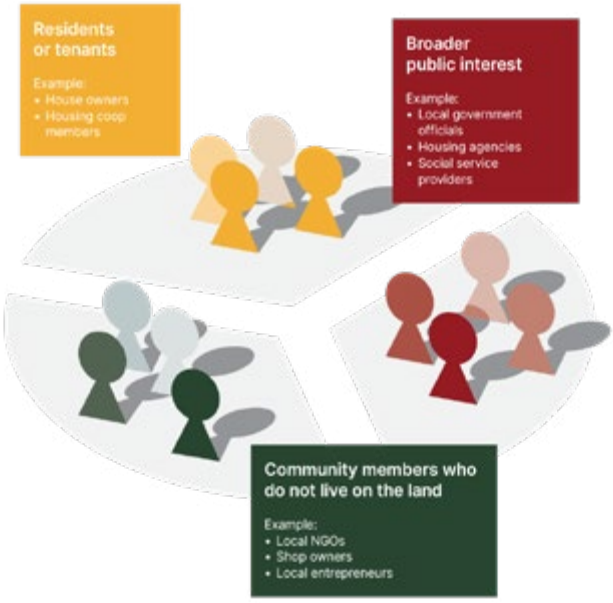
1 https://www.cbpp.org/blog/census-income-rent-gap-grew-in-2018

2 https://ec.europa.eu/commission/presscorner/detail/en/IP_21_6683

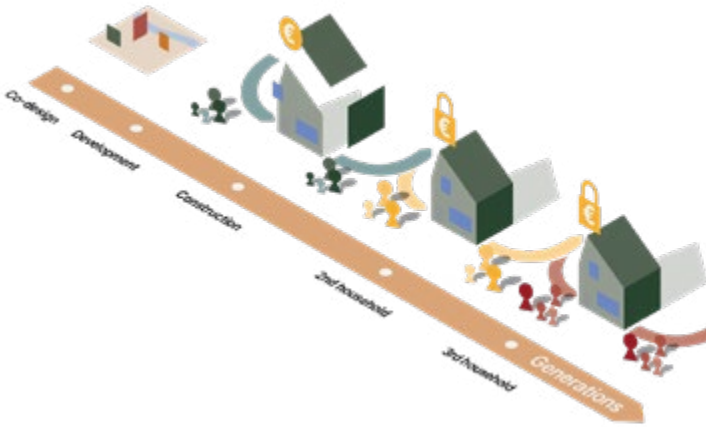
3 https://vb.nweurope.eu/projects/project-search/shicc-sustainable-housing-for-inclusive-and-cohesive-cities

Community Land Trusts in practice

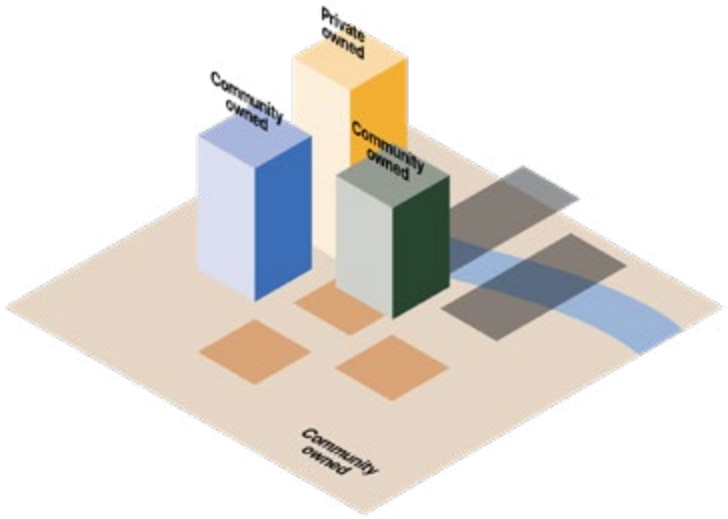
Community - inclusive and democratic governance - Community Land Trusts put communities at the heart of what they do. They acquire land to manage in the interests of the community and legally commit never to sell this land. The ownership of land confers agency, power and wealth. Community Land Trusts' governance structures bring together local residents, businesses and public institutions, balancing individual and collective interest.



Land - separate ownership of land and buildings - Community Land Trusts own the land, and residents own or rent the individual buildings. In so doing, they decouple housing from the financialised economy by separating the ownership of the land, which is the main driver of market value, from the ownership of the houses themselves, which is more reflective of their use value, creating genuinely and permanently affordable housing.



Trust - permanent affordability - Legal protections take the land out of the market and out of speculation in perpetuity, creating genuinely and permanently affordable housing generation after generation.



Proven and ready to scale

Globally there are over 600 Community Land Trusts acting as stewards for affordable homes and other assets for thousands of families and businesses. They have been recognised by the UN[4] and the European Union[5] as a solution that can achieve community-led delivery of permanently affordable homes (and other land-based assets). Community Land Trusts in Puerto Rico, Belgium and the US have won the Gold World Habitat Award, proving their adaptability to different geographic contexts.[6]

Since the 2010s, Community Land Trusts have become a mobile policy model supported by the EU's INTERREG project 'Sustainable Homes for Inclusive and Cohesive Cities' (SHICC). In Paris, the city administration has committed to erecting 20,000 new affordable homes through Les Organismes de Foncier Solidaire (OFS), the French version of Community Land Trusts, by 2026. Likewise, in Barcelona, a public-community partnership revolves around the extended lease of municipal land. In the UK and the Netherlands, housing associations and private developers are partnering with Community Land Trusts. Community Land Trusts also exist or are emerging across Belgium, Ireland and Germany.

4 CLTs have been recognised as best practice in the Habitat III UN's New Urban Agenda (UN, 2017, Art. 107 and 137) and in the most recent Cities for Adequate Housing Declaration (UCLG, 2018)

5 The EU Urban Agenda on Housing recognises CLTs as 'best practice' and encourages their replication; The European Parliament Report on Housing for All calls on the EU and member states to support CLTs. Texts adopted – Decent and affordable housing for all – Thursday, 21 January 2021 (europa.eu)

6 https://world-habitat.org/world-habitat-awards

Bridport Cohousing CLT (England) has 53 affordable, eco-homes for rent or buy. Here is a picture of its passivhaus timber frames, photovoltaic solar panels distributed to residents via a high capacity shared battery and microgrid.
Photo: Barefoot Architects.

La Borda, Barcelona is a self-organised housing cooperative offering sustainable, non-speculative housing. The project is located on a public land of social housing, with a leasehold of 75 years. Here you can see its collective living spaces and timber framing, built by its own timber framing construction cooperative.
Photo: Ivaro Valdecanto.

In 2023, the European Community Land Trust Network launched as a voice for Community Land Trusts across Europe. It will connect and support CLTs across the continent, spearhead awareness and advocacy campaigns, and collaborate with development partners to drive social, design, construction and environmental innovation within housing.

"The European Community Land Trust Network is such an important move at this time... to produce public value, public good, and create a better society."

– Leilani Farha

Delivering affordable and circular land use and housing

Community Land Trusts distinctive characteristics hold the potential to deliver circular and regenerative neighbourhoods. As permanent owners and stewards of the land, Community Land Trusts take a long-term perspective on decisions related to development and use which naturally results in more circular outcomes. Also their governance structures balance individual and collective perspectives and create a social foundation to enable collective circular initiatives. In doing so they offer an alternative to dominant real-estate practices which can hamper circular development due to the misalignment of costs and benefits between stakeholders.

Signals of change

Community Land Trusts principles of collective land ownership, permanent affordability, and democratic governance, make them effective vehicles for driving the transition to regenerative built environments and neighbourhoods.

There are already signals of change in support of Community Land Trusts. City governments are using Community Land Trusts as a solution to their housing affordability and stewardship challenges and introducing policies that support their growth. Community Land Trusts are partnering with housing associations and developers to marry the strength of both partners. It is the vision of the European Community Land Trust Network that Community Land Trusts become recognised as a mainstream option for affordable, inclusive and sustainable land use and housing across the continent.

Now is the time to accelerate the growth of Community Land Trusts in Europe, and to enable and promote Community Land Trusts across Europe to become regional drivers in the transition to a circular built environment.

Community Land Trust Brussels – Roue Libre shared mobility scheme.

Laura Parker-Tong

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3

Regenerative Communities in Deprived Environments

An Alternative Vision for Socio-Spatial Justice

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Within the discourse of regenerative neighbourhoods, pivotal considerations involve integrating notions like resilience and environmental sustainability. But how effective is a paradigm that depoliticises urban complexities and normalises adapting to perpetual disruption?[1] Departing from the mainstream discourse treating these concepts as static and technocratic solutions, we explore a paradigm shift towards establishing regenerative communities, focusing on participatory action research and design as catalysts for community-driven urban regeneration.

Elaborating and critically reflecting upon lessons from completed projects (CO3, NLAB4Cit, ge.CO, Public Toilet for Thoughts, Kalotrofa) of the research collective Open Lab Athens, this position paper envisions the regenerative community as a framework for the emergence of urban commons (Figure 1).

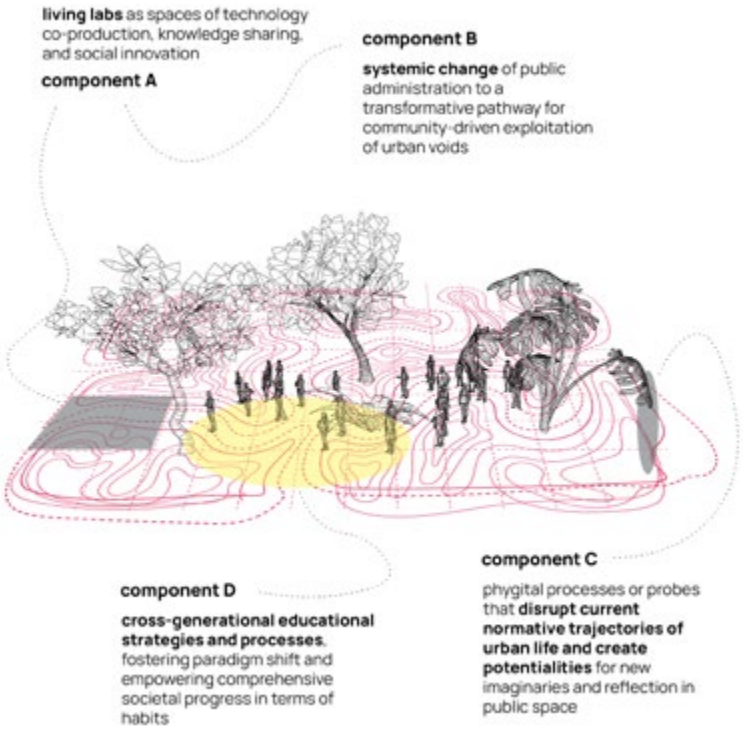

Figure 1: Diagram of the basic components of an alternative framework for socio-spatial justice in urban areas.

We have acknowledged that in the last decade there are opportunities in terms of just transitions for a city or neighbourhood to transform critical infrastructures and gain access to technological innovation. Still, it is crucial to consider equity in structuring those changes and with respect to the socio-cultural identity of each urban entity. This framework intends to address complex socio-spatial challenges and showcase the potential of these communities in fostering inclusive and socially just urban environments by gaining meaningful opportunities to exercise their voice.[2]

1 Neocleous, M. (2013) Resisting resilience. Radical Philosophy 178:2–7. Chandler, D. (2014) Resilience. The Governance of Complexity. London: Routledge

2 Cornwall, A. (2009) Locating Citizen Participation. DOI: 10.1111/j.1759-5436.2002.tb00016.x

We build our argument on four components from these projects, having as a core element and point of departure the concept of **living labs as spaces of technology co-production, knowledge sharing, and socio-technical innovation** (NLAB4Cit - **Figure 2**). Such spaces are 'third spaces', environments for addressing societal challenges by bridging the gap between research and real life. They provide an educational space for sharing knowledge (between stakeholders and across disciplines and schools of thought) and co-developing concrete solutions while at the same time making technology and participatory methodologies more accessible to the community.

Figure 2: Community infrastructuring with the Volunteer Forest Protection Team of Kesariani in Athens. Development of IoT meteorological station for the monitoring Hymettus forest as action in local living lab in terms of NLAB4CIT Horizon research program.

Building on this argument, living labs could work as impactful platforms for the nurturing of **communities of practice.** By approaching active citizens' initiatives in the city and connecting them with formal and informal stakeholders that can provide additional knowledge and resources, a living lab could help them grow and expand their actions. In this sense, "the concept of communities of practice" could help us understand living labs as processes that "reflects a social theory of situated learning that occurs within a web of social relationships and through participation in the world".[3] Developing these socio-technical processes through participatory action research and design implies a critical challenge from a research perspective. It poses a general question on how the role of the researcher as an expert with power in a co-design process, could be challenged through the horizontality implied by the approach of participatory action research.[4]

3 Cundill, G., Roux, D. J., & Parker, J. N. (2015). Nurturing communities of practice for Transdisciplinary Research. Ecology and Society, 20(2). doi:10.5751/es-07580-200222

4 Susanne Bødker and Morten Kyng. 2018. Participatory Design that Matters—Facing the Big Issues. ACM Trans. Comput.-Hum. Interact. 25, 1, Article 4 (February 2018), 31 pages. https://doi.org/10.1145/3152421

These spaces of experimentation also provide **a model for the systemic change of public administration to a transformative pathway for community-driven exploitation of urban voids (Figure 3).**

Figure 3: The "12 common buildings" is a board game about community infrastructure, abandoned buildings and the dialogue between different stakeholders in the city. It was created as an engagement tool in terms of the H2020 CO3 project. Workshop in July 2021 in Kypseli, Athens.

There is a great number of empty buildings or urban voids in the cities which could host uses for the flourishing of communities, and many of them are owned by public authorities. Through the model of living labs such spaces could be provided to citizens in order to empower social reproduction and solidarity activities as well as to develop new trajectories of cooperation and social innovation. The generation of new common places of social interaction by implementing inclusive participatory processes and by engaging diverse stakeholders to propose community uses on empty buildings could have a beneficial response to the dynamics of gentrification and touristification of urban areas. Such procedures of collective reflection and decisions about the management of urban space have the potential to raise awareness of critical urbanism for both citizens and public administrations. Consequently, when such experimentations lead to the development of community infrastructures or social provision (solidarity clinics or housing) that could 'scale out, up, and deep'[5] they could impact and protect areas from the loss of their local identity or population displacement, as an uneven consequence of large-scale redevelopment.

The third component refers to phygital processes or (cultural, technological or civic) probes that disrupt current normative trajectories of urban life and create potentialities for new imaginaries and reflection over, of and for **public space and its interaction with potential socio-technical configurations** (Public

5 Moore, M.-L., Riddell, D., & Vocisano, D. (2015). Scaling Out, Scaling Up, Scaling Deep: Strategies of Non-profits in Advancing Systemic Social Innovation. The Journal of Corporate Citizenship, 58, 67–84. http://www.jstor.org/stable/jcorpciti.58.67

Toilet for Thoughts - **Figure 4**). It is generally accepted that the experience of the pandemic and its implied isolation had a big impact on our social behaviour and reflexes. In this social context, it is important to rethink how individuals could regain a sense of belonging, without feeling exposed.

Figure 4: The "Public Toilet of Thoughts" in use in the public square of Chalandri, Athens in July 2021. The idea was created as an experimentation in-between research and art in order to explore how people would respond to the challenge of expressing and sharing feelings and experiences about the pandemic. (In collaboration with LUDD and University of Aegean).

Through the mediation of digital prototypes (IoT or digital archives/platforms) that we have all gotten used to using and relying on for our everyday lives, we could create a condition of possibility in public space, to speak and also to listen to narratives of the neighbourhood. On this basis, the process of exchanging thoughts and feelings through a place-based physical/digital intermediate can reveal great potential in becoming aware that "I am not alone" in this city, and as such regain a sense of belonging and place-based connectedness. People would obtain the possibility of sharing stories about stressful situations, depression and techniques to "ride out the storm" in conditions of emergency our societies are facing, and maintain a mental shared space where individualities build a collective assemblage, that constitute a passage to re-enter a collective reality in the postmodern times of social isolation.

Finally, the fourth component is about **cross-generational educational strategies** and processes, fostering a paradigm shift and empowering the idea that any **urban transition comes through comprehensive societal progress in terms of habits** (Kalotrofa). Our involvement in projects in the field of education led us to realise the impact of serious games, as an approach to communicate complex knowledge about societal challenges to a group of people in a small amount of time. Processes could engage different age groups in generative ways and provide frameworks where learning and knowing emerge through a more performative involvement and interaction of the participants.

This holistic approach to regenerative communities could represent not only a process of participation in urban transformations but also survival practices against gentrification and displacement. The successive crises of the last two decades, proved, on many occasions, that communities were left alone to take responsibility for their future well-being under a regime of self-help, driving them to discover innovative and inclusive solutions. Through this holistic approach, the framework goes beyond resilience by spatialising justice, building long-lasting social relations, and ultimately, contributing to the emergence of regenerative communities capable of thriving in the face of perpetual disruption.

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4

New Urban Tourism as a Frame for Regenerative Practice in the Living Lab Setting

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Introduction

The European Commission advocates for Circular Urban Economies (CUE) to transform cities into sustainable, resource-efficient hubs through circular practices, collaboration, and innovation[1]. The integration of such measures aims to address environmental and societal goals while countering the adverse effects of unfettered capitalism by emphasizing social resilience and innovation at the community level. Despite the ambitious agenda, the compatibility of CUE with the prevailing growth-centric policies remains uncertain, since aligning urban development and economic governance to circular principles, requires deep engagement with quintuple helix actors to influence behaviours, and new patterns of resource consumption. Tourism, an economic activity that touches almost every facet of urban governance is uniquely placed to frame citizen engagement and regenerative dialogue. The extractive nature of current tourism practices necessitates bespoke solutions. As the world's only urban living labs in the area of leisure and tourism, the Urban Leisure and Tourism (ULT) living labs are a mechanism to initiate positive interventions at the neighbourhood scale that can help integrate tourism into wider policy debates.

As a regenerative paradigm, CUE resonates with the ULT values in fostering collaboration within the local community, supporting interdisciplinary research towards inclusive, and sustainable tourism and leisure products and interventions. Informed by the framework proposed by Hernandez-Santin et al.[2], regenerative tourism requires a shift in social-ecological consciousness, moving from individualistic to collective action. This systemic change necessitates that cities (as their tourism ecosystems) be understood as a complex adaptive systems, and that actions and measures taken towards achieving this change are rooted in specific places, community-centred, and place-based. Experience from our ULT labs, both established in peripheral peri-urban communities undergoing significant speculative socio-spatial transformation, cautions us against tokenistic models of collaboration with communities[3]. Often these exercises do not adequately address the power imbalances that exists within these adaptive systems, and how political ideologies influence the planning for sustainable and inclusive communities[4]. Noble goals can often clash with political realities, where grassroots efforts to build community resilience struggle to influence policymaking significantly. Ideological conflicts, particularly between conservative fiscal approaches and more nuanced, multi-polar governance models like urban commons, hinder the practical application of circular urban economies. This stalemate obstructs policies aimed at fostering equitable community-environment relationships, impacting spatial justice and resource accessibility.

1 European Commission (2021). Urban Agenda for the EU on Circular Economy. European Commission. Available from: https://futurium.ec.europa.eu/sites/default/files/2021-07/Urban%20Agenda%20for%20the%20EU%20%20Circular%20Economy%20-%20Final%20report.pdf

2 Hernandez-Santin, C., Hes, D., Beer, T., & Lo, L. (2020). Regenerative placemaking: creating a new model for place development by bringing together regenerative and placemaking processes. Designing Sustainable Cities, 53-68.

3 Gerritsma, R and Horgan, D. (2024) The Urban Leisure and Tourism labs as incubators for sustainable tourism interventions: sharing insights from educational research perspectives on regenerative placemaking in Amsterdam and Rotterdam. In Tourism Interventions Isaac, R.K., Nawijn, J., Farkić, J., & Klijs, J. (Eds.). (2024). Tourism Interventions: Making or Breaking Places (1st ed.). Routledge. https://doi.org/10.4324/9781003449027 (Edited volume in publication)

4 Horgan, D., & Dimitrijević, B. (2020). Social innovation in the built environment: the challenges presented by the politics of space. Urban Science, 5(1), 1.

Furthermore, municipalities often grapple with resource limitations, conflicting ideologies, and the challenge of empowering communities. This position paper contribution draws on insights from our ULT labs and proposes a nuanced approach to inclusive urban development, highlighting the potential of living labs in facilitating community-centric sustainable tourism and urban regeneration.

The challenges facing CUEs in practice

Loretta Lees' extensive research on gentrification underlines the complexities cities face during spatial changes, competing for investment and global stature within a neoliberal framework[5] Amsterdam, post-2008 crisis and pandemic, revamped its tourism and attracted elite expatriates, while Rotterdam reinvented its post-industrial image to boost tourism and investment[6]. These efforts often lead to policies resembling gentrification, challenging community preservation. Lees et al. emphasize considering the human impact of such urban policies. Horgan and Dimitrijević[7] advocate for inclusive urban development, enabling communities to actively participate in and shape their urban landscapes, particularly within the tourism context and refer to how political ideologies often inhibit development policies that promote the values of the socio-spatial equity. Under neoliberal policies since the 1970s, Dutch urban planning accountability has waned, with New Public Administration (NPM) aiming for efficiency but leading to varied impacts across Europe. Claassens et al.[8] highlight the unintended consequences of Dutch decentralization, moving from stringent spatial planning to a more deregulated, market-oriented approach. This shift increased competition for land, leading to densification and spatial conflicts in cities like Rotterdam and Amsterdam, despite a formally hierarchical planning structure. Reinvoking the spirit of the Dutch polder model, emblematic of consensus and cooperation, parallels the collaborative spirit of the labs. As a model for platforming place-based co-production the ULT living labs drive positive change through capacity building that underpins the collective mission to activate circular urban environments, with a focus on real-world sustainability and regeneration. Incubated within a university of applied sciences, our labs transcend heterodox research approaches, being practice oriented by design and focused on growing social capital in place. This we do in close partnership with local ecosystem partners including the DMOs (Destination Management Organisations) of both cities hosting labs.

Gentrification challenges (peri)urban community transitions due to its profit-driven nature and transitioning towards regenerative models requires confronting disparities stemming from such clashes. Amsterdam Noord and Rotterdam Zuid are examples of this, with gentrification altering community landscapes and raising concerns about public trust and participation. The role of new urban tourism is highlighted to mitigate these impacts, encouraging local engagement and identifying opportunities amidst change. The ULT labs

5 Lees, L. (2022). Gentrification, urban policy and urban geography. Space and Polity, 26(2), 109-114.

6 Cocola-Gant, A. (2018). 17. Tourism gentrification. L. Lees, & M. Philips, M.(Eds.), Handbook of gentrification studies, 281-293.

7 Horgan, D., & Dimitrijević, B. (2020). Social innovation in the built environment: the challenges presented by the politics of space. Urban Science, 5(1), 1.

8 Claassens J, Koomen E, Rouwendal J (2020) Urban density and spatial planning: The unforeseen impacts of Dutch devolution. PLoS ONE 15(10): e0240738.

focus on enhancing this through regenerative tourism, emphasizing community co-creation and sustainable development. Hernandez Santin et al.[9] suggest a regenerative placemaking framework, focusing on community and environmental connections through local initiatives, fitting within broader social innovation strategies. Living labs play a crucial role, fostering collaborative place development and bridging individual and collective goals towards ecological and societal sustainability[10]. The iterative practices of the ULT labs are continuously being improved, seeking to drive local ownership for creative tourism and leisure interventions and move away from exercises of solutionism7[11]. Efforts are underway to refine tools like a "Place exploration and sensemaking"-map to better engage with local identities and resources, moving away from traditional management towards adaptive, regenerative tourism strategies. Addressing challenges like participation fatigue involves developing more intentional community relationships and fostering a collective socio-ecological consciousness, emphasizing empathy and collaborative efforts for sustainable urban transformation. Regenerative tourism, as advocated by Bellato et al.[12], aims to enrich the unique character of destinations, guiding the Amsterdam and Rotterdam Urban Leisure and Tourism Labs (LLs). Our tools, like the Place exploration and sensemaking map, are crucial for identifying and enhancing local features, with a focus on co-developing strategies that honour local culture and nature. Dredge[13] emphasizes that regenerative tourism, counter to traditional management, views tourism as a complex system needing nuanced, community-focused approaches to address challenges like social exclusion. Our goal is to refine tools for deeper engagement with ecosystem actors, fostering shifts from individual to collective focus and enhancing community capacity for sustainable change, urging policymakers and practitioners to engage more directly with community life.

9 Hernandez-Santin, C., Hes, D., Beer, T., & Lo, L. (2020). Regenerative placemaking: creating a new model for place development by bringing together regenerative and placemaking processes. Designing Sustainable Cities, 53-68.

10 Koens, K. (...) & Horgan D. (2024). How deep is your lab? Understanding possibilities and limitations of living labs in tourism. Journal of Destination Marketing & Management. (In publication).

11 Gerritsma, R and Horgan, D. (2024) The Urban Leisure and Tourism labs as incubators for sustainable tourism interventions: sharing insights from educational research perspectives on regenerative placemaking in Amsterdam and Rotterdam. In Tourism Interventions Isaac, R.K., Nawijn, J., Farkić, J., & Klijs, J. (Eds.). (2024). Tourism Interventions: Making or Breaking Places (1st ed.). Routledge.(Edited volume in publication)

12 Bellato, L., Frantzeskaki, N., & Nygaard, C. A. (2023). Regenerative tourism: a conceptual framework leveraging theory and practice. Tourism Geographies, 25(4), 1026-1046.

13 Dredge, D. (2022). Regenerative tourism: Transforming mindsets, systems and practices. Journal of Tourism Futures, 8(3), 269-281.

Conclusion

Regenerative urban tourism integrates users and functions within circular urban economies, emphasising circularity and efficiency in a place-based ecosystem. This requires a shift towards a regenerative mindset, engaging stakeholders through active listening and consensus on future socio-ecological urban challenges. Equitable, inclusive policies and actions are vital, requiring deep participation, especially from marginalised groups, to enhance quality of life. Regenerative practices depend on continuous feedback and adaptation, with ULT labs in Amsterdam and Rotterdam embodying this approach. They aim to develop sustainable tourism that supports circular urban economies, fostering equitable, resilient, and vibrant communities. Community concerns about sustainable development often involve fears of exclusion and gentrification.

To foster a systemic regenerative approach, communities must lead the contextualisation of circular urban economies' ambitions, enhancing future resilience. This requires shifting from traditional outcomes to dynamic, community-owned strategies, promoting direct, on-street engagement with civil servants and locals to ensure community buy-in. Customized engagement strategies are crucial, reflecting each community's unique culture and needs, fostering ownership and active participation in co-production towards sustainable outcomes. Building long-term trust within ecosystems is essential for the success of such initiatives, moving beyond temporary interventions to establish deep-rooted, impactful projects. Addressing the populist narratives challenging CUE's development and promoting collective action through community-driven storytelling can empower sustainable urban transformation, highlighting the importance of inclusive, collaborative frameworks for achieving equitable and regenerative urban neighbourhoods.

The Urban Leisure and Tourism labs in Amsterdam and Rotterdam's peripheral neighbourhoods are central to understanding and influencing the socio-spatial evolution of these cities. In collaboration with a diverse network, the labs employ participatory methods to forge socially beneficial sustainable tourism interventions. The Rotterdam lab, situated in the redeveloping Zuidplein area, builds on Amsterdam Noord's experiences, turning a once-vacant space into a collaborative hub for urban renewal. Rotterdam's ambition to transform from its port-centric past to a vibrant urban space is emblematic of the post-industrial city's adaptive resilience. These labs leverage their peri-urban settings to address broader societal challenges through tourism-focused initiatives. Tourism, intertwined with urban economic growth, is redefined by the Inholland labs to foster local engagement and address holistic community needs.

The labs prioritize regenerative tourism through co-produced research, engaging a wide array of stakeholders in creating sustainable, inclusive urban environments. They envision future scenarios that champion 'localhood', aiming to enrich urban leisure, tourism, and community vibrancy, thereby positively transforming Dutch urban landscapes.

Our vision for Living Labs 2.0 involves refining prototyping, engaging end-users in testing, and ensuring local ownership for scalable interventions, integrating diverse knowledge and research methods for impactful co-production. We aim to stay at the forefront of innovation, focusing on community integration and enhancing educational approaches through tools like the Place Exploration and Sensemaking templates, fostering community engagement and partnership. ULT Amsterdam students have been developing innovative experiences to foster connections among Startblok Elzenhagen residents, focusing on communal engagement. Examples of these are found throughout this contribution.

Examples of Urban experimentation and placemaking interventions in Amsterdam and Rotterdam

Model of the **Silent Sail** concept used to facilitate co-design with communities

Andromeda Achiaa speaks to media about the **Story Bench** in Amsterdam Noord

The **Stories of Fire project,** a collaboration with Warm Welcome Amsterdam, centers around a sustainable fire pit, facilitating storytelling among diverse young adults, enhancing safety, social cohesion, and resilience. This initiative creates a welcoming environment for 530 residents, utilizing the ashes for soil enrichment. Another student group collaborated on the SAIL event, proposing a **Silent Sail** to make the large nautical gathering accessible to neurodiverse individuals, promoting inclusivity and local community engagement. These projects exemplify how tourism can bridge gaps and combat social exclusion. A recent "Travel Beyond" episode showcased **the "Verhalenbankje"** (Story Bench) by Andromeda Achiaa and Amsterdam lab students. This bench, encouraging locals to share stories, exemplifies practical, sustainable tourism efforts in the Netherlands, highlighting our labs' commitment to applying theoretical concepts in real-world settings.
Listen at: http://tinyurl.com/398ft8hm

Place exploration with Rotterdam Partners the local Destination Management Organisation (DMO)

Learners explains their **Wayfinder** concept to Mayor of Rotterdam, Ahmed Aboutaleb

In Rotterdam's Zuidplein area, known for its regeneration yet facing social challenges, a project focused on Placemaking after dark aims to enhance safety and liveability. Collaborating with Rabobank, students and researchers developed solutions to improve the well-being of residents and businesses, emphasizing quality of life, sustainability, and inclusivity. The **Empowherpath**, an interactive route designed for those feeling unsafe at night, particularly young female employees, incorporates art and community engagement to foster a safer environment. The **Wegwijzer (Wayfinder),** an interactive installation highlighting local culture and diversity, serves as a community beacon, enhancing social cohesion and safety perceptions through engagement and local ownership. These initiatives exemplify innovative approaches to urban safety and community building, supported by collaborations that bridge social design and practical implementation

Donagh Horgan

Dr Donagh Horgan is a researcher-practitioner and lab lead at the Urban Leisure and Tourism Lab Rotterdam. His work looks at societal transitions through a holistic lens of sustainable tourism. Trained as an architect and social designer, he follows a regenerative perspective, consulting with governments and place-based ecosystems on socio-spatial transformation.

5

The Right to a Fair City

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Keywords:

Youth participation, empowering citizens, capacity building, knowledge transfer, films, movies in wonderland

“The world of reality has its limits; the world of imagination is boundless.”

Jean-Jacques Rousseau

How we grow and where we grow up determines our understanding of the world. We tend to meet our world, especially the built environment, daily as a sequence of buildings, places, streets, which were constructed or placed for us, by others.

My daughter grew up in an urban environment. For her the term “Wir gehen in die Natur” (We are going into nature) meant having to walk on busy streets for a dozen minutes, taking the tram for another ten to twenty minutes, and then reaching a park, predefined in functions, furniture, and paths. Her perception of nature was not related to green at all. It was only when we went camping that we noticed her concept of nature was different.

Most young people have similar limitations, which we adults and professional are not aware of. Based on their primary experiences and upbringing they see their surroundings in a certain way, which is different from location to location and different from group to group. Yet they are expected to take part in or make informed decisions during participatory processes. How can we rely on participatory processes if the experiences of participants are so limited?
How can we ensure that new ways can be found through participation? In other words, how can we make participation and collective decision-making work?

Imagining the non-experienced is best made possible through exposure to images. Especially moving images have the capacity to tell stories that inspire and inform. This is the reason why we employ films to show and exhibit what can be done or has been implemented by others in other places and use them to inspire and ignite conversations on themes such as quality of life, quality of relationships, quality of places, quality of belonging, quality of working towards common interests, quality of realities and much more. These are the qualities that need to serve as the ambition for regeneration projects, and they can’t be fully experienced in one location or in the lifetime of a youngster residing in a neighbourhood of a city. Through films however, we can tell the stories of how such qualities can be utilised and show real-life examples of what they mean, how they’re incorporated into design, and what they might look like to the blind eye.

A person of 10, 15 or even 20 years has a set of experiences and a notion of reality. Working on a potential future scenario will most likely be fuelled by the experienced reality. No matter what information might be provided to the participants in a participatory process, the fact is that their built reality and experience within it is what will be dominating the exchanges. If participants are only provided information to help expose them to new ideas and concepts through forms such as flyers, presentations, and similar, our observation is that they tend to become rather passive. To effectively collaborate and co-create with citizens, especially with young ones, a more intensive effort is needed. The

aim must be to provide some sort of proverbial nutrition to fuel their thought patterns and the imagination. To empower citizens to decide or at least co-decide, we need to provide **a better understanding of what is possible.** We use films as a means of enhancing the understanding of what was possible elsewhere, showcasing potential scenarios and highlighting dynamics of urban regeneration projects, while naming and describing the winners and losers of such undertakings. We curate a selection of different films by different artists, with different genres and differing lengths on the topics of focus, to help us visualize and imagine the realms of possibility.

Watching films – seeing alternative realities

Urban Civic Lab film screening and discussion ©wonderland

In our training of Urban Civic Lab, we curated different short films originating out of various parts of Europe to define collectively the values for our project. While viewing "Convento delle Capucinelle[1] - the former church complex", an Open Heritage film, we noticed one participant was emotionally impacted. We then learned that he originates from Napoli, where the case is located, and left the city due to lack of opportunities in the city for young people in his home-town. The film presented a case study as an alternative scenario, and that this came out of his hometown was the perfect emotional connection to start the workshop on values and expectations. Our curated films evoke emotions and concentrate the energy and thought patterns around the topics that are normally not possible with common or regular workshop methods.

1 https://openheritage.eu/convento-delle-cappuccinelle/

Producing films – altering the reality

In film workshops we work with citizens and try to find means to express their imagination. In the Blickpunkte[2] workshop with a team from Mies TV in Salzkammergut we staged how young people perceived existing and underused public spaces. The workshop addressed questions such as:

- Who owns the street and public space?
- What about the right to use this space, and the ways we navigate through it?
- Which routes do we take?
- Who has access to urban space, to shops, recreational, and green spaces?
- What do children and young people need or want for spaces and places in their town and neighbourhood?
- Does the region offer sufficient mobility for senior citizens?
- And what about the re-use of vacant spaces?

As a visual exploration, the public spaces of the region were filmed and edited into a short story. The public screening[3] allowed an insight into the perspectives of youngsters on the spaces and as well as their demands from the regional development.

Screening films – where matters

Parkingday for fitness in Favoriten ©xsentrikarts

During our film screenings, we aim to ensure the attendance of a diverse audience and attempt to involve people who might not be directly related to the topics dealt with, especially on the challenges of architecture and urban

2 https://wonderland.cx/news/film-workshop-our-free-spaces-european-capital-of-culture-bad-ischl-salzkammergut-2024/

3 https://www.salzkammergut-2024.at/en/projekte/points-of-view/

planning. Therefore, our priority with popup film screenings in public spaces is to ensure it is accessible for everyone, viewable with no fees, and followed up with discussions on the topics raised. We like to use the occasion to foster dialogue and exchange among citizens and experts. Our collaboration with the Viennese Cycle Cinema for instance allows such screenings to be interactive because they developed a system that uses the electricity created from pedalling stationary bikes to power the projector and screenings[4]. This unique format allows us to simply create a pop-up cinema anywhere needed and organize screenings to the public. From parks, mills, to streets or fields, any field-film-screening is possible. And as an additional feature, the bike ride of participants allows a deeper connection with the activity. During the "Parking Day for fitness" initiative, we curated a public screening in the Viennese Supergrätzl in collaboration with Xsentrikarts. Citizens of all ages powered the screening with bikes throughout the event.

Outcomes

Stories in films are very effective in helping launch discussions and provide input to inspire imagination. At times the exchange can be very emotional and requires skilful moderation during the event and follow up activities. If films are used as a means of communication, providing sufficient time to elaborate on the topics, and ensuring an environment in which participants aren't hesitant to speak up, is very important. Due to our long-lasting experience with films, we strongly recommend the media of films for collaboration and co-creation process in our urban-healing projects. Films help with imagining alternative scenarios, expressing needs, and pointing out issues which are not possible with other media. **The rich spectrum of films is a very helpful tool to ensure a meaningful participation of citizens,** especially with young participants.

Bahanur Nasya

Bahanur is an architect, researcher, managing projects, as well as teams, and film producer. She has studied in Vienna and Barcelona where she has specialized in sustainable architecture, just and fair scenarios, and future proof development concepts. She is working in different international projects (EU funded), with the aim to support communities throughout Europe to valorise their heritage collectively, to serve everyone and not just selected few. She combines research with creating knowledge sharing products (manuals, films, stories, webinars, and training). She is working in the grey field between citizens, practitioners, scientists, engineers, and decision makers.

Yilmaz Vurucu

Yilmaz boasts over 20 years of international experience in creating stories, producing, writing, and directing films, documentaries, and campaigns. As an award-winning filmmaker, his work covers a wide range of subjects, ranging from questioning whether AI can develop human traits in his most recent film, I Feel Human. Again (2023) to sustainable urban development in "the sea in me" (2010), social inclusion and justice in Borders (2011), social inequality, class struggle and family abuse in "Dr. Zack" (2010) and capturing the stories of adaptive heritage re-use in "The Open Heritage" documentary series (2020). He's currently in post-production on a feature documentary telling the stories of communities transforming historical heritage buildings into socially inclusive projects. He's active in research and social programming in numerous EU funded projects, while using artistic research methods to reach diverse groups of the society.

4 https://wonderland.cx/elementor-11569/

6

Infrastructures “in Between”

Placemaking To Support Circular Behavior With Regenerative Potential

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Keywords:

Circular economy, circular transition, neighbourhood scale, neighbourhood infrastructure, productive infrastructure, community building, community innovation, urban experimentation, placemaking, daily life, behavioural change

"A place belongs forever to whoever claims it hardest, remembers it most obsessively, wrenches it from itself, shapes it, renders it, loves it so radically that he remakes it in his own image".

– Joan Didion

The concept of the regenerative city pays special attention to the multi-scalar balance between the productive capacities of a system and the resources that this system needs. Thus, the regenerative aspect can be understood as the way in which the urban system seeks to self-provide more resources to sustain both, society (for consumption purposes) and the ecosystems that support it (for regeneration purposes).

However, it is difficult to think of generating more resources than we consume without immediately inscribing them in the logic of consumption, assuming them as potentially consumable. How to can we get out of the production-consumption equation, so we allow regeneration to happen?

This has to do with the fundamentals of the circular economy, where value is given to all outputs as resources for new processes, to minimise the impact of productive systems. Beyond ensuring the long-term environmental sustainability of urbanisation, implementing the regenerative city can also means creating opportunities for local economic growth, enhanced livability and well-being, better public spaces, improved social equality and cohesion, greater democratic participation, and stronger urban resilience.[1]

The circle of daily life

The principle of circularity drains into the habits and daily life of people, valuing the domestic practices of reuse, recycling, responsible consumption, and resource optimization. However, we know that there is no point in separating garbage in our homes if there is no management system that properly processes household waste and puts it back into circulation as raw material for other production processes. If the consumer does not return the empty ink cartridge from his printer to a point where the ink supplier can use it as a raw material, the system is not complete; the cartridge simply becomes waste as in the traditional linear system. The consumer must therefore assume his role within the production system as a structural part of his daily life. The consumer is a link in the circular chain and without his participation, the circle is broken.

1 World Future Council (2014). Imagine a Regenerative City. Hamburg: World Future Council.

The circular system is not reduced to the simple producer-consumer binomial. When consumers bring ink cartridges to nearby collection points, they participate in the distribution system and take on logistical roles within their daily routines. For this to occur, collection centers must be strategically placed for easy incorporation into daily life.

Many of the different steps in the collection, treatment and reuse processes occur at the neighbourhood scale where proximity relations facilitate integration between productive flows and daily habits. However, textiles, food, electronic devices and furniture follow different circular systems and we must therefore equip our neighbourhoods with a technical support infrastructure that fits these production processes. If, in addition to leaving our empty ink cartridge, we leave a chair that has a broken leg, a place could be linked to a carpentry workshop that repairs the chair and that could supply it to a secondhand store. Scaling this logic to the level of entire communities, we are then talking about a network of collective facilities that in their daily operations incorporate logistics, transformation, sales, training and employment with a considerable impact on the spatial and functional configuration of a neighbourhood.

Infrastructures "in between"

Moving beyond the top-down dimensions of production or the bottom-up dimensions of the conscious consumer, it is crucial to work on intermediate scale infrastructures where systems merge in collaborative models and partnerships between different actors (community, economic and institutional). Urban renewal operations should therefore seek to systematically incorporate spaces that allow the development of this type of productive practices as complementary elements to the traditional network of facilities and public spaces, including urban green spaces and landscape structures.

This is a great challenge, especially in existing urban fabrics where market dynamics and traditional real estate management models make it difficult to provide spaces for such practices, and to free up space to incorporate landscape structures. However, when we consider urban renewal as a collective effort of space (and resource) optimisation, the identification of spaces with unrealised potential (residual open spaces, vacant buildings, underutilised first floors, etc.) becomes an opportunity for the incorporation of such support infrastructures.

A place for everything and everything in its place

According to Marc Augé, a place can be defined as a space around which an identity is built, which has a history, which forms part of a collective imaginary and which belongs to a spatial and cultural context.[2] Therefore, transforming a space into a place requires a collective process of appropriation and memory creation.

2 Marc Augé, Non-lieux, introduction à une anthropologie de la surmodernité, La Librairie du XXe siècle, Seuil.

The concept of placemaking is built around this principle. It can be understood as a method that invites people to collectively reimagine and reinvent urban spaces as the heart of every community to maximise shared value. It facilitates creative patterns of use, considering the physical, cultural, and social identities of a place, as well as the needs of different users.[3]

Placemaking implies bottom-up democratic strategies of inclusion and citizen participation, and can be summarised in four fundamental stages:

The first stage is identification. It is in this phase of analysis that problems and their root causes are identified; it is here that ideas emerge and, consequently, opportunities are glimpsed. Various initiatives arise spontaneously and the first mobilisations of efforts start in response to a specific challenge.

Case 1: Bruxelles plante, Brussel plant!

What? As part of their regional plan to demineralise regional roads, the Brussels Regional Agency for Mobility launched a call for ideas from residents to bring more green to the capital's public space.

How? 40% of Brussels' public spaces are still paved, so the potential to include more green surfaces is still big. Through this call for projects, Brussels Mobility, would like to involve the people of Brussels in the quest for actively identify opportunities to bring more green into local neighbourhoods. The selected projects will receive financial and institutional support for their execution, giving individuals or group of neighbours the means to kick-off a local action as part of a city wide ambition.

Illustration: Louis Bonte

3 The Project for Public Spaces (PPS). What is Placemaking? What if We Built Our Communities Around Places? [Online]. https://www.pps.org/category/placemaking.

The second stage is activation. The first ideas are put into practice, usually through temporary activations of the space to be transformed. The organisation of events or the installation of short-term structures contribute to the creation of a collective memory of the place, to create opportunities for interaction, to reveal hidden potentials and to enhance its qualities. The temporary and light character of this phase makes it favorable to experimentationand to start mobilising the first resources (both human and financial). The fluid nature of this phase helps to create alliances and identify skills and talents within the community. This reveals the productive potential of the community to activate the intermediate systems of the circular chain. It is in this phase that the first decision-making structures are put in place, taking the first steps towards a site-specific management model.

Case 2: Esto no es un solar (Zaragoza, ES / since 2009)

What? It is a project to clean, rehabilitate and maintain abandoned lots within the city and to recover them in order to make them open spaces for neighbours.

How? This vacant plot intervention program stems from the need of crossbreeding a couple of correlated and complementary initiatives: the municipal employment plan and the local state backed agency responsible of housing and planning policy. It is supported and implemented in collaboration with local associations, neighbours and guided by spatial designers.

Illustration: Louis Bonte

The third stage is appropriation. The activated space becomes a laboratory where the dynamics of daily use allow for different appropriation formats. This lets us evaluate the use, analyse results and learn from them. Much of this feedback process is based on critical observation of how the space is being used and early reaction to adjust the uses when necessary. It is this experimental use that allows the imagination to be stimulated and provides the basis for developing a collective vision. This vision will potentially drive a new design of the space as it becomes a place.

Case 3: Le 56 eco-interstice (Paris, FR / Since 2006)
What? Structural activation process of a vacant building plot located in the heart of the Saint Blaise district in Paris.

How? The Paris City Council (DPVI) invited the Atelier d'Architecture Autogérée (AAA) to explore the potential uses of this unused 200m2 space. After surveying and multiple contacts with local actors AAA proposes the main lines of a project elaborated on the basis of suggestions and desires from locals and following ecological principles. This project should then evolve with the future users of the place.

Illustration: Louis Bonte

The fourth stage is consolidation. The places have improved their spatial quality and matured their formats of use, inserting themselves into the social infrastructures of the community. The preceding stages have defined the functional vocation and have brought together various actors with management capacities, generating alliances between community, institutional and economic actors. Consolidation is the moment when the site acquires a permanent status, either by the formalisation of its use, by the lessons learned, by the capacity to expand or replicate in other places and by its impact on the improvement of the community's support systems.

Case 4: Portland Works (Sheffield, UK / Since 2013)

What? A community of enterprises operating a centre for small manufacturing, independent artists and craftspeople, within an important historical industrial building.

How? Portland Works is an industrial building built in Sheffield in 1879. Following half a century of neglect, the building was purchased in 2013 by a social enterprise comprising more than 500 community shareholders who, having saved it from residential conversion. Today the community collectively conserve Portland Works as a functioning, self-sufficient community heritage facility that support small-scale manufacturers and creative businesses with workspace, help, guidance development and capacity building.

Illustration: Louis Bonte

Caring is sharing

Considering placemaking as a dynamic process, it does not have a definitive end. Instead, the consolidation phase becomes a trigger for other operations revealing new challenges and opportunities. It is precisely this amplification of systems that makes it possible to complete the productive cycle, where domestic initiatives acquire that intermediate scale so necessary for the creation of added value, the provision of employment, the valorisation of urban spaces, the reinforcement of urban ecologies and the consolidation of communities.

The urgency of implementing rapid changes demands innovative forms of learning. Urban experimentation is crucial for proposing and testing new alternatives, learning from them, and establishing trends to drive systematic change. Such endeavors require diverse collaborations between challenge-oriented entrepreneurs and knowledge networks.

In this sense, placemaking is a field of action that creates interdependence between institutions and civil society. This implies a shared responsibility between the many actors who build the city from specific places and communities, ensuring that they have the means and capacities to fulfill this responsibility.

But with great responsibilities also come great powers. The transition to a regenerative circular model should be conceived as a systematic instrument for the empowerment of individuals. Empowered communities are better prepared to react collectively to change, always looking out for the well-being and quality of life of those who live in them.

Placemaking is therefore a strategy to bridge place-based challenges and societal ambitions. It is crucial to create placemaking opportunities within formal urban planning and renewal processes, to raise support for community scale practices and to incorporate placemaking in the methodological approach to spatial projects.

Diego Luna Quintanilla.

Diego Luna Quintanilla is an architect, urban designer and strategic planner with great interest in inclusive design. Diego graduated from architecture in 2005 (Universidad Simon Bolivar, VE) and from the European Postgraduate Masters in Urbanism in 2011 (TU Delft, NL and IUAV, IT). Since then he has worked on urban projects in Belgium, Spain, Tunisia, Pakistan and Lithuania and on urban research projects in The Netherlands, Italy, China, Russia, Venezuela and Ecuador.

Diego joined BUUR (Part of Sweco) in 2011. As project leader he has worked on a wide range of urban revitalization projects, including project definition, feasibility studies, masterplans, planning tools and regional spatial visions. Since 2020 he coordinates BUUR's transition program "Inclusive Neighbourhoods". In 2023 Diego was appointed Group Expert Leader to co-develop the Resilient Societies theme for Urban Insight, Sweco Group's international knowledge sharing platform.

In parallel Diego was involved as guest teacher at VUB's Master in Urban and Regional Planning STeR* (2017-2020) and is frequently involved as a juror and lecturer at Delft University of Technology (TU Delft), Université Libre de Bruxelles (ULB), among others.

Looking at urbanism from the bottom-up perspective, Diego co-founded Cakri in 2016, a collaborative platform engaged in the development of placemaking and curatorial projects that valorise the street as a cultural space.

7

Embracing Regenerative Urban Landscapes

Unlocking the Power of Green-Blue Infrastructure for Stress-Recovery and Healthier Neighbourhoods

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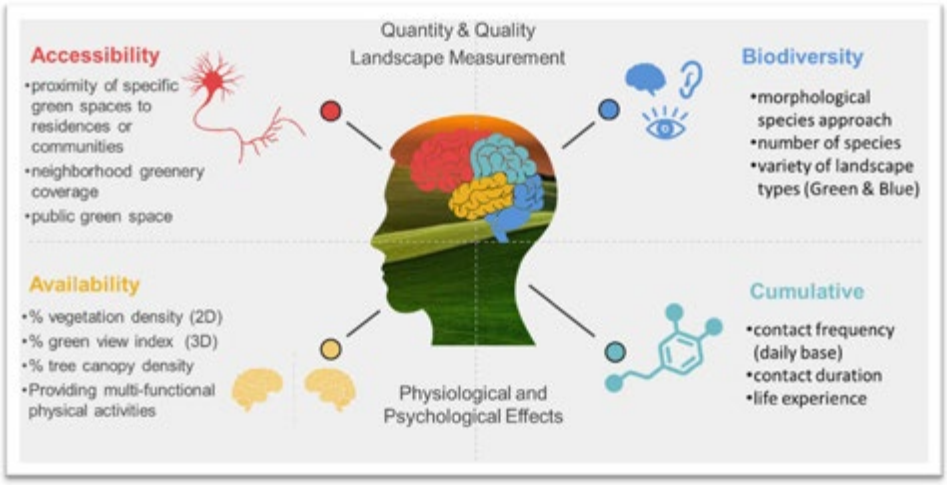
Keywords:

Urban Green-Blue Infrastructure, well-being, ecological harmony, stress reduction, biodiversity, holistic approach, transformative Insights, cross-disciplinary expertise

Urbanization accelerates, yet our cities teeter on the brink of becoming concrete jungles, emphasizing the critical need for urgent integration of nature. By 2050, an estimated 70% of the global population will reside in cities, amplifying the call for Green-Blue Infrastructure (GBI) to support both physical and mental well-being. In the face of pervasive urban stressors, a profound shift towards regenerative urban landscapes emerges as not just beneficial but imperative.



A Systematic Overview of the Relationship Between Urban Green Infrastructure and Stress Resilience.[1]

Anchored in the biophilia hypothesis and stress recovery theory, numerous studies affirm the transformative potential of green spaces in mitigating the adverse impacts of urban stressors. These spaces offer a myriad of benefits, encompassing physical activity, social interaction, and improved air quality, effectively addressing key components of psychophysiological stress.

Furthermore, the diverse forms of urban nature contact, spanning sensory pathways to individual activities, underscore the intricate and multifaceted ways in which nature intertwines with the human experience. This interaction extends beyond visual and auditory stimuli, encompassing tactile sensations, scents, and even emotional responses triggered by nature's presence. For example, the sight of lush greenery or the sound of flowing water can evoke feelings of tranquility and connection to the environment.

Engaging in activities such as gardening, strolling in parks, or birdwatching allows individuals to immerse themselves in nature, fostering a profound sense of peace and rejuvenation. These diverse experiences highlight the rich tapestry of benefits that urban nature contributes to our physical, emotional, and psychological well-being. Research indicates that multisensory qualities significantly impact well-being in urban neighbourhoods, with auditory and olfactory stimuli potentially more effective than visual cues in stress reduction.

1 2023 Li, L.W.*, Lange, W.K. Assessing the Relationship Between Urban Blue-Green Infrastructure and Stress Resilience in Real Settings: A Systematic Review, Sustainability, 15 (12), 9240

This underscores the importance of considering a city's 'smellscape' and 'soundscape' in urban planning, not just as aesthetic elements but as integral components that enhance community welfare and contribute to a healthier urban environment.

As we confront the brink of unprecedented urban growth, the call to embrace regenerative urban landscapes reverberates louder than ever. Prioritizing the integration of GBI into urban planning initiatives allows cities to not only sustain life but elevate it. The benefits of GBI extend far beyond aesthetics—improving health quality, promoting biodiversity, and contributing to overall well-being in profound and extensive ways.

Here are 5 ways for city planners and decision-makers to fortify their city's GBI, aligning with GBI principles and actualizing regenerative urban landscapes:

1. Improving Accessibility: Bringing Nature Closer to Home

- Strategically position both public and private green and blue areas in close proximity to residences, emphasizing both vertical and horizontal greenery.
- Enhance greenery coverage in neighbourhoods, providing accessible public green and blue spaces to ensure inclusivity across socioeconomic strata.
- Evaluate proximity, vegetation coverage, and density of public green and blue spaces, refining accessibility throughout the community.

2. Fostering Biodiversity: Enhancing Urban Ecosystems with Multisensory Landscapes

- Integrate diverse landscape types (see table), including water bodies, to bolster ecological resilience and enhance biodiversity.
- Implement species diversification strategies, using the morphological species approach in both green and blue urban landscapes.
- Prioritize multisensory qualities, extending beyond visual landscapes to incorporate olfactory and auditory stimuli. Emphasize the creation of a 'smellscape' and 'soundscape' for enriched neighbourhood experiences.

OPTIMIZE VISUAL ACCESS.
Source from: Liwen Li (generated with AI assistance).

URBAN GREEN-BLUE NETWORK.
Source from: Liwen Li (generated with AI assistance).

3. Maximizing Availability: Urban Green-Blue Network for Daily Pathway Engagement

- Evaluate and enhance vegetation density and tree canopy cover to foster a closer connection with nature.
- Integrate green networks, establishing corridors connecting homes, workplaces, and urban recreation areas for daily immersion in natural environments.
- Utilize green view indices to optimize visual access, refining and expanding the availability of natural retreats for residents.

4. Promoting Functionalities: Fostering Vibrant Community Spaces

- Design versatile green-blue spaces for physical activities and water-related activities.
- Cultivate environments fostering social interaction and community engagement, nurturing a sense of belonging among residents.
- Integrate Urban Sustainable Farming, repurposing spaces like rooftops, to promote food sustainability and community involvement.

5. Addressing Environmental Concerns: Improving Urban Resilience and Environmental Health

- Implement features to improve air quality, reduce noise pollution, and mitigate the urban heat island effect, harnessing the benefits of GBI.
- Leverage blue spaces for less polluted air, increased sunlight exposure, and opportunities for physical activity, mood enhancement, and stress reduction.
- Enhance the urban environment by reducing greenhouse gases, purifying water, and mitigating wind effects through strategic environmental initiatives.

In conclusion, embracing regenerative urban landscapes signifies a collective commitment to reshaping our cities into vibrant ecosystems that harmonize human well-being with ecological resilience. Through the deliberate integration of GBI principles and a focus on nature's role in urban living, cities can lay the groundwork for healthier, more sustainable communities. This comprehensive approach, spanning accessibility, biodiversity, availability, functionality, and environmental sustainability, ensures a brighter and healthier future for urban inhabitants.

Source from: Liwen Li (generated with AI assistance).

VERTICAL GREENING CITY.
Source from: Liwen Li (generated with AI assistance).

Urban landscape types and measurements		
Vegetation Coverage	Windows Green View Index	
	Floor Green View Index	
	Viewshed Greenness Visibility Index (VGVI)	
	Percent Tree canopy cover	
	Normalized Difference Vegetation Index (NDVI)	
	City Biodiversity Index	
Private Greenspace	Residential gardens	Private gardens, front or back yards
	Functional/amenity	Allotment, cemetery, amenity spaces, Institutional (university, school, hospital grounds, etc.)
Urban Public Greenspace	Formal recreation civic space	Squares, gardens, playgrounds and sports fields (not within parks), zoo
	Parks	Neighbour park
		Urban park
		Regional park
	Natural/green corridor	Greenway, pathways, trails, and cycle paths
	Semi-natural/natural	Biodiversity areas, conservation areas, nature reserves, protected areas
	Other natural features	Street greenery: street trees, pocket parks, green roofs, and vertical greenery
	Landscape elements	Plants species, seasonal plants
Freshwater		Lakes, ponds, wetlands (standing water bodies)
		Rivers, streams, canals (linear water features)

Current urban landscape types and measurements.[2]

Liwen Li

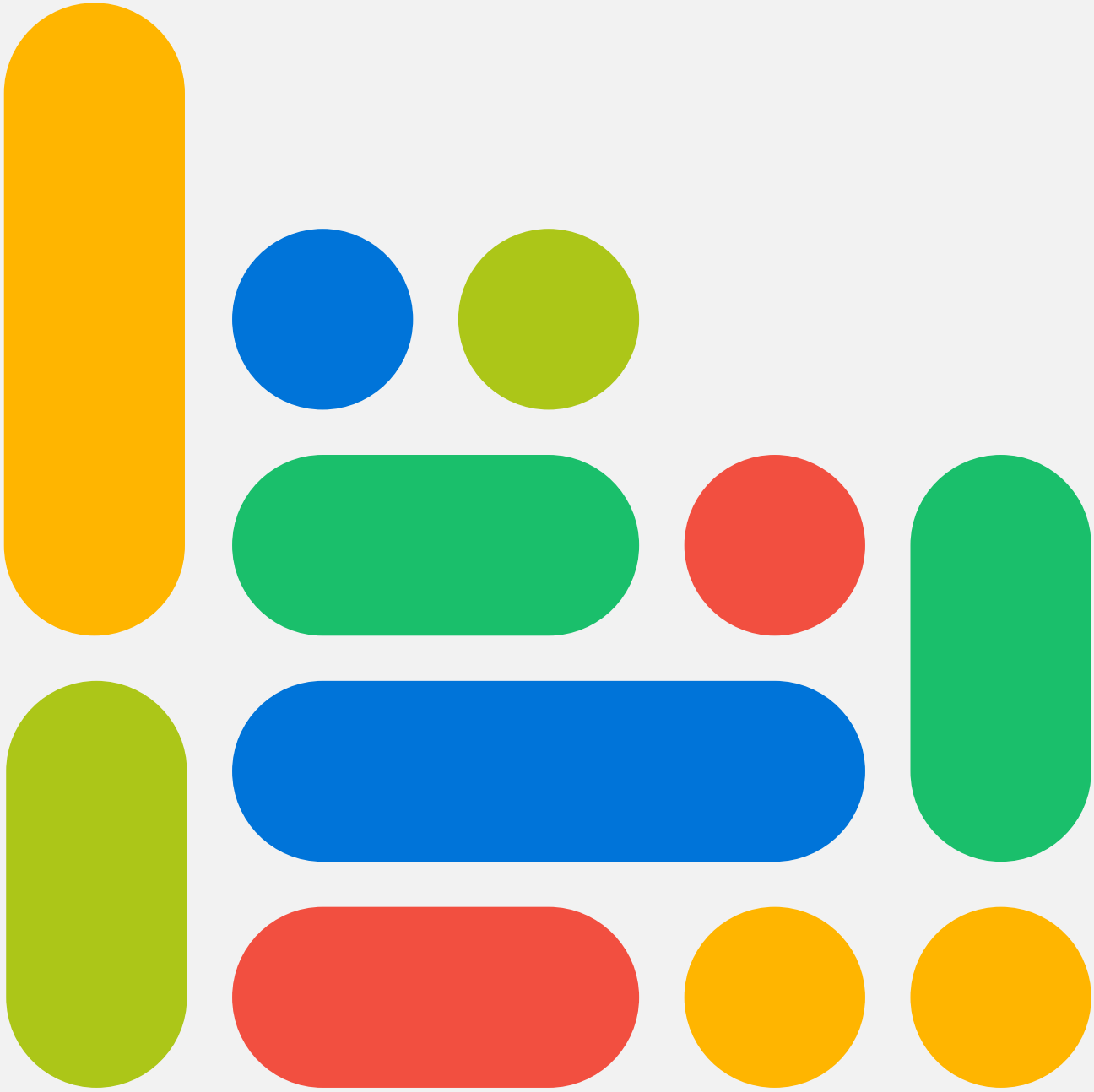
Liwen Li is a prominent expert in environmental psychology and sustainability, renowned for her contributions at the University of Regensburg and beyond. With a rich background in academia and consultancy, including roles at Tunghai University and UC Berkeley, she merges psychology with sustainability to address pressing environmental challenges. Dr. Li specializes in sustainable planning, resource management, and community empowerment, with a particular focus on sustainable energy solutions. Committed to sustainability, climate justice, and ecological integrity, her work reflects a dedication to both practical implementation and research excellence. Dr. Li's impactful efforts are shaping a more sustainable future.

Klaus W. Lange

Klaus W. Lange, MD PhD, graduated in medicine and psychology. He taught at German and English universities and is Professor of Health Research and Neuropsychology at the University of Regensburg, Germany. He was also Guest Professor at the University of Vienna, Austria, and at the Nara Institute of Science and Technology, Japan. His current research interests are the role of urban environment and lifestyle in mental health. He is President of the International Movement and Nutrition Society and serves on the editorial boards of several international academic journals. He has organized numerous international conferences and has published some 400 scientific articles and chapters.

2 2023 Li, L.W.*, Lange, W.K. Assessing the Relationship Between Urban Blue-Green Infrastructure and Stress Resilience in Real Settings: A Systematic Review, Sustainability, 15 (12), 9240

Case Studies



8

Shaping and Strengthening the Regenerative Potential for Local Climate Neutrality

Insights and Reflection From a Transdisciplinary Project in the City of Görlitz

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Sustainability transformation, climate neutrality, peripheral cities, transformative capacities, transition management

The TRUST project[1], underway since 2022, aims to co-create a highly ambitious pilot case of a transformative urban innovation system for climate neutrality in a medium-sized peripheral city (Görlitz/DE). To this end, a mutual transfer of scientific and practice knowledge is being carried out coordinated by the Leibniz Institute of Ecological Urban and Regional Development (IOER), and in collaboration with the municipality, local business partners and civil society initiatives.

Görlitz has undergone several phases of structural transformations within the past decades. After the end of socialism in East Germany, the city and the surrounding region were affected by a severe phase demographic decline causing the city to lose thousands of inhabitants in the 1990 and 2000s. Besides quantitative population loss, social coherence, labour force potential and innovation potential decreased, being followed by societal upheavals. Along with demographic change the local economy transformed strongly. The decline of local industry due to regime shift and a phasing out of lignite mining resulted in an abandonment of workplaces and of relevant infrastructure, e.g. railroads and buildings. These developments have emphasized the peripheral location in the rural East on the boarder to Poland even more drastically.

This incisive phase has left Görlitz with major challenges which are now becoming particularly visible facing urban sustainability transitions towards regenerative neighbourhoods. The city lacks specialists in general, hence specific capabilities and resources are missing for urgently needed processes regarding regenerative ambitions. At the same time these deficits cannot be compensated by spending funds, i.e. by the city administration, due to low local budgets. For the acquisition of external funds the lack of local capacities is again noticeable. However, the principle of local self-government still applies in German-speaking countries, which in principle opens up the possibility of actively shaping and coordinating transformation processes[2].

A targeted build-up of resources and expertise is therefore needed to address the local sustainability challenges. Despite the challenging environment for urban sustainability transitions, there can be found numerous initiatives in Görlitz that are striving to shape the town in a future-oriented and sustainable way. There is a high level of interest and commitment for local development across associations, companies and the city administration, particularly at executive level that inititated efforts for local climate neutrality, such as the proclamation of the target by the local mayor in 2019. Nevertheless, it exists a lack of governance coordination, also relating climate challenges. The dynamic change of corresponding legal and policy frameworks from EU, federal and state governments (e.g. in respect to municipal thermal planning or general funding schemes) represents an additional burden for local governance.

1 TRUST is funded by the Leibniz Association (funding programme Transfer).

2 Riechel, R., Scheller, H., Trapp, J., Libbe, J., Walker, B., Heyen, D. A., Brohmann, B., & Kampffmeyer, N. (2020). Vom Stadtumbau zur städtischen Transformationsstrategie. Bundesinstitut für Bau-, Stadt- und Raumforschung. https://www.bbsr.bund.de/BBSR/DE/veroeffentlichungen/bbsr-online/2020/bbsr-online-09-2020.htm

TRUST "Transfer of Urban Sustainability Transition Knowledge: Towards Climate-Neutral Cities 2030 - The City of Görlitz as a Pilot" operationalizes *transition management*[3]) to activate local frontrunners, to face local challenges and build-up local capacities and resources for a climate neutral city. The approach fosters stakeholders to shape jointly a local transition through sequential steps. These steps include a system analyses identifying and describing local fields of action[4]. The systems analysis highlighted the necessity for Görlitz to prioritize the transformation of its significant historic building stock. A joint vision building of the city's future, transformative path development towards specific local development targets and conceptualizing urban experiments supporting local climate neutrality follow. Additionally, the process seeks to foster trust among stakeholders, providing a crucial foundation for sustained engagement during and after the project. Notably, in the case of Görlitz, there is a particular emphasis on the transdisciplinary and cross-sectoral organization of the project to strategically address the coordination gap in terms of climate action within the city.

Figure 1: TRUST partner institions (illustration: own depicition of IOER): Interdisciplinary Centre for Transformative Urban Regeneration and Leibniz Institute of Ecological Urban and Regional Development (Science), Stadt Görlitz (City Administration), Stadtwerke Görlitz AG and Europastadt GörlitzZgorzelec GmbH (Private Sector),

3 Loorbach, D. (2010). Transition Management for Sustainable Development: A Prescriptive, Complexity-Based Governance Framework. Governance, 23(1), 161–183. https://doi.org/10.1111/j.1468-0491.2009.01471.x;
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Rotmans, J., Kemp, R., & Van Asselt, M. (2001). More evolution than revolution: Transition management in public policy. foresight, 3(1), 15–31 1

4 Maiwald, L., Rößler, S., & Knippschild, R. (2023). Wo steht Görlitz? Dokumentation der Systemanalyse in ausgewählten Handlungsfeldern für städtische Klimaneutralität. https://doi.org/10.5281/zenodo.8081723

TRUST has established two types of transdisciplinary formats:

1) A "Transformation Team" to co-design and implement the overall transfer process. Every project partner institution (in total six, see Figure 1) employs at least one employee on a part-time basis for the project. The team shares the same office once a week in Görlitz. This allows members of the team to receive an idea of each other's day-to-day work beyond the project tasks and to develop a common language, understanding and routines. They are thus tasked with transferring their insights gained from the project back to their own institutions. Additionally, through regular physical meetings in the shared office, the team became a reliable point of contact in climate matters for the public.
Yet, communication and coordination within the transdisciplinary Transformation Team turns out to be time-consuming and resource-intensive. The different perspectives and logics of action of the project partners from administration, business, science and civil society must be taken into account. Also, the co-creative process of developing common visions and transformation paths requires patience and openness from everyone involved. From an organizational point of view, it has been challenging to build common structures integrating actors from different sectors.

One of the tangible successes of the team already is the city council's legal resolu tion to achieve urban climate neutrality. The resolution has been informed and prepared by the Transformation Team before it was submitted to the city council via the municipal Office for Urban Development. This is one of several examples where the team provided fundamental background work, integrating experience from different sectors, for important formal steps working towards a climate-neutral city. However, to ensure this experience from the team is adopted, broad networking in the partner institutions is essential.

2) A series of customized "Transformation Arenas" where visions, pathways and actions for urban climate neutrality by 2030 are co-created. The format brings together relevant local stakeholder for the topic, integrating knowledge and aligning strategies in a cross-sectoral way. With five arenas per year, around 45 key stakeholders from over 20 institutions gather for three to four hour meetings. Initially, many stakeholders were unaware of their role in the local transition to a climate-neutral city. Today, the participants know their capabilities on the subject well and serve as multipliers in the urban community.
The first arenas seemed quite tenacious and theoretical for some arena participants. A common level of knowledge had to be initially developed, yielding no immediate tangible results. This experience has taught the project team a valuable lesson by highlighting the importance of intermediate products as common markers of success. But there were also moments of amazement, particularly in the aspect of social cohesion. Over time, stakeholders realized that the importance of the arenas went beyond the content they developed together and includes building a social network. The value of the contacts made during the course of the project only became fully apparent to the participants after some time. To truly grasp this realization, it takes time to leverage these contacts and enable a dynamics that go beyond the boundaries of the project framework.

Figure 2: Impression from a Transition Arena with local stakeholders (Source: IOER)

The "TRUST"-community emerged thanks to the arenas is now proving to be highly relevant for the continued existence and implementation of the climate neutrality target. Peripheral areas in Europe currently tend to be dominated by fluctuating political majorities - such as in Görlitz. Future political majorities for local climate neutrality do not appear to be guaranteed. The frontrunner approach of transition management seems to counter this development effectively. The fact that important steering and multiplier roles are primarily involved in the transition process ensures the topic of climate neutrality to remain on the local agenda, at least for the time being.

The project's focus on local transitions and the role of local frontrunners aligns with the principles of regenerative design, emphasizing positive impacts on both society and nature.[5]

As a prerequisite for the success of regenerative efforts, the design of the project mainly concerns the way we cooperate. Closing governance and capacity loops is imperative to establish the groundwork for local regeneration potential. Therefore the primary objective should be to facilitate the identification of necessary local resources and expertise among stakeholders. Throughout the TRUST project, the stakeholders not only grasped their individual roles in the transition process, but the project also offered insights into the intricate nature of implementing climate neutrality within the given setting. A key realization was the recognition that there is no master plan available for the local transition. Particularly in the case of mid-sized, peripheral cities, there are scarce reference cases for urban climate neutrality transitions. Instead, regenerative innovations need to be developed locally. Stakeholders must critically consider the unique geographic and economic circumstances on site. It requires open stakeholder networks and, most importantly, individuals who drive innovation forward as multipliers or set the agenda as leaders. Also, it is essential to define meaningful courses of action while collaboratively navigating the transition in line with local conditions and requirements. Not collaboratively exploring local potential

5 Blanco, E., Raskin, K., & Clergeau, P. (2022). Towards regenerative neighbourhoods: An international survey on urban strategies promoting the production of ecosystem services. Sustainable Cities and Society, 80, 103784. https://doi.org/10.1016/j.scs.2022.103784

results in a superficial understanding of how to approach local regenerative potentials. TRUST acknowledges the significance of collaborative endeavors, knowledge exchange and innovative approaches in tackling the challenges of achieving urban climate neutrality within the realm of sustainability.

For more information visit:

The local project website

website https://trust-goerlitz.de/

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9

Regenerative Urbanism and Social Heritage

Learnings From Two Case Studies in Small-Sized Municipalities in Italy

Case Study #1

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Urban regeneration, third sector, human capital, community center, teenagers, small urban areas.

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Population trends in Italian small-sized municipalities

Regenerative urbanism in a country like Italy involves addressing the dynamics of revitalising medium to small-sized cities. In Italy there are 5,529 municipalities with fewer than 5k inhabitants, accounting for 70% of the total number of Italian municipalities[1]. These areas host 16.5% of the national population but represent 54% of the entire Italian land area. Furthermore, the general drop in the Italian population, affects almost exclusively small municipalities with less than 5k inhabitants[2]. More than 35 thousand residents have left these small municipalities in just one year. These areas host 92% of the typical national agricultural production and possess unique historical, cultural, and environmental values.

Regeneration of non-urban contexts via social engagement

In some Italian territories a phenomenon known as *restanza*[3] is emerging. This phenomenon is characterised by a dynamic interplay between remaining and returning communities, and even involves the welcoming of new inhabitants. While the pandemic year strained isolated areas with limited services, it also reinforced community cohesion, accelerated digital infrastructure, and brought to the forefront the phenomenon of revitalising non-urban areas, highlighting their potential as spaces for healthy living, proximity, and promising work opportunities. These communities play a crucial role in activating a place that always depends on the social heritage surrounding it: a place that is not cherished may become abandoned.

This joint paper explores the vital role of third sector organisations (such as co-operatives) and of informal communities in the regeneration of non-urban contexts in Italian small-sized urban areas, where grass-root approaches are not standard procedure. While the first case study focuses on urban regeneration and self-build actions in mountainous territories, the second case study explores tactical and bottom-up urbanism in coastal territories.

1 Alessandro Marucci, A. with L.Fiorini, C.Di Dato and F.Zullo "Marginality Assessment: Computatio Applications on Italian Municipalities" in *Sustainability 2020, 12(8), 3250*

2 https://www.coldiretti.it/economia/popolazione-piccoli-comuni-addio-35mila-residenti

3 Teti Vito, *Pietre di pane: Un'antropologia del restare*, Quodlibet, 2011

Case study 1 - STARGATE: temporary (more-than) urban solutions across Alps

Alpine context

The STARGATE project engaged young people in experimenting with the theme of "urban regeneration" and self-build solutions/actions in mountainous territories. The actions were carried out in three Alpine areas: the province of Sondrio in Lombardy, characterised by its mountainous terrain; Ampezzo and its surroundings in Udine, Friuli-Venezia-Giulia; and Ostana, one of the smallest villages in the Cuneo province (Pindemont), all known for their low population densities. While these regions offer a potentially high quality of life, they are grappling with amplified weaknesses in their community fabric due to their small, isolated, and fragmented nature. These areas lack educational opportunities, especially for adolescents and young people, in contrast to the options available in other regions. Local youth policies have long suffered from a gap, predating the pandemic, with the closure of crucial places such as Informagiovani and Centers of Aggregation, historically dedicated to promoting youth activities and, more generally, fostering a fundamental sense of place and belonging. However, the Italian Alps are also experiencing the phenomenon of new inhabitants, and the STARGATE project certainly benefited from this new potential for revitalising hamlets in marginal areas.

The STARGATE project's actions

We implemented the STARGATE project[4] as a trans-regional network with other organisations[5], and all the municipalities in the mentioned Alpine area. The project offered two primary experiences, blending culture and community-making: the AniMakers Academy and three STARGATE labs, all provided free of charge. Drawing inspiration from Roland Emmerich's famous film (1994) where the Stargate is a fictional device designed to transport people or objects by creating an artificial wormhole between two connected points in the universe, our project similarly culminated in a physical module. **This module will connect, both conceptually and digitally (thanks to a common website), various micro-locations in the Alpine arc** during and after the collaborative creation process. We adopted a disciplinary approach grounded in participatory design, incorporating both co-design and co-production actions. This approach ensured the active involvement of all stakeholders in the design process, aiming to guarantee that the final outcome will meet the identified needs.

4 Partial funding was received from the Italian Ministry of Innovation and Digitalization (MIC), under the "Creative Living Lab 2021" III call.

5 This network included FORME social enterprises, Viso a Viso Cooperative Community, CRAMARS social enterprises, La Capagrossa association, TSD association, Fab Lab Sondrio and Ambria Jazz association.

The first project action engaged young people through a **trans-alpine AniMakers Academy:** an online school accessible to youngsters from various valley areas. Its objective was to impart skills rooted in maker culture, design tools, and the fundamentals of self-construction and 3D printing. The school concluded with an in-person design workshop aimed at collaboratively defining the concept of the module itself. In addition, **three hands-on LABs** were carried out in Tirano, Ostana, and Ampezzo, respectively, aiming to involve the local community in constructing physical structures. The objective was to revitalise public spaces in these remote villages, and this second action was led by the young people already engaged in the AniMakers Academy. The STARGATEs are conceptualised as temporary and mobile structures, constructed from lightweight materials, including salvaged materials for non-structural components, and designed to be completely disassembled. These installations will be built and placed in a manner that avoids obstructing existing public spaces and may even create new ones. The goal is to ensure that inhabitants can interact with these structures.

Figure 1: Hands-on LAB in Tirano and Ostana.

The STARGATE project surpasses the traditional urban landscape, pioneering the creation of distinctive landmarks in non-urban areas: a "new species" of non-urban landmarks, characterised by temporariness and community-driven action. Rooted in the principles of participatory design, these landmarks offer inhabitants unique opportunities to interact with their surroundings, enriching the tapestry of remote communities and redefining their sense of place.
By fostering connectivity both conceptually and digitally through a shared website, the project's physical modules act quite literally as symbolic gateways.

Outcomes

The unique essence of the STARGATE project resides in merging contemporary logics and aesthetics with traditional, and in some cases, overlooked spaces. Its precise objective is to restore collective significance to these locations and establish new landmarks within the three villages that were the focal point of the self-construction workshops. The immeasurable value of intergenerational connections in the context of co-design practices and collaborative sense-

making is evident. The fusion of young minds and university students with the experience and wisdom of senior citizens has cultivated fertile ground for remarkable synergy. This goes beyond the mere exchange of perspectives, extending to the sharing of practical and manual skills.

Figure 2: Final STARGATE in Ampezzo and Tirano (by night).

QR-Code

You-tube channel with a final video-memories of the summer activities in 2022

https://www.youtube.com/@stargatedellealpi1449

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SHIFT Studio
SHIFT is a design studio situated in Valtellina since 2016, having moved from Milan city in search of new experiences in social innovation. We are a multi-disciplinary team which designs and implements workshops and groups of practice, allowing stakeholder to participate actively by using co-design techniques for analysis and development of systemic design and new services with a strong social or environmental impact. We pursue social, inclusive and happy communities. We love working with places: neighbourhoods, public spaces, cities and villages, inland areas (rural and alpine). We design interventions and implement ad-hoc tools to dialogue and co-create with citizens; to develop meaningful design solutions that improve lives and regenerate public utility spaces.

Case study 2 - Thriving small urban areas: learning from the experience of the community centre “Centro Giovanile Casette” in Central Italy

Urban context

Casette D’Ete is a small village[6] of approximately 3.000 inhabitants in the Marche region, which can be entirely walked in 15 minutes. It is therefore equatable to the world-wide-coveted neighbourhood scale[7]. Unfortunately, due to a lack of attractive non-residential activities, of human scale public spaces and of community engagement, its population shrinks year by year.[8] In spite of the depopulation trend during recent years, there is a revolution underway, made possible by the cooperative-led community centre “Centro Giovanile Casette” (CGC), which is investing in human capital and young generations.

“Teens is a fragile stage of life and the Centro Giovanile Casette acts was a self-exploration tool and social booster. Our mission is to invest in human capital, as a priority, for the reactivation of the village”

“Moreover local schools do not provide afternoon lessons, therefore the community centre gives crucial support to working parents too”.

The co-founders of the cooperative EraFutura and project managers of the CGC.

Community centre “Centro Giovanile Casette”

The community centre is located on the main square of Casette d’Ete, named “Piazza Mazzini”. Every afternoon it provides a recreational programme for children from 10 to 18 years old, for free, giving support with school homeworks as well as offering various creative workshops.Nowadays the CGC counts approximately 350 enrolled children, but despite its success, it lacks outdoor spaces suitable for open air activities, since the main square is mainly used as a parking area. To counter this problem, in 2022 the cooperative EraFutura initiated a bottom-up process for the urban regeneration of “Piazza Mazzini” with the urban festival “Casette ON”[9].

6 Casette d’Ete is a fraction of the Municipality of Sant’Elpidio a Mare (Fermo, Italy).

7 15-minute cities: How to develop people-centred streets and mobility (C40 Knowledge Hub) www.c40knowledgehub.org/s/article/15-minute-cities-How-to-develop-people-centred-streets-and-mobility?language=en_US

8 Based on demographic data from 2019 to 2023 provided by the Municipality of Sant’Elpidio a Mare.

9 https://ringscapearchitecture.com/portfolio/urban-festival-casette-on/

Figure 3: The square before the urban festival.

Figure 4: Urban experiment during the festival "Casette ON".

Urban festival "Casette ON"

The festival consisted of an urban experiment, developed in collaboration with architects from Ringscape Architecture, which turned the square into a place to inhabit: a lively car-free public space that enhanced social interactions. Citizens were also engaged in the urban regeneration of the square by sharing their opinions and thoughts in a participatory process.

In order to make participation as much accessible and inclusive as possible, especially for children and teenagers, "Casette ON" offered an unexpected contamination between urban regeneration and creativity: creative workshops, such as urban art, photography, paper crafts and gardening were used as informal means of expression and opinion sharing. Furthermore, participation was structured in three tenses: past, present and future; respectively covering memories, feelings and desires. This way, different generations could meet in a collective story-telling about the square. Parallel to the festival, a participatory public survey, which was available both on paper at local shops and digitally online, was distributed among the local community and filled out by people that could not join the festival.

Figure 5: The staircase of the community centre transformed into a public tribune during the festival.

Figure 6: Creative workshop during the urban festival.

Outcomes

The festival developed awareness and ownership of public space among citizens: at first, they were surprised to have the opportunity to share their opinions about public space and discuss the future of the square. Whereas, by the end of the festival, they developed a sense of ownership and started to refer to the piazza as “our square”.

What emerged from the participatory workshops is the importance of social interactions: the community centre and the local shops on the square are reference points for the community thanks to their social function. On the other hand, the absence of comfortability in public space due, for example, to the lack of urban green for shadow or of playing elements for children, is perceived as negative. In conclusion strengthening human relationships within the neighbourhood scale is a necessary premise for regenerative urban environments: as the 12-years-old Giulio said during the urban festival “I would like to keep my friend David in the new square because he became my best friend and we spend every afternoon together at the community centre.”

Figure 7: Results of participatory workshops: “I like / I don’t like”.

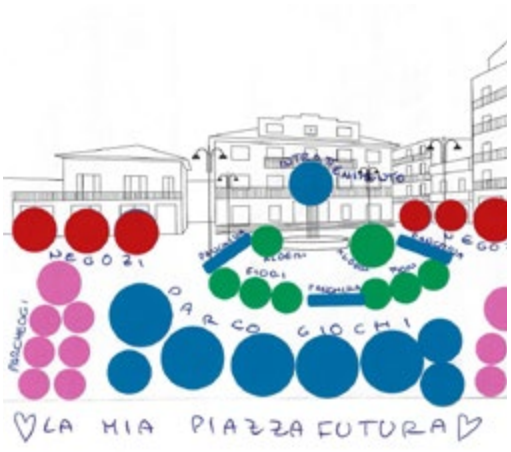

Figure 8: Results of participatory workshops: “My future square”.

Giorgia Pierleoni
Architect and founder at Ringscape Architecture.

Ludovica Medori
Architect and founder at Ringscape Architecture.

Ringscape Architecture

Ringscape Architecture is a young architectural collective founded in 2017 in Ferrara (Italy) by Ludovica Medori and Giorgia Pierleoni. Its research is focused on the improvement of the urban condition using existing elements and empowering them, in order to face contemporary challenges. Clients and collaborations include: Museum of Architecture and Design Ljubljana (SL), Municipality of Vienna (AU), EraFutura social cooperative (IT), Municipality of Monte Urano (IT) and URBANISTAS ROTTERDAM EXPO (NL).

10

Transition to Sharing

A Platform to Support Social Sharing in Sege Park Neighbourhood

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Sharing, local communities, trust, neighbourhood, platform, imagination, Sege Park, participatory design, circularity

Sharing in neighbourhoods: More than affordable living

The concept of sharing is, in the words of Belk: 'as old as humankind.'[1] It constitutes an integral aspect of the circular economy, reshaping consumption patterns to minimize resource extraction and usage. In contemporary Western urban settings, sharing is often confined to basic household structures (such as sharing laundry rooms among housing tenants) or manifested in services with monetary priorities, such as renting out one's apartment for profit on platforms like Airbnb.

However, sharing goes beyond mere transactions; it requires trust. Consider a simple scenario where someone asks to borrow a pen; the act itself is grounded in the trust that the borrowed item will be returned. In more complex situations, sharing involves intricate social foundations, where trust becomes a gateway to accessing shared resources.

The project showcased in this text, delves into the concept of Social Sharing, describing a form of sharing motivated by a 'nonreciprocal pro-social behavior.'[2] Social sharing has the potential to reinstate trust among residents, fostering ties that contribute to a sense of belonging and safety in everyday interactions within one's habitat. Additionally, it can facilitate equitable resource access and promote sustainable consumption practices, leading to a more affordable way of living.

Benkler emphasizes the importance of physical presence and negotiations over time, allowing participants in sharing actions to develop the tacit skills of social exchange[3]. Social Sharing may involve management and efficient negotiations, as well as social connections rooted in enjoyment and leisure[4]. In either case, social exchange and communication are indispensable, as lived experiences are crucial for learning and practising the nuanced skills of social interaction.

Co-designing a sharing platform with neighbors

The project presented here was the design thesis project for the master's program in Interaction Design at Malmö University, Sweden. It was based in Sege Park, a neighbourhood in transition as new housing buildings are constructed, and people move into the neighbourhood according to Malmö's densification plan that was approved a decade ago. Along with that, the local actors agreed on a sustainability strategy that supports a sustainable affordable future for the neighbourhood around the concept of sharing.

1 Belk, R. (2014). You are what you can access: Sharing and collaborative consumption online. Journal of Business Research, 67(8), 1595–1600. https://doi.org/10.1016/j.jbusres.2013.10.001

2 Benkler, Y. (2004). Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production. The Yale Law Journal, 114(2), 273. https://doi.org/10.2307/4135731

3 ibid.

4 Light, A., & Miskelly, C. (2015). Sharing Economy vs Sharing Cultures? Designing for social, economic and environmental good. Interaction Design and Architecture(s), 24, 49–62. https://doi.org/10.55612/s-5002-024-003

Participatory Design was a main component of this project, based on the fact that Social Sharing is grounded in physical encounters and tacit social skills. Workshops were used as a set for experimentation and co-creation with the participants. The element of playfulness was intentionally enhanced in the processes as a way to imagine alternative futures, more specifically on "what can be shared" in the future of the Sege Park neighbourhood[5].

Four participants were engaged: three residents from two different housing complexes (Miri, Anja, and Carina) in the area and one housing coordinator (Catrin). After the initial individual interviews, participants were handed a cultural probe; a set of inspirational cards illustrating shared activities to prepare and discuss during the first workshop, such as gardening or playing board games (Figure 1).

Figure 1: The cultural probe, a set of inspirational cards on shared activities with a printed manual.

Figure 2: During the collective storytelling. Anja wears the magical hat that makes people's intentions transparent so that communication is facilitated, and conflict is avoided.

In the first workshop, the participants met for the first time and discussed everyone's motivation to participate in the project. We then attempted a collaborative storytelling exercise: each participant took some time to think and imagine their ideal ways of living in the future. Then, they were asked to combine aspects of their individual imaginaries into a collaborative story inspired by improvisation practices (Figure 2). We utilized the "magic thing," a practical tool to unveil core problems in a situation, allowing the collaborative story to progress. The "magic thing" is an everyday object with magical powers that the participants had to incorporate into the story. An insightful moment during the workshop was when Anja wore the "magical" hat, explaining that it "can show others your true intentions and thoughts," pointing out that conflicts can be avoided in social settings if there is honest communication (Figure 2).

5 cf. Hopkins, R. (2019). From What is to What if. White River Junction, Chelsea Green Publishing.

Figure 3: Miri putting up post-its with ideas on what can be shared.

Figure 4: The sharing ideas mapped by theme on Miro.

Based on the insights mentioned above, the design question was formulated as: How might we create a digital artefact to support Social Sharing in the Sege Park community based on physical encounters? How might we foster ways to imagine the potential of sharing in everyday life? The formulation of the design question led to a brainstorming and sketching process to explore ideas that could be further examined with the participants.

During the 2nd workshop, we attempted to ground the Sharing concept brainstorming on what can be shared in a neighbourhood right now. We mapped the ideas and found patterns and themes (Figure 3 & 4).

We enacted some of the ideas derived from the brainstorming session, for example, an interactive board of communication which would make it easy to distribute information through all the residence's buildings because "you just pass by." (Figure 5) However, it would be a very high-tech, expensive, and thus non-sustainable solution. Using the mapping process from the 2nd workshop, a prototype board of co-created "Sharing ideas"-modules was created to invite residents to imagine and create their Sharing initiatives, which we then tested with Anja, Catrin, and Carina in the 3rd workshop. The prototype was presented in a card game, where every instance of the digital platform was one card. The participants were to play the card they thought would serve the sequence of actions or sketch themselves what the next action would look like.

This was useful to unveil the flow of actions in user journeys. Since the wireframe was low-fi and the user journey short, I complemented the card sorting-game by putting the cards in sequence and discussing and sketching alternatives while enacting the user journey with the participants (Figure 5).

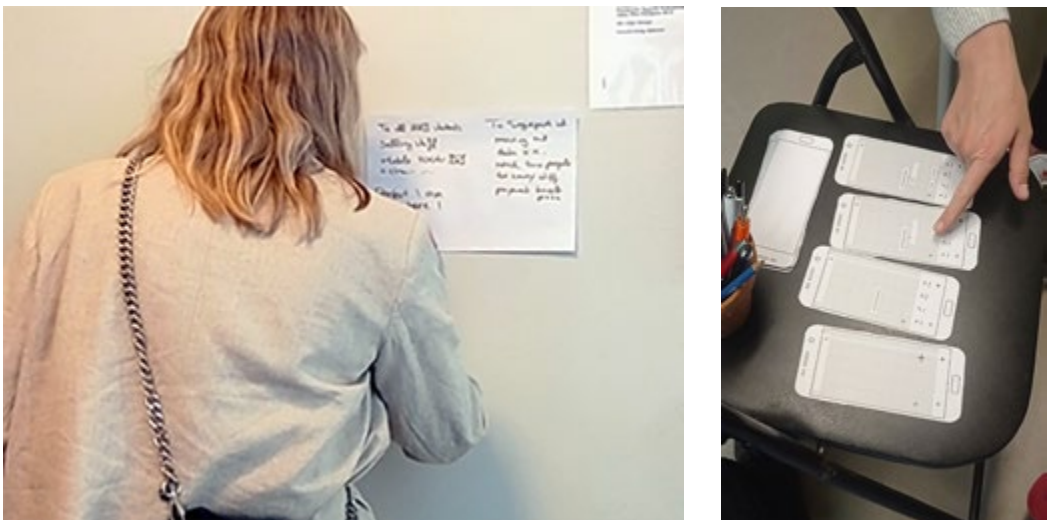

Figure 5: (Left) Catrin enacting the idea of an interactive board at the entrance of one of the residences. She writes a post that would be synchronized and sent as a notification to all residents enabling easier communication. The solution though seemed to be very high-tech and unrealistic.

(Right) Catrin is commenting on a specific instance of the low-fi prototype during the 3rd workshop. The instances are printed on paper so that they can be played as cards and also that someone can sketch or write on them.

Discussing the Sharing platform, the participants said that it is an interesting feature to promote ideas. Anja mentioned, for example, that she never thought she could ask to borrow a bike. They agreed that it would make it easier for shy people to try, "if it is there. It is a good way to meet people if they want to be met." Carina said that if she wanted to cook with someone, she would knock on her neighbour's door, but she would use the platform for practical reasons, to know how many people she would cook with, for example, to buy groceries, confirming the platform's role as a facilitator to Social sharing.

Discussion was also raised on issues of trust and whether a profile-based option could inspire safety. The participants agreed that although names might not be shown on the platform, in the case of an event or shared activity, it would feel safer if the platform provided a profile page of the attendees in case they do not know each other in person.

After the end of the project, we agreed with Catrin to add a Sharing goods station in the common Room using the existing shelves. Anja and I volunteered and agreed with Catrin to help maintain the place in good condition. The Sharing goods station is still there several months after the end of the project. (Figure 6)

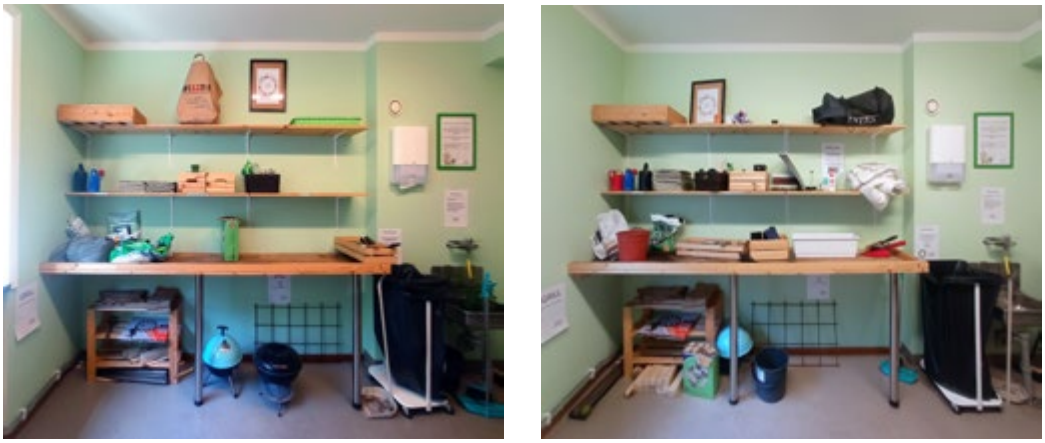

Figure 6: Before and After of the Common Room in one of the residences. The shelves and workbench were used for replanting one's house plants. Catrin agreed to add a sign above one of the shelves that says that residents can leave small items they no longer use so someone else can take them, creating a tiny Sharing goods station for the residence. Reimagining a regenerative neighbourhood through co-creation.

Reimagining a regenerative neighbourhood through co-creation

The purpose of this project, although an Interaction Design project, was to highlight the irreplaceable role of physical social exchange: the tacit nuanced learnings that come with interpersonal human interaction cannot be replaced by digital communication. Participatory practices are meant to work together with technology in SegePark to establish trust through meetings and connections, as this project has aspired to do.

The co-creation process of the sharing platform for SegePark provided a sneak peek into imagining a shared regenerative future in urban neighbourhoods. It demonstrated a future where neighbours come together to discuss alternative ways of consumption and lifestyle; they co-design the infrastructure needed to support such lifestyles and engage in discussions on their connections and the conditions that foster trust and safety.

Annita Douka

Hello! I am Annita, a placemaker, participation and sustainability nerd using my background in architecture, and interaction design to explore how we can live in more connected, healthy, and sustainable ways in contemporary cities.

After studying and working as an architect in Athens for almost a decade, I decided to move to Malmö, Sweden to study Interaction Design and embrace the Scandinavian human-centered design thinking. I have been residing there ever since, actively participating in discussions and activities centered around sustainable communities.

In my practice, I use co-creation as a way to include the people actually affected by decision-making and promote collaboration skills. Recently, my focus has shifted towards transition places: spaces where communities can shape their identity and micro-culture, contributing to a broader impact within their cities.

11

The Green Roof at the Nivy Shopping Centre in Bratislava

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Green roof, Nivy Shopping center, award, Slovakia

Urban sustainability has become a significant challenge in recent decades due to factors like climate change, human activities, and rapid urbanization. These have led to various environmental issues such as global warming, air pollution, ozone depletion, the Urban Heat Island effect (UHI), noise pollution and loss of biodiversity. These problems have adverse effects on human health including mental, psychological and physical well-being. The integration of green roofs in urban areas helps alleviate these issues in an urban context. Green roofs can improve urban sustainability by performing numerous functions, providing a vast array of interacting services and benefits at various scales. Green roofs absorb CO2, act as thermal insulators and retain rainwater, thereby mitigating the effect. They also contribute to energy savings, sound insulation, and reduce the strain on sewage systems during heavy rainfall. By relocating green spaces to rooftops, buildings can become more ecological and energy-efficient. In addition, green roofs offer environmental benefits, such as mitigating the effects of climate change and improving energy efficiency. They also provide space for relaxation, events and community gatherings thus benefiting the wider community.

Green roof at the Nivy shopping centre in Bratislava

The NIVY Shopping Centre in Bratislava, Slovakia is an example of a green roof that is both architecturally and functionally integrated into the building's operation. The shopping centre is part of the NIVY complex which includes a new bus station and the NIVY Tower office building. The NIVY Tower is currently the tallest administrative building in Slovakia, standing at 125 meters. The building is located on the site of the original Mlynské Nivy bus station which was demolished at the end of 2017. The new station, completed in September 2021, has five above-ground floors and two below-ground floors. The station is situated on the first underground floor covering an area of approximately 30,000 m^2, while the second underground floor is reserved for parking. The bus station has over 2,000 parking spaces, half of which are in the basement. The building houses bus platforms, cash desks, commercial operations, a market and services on three above-ground floors. In addition, it has a green roof with a park and sidewalks (Figure 1). The NIVY green roof with an area of 10,000 m^2 is divided into separate zones, each with its own function.


Figure 1: Green roof of the NIVY Shopping Centre with a view of the NIVY TOWER in winter 2024 with a playground and a jogging path in the background, Source: own pictures.

The project was developed by the British architectural firm, HB Reavis. Ing. Ing. Ján Andrejko served as the project manager representing the company APRO and overseeing the planting of plants, bushes and trees. Daniel Hollý was the implementation manager. The architects based their design on the diversity of Slovakia. On the roof, Slovak trees were planted, and the diverse relief of Slovakia was showcased through terrain modelling. HB Reavis has ensured the presence of decades-old trees with large girths. The condition of the drains is checked with inspection shafts on the green roof. The control shafts are so important that there are 160 of them on one section alone. The street itself has undergone extensive reconstruction including new public transport stops, pedestrian crossings, dedicated bus lanes on both sides and a two-way separate cycle path have been added on the north side.

Plants, trees, green facades

The NIVY green roof has two categories of green roofs: intensive and extensive. The extensive roof serves a thermal insulation and ecological function and is covered with succulent plants that require minimal moisture and nutrition. The extensive roof at NIVY spans 9,000 m2. An intensive green roof, on the other hand, is composed of trees, shrubs, perennials, and ornamental grasses. Additionally, the NIVY green roof features two green facades. The structure of the building comprises of stainless-steel cables that support different climbing plants such as ivies and clematis. The green facade and roof provide thermal insulation by absorbing solar radiation, which reduces heat absorption in the building and the need for heating in winter. At NIVY, the green roof aims to increase species abundance by using insect houses (Figure 2). Furthermore, the area boasts flowers, grass beds and birdhouses (Figure 2). It also includes community gardens, a botanical trail and bat shelters that promote biodiversity.

Figure 2: Examples of an insect hotel (left) and bird houses on the green roof of NIVY. Source: own pictures.

Social aspects

The NIVY green roof is divided into separate zones, each with its own function. These zones include the Atrium, Meadow, Central Social Space, Sports and Community Zone, Running Track and Walk Path. Visitors can enjoy relaxation, fitness, sports, leisure, community meetings and shopping. **The Atrium** is a large, hardened surface that is used to organize events intended for a large number of participants, such as art exhibitions, seasonal fairs, food festivals, concerts and fashion shows. **The Meadow** provides city dwellers with access to nature and is particularly popular among families with children, young people, employees of nearby companies and senior citizens. It is a place where people can relax and enjoy a meal or drink purchased from the nearby shopping centre. The upper part of the roof serves as a **Central Social Space,** covered with green grass and intended for family picnics. There are two playgrounds available for children, one of which has access to water for cooling during the summer (Figure 3). The NIVY green roof is popular among families with children, young people, senior citizens and nearby office employees seeking active relaxation in the peripheral zones. The area is frequently used for lunch and work meetings. It is equipped with built-in tables that have sockets for outdoor work. The space is regularly used by travellers, NIVY visitors and employees working on all 29 floors of the NIVY Tower office building. **The Sports and Community Zone** (Figure 4) serves as a meeting place for people who practice sports. The green roof area features a range of amenities including sports equipment, a barbecue area with seating and a communal garden for growing plants. Additionally, there is (the) Running Track and Walk Path around the perimeter of the roof. In 2022, the NIVY green roof was awarded (the) first place in the public green roof category of a competition organized by the Association for Green Roofs and Green Infrastructure in the Slovak Republic. The competition awards green roofs of family houses and public green roofs of multifunctional centres.

This achievement demonstrates the centre's commitment to sustainability and environmental responsibility. The NIVY Tover which is a part of the NIVY Shopping Centre and NIVY area received an important BREEAM Communities certificate at the Excellent level, which evaluates the positive impact of buildings on the immediate surroundings with an emphasis on its sustainability.

Figure 3: The Central Social Space with two playgrounds available for children. Source: Pravda, Ľuboš Pilc.

Figure 4: The Sports and Community Zone serves as a meeting place for people who practice sports. Source: own picture.

Further Reading

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Malgorzata Agnieszka Jarossová

Assoc. Prof. Dr. Ing. Malgorzata Agnieszka Jarossová obtained her Ph.D. in 2011 from the Faculty of Engineering and Economics at the Wrocław University of Economics and Business in Poland. Since 2012 she has been working at the University of Economics in Bratislava in Slovak Republic (from 2012-2020 at the Department of Commodity Science and Product Quality; since 2020 to present at the Department of Marketing). She cooperates with the Ekotrend Slovakia - Association of Organic Agriculture, the ISOCERT sp. z o.o. (certification body in Poland) and international companies such as Nestlé and UNILEVER. Currently she is the leader of the VEGA project no. 1/0398/22 Status and perspectives of the market development of healthy, environmentally friendly and carbon-neutral products in Slovakia and the European Union (2022-2025).

12

Edible Streets - A Case Study in Oxford

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Keywords:

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Urban streetscapes are key areas where humans and nature can thrive symbiotically. Growing food throughout an urban environment can not only improve health and well-being for all living beings, but it can also improve air quality, cooling and storm water retention. Presently, food is grown in urban areas in varying contexts, from private gardens to allotments and community gardens. Whilst allotments in urban areas create spaces for communities to come together to grow food, they also pose three challenges to the feasibility of plots: the cost, the waiting list for a plot, and the restrictions imposed by the allotment committee[1]. Furthermore, they are often not easily accessible for busy urban dwellers, and therefore have limited positive impact on their lives. As a result, frequenting an allotment or community garden is viewed as a privilege.

Research to date

Edible Streets integrates food production into publicly owned and accessible land by utilising underused areas on streetscapes. The location of the planters (Figure 1) grants direct and easy access to the occupants of the street for maintenance and harvesting, therefore facilitating their participation in food production. This increases the accessibility of community gardening, enabling it to become part of our daily lives and woven throughout our neighbourhoods. Whilst helping to increase agency over food of marginalised groups, Edible Streets can also promote mental and physical health. It is a tool for advocacy of how residents interact with their urban landscape and take ownership of it, whether it be individually, as a group or as an entire community (Figure 2).

Figure 1: Edible Streets Planter in Barton. (Source: Authors)

Figure 2: Community interaction with Edible Streets Prototype. (Source: Authors)

1 Greater London Authority (GLA) (2006) A Lot to Lose: London's disappearing allotment. Available at: https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/archives/assembly-reports-environment-allotments-main.pdf (Accessed: 20 October 2021).

According to Good Food Oxford the carbon footprint of our food in Oxford is twice as high as that contributed by our cars, which is evidenced by the fact that less than one percent of food consumed in Oxford is locally sourced.[2] This research therefore aimed to understand the feasibility of growing food locally on residential streets in Oxford. In collaboration with Oxfordshire County Council Public Health, Edible Streets designed and implemented an intervention in a residential street in Barton, Oxford. Public engagement exercises gathered views about initial design ideas. Thirty-five interviews were undertaken with Oxford residents and a workshop was held with 16 stakeholders, including the local authority, charities and community groups. Interventions were designed through co-creation with residents and architecture students (Figures 3 and 4), as well as from the findings from content and thematic analysis of interview transcripts and workshop notes.

Figure 3: Edible Streets Planter Illustration.

Figure 4: Edible Streets planter in Barton.

Key findings from interviews carried out with residents of Barton, and workshops with various stakeholders in Oxfordshire, highlighted an interest and enthusiasm for growing food in streets to create more opportunities for community cohesion, as well as for health and well-being benefits. There is a significant barrier from Local Authority Highways due to the need for public liability insurance and gaining a licence for using publicly owned land. Findings from this research were used to develop a “How to” Guide for Edible Streets (Figure 5).

2 Good Food Oxford (2016) Putting Food Poverty on the Map. Available at: https://goodfoodoxford.org/blog/putting-food-poverty-on-the-map/ (Accessed 21 October 2021).

Figure 5: 'How to" Guide for Edible Streets in Oxfordshire

The guide was written in language easy to understand by any audience. The draft of the guide was shown to key stakeholders from the local community, community groups and the council for feedback through two feedback workshops. The final version of the "How to" Guide is now available on the Oxfordshire County Council Public Health webpage.[3] Further research can evaluate the use and impact of the interventions, including potential nutrition and biodiversity impact of edible streets, in order to inform further regenerative design solutions. This contribution will show how Edible Streets could work as a key part of regenerative neighbourhoods.

3 https://www.canva.com/design/DAF2TbT6Nj0/_HCyBkCudSdCHgXSPnWSqQ/view

Mina Samangooei

Mina is a Senior Lecturer in Architecture at Oxford Brookes University and Director at Sow Space. She is specialised in ecological and regenerative building design with a focus on urban greening and healthy buildings. Her research specifically looks at integrating edible urban greening with architecture and the built environment, and she also has an interest in how the psychology of motivation and behaviour can progress this field..

Sangeetha Thondre

Sangeetha has a PhD in Biotechnology from The Central Food Technological Research Institute, India on the topic 'Microbial production of fructooligosaccharides'. Prior to her position as Senior Lecturer at Oxford Brookes University, she worked in plant tissue culture and analytical food testing laboratories in India and the UK

Emma Davies

Emma's research explores the psychological factors associated with health behaviours such as alcohol consumption and physical activity. She has expertise in the development and evaluation of behaviour change interventions across a wide range of domains, and is particularly interested in the social and emotional aspects of health behaviours and how they impact on our mental health and wellbeing.

Conversation Piece

13

Reimagining Urban Wildlife Habitats

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Keywords:

Urban biodiversity, regenerative action, urban amphibians, brownfields, non-human urban planning

Introduction

Toads, frogs, newts, and salamanders are an indicator for local biodiversity and ecosystem health. Their populations, however, are dwindling due to the urbanisation-related destruction of wetlands, leftover spaces, and small freshwater bodies and the fragmentation of habitats, for instance through the construction of infrastructure such as roads.

Considering the conditions for amphibians to thrive and taking non-human perspectives into account in urbanism is key for local and urban biodiversity due to amphibians' crucial place in the food chain. Small(er) projects aiming to bring back local populations of highly specialised amphibians from the brink of extinction by restoring their urban habitats can trigger positive effects on a larger scale.

Based in Munich, Germany, Gerfried Ambrosch does volunteer work to enhance and safeguard the habitats of frog and toad populations, some of them critically endangered, in Germany and Austria. The author of The Poetry of Punk, published by Routledge, has a PhD in literary and cultural studies. He sat down with Johannes Riegler, host of the Cities Reimagined Podcast and member of the DUT Management Board, to discuss:

- Why taking non-human perspectives into account in urbanism is essential
- How brownfields provide natural habitats for highly specialised species
- Why personal connections to a certain space help biodiversity projects
- Why increasing the density of urban areas in current urbanism threatens biodiversity

Gerfried Ambrosch with a toad.

Johannes: Hi Gerfried! I'm very happy that we can continue the talk we had the other day on a bike ride through Vienna where you showed me all those hidden wildlife habitats, some of them in newly built areas, brownfields, and recreational areas. You do not have a background in natural science. How come you developed this strong interest in amphibians?

Gerfried: That started very early as a kid. I think I dug my first pond, or had my dad dig my first pond for me, when I was 5 or 6. And it's just fascinated me ever since. In recent years, I started to pay more attention to all the factors that have caused amphibian populations to plummet, such as urban sprawl and densification and industrial agriculture. Since I have a background in Do-It-Yourself punk, I told myself: 'Why wait for big institutions to do things.' And so I just started to go out with a shovel to dig ponds and most importantly connect with people and grassroots organisations. **From the moment you start, you learn, and the more you learn, the more you kind of want to do to prevent the species you love from going extinct.**

Johannes: What do you do exactly?

Gerfried: My work could be summarised as restoring and preserving habitats that are either on the brink of vanishing or have already vanished. I go out with a shovel to dig ponds where there is a need and chance to bring back a species from the brink of local extinction. Of course, before you can start digging, there is a whole process including permits from the owners and the mobilisation of smaller budgets of a couple of hundred or thousand Euros for pond-liners, sometimes excavators, and so on. Luckily, if local public administrations are involved, they often contribute labour power of their staff in kind.

Besides the construction part, there is a significant educational element as well, where I take school kids to the biotopes and work on educational boards and leaflets for the projects which are usually publicly accessible.

In this line of work, very small projects can have huge knock-on effects because a lot of amphibians are actually quite versatile. **With my projects, if you succeed in bringing back a species from the brink of local extinction to being sort of almost commonplace again, it is extremely satisfying for me. That's what keeps me going.**

Johannes: How do local public administrations usually react when you approach them with an idea for a project?

Gerfried: You have to show the added value for the community and find allies. You kind of have to change your approach a little depending on who you talk to. When it comes to dealing with local authorities, it's key to get everyone, or at least a majority, on board. While Green Party representatives tend to support conservation projects, others

might not, usually because they don't see the value in it. It takes a great deal of explaining and convincing to change that. I find the best way to go about it is by finding common ground. After all, most people want their hometown to shine, and being eco-friendly is a badge of honour. So I explain to them the importance of an intact ecosystem and the key role amphibians play in it. It helps when you have roots in the same town and remind people of their own childhood, when some of these species were still common. Why deprive current and future generations of a childhood rich in biodiversity, when something can be done about it at the local level?

Johannes: On our recent bike tour through Vienna, we visited the Nordbahnviertel in Vienna, a former train yard that has been developed in the last 10-15 years into a new inner-city neighbourhood. Between the new buildings, you find some leftovers of uncultivated land, which happens to be the preferred habitat of the highly endangered green toad. Why do the toads like it there so much?

Gerfried: Those areas very often are the lifeblood of specialist species. Green toads used to live around big natural rivers; in the areas where the rivers would flood and they would use those little basins, those little pools of water, that would remain once the water retreated for spawning, because they could be sure that there would not be any predators in these new bodies of water, and no competition for their tadpoles. These areas are now largely lost due to river regulation. But some toads found refuge in anthropogenic environments that resembled their sparsely vegetated natural habitat, such as quarries and brownfields. However, unutilised land is becoming extremely scarce in most Western-European cities due to economic pressures on the land. In most cases, the result is the destruction of these habitats. A brownfield doesn't sound like much. But it might be the perfect habitat for these highly specialised species. Another huge problem in urban areas is the fragmentation and disconnection of local wildlife habitats by streets, tram lines and other infrastructure, which causes the drainage of the gene pool in urban amphibian species. The densification of urban areas is a significant threat to amphibian wildlife.

Johannes: In what way does urbanism have to change to plan and activate these complex connections between species? Between humans and non-humans?

Gerfried: Cities are built by humans for humans. But that doesn't mean that we're the only ones inhabiting those cities. It's only fair to take other, non-human perspectives into account in urbanism. While there are improvements in urban greening and green infrastructures and buildings, respecting the perspective of very slow moving, ground dwelling animals is key to protecting urban amphibian populations. There are ways to do that, but it requires an open mind to these non-human perspectives and that infrastructures be planned accordingly.

Johannes: For your grassroot work of restoring amphibian populations, you recently won an award for biodiversity from the province of Styrian, Austria. What was the project about and why was it so successful?

Gerfried: The award was for a three-part amphibian welfare project near Graz, Austria. To realise it, I had to get the municipality, the federal state government, the road maintenance organisation, local farmers and residents, and the Austrian Herpetological Society (ÖGH) on board. That, in itself, was a success. The project consisted of roughly ten new and restored amphibian ponds in three different locations a few hundred meters apart and was aimed to prop up local amphibian populations. Two years later, I can say that we're already seeing results, but it takes time for these toad, frog, and newt populations to fully rebound.

Johannes: How do you see your work in a greater picture given the urgency at the moment: declining biodiversity, an accelerating climate crisis etc.?

Gerfried: It feels like there has been a shift in attitudes. For instance, we now live in a society where if you want to build somewhere you have to make sure you either build around the natural habitat or create some alternatives for it. But of course, there could be a little bit of bias in my estimation that attitudes are changing since I tend to socialise with people who are already open to that.

QR-Code

Listen to the Cities Reimagined episode on your favourite podcast platform or use the QR codes.

https://www.anthropocene.city/podcast/Reimagining-Urban-Wildlife-Habitats

Gerfried Ambrosch

An award-winning conservationist, Gerfried Ambrosch holds a PhD in English and American Studies from the University of Graz, his hometown. After moving first to London and then Vienna, he now lives in Munich, where he continues to be active in projects to preserve and restore natural habitats and promote biodiversity in and around urban areas. For years, his focus in this regard has been on amphibians, many of which are on the brink of extinction and whose survival depends on human action, especially in light of climate change. To this end, Gerfried Ambrosch has initiated and participated in measures to protect frogs, toads, and newts – such as building ponds, which these amphibians require for breeding – in collaboration with government and non-government organizations. He has, moreover, given talks and published articles on the subject and networked with likeminded people in Germany and Austria.

Johannes Riegler

Johannes is an urbanist and geographer based in Vienna, Austria, pulling together expertise and experience from multiple disciplines to transform cities in times of climate, biodiversity and other human-made crises. He is serving as a member of the Management Board for the Driving Urban Transitions Partnership, host and producer of the Cities Reimagined Podcast, and runs Anthropocene.City and is a validated URBACT expert. Johannes has conducted conceptual work on experimental urban governance models, particularly in the area of urban living labs, multi-actor processes and communicating complex urban-related topics to a broader public.