



Designs for the NEBourhoods Living Labs

Co-Creating Urban Experiments with the Arts and the Cultural and Creative Industries

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GLOSSARY

EC	European Commission
EU	European Union
HR	Handlungsraum der Stadtentwicklung / Urban Development Action Area
IHRK	Integriertes Handlungsraumkonzept / Integrated Urban Development Plan
ISEK	Integriertes Stadtteilentwicklungskonzept / Integrated Urban Regeneration Implementation Plan
M	Project Implementation Month
NEB	New European Bauhaus
NEBourhoods	Creating NEBourhoods Together
NGO	Non-Governmental Organisation
NPL	Munich Neuperlach
OA	Open Access
T	Task
WP	Work Package
Organisation Name (Consortium)	
AGM	Architekturgalerie München e.V.
BYF	Bayerische Forschungsallianz GmbH / Bavarian Research Alliance GmbH
GC	Green City e.V.
HM	HM Hochschule München University of Applied Sciences
HM:UniverCity	HM Innovationsnetzwerk / HM Innovation Network
MGS	MGS Münchener Gesellschaft für Stadterneuerung GmbH
MS	UnternehmerTUM MakerSpace GmbH
MUC	Landeshauptstadt München / City of Munich
MUC CCI	Kompetenzteam Kultur- und Kreativwirtschaft / Team of Excellence for the Cultural and Creative Industries (Kreativ München)
MUC CULT	Kulturreferat / Department of Arts and Culture
MUC LED	Referat für Arbeit und Wirtschaft / Department of Labor and Economic Development
MUC PLAN	Referat für Stadtplanung und Bauordnung / Department of Urban Planning and Building Regulations
SCE	Strascheg Center for Entrepreneurship
STR	Str.ucture GmbH
SAAD	Studio Animal-Aided Design GmbH
SSR	Studio Stadt Region Forster Kurz Architekten und Stadtplaner Partg Mbb
TUM	Technische Universität München / Technical University of Munich
UTUM	UnternehmerTUM GmbH
Organisation Name (in Cooperation with)	
MER	Münchner Ernährungsrat e.V.
MIN	Münchner Initiative Nachhaltigkeit
OTH	Ostbayerische Technische Hochschule Regensburg
Organisation Name (Associated Partners)	
BDA	Bund Deutscher Architektinnen und Architekten e.V.
BDA-By	Bund Deutscher Architektinnen und Architekten Bayern e.V.
ByAK	Bayerische Architektenkammer, Körperschaft des öffentlichen Rechts / BAK – Federal Chamber of German Architects
BYD	Bayern Design GmbH

1 INTRODUCTION

1.1 PROJECT OVERVIEW

“Creating NEBourhoods Together” is one of the six lighthouse demonstrators of the New European Bauhaus funded by the EU to address the great challenges of climate, environment, and health. The aim is to collaborate on the European Green deal to create more sustainable, inclusive, and beautiful living environments across the EU. In Munich-Neuperlach (NPL), one of Europe's largest post-war urban expansion areas, NEBourhoods is collaborating with citizens and stakeholders from culture, science, and business to implement ten actions from all fields of urban development, encompassing circular construction and redesign of residential and commercial buildings, innovative forms of mobility and energy communities, biodiversity and green space concepts and nutrition and youth culture. Encouragement of entrepreneurial thinking and action and practical implementation in co-creative processes support the formation of sustainable neighbourhoods in liveable, inclusive, and beautiful cities of the future.

Combining co-creation and entrepreneurship while putting culture and creativity at the core of the transformation process, the project is delivering accessible and empowering solutions, providing roadmaps and kickstarting actions to make the EU Green Deal beneficial for all in NPL and beyond. With meticulous care, the district is being cultivated to become a resilient urban innovation landscape. Over this two-year period, we have been creating NEBourhoods together, demonstrating how circular thinking and acting in society and the economy can be realised, how the green transformation in construction, mobility, energy, food and health can be activated and how public spaces can be enhanced.

1.2 OBJECTIVE OF THE TASK

The Transition Hub (WP2) has been responsible for the design, set-up and implementation of Co-Creation in NEBourhoods. Among others, one task was to ensure, through Co-Creation, that the 10 NEB Actions could take root in the local context of Neuperlach. This was done in urban Living Labs.

The NEB Actions on a variety of challenges identified before and topics relevant for climate neutrality and resilience in the district had been prepared but not fully planned before in Munich's innovation ecosystem and had been feedbacked with the findings of the two other large-scale concepts for integrated urban development that the City of Munich is implementing in Neuperlach¹, which had also been identified in a participatory process.

¹ These are the informal Integrated Urban Development Plan for the action area of “Neuperlach and Surroundings” (Integriertes Handlungsraumkonzept, IHRK, <https://stadt.muenchen.de/dam/jcr:c007f679-b39e->

The purpose of the urban Living Labs was

- to align the projects of the NEB Actions with the current needs and the long-term development of the district and its inhabitants,
- to locate them in the district and
- to further co-develop them,
- so that at least their continuation on site, or better still their city-wide replication and, ideally, their European replicability, could be achieved.

1.3 TASK TEAM

Two partners in the Transition Hub formed the task team, these were HM:UniverCity, the Innovation network of Munich's University of Applied Sciences (Workpackage Lead), and the Team of Excellence for the Cultural and Creative Industries of the City of Munich (Kreativ München, MUC CCI), who combined their knowledge and experience in the following fields to accomplish:

- the quadruple helix approach, i.e. the participation of actors from the four key sectors: civil society, government, academia and industry (HM:UniverCity),
- Co-Creation, i.e. collaborative processes, in which the four key sectors jointly create solutions and innovations leveraging the diverse expertise and perspectives of each sector to address complex challenges and optimize outcome (HM:UniverCity), and
- Cross-Innovation with the arts and the cultural and creative industries (MUC CCI), i.e. the initiation and facilitation of collaborations between the Cultural and Creative Sectors (CCIS) and other economic sectors, shaped by design-thinking.

1.4 OBJECTIVE OF THIS DELIVERABLE

HM:UniverCity has published a Co-Creation Handbook (NEBourhoods Deliverable 2.2) that reflects the Transition Hubs learnings and good practices in a functional and condensed form. This deliverable will demonstrate why and how aesthetic experimentation and design with artists and creative professionals has been integrated in Co-Creation in the NEBourhoods project, it will show what kind of work the artists and creative professionals contributed and designed within and for the urban Living Labs and it will present conclusions drawn so far regarding the impacts achieved as well as the untapped potential.

[46c0-b938-d084df6bbea9/IHRK_Neuperlach_HR6.pdf](https://www.stadtsanierung-neuperlach.de/fileadmin/user_upload/Neuperlach/Dateien/ISEK_NPL_Anlage_Stadtratsbeschluss_.pdf), 16.12.2024, 10:47) and the formal, legally binding Integrated Urban Regeneration Implementation Plan (Integriertes Stadtteilentwicklungskonzept, ISEK, https://www.stadtsanierung-neuperlach.de/fileadmin/user_upload/Neuperlach/Dateien/ISEK_NPL_Anlage_Stadtratsbeschluss_.pdf, 16.12.2024, 10:48).

1.5 PLAN OF THE DELIVERABLE

Chapter 2 lays out what is the potential of collaboration with artists and creative professionals in urban experimentation to explain to what purpose it has been placed in the core of the design of the NEBourhoods project.

Chapter 3 explains how this collaboration has been anchored in order to realise this potential.

Chapter 4 shows the designs that were created in the context of Co-Creation in the Living Labs, which impact they had on the co-creative process and what quality of experience they added to the prototypes.

Chapter 5 looks at the NEBourhoods approach to working with artists and creatives as a prototype for reflexive urban governance. It highlights the most important lessons learned for implementing this approach, illustrated by project moments that offered the most promising beauty in the sense of the NEB.

Chapter 6 outlines ways for the dissemination, replication, and exploitation of learnings.

2 THE PURPOSE OF COLLABORATION WITH ARTISTS AND CREATIVE PROFESSIONALS

As part of the European Green Deal, Europe's most ambitious socio-ecological transformation project, the EU Mission "Climate Neutral and Smart Cities" focuses on 100 cities "to act as experimentation and innovation hubs [...taking] a cross-sectoral and demand-led approach"² while delivering climate neutrality by 2030. As lighthouse project of the New European Bauhaus, NEBourhoods wants to show, how this mission can be implemented. To frame the designs, that artists and creatives contributed to the results, this introduction lays out for which purpose the project placed the arts and the creative industries at the core of its design.

Beautiful innovations enhancing sustainable innovation, technology and economy

To address the EU Mission one key element of the NEBourhoods project is the idea to pool together all relevant forces of Munich's innovation eco-system and bring them into joint collaboration to open up and empower Neuperlach and its inhabitants for the New European Bauhaus' movement and the idea of change towards sustainability.

² European Commission: EU Mission: Climate-Neutral and Smart Cities. (https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/climate-neutral-and-smart-cities_en, 12.12.2024, 15:44)

Innovation research names three essential knowledge types needed in cross-sectoral innovation to use the full potential of a given regional or metropolitan innovation eco-system: the mostly science-based analytical knowledge, the more applied, problem-based entrepreneurial and engineering knowledge and the type of knowledge that is produced in the arts and the cultural and creative industries (CCIS):

“Symbolic knowledge represents the ability to understand and interpret the habits and norms of popular culture. Innovations result from the creation of meaning and desire through the generation of new designs, aesthetics, and intangible, cultural attributes of products. This type of knowledge exhibits a high cultural embeddedness and is typically created by exchange in informal and professional communities, often in a local context.”³

As actors and producers, developers and cultivators of symbolic knowledge the CCIS have been identified to be ideal cross-sectoral innovation catalysts for local multi-stakeholder collaborations facing the more and more volatile, uncertain, complexe and ambiguous challenges of our globalized, digitized, urbanized world in climate change.⁴ In recognition of this innovative and cross-innovative potential of the sector, the European Commission has even named the cultural and creative industries as one of 14 industries in its current industrial strategy that are of strategic importance for managing the upcoming ‘triple transition’, consisting of green and digital transformation under the condition of social inclusivity.⁵ It was therefore a logical step to integrate the CCIS into a project in which the city of Munich is trying out to act as an innovation hub.

The New European Bauhaus (NEB), however, goes even further than identifying the sector as an essential component of innovation ecosystems. It attributes a far more comprehensive role to its actors in implementing the Green Deal. As the think-and-do-tank of the Green Deal, the NEB sets the agenda for the process of the transition, focusing on the fundamental systemic shifts that need to happen on multiple scales in collaboration of multiple societal actors transcending the classical arenas of innovation. The New European Bauhaus enables this transition as: **“a project of hope and perspectives that bring a cultural and creative dimension to the Green Deal – the European Climate Agenda – to enhance sustainable innovation, technology and economy.”**⁶ This process has cultural impact, because basic

³ Asheim, Björn: Regional Innovation Systems: Past - Presence - Future, Lund University, Circle - Centre for Innovation Research, Papers in Innovation Studies 2015 (36), p. 8. (Preprint Version of a book chapter in Doloreux, D; Shearmur, R; Carrincazeaux (eds.): Handbook on the Geographies of Innovation, Cheltenham (UK) and Northampton (US) 2016.

⁴ Hamburg Kreativ Gesellschaft (ed.): Green Paper, Creative Sustainability Solutions: CCI Innovations lead Sustainability. (https://mcusercontent.com/7eac9615c3e0e4beb1ba566fe/files/54e345ab-a04d-4813-a263-820c8a965ab6/ECIS2020_Green_Paper_BoS_4.pdf, 16.12.2024, 10:12)

⁵ https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy_en (13.12.2024, 11:03)

⁶ New European Bauhaus Compass, A guiding framework for decision and project makers wishing to apply the NEB principles and criteria to their activities, Version 4 2022 (NEB Compass 2022, <https://new-european->

assumptions of our current way of life must change, i.e. the economic framework, power relations, worldviews, behaviours, and paradigms.

For the green transition, not only symbolic knowledge as an innovation resource, but **“aesthetics [as] a quality of experience and style, beyond functionality”⁷** is set as one of the three guiding practices of thinking and doing. Beyond functionality means, that the expectation of impact includes **more than the creation of intangible attributes of tradable products**. On the contrary, the creative dimension that the NEB wants to bring to the Green Deal, means **the creation of explicitly tangible solutions that provide transformative experiences** in two respects – the experience of the sustainably transformed living environment as a meaningful and desirable one and the experience of sustainably transforming the living environment as a meaningful and desirable process: “People will embrace or drive change when they see it. The quality of our living environments is essential, and art and culture play a key role in improving it.”⁸ Beautiful innovations in the definition of the NEB are enhanced innovations because they aesthetically enable and inspire people not only to understand and share the need for deep shifts of the existing system but also to participate in co-creating and performing them.

But what exactly is the enhancing potential of the CCIS for NEB green transition projects in the context of urban development and what can it be used for?

Sustainability transformation

The research field of sustainability transitions has emerged in the early 2000s, also in response to the systemic nature of the shifts our way of living, working, and doing business together do require. In its socio-ecological research community⁹ it has developed a model

bauhaus.europa.eu/document/download/405245f4-6859-4090-b145-1db88f91596d_en?filename=NEB_Compass_V_4.pdf, p. 3.

⁷ NEB Compass 2022, p. 3.

⁸ NEB Compass 2022, p. 3.

⁹ For an up-to-date overview of the field see Geels, Frank W.: Advanced Introduction to Sustainability transitions, Edward Elgar Publishing: Cheltenham (UK) and Northampton (USA): 2024, (Geels: Sustainability transitions 2024). Geels identifies four strands in the field of research, the first two of which he considers relevant for identifying transformation patterns and producing advice that is helpful in the context of the challenges that urgently need to be solved: the sustainability transitions approach, which focuses on the replacement of one socio-technical system by another through the emergence of niche innovations, and the socio-ecological, which focuses on “socio-ecological systems, which involve interactions between ecosystems and humans at different spatial scales.” (Geels: Sustainability transitions 2024, p. 6). The latter seems better suited to understand urban transformation to sustainability, because a city cannot be reduced to a socio-technical system and is as a public and democratic organization governed as such and not as a production-consumption system. Neither can a city be analysed as a system without regard to its socio-technical-systems. Noting their analytical-descriptive similarity, Geels also describes the links between the two approaches. Especially the underlying multi-level models for social transformation are very similarly structured. The transformation model in the following figure 1 is the socio-ecological one, a reprint from Folke, Carl; Polasky, Stephen and Rockström, Johan (et.al.): Our future in the Anthropocene biosphere, in: Ambio 50 2021, p. 834-869, (Folke et al.: Anthropocene 2021), p. 851.

that explains the dynamics of the transformation towards sustainability in a multi-scalar process, that can be applied to urban development.

The multi-level approach (Fig. 1) shows a process of emergence through diverse interactions across scales and among diverse actors, beginning with small-scale experiments that – under favourable overarching conditions – may find windows of opportunity and thus be able to extensively transform user practises and governance regimes, if they achieve to create narratives of hope and action or if they are themselves inspired by or open to such narratives.

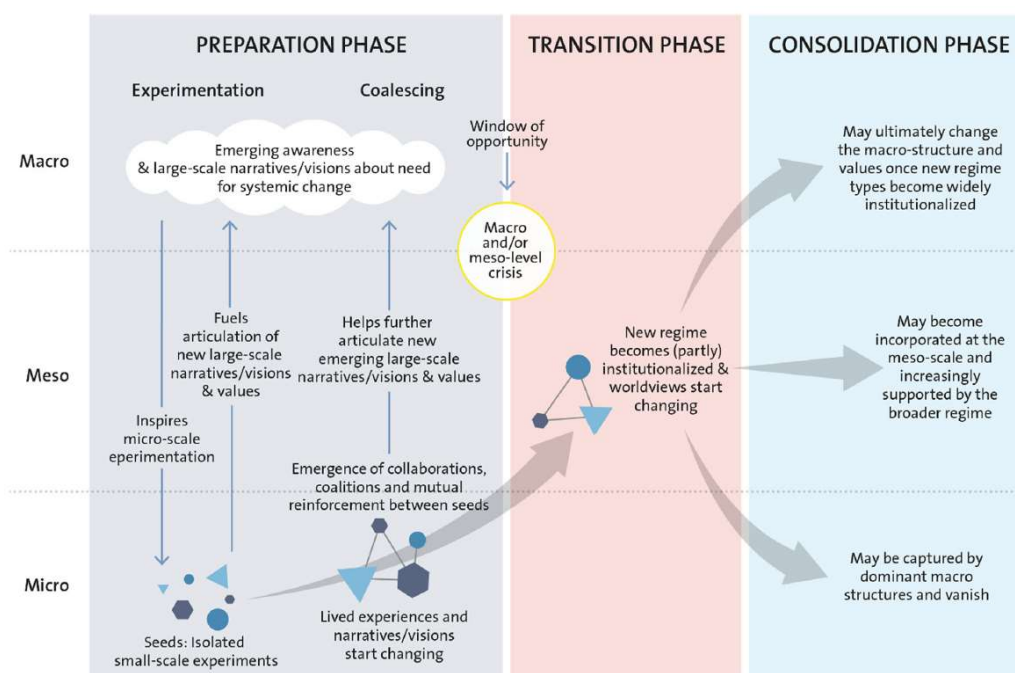


Fig. 9 The transformation process. A social innovation, a seed, matures to the extent that the initiative becomes *prepared for change*. And when change happens, when the *window-of-opportunity* unlocks at broader levels of governance, often in relation to a shock or disturbance, the new initiative can be skilfully *navigated through the window and transitioned* into a new development pathway, making it possible to transform the governance system and start *building resilience of the new situation* and taking it to scale (based on Olsson et al. 2004, Geels et al. 2002 and adapted from Pereira et al. 2018b). Reprinted with permission

Figure 1: The transformation process towards sustainability (Reprint from Folke et al.: *Anthropocene* 2021.)

The dynamics of sustainability transformation arises from the reciprocal action between experiments and narratives. This dynamic points to the innovation-enhancing practices and skills of artists and creative professionals relevant for urban development projects for sustainability transformation in the context of the NEB.

Explorative experiments

The transformation model addresses the **characteristics of artistic and creative research** by referring to experiments as the seeds of the transformation process. These are not falsifying

or assessing experiments that test hypotheses or the usability of a product under real conditions that have been created inside a scientific laboratory or a conventional R&D process. The term “emergence” rather suggests an evolutionary dynamic of societal change and a more inductive, investigative way of reasoning by undertaking exploratory experiments that venture out of a system to gain completely new experiences. Both can bring about innovations, the difference lies primarily in the respective **experimental attitude**:

“To put it bluntly, technical, and artistic approaches are pitted against each other here: [...] only exploratory experiments are real ventures that also require corresponding daring. A willingness to take risks is different from a willingness to take chances: a risk is the product of the statistically determined probability of occurrence and the extent of the damage. Risks are therefore the result of a calculation and aim to make dangers manageable by quantifying them. Ventures, on the other hand, aim to gain experience by venturing into unknown territory and letting things happen. In this sense, ventures are exploratory experiments in which the unknown can occur with the possible consequence that things can go wrong – and **taking a chance always means giving in to a certain curiosity about the world and having the hope that something new will reveal itself – not in the sense of a strategically orchestrated innovation, but as an incalculable effect of a provoked experience.**”¹⁰

The enhancement, that sustainable innovation, technology, and economy need according to the NEB, could be achieved by integrating this artistic and creative experimental attitude, that encourages and enables to overcome systemic biases. Because if the aim is to bring about far-reaching systemic shifts that are developed from the broad base of society, it is likely that both, the values and the risks that arise in this process, can no longer be assessed, managed and distributed in the conventional way, through the logic of competitive advantage based on proprietary knowledge for the usual parties involved in technical innovation, that even informs the design of the experiment itself. In the first place, it must be explored and learned together, which new values and risks are emerging at all, when a greater diversity of societal actors are involved to work together on a societal rather than a pure technological challenge, and which new forms of partnerships and collaborations are needed to distribute values and risks fairly and viably.

Urban experimentation

Research on urban development in cities, that aim to become agents of change in the context of sustainability transformation and thus experimental in the sense of the EU Mission, stresses, that urban development should embrace precisely this artistic and creative attitude

¹⁰ This is how Jens Badura formulates it on behalf of the Federal Government’s Competence Centre for Cultural and Creative Industries in Bundesministerium für Wirtschaft und Energie (BMWi): ~~Nichttechnische Innovation~~ [sic] – Ein Denkanstoss in Etappen, Berlin 2019 (Badura: ~~Nichttechnische Innovation~~ 2019), (https://kreativ-bund.de/wp-content/uploads/2019/08/Dossier_Nichttechnische_Innovation-2019.pdf, 15.12.2024, 13:00), p. 18. Here and in the following translated by Christina Schepper-Bonnet.

and practice of at the same time devoted and immersive as well as curious and explorative learning from and with the great diversity of those who shape urban life: “While assuming many formats, **urban experimentation** can become distinguished conceptually from conventional urban development or policy by an explicit emphasis on **learning from real-world interventions [...] within and between networks of urban actors**”.¹¹

The relevance of cities for the transformation towards sustainability is seen particularly in the fact that they may enable these learning processes, are the suitable venue and have the capacity to solve the governance challenges that arise from them and thus are able to strengthen the transformational impact and scale of experiments for sustainable transformation:

- by “motivating and organizing denser networks of collaboration amongst diverse actors who mutually benefit from information and other spillovers”,
- by the involvement of “urban cultures fostering more sustainable lifestyles, a specifically urban demand for innovative services, coupled with permissive local regulation and planning”, and
- “the capacity to put in place procedures to negotiate interests and values”.¹²

In addition to the fact that artists and creative professionals are experts for explorative learning and drivers and practitioners of collaborative urban cultures, their experiences and skills evolve and are shaped by their way of working in between different societal sectors. Having mostly at least two different legs in professional life, they create artworks and cultural products, develop products and services within companies and are entrepreneurs themselves, are often activists initiating and engaging in debates on diverse societal challenges, work for and in public cultural institutions and at all levels of education. This qualifies them in a special way to translate between different working cultures, to include different mindsets in experimental constellations of learning, to see the potential synergies and to encourage trying out new forms of collaboration.

Meaningful experience and agency

The **dynamic of sustainability transformation**, through which the experimental seeds become strong enough to eventually pass through a window of opportunity and reach the meso and macro levels of change, **is driven by narratives** (Figure 1), that **“serve as meaning-making devices, provide actors with confidence to act and coordinate action.”**¹³ They emerge from

¹¹ Evans, James: The experimental city, New modes and prospects of urban transformation (Evans: New modes 2016), p. 2, in: Evans, James (ed.): The Experimental City, Routledge: Milton Park (UK and New York (USA) 2016, p. 1-12 (Evans: Experimental City 2016).

¹² Sengers, Frans et al.: Experimenting in the city: unpacking notions of experimentation for sustainability, p. 24. (Sengers et al.: Experimenting 2016), in: Evans: Experimental City 2016, p. 15-31.

¹³ Folke et.al.: Anthropocene 2021, p. 851f.

the lived experience of experimentation, that becomes meaningful and thus indicates pathways of action and inspires agency.

The meaningful and desirable experience of transformations and of transforming, that also the NEB sees as an essential prerequisite for the successful green transition, can arise when, during experimentation, there is no purely instrumental objectifying but co-creative and again exploring relationship to the phenomena and things that are being dealt with, which in turn is particularly the case in artistic and creative ways of thinking and proceeding:

“Things create social relationships and our dealings with things should not be limited to the fact that they are available to us as objects (in economic terms: they are tradable) but must consider that they shape our actions. In other words: things participate, they are not just objects of our actions. [...] Therefore, one of the characteristics of creative economies is that “making” and “prototyping” play an important role: **in the active handling of things, in trying things out, it becomes clear that these are not just instruments, but also bring us into situations of transformative experience: our views change, and new perspectives arise.**”¹⁴

Involving artists and creative professionals in experiments for sustainable transformation allows to not only test the technological and economic performance of solutions, but also to explore how they might achieve a social or cultural impact in terms of the meaningfulness and desirability of the experience they provide or the action they inspire in a process of learning-by-doing.

Responsible urban experimentation

Non-instrumental learning-by-doing as an enhancement of data-based research, is as well what urban experimentation needs to integrate to be able to responsibly learn from the real: “Urban experimentation offers a framework within which to **arrange instruments, materials and people to induce change** in a controlled manner, and subsequently evaluate and learn from those changes. [...] And thus] seeking to **reconcile ‘the science of data and the science of experience’ through real-world experiments.**”¹⁵

The ethos of this urban experimentation consists in an attitude of inductive modesty towards the complex reality of urban life, which initially creates not facts, but an abundance of different meanings and with these an openness for what is emerging from them:

“The ethical connection between urbanist and urbanite lies in a certain kind of modesty: living one among many, engaged by a world which does not mirror oneself. Living one among

¹⁴ Badura: ~~Nichttechnische Innovation~~ 2019, p. 24.

¹⁵ Evans: New modes, p. 2. See also Sengers et al.: Experimenting 2016, p. 21-23.

many enables [...] “richness of meaning rather than clarity of meaning”. That is the ethics of an open city.”¹⁶

Only rooted in and open for the richness of its local context, its historical textures and its place-based dynamics, the Experimental City can guard against becoming an instrument of symbolic politics, creating gentrification effects rather than changes on the regime level while coping with real problems.¹⁷ Responsible urban experimentation must be a pre-political shelter for social cooperation and learning if it is not to run the risk of exclusively adapting the local context with regard to its capacity for adaptation and absorption of experiments for a future world that is imagined as being achievable solely through technical innovation and competitiveness, but instead understands experimentation as a curiosity-driven and inclusive exploration of the local context for what can arise from it, concretely here and now, for the benefit of as many people as possible.

The beautiful city in the sense of the NEB isn’t a product with intangible attributes attracting sustainability investments in experiments for economic growth, but a living environment providing tangible experiences to experimentally grow sustainable resilience as part of the anthropocene biosphere.

Therefore, sensitivity for the living environment is needed. And this is precisely where the New European Bauhaus anchors its ambition and conviction: “People will embrace and drive change, when they see it”¹⁸ and this will give momentum to the green transition, because it is in principle an ability that all humans possess.

Aesthetical receptivity and skilfulness

The term “to see” is not used here as a pars pro toto for all the senses, but stands for awareness and understanding. People will embrace and drive change, when they realise it, when they understand the meaning of it, when they are able to make sense of it, when it becomes sensible, because this experience has a certain quality. To create this quality, not only sensitivity is needed, but also the ability to use “this access to the world to gain new insights and ideas about it” - the specific aesthetic competence of artists and creative professionals, their “receptivity to what presents itself when you engage with the world and [...] the skill [...] to deal with it and translate it productively”¹⁹.

Involving artist and creative professionals in urban experimentation bears the potential of not only encouraging and enabling cross-sectoral and experimental learning-by-doing but

¹⁶ Sennett, Richard: Building and Dwelling, Ethics for the City, Penguin : UK 2018 (Sennett: Building and Dwelling 2018), p. 302.

¹⁷ See as well May, Tim and Perry, Beth: Cities, experiments and the logics of the knowledge economy, in: Evans, James (ed.): The Experimental City, Routledge: Milton Park (UK and New York (USA) 2016, p. 32-46.

¹⁸ NEB Compass 2022, p. 3.

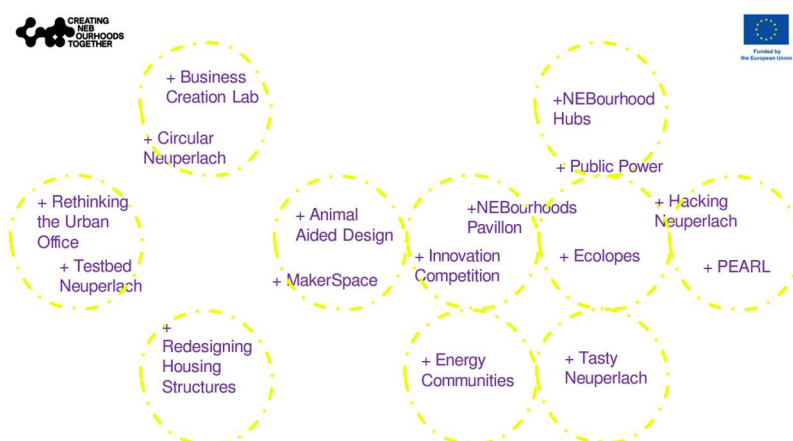
¹⁹ Badura: ~~Nichttechnische Innovation~~ 2019, p. 27.

transforming-by-meaning-making in real-world-interventions. But it is important to emphasise that this should not be seen as a promise of salvation, because it requires genuine and responsible openness on the part of everyone involved to engage purposefully with the abundance of phenomena of urban life. ‘Curiosity’ meaning today “desire to know or learn, inquisitiveness” is rooted in Latin ‘cura “care, concern, trouble”.²⁰ This includes to carefully design a project that allows and funds the use of artistic and creative potential.

3 AN APPROACH TO COLLABORATION WITH ARTIST AND CREATIVE PROFESSIONALS

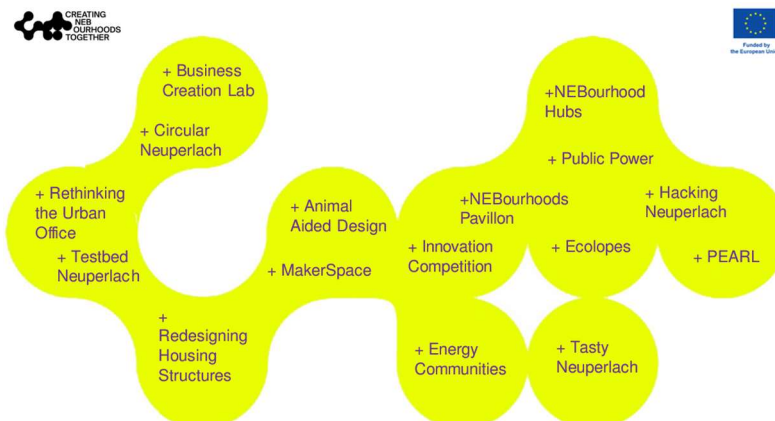
With its own narrative, NEBourhoods classifies itself as a project of socio-ecological transformation towards sustainability through urban experimentation, being as a whole an urban experiment and consisting of a multitude of small-scale urban experiments (initiated by the 10 NEB actions and also the various entrepreneurship offers). These are initiated as decentralised starting points for beautiful, sustainable, and inclusive pathways of the transition of Neuperlach to an urban district that embraces and drives change towards circular thinking and acting as well as climate neutrality and resilience.

Isolated seeds in the beginning, these experiments...

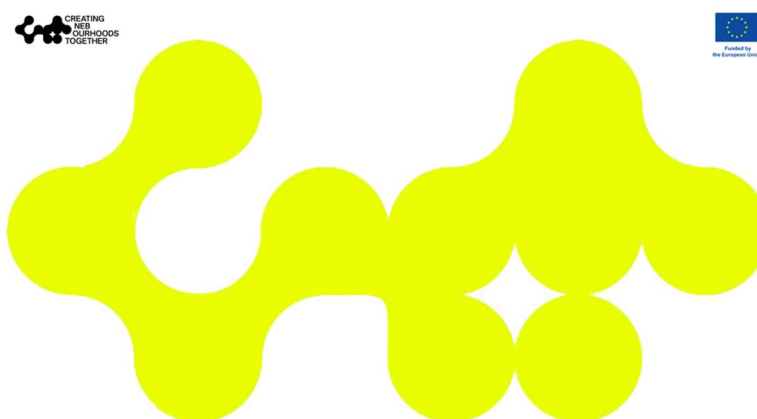


²⁰ Online Etymology Dictionary, Keyword ‘curiosity’ (<https://www.etymonline.com/search?q=curiosity>) and keyword ‘cure’ (<https://www.etymonline.com/word/cure>).

... should take roots and become visible and tangible in the district of Neuperlach, mutually reinforcing one another,



and then coalesce to NEBourhoods – places, people and communities, that are inspired, empowered and willing to continue, beyond the duration of the project, the green transition of the district as a whole:



in the manner of lichens, which symbiotically form a nutrient layer as pioneer plants in extreme regions, on which mosses and later higher plants can then thrive.



Figure 2: NEBourhoods Narrative (© NEBourhoods / AGM / MUC CCI)

Following a co-evolutive dynamic, this kind of transformation can be initiated but not predetermined. It takes place through diverse interactions and among diverse stakeholders

under real-life conditions, that are too complex to be planned in detail. Therefore, it rather needs to be framed by a few basic assumptions on the organisation of the people involved and then be navigated with simple tools, that allow a process of constant assessment and refinement of the course of action.²¹

NEBourhoods included two types of urban experiments:

1. a set of starting points that were framed as **entrepreneurship-offers** and navigated through different formats of entrepreneurship education, sensitization, and promotion (WP3) and
2. a set of starting points, **the NEB Actions** (WP4 and 5), that were
 - **framed as urban Living Labs**²², i.e. as collaboration in “intentional experiments [...] with the four stakeholder groups citizens, academia, business and the public sector” and “users as the key stakeholders in the experimentation process”²³ and
 - **navigated through Co-Creation**, i.e. “display [collaborative] and iterative learning and doing - [which means that] experiments are conducted, monitored, and conducted again with improvements from the previous round”²⁴ through prototyping.

Artist and creative professionals were involved in the Co-Creation process of the NEBourhoods Living Labs (WP2), how exactly is described in the following two subchapters.

3.1 INVOLVING ARTISTS AND CREATIVE PROFESSIONALS IN CO-CREATION

NEBourhoods followed the classical quadruple-helix approach to involve knowledge, competences, and experiences from the whole of society (i.e. the four key sectors Civil Society, Economy, Local Politics and Administration as well as Academia²⁵ in the Living Labs, and the skills of artists and creative professionals as experienced cross-sectoral co-creators.

²¹ Folke et.al.: Anthropocene 2021, p. 850. The New European Bauhaus addresses this feature of sustainability transformations with the NEB-Compass, which is itself a navigation tool, interlinking the NEB values with fundamental working principles, providing guiding questions and ambitions to design, assess and constantly refine the transformative direction and level a project is heading to.

²² Originally rooted in the private sector “the Living Lab approach has been adopted as a tool in urban governance and sustainability research. [...] Living Labs that operate on an urban territory in the pursuit of sustainability goals are increasingly being conceptualized and defined as so-called urban living labs.” (Schliwa, Gabriele, Mc Cormick, Kes: Living Labs, Users, citizens and transitions, (Schliwa, Mc Cormick: Living Labs), p. 164f. in: Evans: Experimental City 2016, p. 163-177.

²³ Schliwa, Mc Cormick: Living Labs, p. 166f.

²⁴ Schliwa, Mc Cormick: Living Labs, p. 166.

²⁵ For the roles and contributions of the different sectors see Deliverable 2.2: Co-Creation in urban development. chapter 2.2.

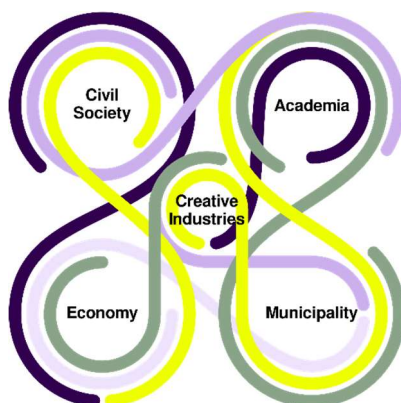


Figure 3: Quadruple helix stakeholders and the Creative Industries (© NEBourhoods / HM)

HM:UniverCity was responsible for mapping and involving the locally relevant stakeholders from the four sectors and, in particular, for involving civil society actors from Neuperlach.²⁶ MUC CCI was responsible for the involvement of artists and creative professionals.

The latter wasn't done through a mapping process but via an open call and a curation process, that were carried out by the two departments of the City of Munich that had access and profound knowledge of Munich's cultural and creative scenes, institutions, individuals and companies: the Department of Arts and Culture (MUC CULT) and the Team of Excellence for the Cultural and Creative Industries (Kreativ München, MUC CCI) in the Department of Labor and Economic Development. MUC CCI is a partner of both the German and the European networks for cultural and creative industries²⁷ and, as such, a well-connected municipal intermediary specialised to promote and develop the skills and innovative potentials of the sector and committed to the European Creative Pact for Skills Manifesto²⁸.

Navigating the Living Labs in the most flexible way required that the artists and creative professionals should be available at the shortest possible notice and for a maximum of at most 20 months of collaboration (March 2023-October 2024). In order to assure flexibility of public procurement, the formation of a pool of creatives at the beginning of the project instead of an ongoing acquisition process seemed to be the most suitable way.

²⁶ Deliverable 2.2: Co-Creation in Urban Development, chapter 3.1, 3.2 and 4.3; Deliverable 2.1: Databases, p. 8-27.

²⁷ In Germany: Fördernetzwerk Kultur- und Kreativwirtschaft : <https://foerdernetzwerk-kreativwirtschaft.de/>, in Europe: <https://www.the-creative-fed.eu/>.

²⁸ The Creative Pact for Skills Manifesto (<https://ecbnintra.notion.site/Creative-Pact-for-Skills-Manifesto-7ab34b220bf54dfc98fb7bac8ad93627>)

The curation process of the NEBourhoods Pool of Creatives was based on qualitative and quantitative criteria derived from the professional fields of cultural funding as well as of funding and promoting the cultural and creative industries, and an assessment of the applicants' experiences with transdisciplinary projects and urban development topics.²⁹ As the pool was built during the preparation phase of the Living Labs, the needs weren't yet fully assessed. The final composition of the pool therefore wasn't guided by the predictability of the creative outcome for the Living Labs, reflected in the sum of the assessed skills. It was guided by a more holistic and inductive reasoning that corresponds to the nature of transformative urban experiments.

The NEBourhoods Pool of Creatives was built to be more than the sum of its parts, to enable non-obvious and exploratory constellations of collaboration with the resources at hand: guided by the "trust in people"³⁰ and the principles of Effectuation, i.e. "making the best use of available resources"³¹. It included 30 artists and creative professionals, that altogether formed the broadest possible spectrum of potentially relevant experimental and aesthetical expertise and experience from as many of Munich's cultural communities and markets as possible.³²

The first matching of the artists and creative professionals followed the steps of Effectuation, which begins with becoming aware of the available resources. Subsequently, options for action are explored based on an assessment of each potential collaborator's individual capacity to manage failure, in order to then enter into binding partnerships under conditions of uncertainty.

In a first step the Transition Hub organized a half-day workshop to bring the NEB Actions and the Pool of Creatives together. In a speed-dating-format they got to know each other's skills, perspectives on the NEBourhoods Project as well as mindsets and personalities. In a detailed feedback-loop, the actors of the pool as well as the NEB Action-Leads expressed the potentials and desires of future collaboration. This feedback then was the basis for the matching of Actions and Creatives in first collaboration constellations for the Kick-off of the Living Labs. These two formats were the only ones for which all pool actors were commissioned as soon as they were accepted into the pool.

From that point on, the Co-Creation of the individual Living Labs took very different speeds and courses, ultimately resulting in very individually developing constellations of stakeholders and thus collaborating artists and creatives. Some of the matches made for the kick-off of the Living Labs continued as such for the rest of the project, some just for the following months,

²⁹ See Deliverable 2.1: Databases, p. 28-39.

³⁰ Badura: ~~Nicht technische Innovation~~ 2019, p. 37.

³¹ Deliverable 2.2: Co-Creation in Urban Development, chapter 4.2. See as well: Society for Effectual Action: Effectuation – Create a New Future through Entrepreneurship. (<https://effectuation.org/>)

³² The profiles of the artists and creative professionals can be seen on the NEBourhoods Website: <https://www.nebourhoods.de/news/pool-der-kreativen>

others changed completely. The roles, that artists and creative professionals took over in the co-creative process are described in the following chapter according to the iteration model the Transition Hub used to navigate collaborations in the NEBourhoods Living Labs.

3.2 ARTISTS AND CREATIVE PROFESSIONALS AS CATALYSTS, FACILITATORS AND DESIGNERS

At the beginning of the project, the Transition Hub had aimed for a similar way of working in all living labs. However, the requirements for collaboration varied greatly according to:

- whether complex research results had to be processed or not,
- to which degree they could be aligned to existing needs, demands and interests,
- whether familiar processes of bureaucracy and administration could be used or not
- to which degree the stakeholder nature had to be considered (i.e. the breeding season of birds and the growing season for plants),
- whether companies or private individuals were involved in the development,
- whether it was a matter of a specific constructional alteration or a planning process.
- etc.

During the preparation phase of the Living Labs the Transition Hub became increasingly aware of these individual requirements resulting from the complex reality of urban life, which happens to be the arena of urban experimentation. Instead of bringing out a typology of Co-Creation formats (constellations of collaboration including their preparation, facilitation, and documentation) the Transition Hub decided to rely on a shared understanding of the process of collaboration to navigate it and to assure that they would progress towards the envisaged solutions.

The following iteration model³³ was incrementally developed by HM:UniverCity:

³³ The model is actually informed by the British Design Thinking Double Diamond (British Design Council: Eleven lessons: Managing design in eleven global brands, A study of the design process, London 2007.) simplifying it to four phases and visualizing and dynamizing it as a life-cycle approach. This corresponds to the findings of research on business ethics, which suggests integrating the design thinking method originally rooted in the world of business and commerce with organizations competing to innovate in the context of responsible business creation able to address sustainable development challenges in complex systems. (See Baldassare, Brian et al: Responsible Design thinking for Sustainable Development: Critical Literature Review, New Conceptual Framework, and Research Agenda, in: Journal of Business Ethics 2024 (195), p. 25-46.)

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to reality from the Co-Creation or Co-Evaluation cycle, so that the Living Lab team and eventually an extended public can be affected by it as part of the living environment – either being inspired to create the next design or being enabled to deepen reflection on what is to do next.

Thirdly, the process needs to **address the social and political agency through which it unfolds.**

These agencies should neither be black boxed, nor be handled in a way that makes commitment to the process and its progress impossible. In the iteration model, the decision-making is visualized at the bifurcation points as well as at the point where the lines, that demarcate the experimental cycles, converge (see Figure 5). These are obligatory points of passage in the process where assessments and decisions are made, not only on the quality of the cycles' outcomes but also about the representation of the stakeholder's interests and about the commitment to their roles in the process.

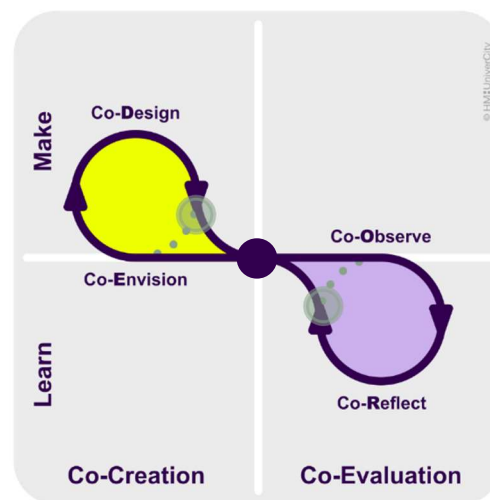


Figure 5: NEBourhoods Iteration Model: Decision-Making (© NEBourhoods / HM / MUC CCI)

Negotiation processes at the level of power relations can only be assessed in retrospect. But the iteration model offers both, the possibility of consciously perceiving these in the process, as well as starting points for their documentation and evaluation.

The artists and creative professionals were commissioned either based on quotations as designers and for the design of prototypes they created to serve the co-creative processes of the Living Labs or as participants in the Living Labs' co-creative processes themselves on the basis of standard daily rates.

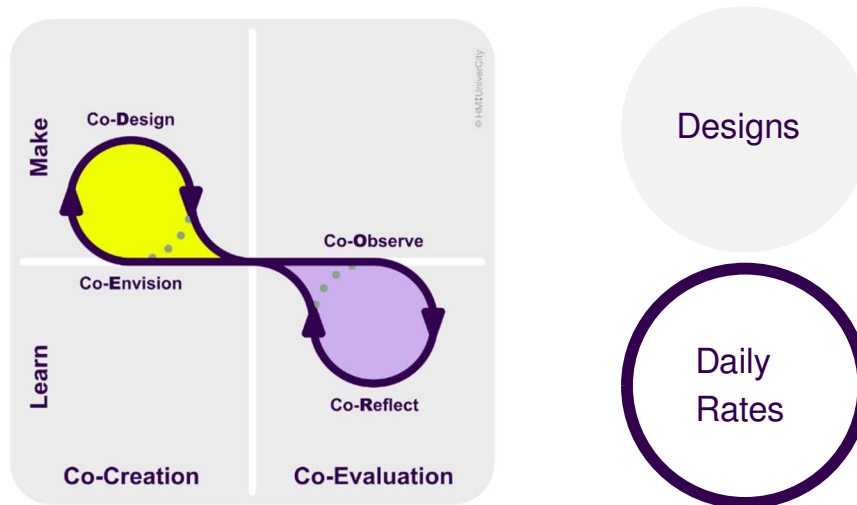


Figure 6: Pool of artists and creative professionals: Deployments (© NEBourhoods / HM / MUC CCI)

In the Co-Creation- and Co-Evaluation-Cycle, artists and creative professionals acted either as catalysts, driving the process to its obligatory passage points or as facilitators of the Living Labs' co-creative interventions in the district.

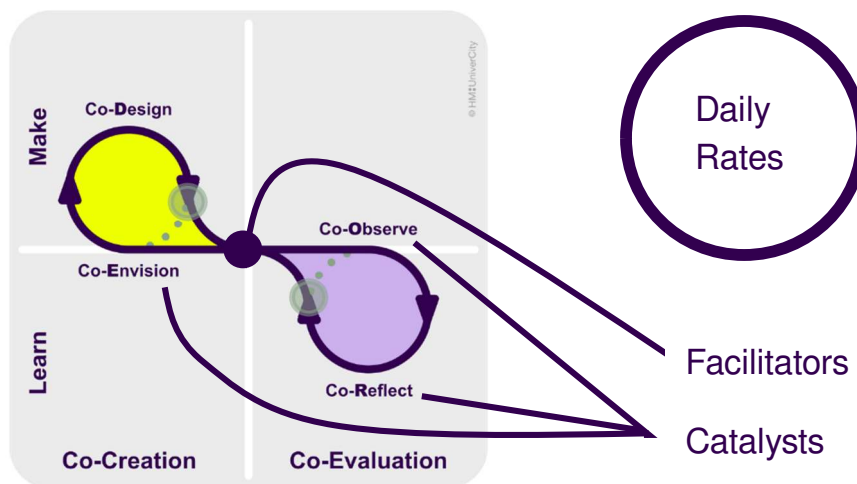


Figure 7: Pool of artists and creative professionals: Roles (© NEBourhoods / HM / MUC CCI)

Here they brought in their experimental attitude: inciting curiosity, encouraging new experiences as well as ways and forms of collaboration, relating and translating between different working cultures and mindsets and enabling transformative experiences.

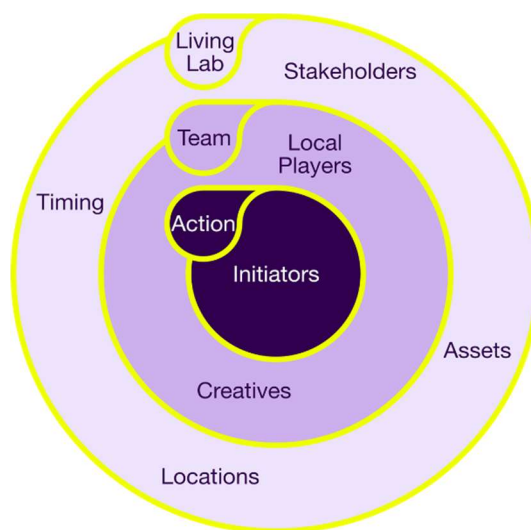


Figure 8: Structure of a NEBourhoods Living Lab (© NEBourhoods / HM)

It is important to note, that even if the artists and creative professionals were perceived or perceived themselves as part of the inner Co-Creation team of a Living Lab, they didn't have any decision-making mandate in the Co-Creation process.

4 DESIGNS FOR THE LIVING LABS CO-CREATIVE PROCESSES

As the Co-Creation Handbook explains, prototyping has been essential to drive the co-creative process of the Living Labs. But prototypes weren't supposed to serve in the conventional meaning of "pre-production model or [final] demonstrator, which comes from engineering. [...] prototype as a means of co-creative work and especially as part of a Living Lab (and its life cycle approach) [...] **serves to learn and is the foundation for the next iterative step.**"³⁶

Another function of prototypes in the co-creative process of the NEBourhoods Living Labs lies in their overarching goal of exploring the conditions for a successful transition to a more sustainable urban reality. "While innovation is always related to an established state that is to be overcome or 'destroyed', transformation is not specifically aimed at such an overcoming, but at the questions 'What could this be, what could become of it?'"³⁷ Following these

³⁶ Deliverable 2.2: Co-Creation in Urban Development, chapter 2.4.

³⁷ Badura: *Nicht-technische Innovation* 2019, p. 36

questions, prototypes for the co-creation processes of the Living Labs **should "enable those involved to imagine the new reality."**³⁸

Furthermore, prototypes for experiments in transformation processes should provide the experience of an **augmented transformative agency and scope for action.**

The artists and creative professionals were commissioned with designs of different types and for different purposes of the NEBourhoods Living Labs. The following chapter (4.1) shows the designs for the Living Labs' co-creative processes as a corpus in a first comparable structure, without claiming that their quality and impact is thereby fully described and analysed. They are linked to the needs the NEB Actions described in their deliverables, which is also where visualizations can be found as well as on the NEBourhoods website. It is described in each case, which type of design was created, how it drove the co-creative process of the Living Lab and which quality of experience or style it provided to the prototype.

Another chapter (4.2) shows the designs that were created in the context of the integrative communication towards the neighbourhood of Neuperlach. These designs are contributed for the NEBourhoods narrative as a prototype, thus serving not individual Living Labs, but their ensemble.

4.1 DESIGNS FOR INDIVIDUAL LIVING LABS

4.1.1 Animal Aided Design

Pool-Creative: Sarah Dorkenwald, designer³⁹

What was needed?

"With the application of Animal-Aided Design (AAD), we are able to integrate wildlife into architecture and open space planning, and thus fostering human-nature relationships. AAD does not only create valuable niches for birds, reptiles, or insects in cities – but also increases the quality of life of city dwellers. **Our recent research has shown that the acceptance of AAD measures is greater, if design for wildlife is combined with good design for humans.** [...] The aim of applying AAD in a participative or even co-creative manner is to create sustainable and resilient neighbourhoods that benefit both people and nature and help **reconnect people with nature.**"⁴⁰

³⁸ Deliverable 2.2: Co-Creation in Urban Development, chapter 2.4.

³⁹ Together with her business partner at UnDesignUnit, Karianne Fogelberg, who wasn't part of the NEBourhoods Pool of Creatives.

⁴⁰ Deliverable No. D4.3: Demonstration of Animal Aided Design Approach, p. 5.

What was designed?

Participatory Species Walk (Process Design)

A participatory outdoor group format for the selection of the target species approach integrating playfully staged design research methods, props and activity cards which allowed visiting Neuperlach while embodying the animals' perception of the district.

AAD Toolbox for Neuperlach (Process Design, Co-Creation-Tools, Information Design)

The AAD Toolbox for Neuperlach was co-created with two local stakeholders, the youth centre Come In and the shopping mall PEP, using their premises (the Come In's garden and the PEP's rooftop, facades and surrounding free spaces) as testbeds and building grounds for the AAD prototypes in Neuperlach: an ensemble of wildlife habitats in the garden of the youth centre and a seating sculpture for people and animals in a square in front of the shopping centre.

The Toolbox “includes a catalogue of measures for meeting the critical needs of the 14 selected target species in new developments or refurbishments of buildings and open (green) spaces. [...] highlight[s] synergies with climate-sensitive urban design and energy retrofitting of buildings, and present[s] practical solutions for the promotion of urban biodiversity. The different elements of the toolbox allow a process of participation.”⁴¹

For the co-creation process Sarah Dorkenwald designed prototypes of the later refined target species portraits (information design), developed props and tools for analysing the space for change and configured workshop scenarios for different stakeholders.

The Toolbox itself has been delivered in form of a booklet and a database to which she contributed the information design elements (target species portraits, overview poster linking the needs of the target species, suitable measures and potential habitats, instructions for using the toolbox).

How did the designs drive the co-creative process of the Living Lab? Which quality of experience or style did they contribute to the NEB Action's prototype?

Co-creative process: by generating and nurturing interest and engagement of inhabitants, of testing organisations and of professional users in workshops, by allowing rapid prototyping and learning.

Prototype: change of perspective and thus awareness for more-than-human urban living as well as expansion of a scientific planning approach to a participative planning approach through playful design.

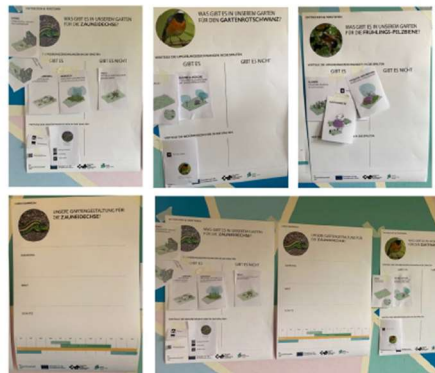
⁴¹ Deliverable No. D4.3: Demonstration of Animal Aided Design Approach, p. 17.



Figure 9: Participatory Species Walk, change of perspective through props and actions (© UnDesignUnit / Sarah Dorkenwald). Where does the sand lizard live? Form teams of six. Two take a 10-metre tape. One stays put, the other runs a radius around her or him. The rest position themselves on the course of the circle line. This is the territory of a sand lizard. What does the sand lizard need in its habitat? Slip into its perspective and look for suitable offers. What do I notice? What surprised me?



Co-Envision
neugierig sein, erkunden, selbst erfahren, lernen, reflektieren, erkennen ...



Co-Design
aushandeln, was wollen wir machen, wo findet
das statt, wie könnte das aussehen ...



Co-Build
anwenden, bauen, testen





Figure 10: Co-Creating a biodiversity toolbox by Co-Creating a biodiverse garden (© UnDesignUnit / Sarah Dorkenwald). Co-Envisioning (being curious, exploring, experiencing, learning, reflecting, recognizing), Co-Designing (negotiate, what do we want to do, where does it take place, what could it look like... WE WANT THESE THINGS!), Co-Building (apply, build, test) the biodiverse garden; Refining the materials of the biodiversity toolbox (How should the profiles, checklists and planning tools be designed?). Final Design of the biodiversity Toolbox (Who is the house sparrow? What does the house sparrow need? How to use the Animal Aided Design Toolbox)

4.1.2 Public Power

Pool-Creative: Jennifer Keusgen, researching textile designer

What was needed?

“Public Power aims to reduce the temperature in urban spaces through shading measures to restore the quality of life and prevent social exclusion. The aim is to examine Neuperlach for heat islands in public spaces and identify areas that make sense for shading measures in terms of their social usability, ecological integration, and sustainable value. This includes not only shading but also the secondary potential analysis of combination solutions with photovoltaic systems.”⁴²

These potentials should be verified by data collection, and then, based on the results, one long-standing shading architecture should be constructed in Neuperlach that makes the best possible use of the identified potentials. In the first step, master's students at the Technical University of Munich used simulations, measurements, and surveys to determine the places in Neuperlach that are relevant for the desired goals. For these places, other master's students then should design and **built five temporary shading prototypes** in order to be able to carry out a before-and-after study in a real urban context to inform the design and construction of the final shading structure. This should be carried out **in a public area accessible to inhabitants** of the district and the prototypes should **remain in place for one week of participative measuring and testing**.

What was designed?

Public construction and implementation of five temporary shading-structures (Process Design)

Jennifer Keusgen designed a workshop scenario and setting for the simultaneous public prototyping of five different shading structures on the forecourt of the Quidde 35-premises (Neuperlach Neighbourhood Management, MGS). This included a preparatory phase with research and feedback loops with the students, the construction phase, and the implementation on the heat-islands (pedestrian bridge, underground exit, entrances of parking structures, public benches, oversized crossroads) identified before.

As the implementation of the prototypes took place during the district's neighbourhood festival in summer 2023, the prototype on the pedestrian bridge was also tried out as a venue for the bicycle cinema CinéVéloCité of the NEB Action PEARL, which produced the first iconic images for the NEBourhoods project and its intention to inspire unforeseen collaborations and place-makings.

⁴² Deliverable No. D4.2: Demonstration of PV Shading Structur, p. 11.

How did the design drive the co-creative process of the Living Lab? Which quality of experience or style did they contribute to the NEB Action's prototype?

Co-creative process of the Living Lab: by allowing rapid prototyping and experienced-based learning that condensed, finalized the database to be prepared for the involvement of the next decisive stakeholders from the municipality.

Co-creative process of NEBourhoods: by providing real-life-settings opening synergies with two other Living Labs (PEARL and later Let's plant a tasty Neuperlach, which initiated the neighbourhood garden in which the final shading structure was constructed).

Prototype of the Living Lab: concretisation of the project and thus improved presentability and accessibility for administrative actors, who were needed for the further process as decision-makers and enablers.

Prototype of the NEBourhoods narrative: physical perception of heat islands and thus awareness of them, which is further increased by their typologisation as well as the experience, that dealing with sustainability issues can lead to the discovery and reimagination of the potential of urban areas as Third Places.



Figure 11: Temporary shading prototypes – underground exit and bench (© NEBourhoods / AGM)



Figure 12: Temporary shading prototypes – traffic light at oversized crossroads (© NEBourhoods / AGM / Patrik Thomas) and pedestrian bridge (© NEBourhoods / TUM / Tobias Truebenbacher)



Figure 13: CinèVéloCité@Public Power (© NEBourhoods / AGM / Patrik Thomas)



Figure 14: Final shading structure in the “Tasty Neuperlach” neighbourhood garden (© NEBourhoods / AGM / Patrik Thomas)

4.1.3 Circular Neuperlach

Pool-creatives: Laura Maria Höpfner, architect, social designer and urban designer, and Anna Varnai, designer and psychologist

What was needed?

“Circular Neuperlach investigates how office buildings that fall out of use can contribute to regenerative, climate-friendly, and neighbourhood-oriented urban development through transformative approaches. Large, monofunctional office buildings from the post-war period in private ownership have been identified by the City of Munich as a particular challenge for urban development in Neuperlach. The focus of our NEB Action is on extending the building's lifespan, further use, conversion, intensified and multiple uses through innovative, circular strategies in a neighbourhood-oriented way.”⁴³

To this aim, the NEB Action developed a methodology for early planning processes in the development of the existing building stock. This was carried out in a research-based co-creative design process involving stakeholders from the real estate industry, the city administration, from planning and from civil society and proceeding in an iterative way, that is, by testing and refining building blocks of the methodology in workshops with students in teaching-research-formats as well as with actors from practice and from real-life-settings comparable to the local context of Neuperlach.

The methodology “expands existing programming methods with a special focus on existing neighborhoods and buildings. This requires **a thorough analysis of the urban context as well as existing built structure**. Programming then has **to synthesize these into a design basis to feed into the building design**.”⁴⁴

In addition to the design of its process-based, multi-scalar and multi-stakeholder methodology the NEB Action addresses the question of **a suitable form of organization** that would be able to mediate the interests of the various stakeholders involved and to align particular interests with the common good of urban development. This has been necessary even to guide the development of the methodology itself, that needed **“a unified presence when dealing with third parties, allowing the diverse competencies of the interdisciplinary project team to be conveyed and to develop a distinct stance and identity”**⁴⁵.

What was designed?

Tool for the assessment and processing of neighbourhoods' needs (Process design, Co-Creation-Tool, Information Design)

⁴³ Deliverable No. D4.4: Circularity Roadmap Neuperlach. p. 12.

⁴⁴ Deliverable No. D4.4: Circularity Roadmap Neuperlach. p. 43.

⁴⁵ Deliverable No. D4.4: Circularity Roadmap Neuperlach. p. 79.

For the design process of the methodology Laura Maria Höpfner designed an activist survey tool which included a set of cards, a survey wording and the setting of the interventions' places and venues.

Needs Workshop, Neighborhood Conversations and Neighborhood Feedback (Process Design)

Laura Maria Höpfner designed the prototypes for the neighborhood-related workshops for the development of the methodology.

Mood-boards, CI-Exploration and Website mock-up for UTO (Marketing-Tool)

Ana Eva Várnai designed a marketing toolbox for the prototype of the future organization (UTO). It includes a comparative analysis of the brand cores and positioning of reference organisations, a set of co-creative exercises to develop UTO's own brand core and positioning, mood boards on the various aspects of the UTO business model and value proposition, and a mock-up of an initial UTO website.

How did the design drive the co-creative process of the Living Lab? Which quality of experience or style did they contribute to the NEB Action's prototype?

Methodology

Co-creative process: by allowing a co-creative intervention it condensed and finalized the database in an experienced-based way, processing concrete local needs in the design of the methodology and vice versa, thus enabling the collaboration with the stakeholders relevant for the next iterative step.

Prototype: The activist design has opened up a door, a channel for the participation of civil society to a new and complex scientific approach.

UTO

Co-creative process: counselling and coaching of the scientific actors in the Living Lab to act in a new role and thus being able to access new relevant stakeholders.

Prototype: professional foundation for the strategic positioning of a new intermediary business model as well as empowerment of originally scientific actors to mediate new hybrid partnerships in the context of the circular transformation of the building stock.

Other pool-creatives, who contributed to the co-creation process: Ursula Gaisbauer, landscape designer, **Max Haarich**, artistic researcher, **Michael Heiduk**, actor, artist, circus and theatre pedagogue, **Mattias Schelbert**, communication designer.



Figure 15: Assessment of neighbourhoods needs (© NEBourhoods / TUM / Carsten Schade)

4.1.4 Redesigning Housing Structures

Pool creative: Enrica Ferrucci, architecture and architecture educator

What was needed?

“The NEB Action "Redesigning Housing Structures" investigated how the structural deficiencies of existing residential buildings can be improved socially, technologically, economically and aesthetically. The goal was to provide energy upgrades and social benefits simultaneously by renovating facades and expanding existing residential spaces”⁴⁶ with prefabricated timber elements or reused components forming a shelf “positioned at regular intervals across the façade”⁴⁷.

“For two years, research and teaching from TUM and OTH Regensburg had been intertwined for the purpose of the NEB Action. **Design methods**, action spectrums and planning options were examined and led to 9 student design projects for the transformation of residential buildings in Neuperlach. These designs and [...] a systematic analysis of the residential building stock formed the basis for the **demonstrator in the form of a public exhibition**.”⁴⁸

What was designed?

WohnWeisheiten (Process Design, Co-Creation Tool)

For the co-creative process Enrica Ferrucci designed a workshop-concept and tape-art tool that integrates bricolage, visualization, and reflection on individual needs of living-space in different life stages. It was performed with the students while working on their design projects as well as with the visitors of the exhibition.

Wohnen Weiterbauen (Exhibition Design and Curation)

For the demonstrator Enrica Ferrucci designed the exhibition as a modular living room, in which the nine student design projects showcasing a variety of solutions for the wooden shelf principle (9 architectural models on a scale of 1:20), as well as the shortfilm based on the models by Prof. Andreas Kretzer, are shown. These are supplemented by image panels, text panels and participative elements in speech bubble design picking up the guidelines and background information of the NEB Action in simple language the simple style of the architectural models. Conveying the core idea of the wooden shelf principle that adds a new living room to the existing residential spaces to the exhibition design, the living room served as well as home-like workshop-room for the accompanying programme.

⁴⁶ Deliverable No. D4.2: Demonstration of structural extensions of residential buildings, p. 10.

⁴⁷ Deliverable No. D4.2: Demonstration of structural extensions of residential buildings, p. 34.

⁴⁸ Deliverable No. D4.2: Demonstration of structural extensions of residential buildings, p. 43.

How did the design drive the co-creative process of the Living Lab? Which quality of experience or style did they contribute to the NEB Action's prototype?

Co-creative process: by differentiating the database of the project in an experience-based way, both for the students' design process and for the exhibitions programme as a co-creative tool.

Prototype: modular functionality and easy transportability of the exhibition; change of perspective on constructional alterations in the district as being imaginable and relatable to personal experience as well as expansion of an architectural planning approach to a participative planning approach through playful design.

Other pool-creatives, who contributed to the co-creation process: Susana Frau, communication designer, **Stephanie Maier**, media artist, author, director

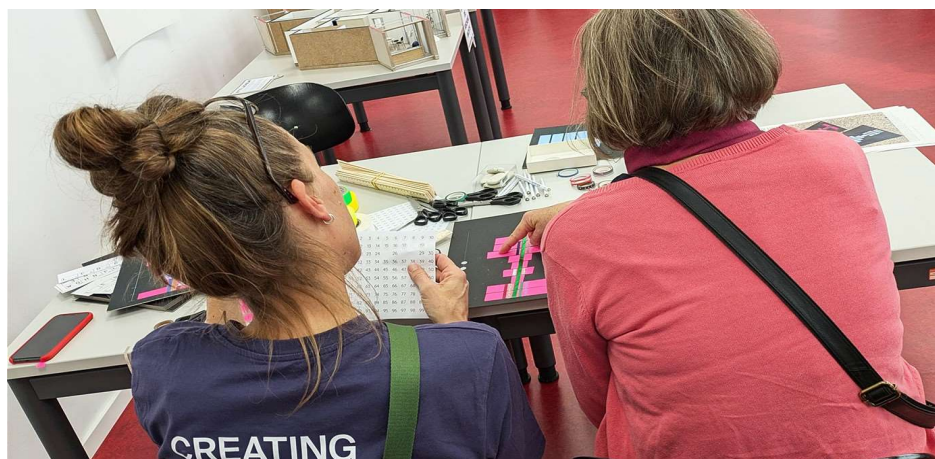


Figure 16: Tape art tool (© Enrica Ferrucci) and workshop on biographically visualized needs of living space (© NEBourhoods / TUM / Stefan Gruhne)

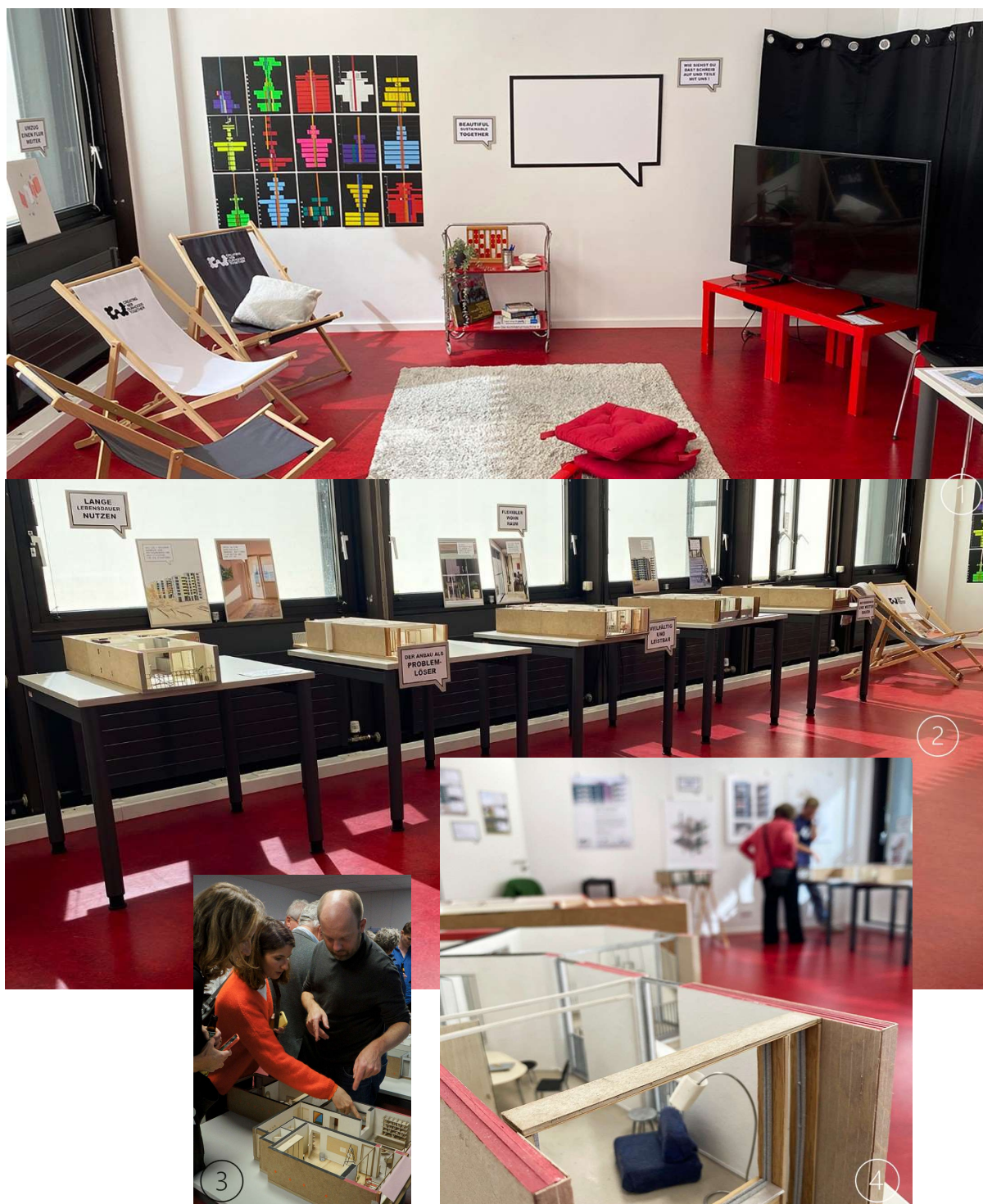


Figure 17: Exhibition Wohnen Weiterbauen (© 1, 2 and 4 Enrica Ferrucci, © 3 NEBourhoods / HM:UniverCity / Gabriella Gunzman)

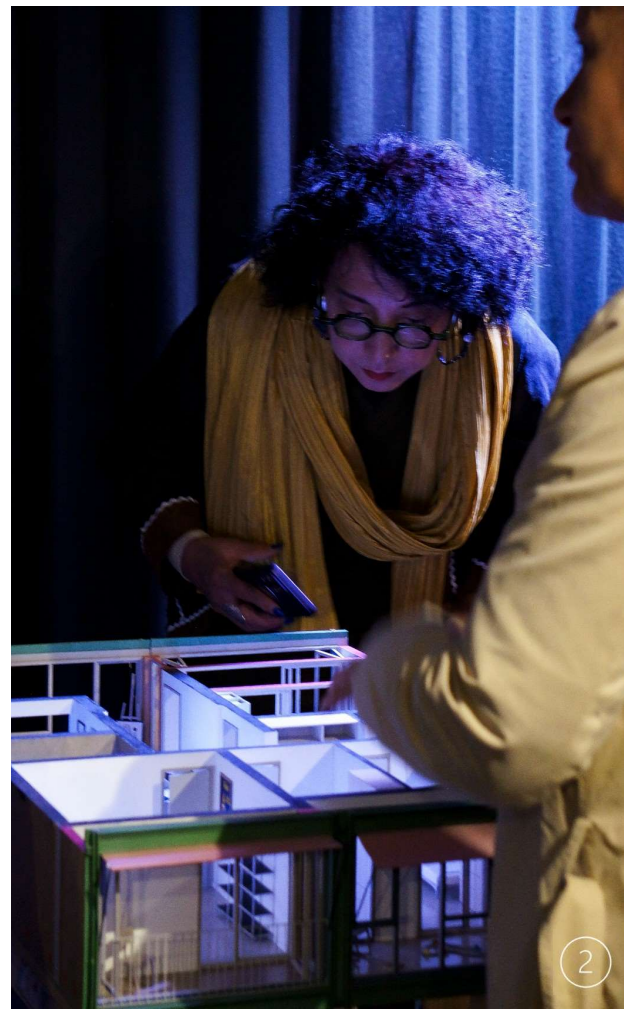
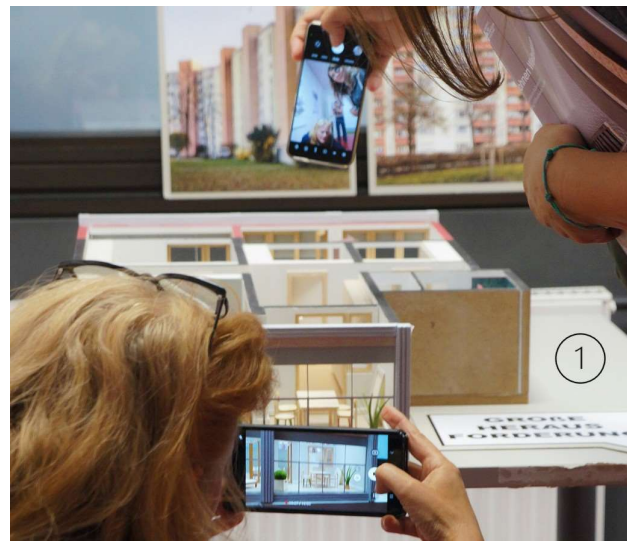


Figure 18: Exhibition Wohnen Weiterbauen (© 1 Enrica Ferrucci, © 2 NEBourhoods / HM:UniverCity / Gabriella Gunzman)

4.1.5 Mobility NEBourhoods

Pool creatives: **Enrica Ferrucci**, architecture and architecture educator, **Ralf Otto**, cultural mediator and DanceAbility teacher, and **Sandra Singh**, photographer, visual artist and art teacher

What was needed?

Based on the findings of the Integrated Urban Regeneration Implementation Plan for Neuperlach⁴⁹ Mobility NEBourhoods aimed to contribute to “the sustainable transformation of mobility in Neuperlach and, at the same time, tackled the need for meeting points”⁵⁰ in the district. In a co-creative process, “two multifunctional and context-specific installations supporting sustainable mobility forms and contributing to livable public spaces”⁵¹ should be developed. Neuperlach is a district, in which different challenges of today’s urban mobility overlap, that are, in a way, all after-effects of the traffic related decisions in the original modernist master plan, but represent as well unforeseen mobility practices, that various local stakeholder groups have developed, to deal with these effects. Consequently, the Co-Creation process of Mobility NEBourhoods should meet the requirements of “not only reorganizing mobility infrastructure but also experimenting with the instruments and processes of mobility planning”⁵² with residents of Neuperlach. To design the NEBourhood Hubs in a demand-customized way **co-creative formats for the collection of three types of data were needed: for the large-scale localization and the small-scale localization of the Hubs as well as for the configuration of their functions.**

What was designed?

Multimodal drifting (Process Design)

Ralf Otto designed a workshop concept to collectively collect data and local insights for the large-scale localization of the future hubs, based on the Situationist method of *dérivé* (drifting) as a playful technique for wandering through cities without the usual motives for movement (work or leisure activities), but rather stimulated by the terrain and its ‘psychogeographic’ effects.

Mobile photography Walk and Contest (Process Design)

Sandra Singh designed a workshop concept to collect data and local insights for the small-scale localization of the future hubs shaped by individual mobility habits and perceptions of public space of Neuperlach inhabitants. The workshop combined the one-site teaching of photographic research techniques using mobile phones and the format of an open photography competition over two weeks to visualize the results.

⁴⁹ MUC PLAN: Neuperlach: Fit für die Zukunft!

⁵⁰ Deliverable D5.5: Multifunctional Mobility Hubs, Summary.

⁵¹ Deliverable D5.5: Multifunctional Mobility Hubs, Summary.

⁵² Deliverable D5.5: Multifunctional Mobility Hubs, chapter 2.

Model making (Process Design)

Enrica Ferrucci designed a workshop concept to collect data and local insights for the configuration of functions of the future hubs. The workshop was open to inhabitants of all ages and included the collective envisioning of possible functions and their interrelatedness as well as the construction of individual 1:20 models to try out different combinations and realisations.

How did the design drive the co-creative process of the Living Lab? Which quality of experience or style did they contribute to the NEB Action's prototype?

Co-creative process: by collecting experienced-based data and local insights that were processed in the next iterative step of the Living Lab, a collaborative scenario-based decision-making workshop, that kicked-off the concrete planning phase for the NEBourhood Hubs.

Prototypes: The designs rooted the functions and the localisations of the NEBourhood Hubs in place-based dynamics and practices of inhabitants of Neuperlach.

Other pool-creatives, who contributed to the co-creation process: Helen Simon, documentary filmmaker, Ana Eva Várnai, designer and psychologist



Figure 19: Multimodal Drifting (© 1 and 2
NEBourhoods / TUM / Matti Drechsel, © 3 and 4
NEBourhoods / TUM / Gerhard Schubert)





Figure 20: Mobile photography walk and contest (© 1 NEBourhoods / TUM / Gerhard Schubert, © 2 NEBourhoods / HM:University / Jana Köstler, © 3 NEBourhoods / TUM / Matti Drechsel)

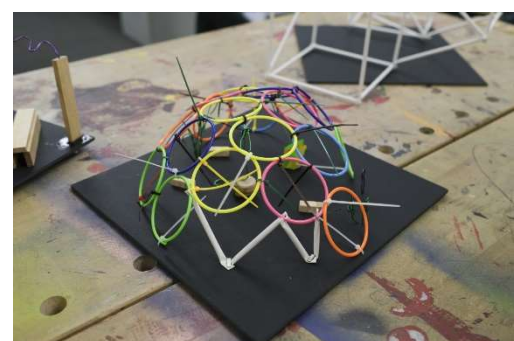


Figure 21: Model Making (© NEBourhoods / Matti Drechsel)

4.1.6 Energy Communities

Pool creatives: **Mattias Schelbert**, communication designer, and **Max Haarich**, artistic researcher

What was needed?

The NEB Action aims to demonstrate how energy communities can “become a standard model for neighbourhood energy systems in particular and for a decentralised energy system in general”⁵³. In a first step an initial framework, that provided key models (business model, governance model) allowing a future energy community in Neuperlach to become operational was developed. Based on this and in a Living Lab setting, an actual energy cooperative (Energiegemeinschaften München eG) was built in the district, through co-creative readaptation, refinement and thus implementation of this initial framework with residents and aligned to local needs. This was carried out through a series of **targeted workshop formats encouraging active participation and practical outcomes**. These workshops covered all the relevant thematic fields of the cooperative’s foundation as well as its entire process. One set of workshops dealt with **the co-creative development of the foundation for the cooperative’s future communication strategy** that should “organise and prioritise communication content, establish a shared vision and unified strategy that simplify future communication”⁵⁴.

What was designed?

Questionnaire on the brand essence of the future energy cooperative (Co-Creation-Tool)

For the co-creation process Mattias Schelbert and Max Haarich created a questionnaire to produce a structured collection of various opinions and statements from the current members of the future energy cooperative.⁵⁵ The questionnaire could be completed online or as part of an interview.

Co-creative Workshops on the communication strategy of the future energy cooperative (Process Design)

Mattias Schelbert and Max Haarich designed three workshop scenarios to foster the brand essence and the positioning of the future energy cooperative in a co-creative way, based on the pre-structured ideas of the current members.

Manifesto, claim and application grid for communication for the future energy cooperative (Marketing-Tool)

Mattias Schelbert and Max Haarich, designed a marketing tool-box for the future energy cooperative, containing a Manifesto (long and short version), a claim and an application grid that links the three main target groups of the cooperative and their needs, the cooperative's

⁵³ Deliverable No. D5.7: Demonstration of an Energy Community: Co-Creation and Implementation. p. 6.

⁵⁴ Deliverable No. D5.7: Demonstration of an Energy Community: Co-Creation and Implementation. p. 22.

⁵⁵ The founding assembly took place nearly 3 weeks before the last design was delivered, most of the time Mattias Schelbert and Max Haarich worked for the Living Lab (February to July 2024), the cooperative still was in it's foundational process.

value proposition, suitable communication channels and a catalogue of questions to guide the future production of relevant content.

How did the design drive the co-creative process of the Living Lab? Which quality of experience or style did they contribute to the NEB Action's prototype?

Co-creative process: by relieving participants of the responsibility for facilitating the joint development process, while at the same time ensuring its transparency and consensual decision-making as well as its foundation in the participants way of envisioning the joint initiative.

Prototype: The design of the marketing tool is both professional and adapted to the skills and resources available to the cooperative's civil society actors for this task. They can take the task of communication into their own hands at their own pace and scale or, if they wish to hire external service providers at a later stage, they have three carefully developed and shared basic building blocks for briefings and assignments.

Other pool-creatives, who contributed to the co-creation process: Silvia Angel, storyteller and facilitator for social interventions



Figure 22: 1st Workshop Communication Strategy – Why? How? What? (© Mattias Schelbert)

Name	ENERGIEGEMEINSCHAFTEN MÜNCHEN eG
Claim	<i>WE LET THE SUNSHINE IN.</i>
Leitidee	Wir sind eine unabhängige Energiegemeinschaft. Und stehen für eine nachhaltige, gerechte und lokale Energieversorgung . Diese ermöglichen wir durch eine co-kreative Gemeinschaft . Von Neuperlacher*innen für München . Für einen optimistischen Blick in unsere gemeinsame Zukunft.

Figure 23: Name, claim and short form of the manifesto: We are an independent energy community. And we stand for a sustainable, fair and local energy supply. We make this possible through a co-creative community. From Neuperlachers for Munich. For an optimistic view of our shared future. (© Mattias Schelbert)



Figure 24: Ursula von der Leyen, President of the European Commission, during her visit to Neuperlach with the members of the energy community, presenting its name and claim. (© NEBourhoods // AGM Patrik Thomas)

4.1.7 Let's plant a tasty Neuperlach

Pool creatives: Anna Diermeier, product designer, Janine Mackenroth, visual artist, and Richard Schleich, architect and visual artist, Christine Krauss, goldsmith, designer and wild herb expert Jörg Sellerbeck, architect and gustatory scenographer

What was needed?

The NGO Green City, that is leading this NEB Action, sees the engagement with local food systems, as a “powerful entry point for ESD”⁵⁶, its key activity: “At a neighbourhood level, we define food chains as local production, processing, distribution, consumption, and recycling of food. In this context, we emphasize urban gardening, sustainable catering, and minimizing environmental impact through reduced transportation and waste recycling.”⁵⁷ The objective in the context of NEBourhoods was to transform local food chains in Neuperlach by integrating plant-based nutrition and edible greening and empowering local communities and individuals to create and lead a more resilient, sustainable and healthy urban lifestyle.

In the beginning, the NEB Action followed a tactical urbanism approach, setting-up different pop-up-formats to engage directly with individuals in the district. One of these in total three pop-up-formats should address **the transformation of balconies**, which are part of almost every flat in the predominant high-rise buildings in the district, **to easily greenable places with eatable plants**.

The pop-up-formats didn't resonate with the inhabitants of Neuperlach in a sufficient scope to be further developed and scaled-up in urban living labs but provided valuable insights for the redirection of the Co-Creation process. From autumn 2023 on, the strategy prioritized “community and network building to establish a robust foundation for long-term participation, support the creation of enduring initiatives, and successfully implement Tasty NEBourhoods formats within the Living Lab framework”⁵⁸. Two networking workshops carved out two strands as starting points for the sustainable transformation of food chains in Neuperlach: the sustainable transformation of catering with a focus on schools and building an edible city through urban gardening with food-sharing and cooking communities.

With the initially 15 gardening initiatives, interested in support from NEBourhoods, the Living Lab for the edible city worked on **solutions for local food production and horticulture as well as for local collective cooking, both with the purpose to on the one hand serve the individual initiatives needs and on the other hand stimulate a Neuperlach urban gardening movement for the edible city**.

⁵⁶ Deliverable 5.4 and D5.8: Demonstration of Food Chains, Demonstration of Tasty NEBourhood formats, p. 11.

⁵⁷ Deliverable 5.4 and D5.8: Demonstration of Food Chains, Demonstration of Tasty NEBourhood formats, p. 11.

⁵⁸ Deliverable 5.4 and D5.8: Demonstration of Food Chains, Demonstration of Tasty NEBourhood formats, p. 22.

What was designed? How did the designs drive the co-creative process of the Living Lab? Which quality of experience or style did they contribute to the NEB Action's prototype?

Upcycled Plan Pots (Product Design, Process Design)

Richard Schleich designed prototypes for planters on balconies including devices for attaching them and a construction manual.

Co-creative process: by providing a prototyping programme for the first pop-up intervention.

Prototype: inclusiveness through low-threshold accessibility of materials and simplicity of construction.

Urban Gardening Hexamodules (Product Design, Process Design)

Anna Diermeier, Janine Mackenroth and Richard Schleich designed a modular and transportable system of hexagons made from simple and inexpensive materials that can be produced with simple crafting techniques. These modules can be used to create the basic elements that an urban garden, that wants to be part of a larger garden community in a neighbourhood, needs: raised beds, seating, and an element to share information.

These basic elements can be combined in any number and individual constellation to form a garden landscape, and their functionality can be expanded and supplemented to enable, for example, irrigation, shading, storage of material or even barrier-free gardening. This is possible, like a puzzle, due to the basic shape of the hexagon, which can be docked on six sides and symbolises, as pars pro toto, the district, whose central square has this shape, as a whole.

The constructability of the modules was tested and visualized in a open source construction manual. For playful demonstration a hexagon model kit was produced.

Co-creative process: by translating the horticultural functions and garden community needs in a testable mockup, allowing for refinement and further translation into a construction manual to disseminate the modules via workshops in the broader urban gardening community.

Prototype: inclusiveness and empowerment through low-threshold accessibility of materials and simplicity of construction, easy entry and scalability through modular system, sense of belonging and individuality at the same time by the basic shape connecting the gardens to Neuperlach while enabling individual garden landscapes.

NEBourfoods Manual (Product Design, Process Design)

Christine Krauss and Jörg Sellerbeck designed cooking-formats and recipes in the form of a manual for the mobile kitchen, that Green City had been built by Adrian Sölch and Raphael

Krome, to provide garden initiatives involved in the Living Lab, but also other interested inhabitants of the district, with a possibility to easily realise collective outdoor cooking events.

The cooking formats stimulate community building and place-making through collective cooking, eating and exploring the district, focusing on basic cooking practices, that are known in multiple cultures. They can be used to either discover and try out a great variety of ingredients and flavours or to create local signature food, using what has been grown in the urban gardens or what can be found in the urban environment (i.e. wild herbs).

Co-creative process: by translating the culinary communities needs and habits, the functionality of the mobile kitchen and the nutritional potential of the district in a playful manual allowing for greater dissemination of the mobile kitchen, of the topic of sustainable local food chains and its community-building potential.

Prototype: inclusiveness and empowerment through low-threshold accessibility of cooking techniques and ingredients, change of perspective and initiation to sensory experience through culinary exploration of the urban environment, expanded usability of the mobile kitchen.

Other pool-creatives, who contributed to the co-creation process: Adrian Sölch, sculptor, Raphael Krome, strategic design consultant

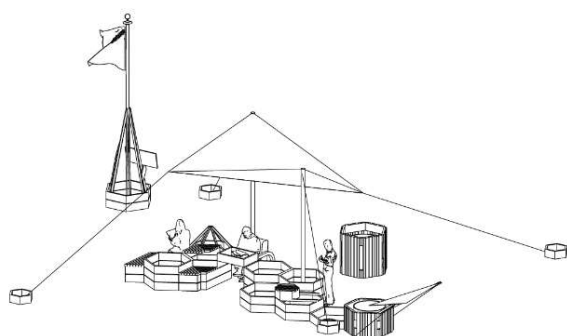
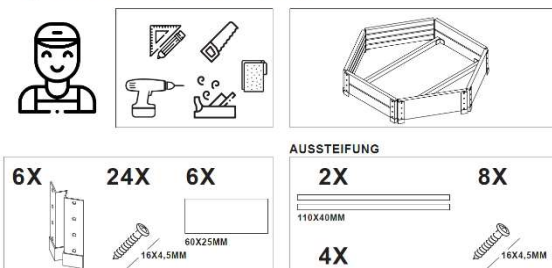


Figure 25: The NEBourhoods Hexamodules forming urban gardening landscapes (© Photos NEBourhoods / AGM / Patrik Thomas, © Graphics Anna Diermeier)

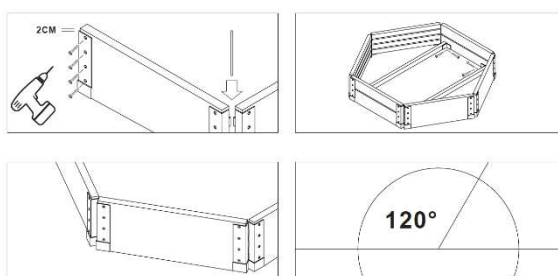


HEXAMODULE ZUTATEN 1. HEXAMODUL



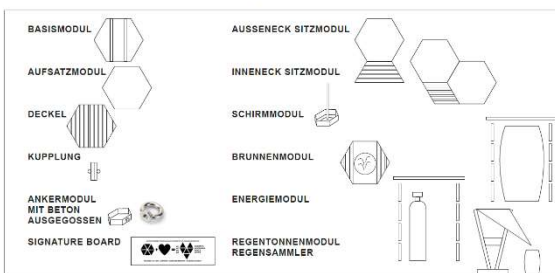
BAUANLEITUNG HEXAMODULE
im Projekt der NEB European Trailheads
ANNA DIERMEIER - JANINE BACKENHOFF - HELMUT SCHLEICH

1. HEXAMODUL



BAUANLEITUNG HEXAMODULE
im Projekt der NEB European Trailheads
ANNA DIERMEIER - JANINE BACKENHOFF - HELMUT SCHLEICH

AUSBLICK WEITERE HEXAMODULE



BAUANLEITUNG HEXAMODULE
im Projekt der NEB European Trailheads
ANNA DIERMEIER - JANINE BACKENHOFF - HELMUT SCHLEICH



Figure 26: The NEBourhoods Hexamodules construction manual showing the basic module and its variations: attachment module, cover, anchor module; external corner and internal corner seat module; parasol module and power module; well module and water butt module (© Photos NEBourhoods / AGM / Patrik Thomas, © Graphics Anna Diermeier)



Figure 27: The mobile kitchen@Animal Aided Design's seating sculpture and the NEBourfoods manual featuring the stew as a universal cooking practice allowing to bring people together while enjoying diversity. (© Photos 1, 4 and 5 NEBourhoods / AGM / Patrik Thomas, © Photos 2 and 3 HM:UniverCity / Gabriella Guzman, 4 NEBourhoods / AGM / Patrik Thomas, © Graphics Christine Krauss and Jörg Sellerbeck)

4.1.8 PEARL

Pool creatives: Raphael Krome, strategic design consultant, Adrian Sölch, sculptor, and Patrik Thomas, filmmaker and media artist

What was needed?

“The objective of PEARL Cultural Places for Young People is to enable young people in Neuperlach to develop, articulate and pursue their individual local culture. Presently there is a lack of cultural institutions respectively cultural offers in this part of Munich, that has a high percentage of young people. The project seeks to initiate cultural places, which can be places of encounter and communication. Furthermore, it is still common practise, that decisions for young people are not made with young people but about them. In this project the attitude shall be changed completely by collaborating with young people in order to cocreate (temporary) places for young culture. The young people will thereby (re-)discover and (re-)appropriate spaces in their neighbourhood. Place-making is therefore at the core of this inclusive endeavor.”⁵⁹

Place-making of PEARLs is the co-creation of third places according to the sociological description of Ray Oldenbourg. Neither home nor work-place, third places are “local and inclusive and accessible to everyone”⁶⁰, thus strengthening social cohesion and civil engagement. As the ethnographic characteristics of third places are similar to those of the theatre, PEARL explores their co-creation through theatre-making and the performative arts.

After the co-creative and interdisciplinary research phase in the first year of the project, which had produced two prototypes for the mobile and interventionist creation of third places, a permanent place was to be created in the second year of the project – according to the same principle, that bring together space, performance and fiction: “Places of youth culture have been developed while youth culture was being created.”⁶¹

CHILLspORT should be co-created by a class of pupils and students of architecture of HM as a place to chill and to do sports. The forecourt of the secondary school on Gerhart-Hauptmann-Ring in Neuperlach was identified as the ideal place. **The design process of the construction should be supported through an activist approach (through 1:1 prototyping) to the construction site and team and should be informed by performative research (through film making) on the diverse meanings and functions of chilling as an activity.**

⁵⁹ Deliverable 5.3: Demonstration of PEARL Cultural Places for Young People, p. 6.

⁶⁰ Deliverable 5.3: Demonstration of PEARL Cultural Places for Young People, p. 10.

⁶¹ Deliverable 5.3: Demonstration of PEARL Cultural Places for Young People, p. 12.

What was designed?

Rough Prototype (Process Design)

Adrian Sölch designed an activist workshop concept for the start of the collaboration process between the pupils and the students, using direct contact with materials and joint construction of 1:1 prototypes to create the foundation for their relationships as the future construction team. The workshop concept combined joint brainstorming, jointly solving crafting tasks and possibilities, the testing, discussing, and refining of the future construction's materials, components and functions and the perception of the forecourt's dimensions, proportions, atmosphere and qualities of leisure.

Street Furniture (Process Design)

Raphael Krome designed an activist workshop concept for the assessment and test of the first four 1:33 building models for CHILLspORT, that the students had made, through the construction of four 1:1 Mock-ups together with the pupils. The workshop concept was informed by research for materials that would be suitable for checking proportions, sizes and above all, their possible uses in a real environment.

What is stressing you out? (Process Design)

Patrik Thomas designed a film workshop concept to find out what young people associate with the term "chilling", based on the question "What stresses you out?". Applied film workshops were used to investigate the imagery they associate with the term and what this means for the place and quality of stay at school, to what extent new utopian ideas can be worked out by exaggerating and fictionalizing the place. The aim was to create an audiovisual translation of the young people's feelings and reflections using video collages.

How did the designs drive the co-creative process of the Living Lab? Which quality of experience or style did they contribute to the NEB Action's prototype?

Co-creative process: by providing the experience of space-filling interventions with little material and logistical effort, that allowed for co-creation on eye-level between pupils and students and for crucial and quick learning in the design process (activist approach); by informing the design process of the construction as well as of the first performative use of the construction with experienced based data translating the emotional quality of chilling visually (performative research approach).

Prototype: the translation of an equal, co-creative working and decision-making process into a physical object in the urban space of Neuperlach. The film workshop, the joint film shoots and the presentation enhanced identification with the project and the prototype.

Other pool-creatives, who contributed to the co-creation process: Benjamin Calliari-Herzberg, graffiti and street artist, Maja Das Gupta, theatre maker and radio playwright, Ruth Hahn, visual artist, David Westphal, poet, radio producer and acoustic artist



Figure 28: Workshop Rough Prototype (© NEBourhoods / HM / Janina Sieber)



Figure 29: Workshop Street Furniture (© NEBourhoods / HM / Andrea Benze)



Figure 30: Opening Performance CHILLspORT (© NEBourhoods / AGM / Patrik Thomas)

4.2 DESIGNS FOR OUTREACHING AND INTEGRATIVE COMMUNICATION

Right after the first matching workshop and before the Living Labs' kick-off, several pool actors independently raised the question of how the narrative of NEBourhoods as a whole and as a project of urban experimentation could be made tangible and accessible to local people. Some pool actors had made concrete suggestions based on their own artistic research or creative practices for the design of place-making-tools, activation-tools or research-tools, some had expressed a general interest in working on this issue.

The Transition Hub also saw this concern as a reflection of another experience. After the launch of the Living Labs, in which co-creation was initially conceived as a series of regular workshops, it proved difficult to find participants for these, not only key actors that would become part of the Living Labs' teams, but also local people who would participate in exploratory interventions or test- and feedback-scenarios.⁶²

⁶² See Deliverable 2.2 : Co-Creation in Urban Development, chapter 4.6.

To address this issue, the Transition Hub made two attempts with something like a small in-house, or better in-pool agency, once under the title of outreach communication in summer 2023, then under the title of integrative communication in summer 2024.

4.2.1 A herd of chairs, Talking Bridges, Good News Open Mic and a NEBourhood-Skills-Picnic

In the first attempt, four project ideas for the design of place-making and activation tools were developed in two Design-Thinking-Sprints, up to the point that creative teams and initial implementation timetables were available, and the project ideas were feed backed with the Project Coordination (WP1), the district management and the WP6 Communication, Replication and Dissemination. Unfortunately, the project ideas could not be realised due to staff turnover at MUC CCI.

All project ideas had an exploratory approach, starting with a small-scale meaning-making device, and were fundamentally intended to be further developed in Co-Creation with the Neuperlach residents and followed the principles of positive psychology, i.e. focusing and raising awareness for the strengths and virtues of the district, both in terms of its urban character and in relation to the character of its social textures.

The involved pool creatives were:

Benjamin Calliari-Herzberg, graffiti and street artist

Sarah, Dorkenwald, designer

Tugba Ercan, architect

Ursula Gaisbauer, landscape designer

Max Haarich, artistic researcher

Michael Heiduk, actor, artist, circus and theatre pedagogue

Ralf Otto, cultural mediator and DanceAbility teacher

Richard Schleich, architect and visual artist

Sandra Singh, photographer, visual artist and art teacher

Adrian Sölch, sculptor



Figure 31: A herd of chairs in Neuperlach (© Ursula Gaisbauer)

4.2.2 The NEBourhoods Boulevard

The project of the second attempt was not only envisioned but also carried out. At this point, almost all the Living Labs had installed visible prototypes in urban areas or created usable offers for the people in the district.

The requirement for the project was to design meaning-making devices, that would inform the residents of Neuperlach about the prototypes of the Living Labs and to invite them to test and use them. It was essential to reach as many local people as possible through a variety of different devices. In addition, the task was to make the results of the Living Labs across the board, to show them in context, so that it would become clear to what extent the desired starting points for the green transition had actually been created, and how they would have an impact and grow in Neuperlach beyond the project.

This time, the project development was not facilitated in design sprints. After 6 pool creatives relevant to the project had been matched to the project, their availability had been checked and the financial framework clarified, the project was set up in a more exploratory way in three co-creative briefing loops and two reviews, coordinated and informed via a shared Miro-Board.

- **First Briefing:** a short online briefing with MUC CCI to commission a first set of artistic and creative research of each pool creative that should be presented a week later. The task was to show first ideas or approaches for the project each based on the own

artistic and creative practices and reflecting the New European Bauhaus values and working principles as well as Circular Design Principles. The forms of presentation could be chosen freely.⁶³

- **Second Briefing:** In a half day workshop the pool creatives presented their ideas, which were then feedbacked from the Project coordination (WP1), from the neighbourhood management (MGS) and from Lead of the Co-Creation Task (WP2, HM). The ideas were then clustered, synergies were noted and visualized.
- **Third Briefing:** A week later and after a bicycle tour to the various locations of the prototypes and a conversation to clarify the assignment (again with the project coordination, the neighborhood management and the Co-Creation Lead, offers were requested from five pool actors.

The individual designs should allow access to individual Living Lab prototypes, as well as being connectable to the designs for the accessibility of NEBourhoods as a whole. Three phases for delivery were fixed:

- the co-design-phase, in which the pool creatives created the designs integrating input from Neuperlach residents,
- the production phase, in which the devices where produced, and
- the intervention phase, in which the devices were brought in the urban space.

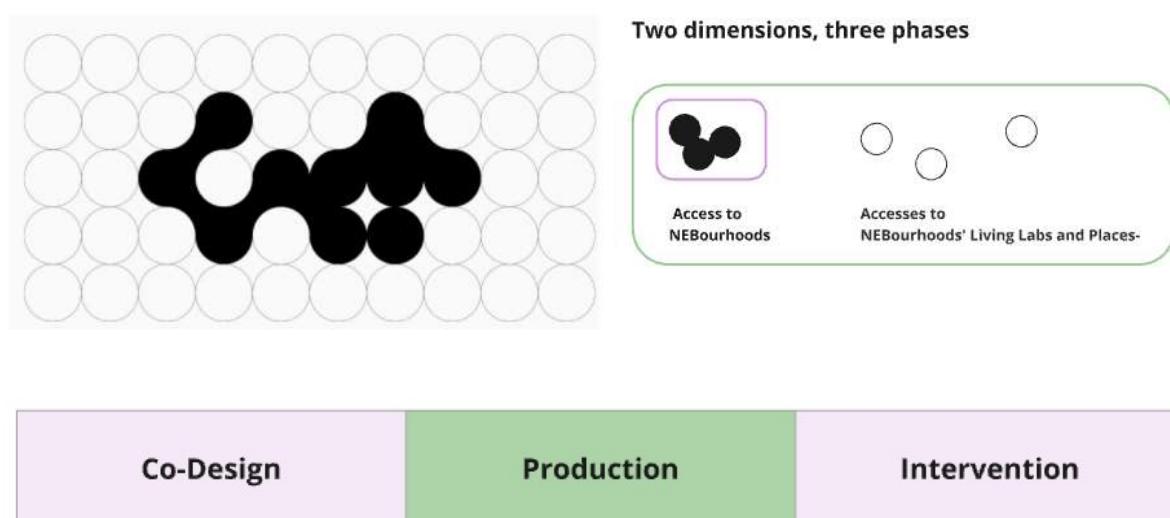


Figure 32: NEBourhoods Boulevard Design Brief (© NEBourhoods / MUC CCI)

⁶³ To inform the research, the Transition Hub provided the following links and documents: links to the NEB Prizes editions, the NEB Concept Paper and Compass, as well as to the Circular Design Rules Institute for Design Research Vienna (https://a.storyblok.com/f/307364/x/3821b94955/quality_standarts_circular_design_idrv-pdf.pdf), the Hans Sauer Foundation papers on Circular Society (<https://www.hanssauerstiftung.de/projekt/circular-society-positionen-dokumentationen/>) and the Wuppertal Institute's Zero Waste Concept for the City of Munich (https://www.awm-muenchen.de/fileadmin/Dateien_pdfs/presse/Presse_2022/Zero-Waste-Konzept.pdf).

The Transition hub provided all accessible and relevant information and contacts about the Living Labs on the Miro-Board. During a review in the co-design phase, the individual approaches and initial sketches were combined into an overall concept. Only at this point a joint decision was made on the overall format in which they would be incorporated.

The NEBourhoods Boulevard – an infotainment promenade

Designing pool-creatives: Anna Diermeier, product designer, Susana Frau, communication designer, Michael Heiduk, actor, artist, circus and theatre pedagogue, Stephanie Maier, media artist, author, director, and Jürgen Reiter, musician and composer

Contributing pool creatives: Christine Krauss, goldsmith, designer and wild herb expert, Jörg Sellerbeck, architect and gustatory scenographer, Ralf Otto, cultural mediator and DanceAbility teacher Patrik Thomas, filmmaker and media artist

The event and its program

On 19 October, NEBourhoods-Boulevard showcased the new offers and places created in Neuperlach and provided a stage for the honouring and presentation of certificates to the Neuperlach actors who worked on the project. Neuperlach artists and Munich collectives performed on two open stages for music, dance and circus. People from the project explained how the NEBourhoods prototypes were created.

The individual stations

Various stages and information stands were lined up under a giant garland between the Nist-Hocker, a the Animal Aided Design seating sculpture for people and animals on the forecourt of the PEP (east side), and the NEBourhoods MakerSpace at the star fountain on Theodor-Heuss-Platz.

The NEBourhoods pavilion was the central information point and showed parts of the exhibition “Wohnen Weiterbauen” (Redesigning Housing Structures), the models of the NEBourhoods Hubs RESI and STEINI (repair and share meeting points in the neighbourhood) as well as the Nist-Fassade (nesting facade) developed in the project from 3D-printed clay elements (Ecolopes).

On the lawn in front of the pavilion, the mobile kitchen was used to provide information about the modular gardening system, the NEBourhoods Hexamodules (Let’s plant a tasty Neuperlach). During the day, mini podcasts about the various locations and offers could be heard in a deckchair. In the evening, the bicycle cinema (CinéVéloCité) also showed films about the project here.

On the cargo bike of HM, on the way to the MakerSpace, information was provided about the newly founded Neuperlach Energiegemeinschaft (Energy Community) and the Schattenbank (Public Power) – the NEBourhoods prototype for urban heat islands.

At the MakerSpace itself, people were able to work on the last section of the giant garland, which was then stretched with the circus artists who performed on the boulevard throughout the day.

How did the NEBourhoods Boulevard drive the co-creative process of NEBourhoods?

By addressing, inviting and involving communities and individuals that weren't aware of NEBourhoods so far, by creating a hinge, a connecting momentum between the coming end of the project and its continuation afterwards.

What was designed and which quality of experience or style did this contribute to the NEBourhoods-Boulevard?

Giant Garland (Product Design, Process Design)

Anna Diermeier designed the prototypes, the production instruction and the workshop concept for the collaborative production of the giant garland, processing a stock of disused façade banners. Beyond its decorative function the garland is an outdoor pathfinder as well as spatial divider that can be used as place-making tool in the urban space. It is made up of semicircular elements that were laser-cut and sewn together with sewing machines provided by the MakerSpace. The colour scheme of the elements incorporates both the NEBourhoods colours and the design language of the NEBourhoods logo's circles, which grow together to form a whole. Since its use in the NEBourhoods Boulevard, it has been available to borrow from the Library of Things in the NEBourhoods Hub RESI for the people of Neuperlach.

Quality of experience or style: inclusiveness and empowerment through a collaborative design element of the event, change of perspective on the urban space through place-making, initiating and enabling creative recycling, translating the NEBourhoods narrative to a place-making-tool.

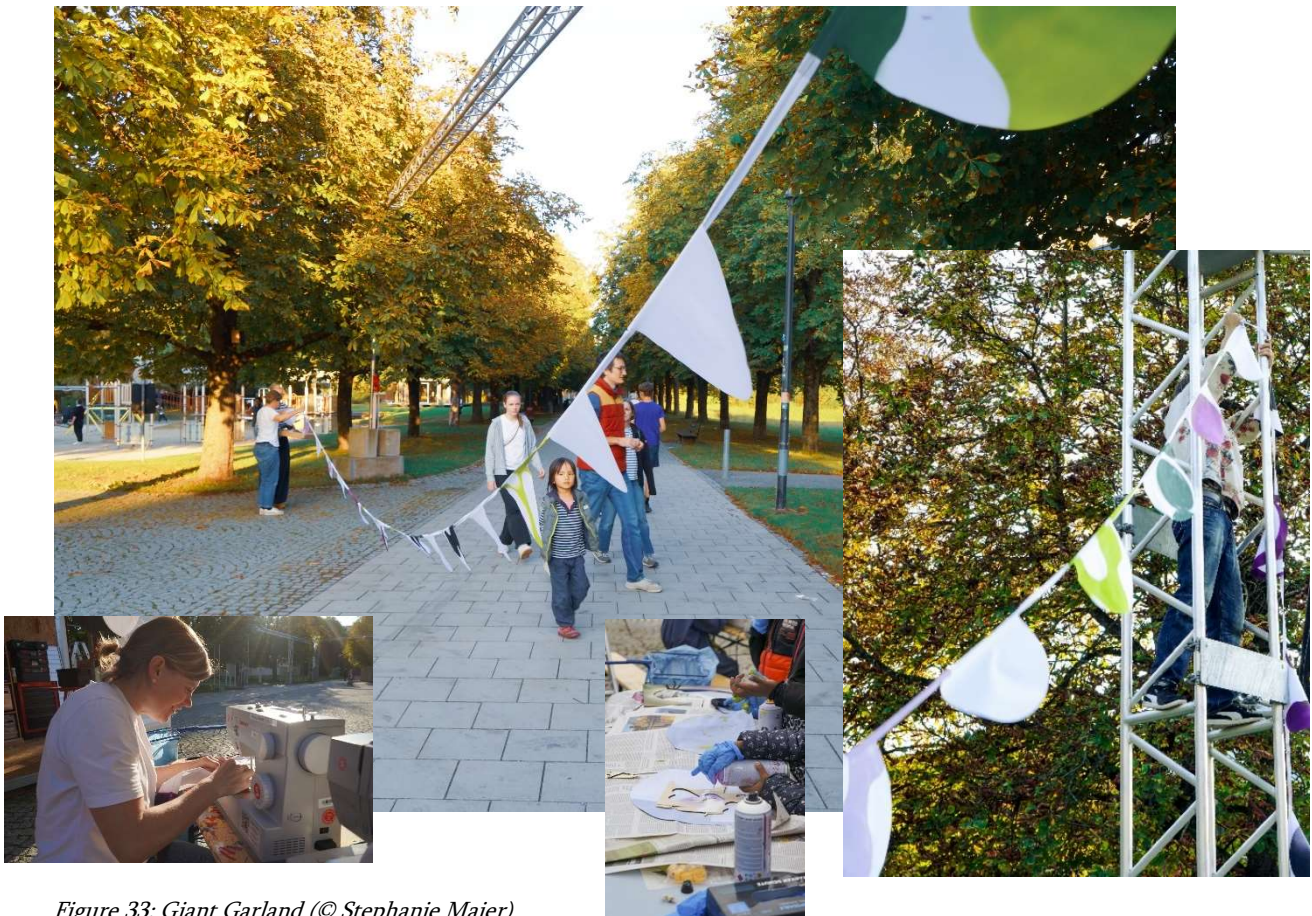


Figure 33: Giant Garland (© Stephanie Maier)

NEBourhoods signage (Communication Design)

Susana Frau designed a modular signage and information concept and visual for the NEBourhoods offers in the urban space. It includes signboards, flyers and a window display, incorporating both the NEBourhoods colours and the design language of the NEBourhoods logo's circles, which grow together to form a whole. The wording is based on everyday language and the content of the texts focuses on the benefits and functions that the prototypes offer residents, inviting to try them out and to give feedback.

Every concrete offer or prototype that had been realised in the urban space so far, received a signposting consisting of different elements allowing to

- identify the place and the offer,
- understand, for which challenge or problem or need of urban dwellers it provides a solution and how to use it,
- recognize it as a solution coming from the NEBourhoods-project,
- feed-back on the usability, desirability and functionality.

This information was summarised in a flyer that includes a map showing the various services and locations dispersed widely in the district and that couldn't all be physically represented at the location of the NEBourhoods Boulevard throughout the event. The flyer also contains

information about the development process. Moreover, the map and localisations of the NEBourhoods prototypes was designed as window display for the NEBourhoods Pavilion as the central premise of the project in the district.

All the elements were realised in the context of the NEBourhoods Boulevard but are still used for communication on the project results are still present in the district.

Quality of experience or style: accessibility and usability of the project results communicated at the event through visibility in the urban space, change of perspective on the neighbourhood as a vibrant environment of green transition.



Figure 34: Sign Boards at Hortus di Monaco and CHILLspORT (© NEBourhoods / MUC PLAN / Christoph Heidenhain)





“On the Schattenbank, you can find shelter from the sun when you need a break. And you can use solar energy at the same time – the solar cells in the roof above the bench produce electricity.

Auf der Schattenbank findest Du Schutz vor der Sonne, wenn Du mal eine Pause brauchst. Und Du kannst gleichzeitig die Sonnenenergie nutzen – die Solarzellen im Dach über der Bank produzieren Strom.

Du erholst Dich einen Augenblick und schon ist Dein Handy voll! Du hörst dem Gras beim Wachsen zu und schon sind Deine Kopfhörer

aufgeladen! Oder Du kommst in der Dämmerung mit einem Buch und einer Leselampe.

Die Schattenbank ist ein kostenloses Angebot für alle. Bitte halte den Ort sauber und nimm Deinen Müll mit! Danke Dir!

Wenn etwas nicht funktioniert oder kaputt gegangen ist, ruf uns gerne an unter 089 233-26343 oder schreib eine E-Mail an post@neighbourhoods.de.

You relax for a moment and your mobile phone is full of power! You listen to the grass growing and your headphones are charged! Or you come at dusk with a book and a reading lamp.

The Schattenbank is a free service for everyone. Please keep the place clean and take your rubbish with you! Thank you!

If something is not working or has broken, please call us on 089 233-26343 or write an e-mail to post@neighbourhoods.de.”

Ein Projekt von



„Creating NEighbourhoods Together“ ist ein Vorbildprojekt für das Neue Europäische Bauhaus (NEB) der Europäischen Union. Wir haben zum Ziel, gemeinsam mit Bürger:innen, Kreativen und Expert:innen das Leben und Arbeiten in der Stadt zukunftsfähig, sozial gerecht und umweltfreundlich zu gestalten. Unter der Leitung der Landeshauptstadt München arbeiten Institutionen aus der Wissenschaft, Vereine und kleine Unternehmen für „Creating NEighbourhoods Together“.

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Figure 35: Sign Boards at Schattenbank (Public Power), the name “Schattenbank” is a play on words that alludes to the German word for a tanning bed, “Sonnenbank”. (© Graphics Susana Frau, © Words Christina Schepper-Bonnet)

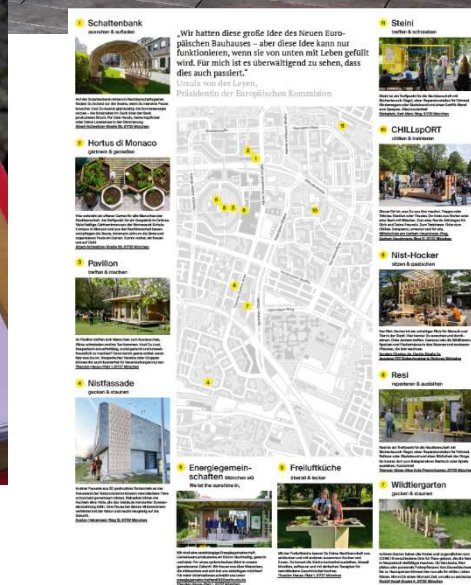


Figure 36: Sign Boards and window display at the NEBourhoods Pavillon, flyer with all new places and offers in the district “New Places in Neuperlach - Come by and give it a try!” (© Photos NEbourhoods / MUC CCI / Christina Schepper-Bonnet, © Graphics Susana Frau, © Words Christina Schepper-Bonnet)

NEBourhoods Boulevard Dramaturgy (Event Design and Curation)

Michael Heiduk designed the dramaturgical concept of the NEBourhoods Boulevard as infotainment event, including the spatial setting, the atmosphere of urban strolling from sensation to sensation, and the collaborative character, both regarding the public and the involvement of local artists.

Quality of experience or style: inclusiveness and sense of unity through making the public participate in the creation and installation of the event as well as local artists in the performance; consumption-free and activating quality of stay through the framing of the urban space as an open stage.



Figure 37: NEBourhoods Boulevard Open Stage (© 1 NEBourhoods / HM:University / Gabriella Guzman, © 2 and 3 Susana Frau)

NEBourhoods Sounds (Product Design)

Jürgen Reiter designed a compilation of acoustic explorations of Neuperlach, including different sounds: at places where Neuperlach residents had led him or that he had discovered by chance, places where NEBourhoods ideas have been realised, also places where they ultimately could not take root, places that visually characterise Neuperlach and where it is not so easy to consciously listen, and places where people rarely stop, because there is nothing to see. In between these sounds, short podcast-like episodes feature people from the NEBourhoods project, freely narrating what they worked on in Neuperlach, how this has become visible and usable in the district and what will happen next.

The compilation was accessible for the public of the NEBourhoods Boulevard in form of a listening station at the NEBourhoods pavilion and is now accessible on the NEBourhoods Website.⁶⁴

Quality of experience or style: inclusiveness through acoustic accessibility of the project results communicated at the event, expansion of the Boulevards scope by integrating the widespread places through acoustic representation, change of perspective on the urban environment through the initiation of conscious listening.

“How does our environment change when we simply close our eyes? Hide the obvious and let the unheard enter our heads?”



Wie verändert sich unsere Umgebung, wenn wir einfach mal die Augen schließen? Das Offensichtliche ausblenden und das Unhörbare in unseren Kopf lassen?

Die NEBourhoods Sounds sind akustische Erkundungen von Neuperlach, die der Musiker und Komponist Jürgen Reiter aufgenommen und zusammengestellt hat. Es sind Sounds von Orten, an denen Neuperlachern ihre Gehpfade führen oder die er zufällig entdeckt hat. Orte, an denen NEBourhoods Ideen verwirklicht wurden. Auch Orte, an denen sie schließlich doch nicht zu Fuß kommen konnten. Orte, die Neuperlach stark prägen und an denen es gar nicht so einfach ist, bewusst zu hören. Und auch Orte, an denen Menschen selten vorbeikommen, weil es nichts zu sehen gibt.

Zwischendurch erzählen ein paar Menschen aus dem Projekt, an welchen Ideen sie in Neuperlach gearbeitet haben, wo und wie diese im Quartier jetzt Gestalt angenommen haben und wie es mit ihnen nach dem Projekt weitergeht.

Dieses Projekt ist ein Produkt der ...

Wir möchten hiermit danken ...

© 2024 NEBourhoods

The NEBourhoods sounds are acoustic explorations of Neuperlach, recorded and compiled by musician and composer Jürgen Reiter. They are sounds from places that Neuperlach residents have taken him to or that he discovered by chance. Places where NEBourhoods ideas were realized. Also places where they ultimately failed to take root. Places that visually characterize Neuperlach and where it is not so easy to consciously listen. And also places where people rarely stop because there is nothing to see.

In between, a few people from the project talk about the ideas they worked on in Neuperlach, where and how they have now taken shape in the neighborhood and what will happen to them after the project.”

Figure 38: NEBourhoods Sounds (© Stephanie Maier)

⁶⁴ <https://www.nebourhoods.de/news/202410-soundscapes>

Exploring NEBourhoods (Product Design)

Stephanie Maier produced a film which discovers and visits NEBourhoods places with people from Neuperlach, some of them just discovering NEBourhoods themselves, some of them having participated in the project, in Summer 2024. This was the moment, when the NEBourhoods prototypes were still in construction or had just been installed and thus the film shows the different people involved at work, explaining spontaneously what the project and their work is all about. Residents of Neuperlach take in the sights, share their perceptions, and think about how these fit into the district and what could become of them.

A first version of the film was shown at the NEBourhoods Boulevard at CinéVéloCité, the mobile bicycle cinema, that had been developed in the NEB Action PEARL. In the final version, which is accessible on the NEBourhoods Website⁶⁵, impressions from the NEBourhoods Boulevard itself were added.



Quality of experience and style: expansion of the Boulevards scope by integrating the widespread places through audio-visual representation, accessibility of the project through focus on the tangible, real-world results and the through the documentary character of the film.



65



Figure 39: Exploring NEBourhoods - presentation of the NEBourhoods certificates by the Munich University of Applied Sciences during the NEBourhoods Boulevard, here to Mi Nguyen, Tutorat the Montessori School in NPL, Campus die Monaco © Stephanie Maier)

5 A PROTOTYPE FOR RELEXIVE URBAN GOVERNANCE IN

BEAUTY

How did the way artist and creative professionals were involved in the NEBourhoods project help to unlock their potential for urban experimentation guided by the New European Bauhaus?

The idea of collective action and the dynamics of social change expressed in the New European Bauhaus Compass fundamentally reflects the multi-level perspective of research on sustainability transformation (see chapter 2). For the first generation of projects, the initiative particularly emphasises the activation of the local level to create new transformation networks.

NEBourhoods has responded to this with a resource-oriented approach that focuses on the organisations and stakeholders available in Munich's innovation ecosystem. Together with these actors, the project should show, how cities can become relevant agents of the green transition:

- aligned to the sustainable urban development goals of the City of Munich⁶⁶,
- using a concrete suitable urban district of the city as test-bed, and
- trying out, how far you can get, if the collaborating parties consciously engage in Co-Creation as an experimental learning process “within and between networks of urban actors”⁶⁷ from all 4 sectors of society (urban experimentation, see chapter 2).

In terms of organizational structure, the Co-Creation function in the project was set up like an internal service, responsible to frame and facilitate this learning process. Co-Creation as an internal service should thus itself function as a prototype. It should test the institutionalization of experimental learning processes as a new approach to solve urban governance problems of high complexity, such as climate change or steering transformation towards sustainability. In other words, Co-Creation should serve as a prototype for reflexive urban governance:

“Sustainability calls for new forms of problem handling. These differ from the forms that are adequate for delimitable, decomposable problems that can be managed in a linear way. The concept of sustainability has brought with it recognition of the limits of rigid analysis and the inadequacy of policy approaches that aim at planning and achieving predetermined outcomes. From this perspective, sustainable development is more about the organization of processes than about particular outcomes.”⁶⁸

The Pool of Creatives, in turn, is anchored in the Co-Creation function of NEBourhoods. As such, it is a prototype in itself, because the integration of the actors works neither like classical forms of cultural promotion (e.g. artists residency programmes) nor like classical forms of subordinate artistic services (e.g. art in architecture). The Pool of Creatives is the attempt to curate and unlock the mindsets, skills, practices and experiences of artists and creative professionals (chapter 2) as a structurally relevant local resource for sustainable urban development right from the start of planning.

For this reason, the Pool of Creatives has been formed:

- in the beginning of the project
- as a collaborative community with the broadest possible spectrum of potentially relevant experimental and aesthetical expertise and experience from as many of Munich’s cultural communities and markets as possible and

⁶⁶ See MUC PLAN: Integriertes Stadtentwicklungskonzept and MUC PLAN: Integriertes Handlungsraumkonzept as well as the overarching municipal concept for urban development „Perspektive München“

(https://stadt.muenchen.de/dam/jcr:b129023c-5202-4788-9f5e-a38b47b83776/2021_Fortschreibung_PerspektiveMuenchen.pdf).

⁶⁷ Evans: New modes 2016, p. 2.

⁶⁸ Voß, Jan-Peter, Kemp, René: Sustainability and reflexive governance: introduction, p.4, in: Voß, Jan-Peter, Bauknecht, Dierk, Kemp, René: Reflexive governance for sustainable development, Edward Elgar Publishing: Cheltenham, 2006, p.3-30.

- to enable non-obvious and exploratory constellations of collaboration as well as the neither predetermined nor subordinate co-creation of design tasks together with quadruple-helix stakeholders.

If you want to try this out, what should you bear in mind?

Co-Creation as an internal service in the context of urban experimentation requires a genuine openness for unexpected events and coincidences. This is especially important when artistic research and practices are involved, as they can significantly shape both, the process and the outcomes of collaboration. This should be based on a binding commitment, trust in the process and self-reflected co-responsibility. It is an ambitious mode of collaboration that may challenge the individual interests of the collaborating parties and the power relations between them as well as the funding framework and agreement.

Therefore, not only are regular mutual learning formats needed to accompany the process, but also something like a phase zero before the actual work begins.

This phase zero should enable the cooperating parties to become aware of the requirements for this way of working and to consciously decide on them, because overarching interests are revealed and discussed and mutual expectations are formulated. Of course, it is highly advantageous if the funding framework allows for deviations that can be justified by the collaborative process.

Handling a Pool of Creatives as a tool of public procurement, which, based on a fundamental trust in the actors, wants to combine the greatest possible potential with the greatest possible commissioning flexibility and make it available for the project, may tilt into a very elaborate and piecemeal commissioning practice, if the budgets are too tight.

More important than planning working hours for the latter is to plan sufficient time for the support, care and maintenance of a Pool of Creatives as a collaborative creative community in urban experimentation. The approach tried out in NEBOurhoods is also something new for the selected artists and creative professionals who come from very different sectors and markets with different affinities for urban experimentation. Even if they naturally embody a co-creative mindsets and skillset, institutionalised Co-Creation introduces a new mode of collaboration for them as well. It differs from both, classic client-contractor working relationships as well as precarious yet highly creative partnerships. It also stands apart from project-based funding or artists residencies. Here, too, sufficient time and space for the exchange of experiences and mutual learning is indicated.

To finalize the work with the Pool of Creatives MUC CCI hosted a final event. This was done to the purpose of giving a project review, collecting the actor's experiences of working in NEBOurhoods and their views on the outcomes and to jointly reflect these together with Maria Hansen (ELIA Art Schools), our NEBOurhoods advisory board member. The

experiences and reflections on the process helped a lot shaping these requirements for the successful unlocking of the creative potential in projects like NEBourhoods.

Finally, the people who take care of a pool of creatives as part of the city administration need to have special professional profiles, because they fulfil an intermediary-like pivotal function –

- not only curating a community, but also working with it,
- not only awarding design contracts, but also co-creating their content,
- acting as a mediator and translator between artistic and creative approaches, mindsets and requirements and those of the other stakeholders in the Co-Creation settings and formats,

thereby enabling better collaboration through, again, trust, self-reflection and co-responsibility.

Apart from the need for sufficient budgets, the absence of these requirements is not an exclusion criterion for trying out the NEBourhoods approach, because in the end, given the strong emphasis that the NEB places on local, tailor-made co-creation means that each NEB project must, to a certain extent, develop these requirements anew.

They may as well little by little evolve in the process or emerge unexpectedly and bring out results of genuine NEB-beauty, like the following ones.

Promising beauties

The beauty of open-ended exploration

In the co-creative briefing loops that were used to develop the NEBourhoods-Boulevard, the orientation towards predefined goals of individual Living Labs could be abandoned. The project responded to a need for which there was no clear responsibility and that had not been anticipated, but rather had firstly to be understood properly.

This situation enabled a coming together of various project functions (project coordination, co-creation lead, neighbourhood management) with artists and creatives. The process wasn't guided by the question of how the artists and creatives could best serve a need. Rather, the basic idea of the product, that was then co-created, emerged through a joint and equal exploration. The process was driven by a shared curiosity to identify missing experiences and to explore the potential of existing tangible elements within the living environment.

The most important thing was, to give enough space and time for the artists and creatives to explore and present in their own way, how they perceived the situation and would deal with it out of their unique artistic and creative practice. A key moment in this process was the outcry of a colleague from the neighbourhood management witnessing the creative's presentation

of first ideas: “Now I finally understand what is meant by beautiful!” – a goose bump reaction to the skillful and productive translation of a given situation into a meaning-making device.

The beauty of the trust in people

“Let’s plant a tasty Newperlach” deviated from their original strategy to deliver their demonstrator. Instead of developing a new strategy, the NEB-action leads engaged in truly open-ended Co-Creation. They trusted that the co-creative interplay between civil society actors, city administration, neighbourhood management and creative professionals would generate solutions. These solutions would not only enhance but also bridge their expertise in tactical urbanism and Education for Sustainable Development.

The key moment here was again the presentation of the Hexamodule idea by the three participating artists and creatives. They had entered the design process with a complex co-creatively developed briefing – one that seemed justified to all those involved, yet almost impossible to solve. They showed how they had arrived at the basic hexagonal shape by associating a representation of a medieval garden with the central square of Neuperlach.

The solution had emerged through playful, hands-on experimentation between three different practices: visual arts, product design and architecture. It was a truly beautiful moment. The enthusiasm for the solution – one that not only fulfilled the desired functions but also revealed unexpected potentials for urban gardening - merged with the confirmation of the trust placed in the creators and the skillful mastery of their craft.

The beauty of non-instrumental complicity with the living environment

According to PEARL, cultural place-making with and for young people should follow the principle that a self-governed group of youngsters and not a given space should be the starting point of the co-creative process. It was therefore initially disappointing for the NEB Action’s team to work with a group of students at CHILLspORT, who were available to the project through the organizational framework of a school and who were also supposed to deal with a school-related and not a self-chosen location.

One aspect of the success of CHILLspORT is that, despite these conditions, a self-governed process emerged, essentially through the activist approach. This consisted of not just talking about what this place could become, but rather trying it out directly, physically and analogously, together. The complicity with the place, made possible by artists and creatives, has shown that the working principle works in both directions – self-governance and responsibility can also arise from the active, non-instrumental engagement with things.

6 OUTLOOK ON REPLICATION, DISSEMINATION AND

EXPLOITATION

The replication of the NEBourhoods approach to Co-Creation as a prototype of reflexive urban governance in beauty (in the sense of the NEB) will be supported by a City Council decision concluding the project in 2025. The aim so far is, to propose the design of a second prototype as governance tool in the sense of a creative bureaucracy – however within the limits of a restricted public budget.

The experiences gained in the process regarding the conditions for successful Co-Creation with artists and creatives in urban experimentation can and will be disseminated by MUC CCI in the form of lectures and papers, both in the discourse on cross-innovation with the cultural and creative industries, and in the discourse on the innovation capacity of cities in the context of the green transition.

Of course, many new working relationships have emerged in the Living Labs that will remain in place because NEBourhoods was a purely local consortium, and the Pool of Creatives also includes only actors who work in Munich. Some were already active in Neuperlach and were able to make their impact on the district visible through the project. Others have discovered Neuperlach for themselves and their work. Overall, Munich's creative ecosystem has grown and become denser.

The Pool of Creatives itself is a creative community, MUC CCI will continue to work with in future cross-innovation settings or projects because both the actors and MUC CCI itself have developed their own expertise in the project. The artists and creative professionals have acquired knowledge and skills on the job that qualify them for this kind of collaboration. MUC CCI has consolidated its methodological knowledge of iterative learning and design processes through practice and has learned how to organise, manage and support Co-Creation with artists and creative professionals.

Furthermore, the corpus of designs including the processes for and within they have been produced will be opened for discussion and research with the other NEB-Lighthouses on the potentials and success factors of collaboration with the arts and the creative industries for the green transition and the next possible joint steps, beginning with the final conference of NEBourhoods in March 2025.

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