Community Engagement for Resilient Neighbourhoods

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This position paper consolidates the work of researchers from various departments and areas of expertise across the Faculty of Architecture and the Built Environment at Delft University of Technology. It discusses the relevance, applications, and different methods of community engagement in the built environment. The inclusion of main take-away, recommendations for community engagement, and a range of example projects demonstrating various methods, bridge the gap from scientific knowledge to application in practice.

Prologue: Community Engagement within the Context of Dutch Policies

In 2013, the Dutch Rutte II administration underscored the importance of citizens taking greater responsibility for their own lives. This call for a 'participatory society' prompted a rethinking of relationships between government and citizens, encouraging government to become more facilitative and supportive. This can be regarded as a shift away from the 'welfare state' that had evolved in the post-WWII decades. In this model of 'participatory democracy,' citizens are expected to address social issues directly and to (co-) decide on policy matters. Over the past decade, the term 'participatory society' has predominantly been used to encourage or force citizens to adopt greater self-reliance, due to a diminishing role of the government.

However, the 'participatory society' also has a positive reflection of citizens' determination to organise independently and take control, or influence policy, either through their voice or veto power. Examples of voice power include legal challenges to new development projects, such as the 'Right to Challenge' as implemented in several initiatives in Rotterdam[1]. Activist interventions, such as the Extinction Rebellion blockades on the motorway near The Hague, which criticise the state's support for fossil fuels, illustrate voice and veto power. In other cases, citizens have utilised their 'voice' to create alternatives to institutions and taken initiative at the grassroots level to shape their living environments. Citizens have found collaborative housing initiatives, such as 'Centraal Wonen', which has existed since the 1970s, and 'Knarrenhof[2]', a foundation that supports the co-creation of residential communities for the elderly. Others start or join energy cooperatives, such as 'Blijstroom[3]', the first energy cooperative in a Rotterdam neighbourhood, which invests in solar panels on available and empty roofs.

In response, governments, market actors, not-for-profit organisations—including housing associations—have been striving to incorporate the perspectives and initiatives of citizens better. The Revised Housing Act of 2015, for instance, establishes the right to form housing cooperatives. Additionally, private developers are adopting participatory approaches to involve residents in area development plans, such as the method 'Kijk op de Wijk[4]' developed by VORM Vastgoed, which analyses resident preferences and aims to incorporate them into the development process through a co-creation game. Inspired by the French national government, some local Dutch governments also convene citizens' assemblies, like the 'Burgerberaden' in several regions, organised by foundation G1000 on topics including climate change and housing challenges. Other local governments utilise digital tools for citizen engagement, such as the 'Wevaluate' method developed by Populytics[5]. This enables outreach to a large number of respondents to seek support for policy measures such as parking and mobility or locations for wind energy.

These participatory initiatives experiment with empowering citizens, recognising the need for civic engagement from both ideological and practical considerations, often without any legal obligations. The initial step towards establishing a legal framework for citizen engagement in Dutch policies regarding the built environment can be observed in the new Environment and Planning Act (Omgevingswet), which took effect in 2024 and mandates public actors to involve residents in the decision-making process. But although the Omgevingswet states that for certain developments in built environments, citizens, residents, and community members should be involved, the approach and method to achieve this may vary depending on the situation, neighbourhood, societal issue, and the preferences of the initiator.

[1] https://www.rotterdam.nl/right-to-challenge
[2] https://knarrenhof.nl
[3] https://blijstroom.nl
[4] https://vorm.nl/kijkopdewijk
[5] https://populytics.nl

The readers of this position paper may be engaged in participatory processes, such as professionals in urban development, policymakers in local or national governments, active citizens, or academics. Others may find themselves challenged by the regulations and obligations of citizen engagement, such as those outlined in the Omgevingswet. This position paper aims to provide a starting point and substantiated knowledge for all who are or will be involved in community engagement within the built environment. The main takeaways below summarise key learnings and conclusions from the chapters, serving as a quick link or reading guide.

Main Takeaways

1. Citizen engagement is essential for building resilient neighbourhoods, as they foster trust, collective ownership, and locally grounded spatial interventions that are more attuned to communities' needs and aspirations. > see Chapter 2

2. A clear definition of the role and purpose of engagement is crucial (whether to democratise decision-making, tackle specific issues, or consult for information) to ensure that community input translates into meaningful action. > see Chapter 2.1

3. Citizen participation can be a democratic tool that appeals to intrinsic and societal motivations of citizens and communities, fostering a shared responsibility and social cohesion. Or it can be a problem-solving tool, which appeals more to the personal, often pragmatic, motivations of individuals to address specific issues or fulfil personal needs. > see Chapter 2.2

4. To achieve meaningful and inclusive public participation, it is essential to use a range of engagement methods that reflect the different ways in which people experience and interact with their environments. > see Chapter 2.2

5. When citizens are engaged in co-creation of the built environment, the roles and responsibilities change, specifically the role of the (urban) designer. This requires creative competencies like empathy, (self-)reflection, ideation, and imagining and prototyping of solutions, not only by participating citizens, but also of the civil servants. > see Chapter 3.1

6. Citizen engagement in the evaluation of existing neighbourhoods reveals insider knowledge that experts do not possess. Including various stakeholders broadens the range of attributes considered, such as intangible aspects, the dynamic nature of aspects and daily-use perspectives, complementing the expert assessments. > see Chapter 3.2

7. Engaging citizens is essential to empowering individuals and groups that are usually underrepresented. In doing so, we must understand the layered historical, political, and socio-economic processes that have contributed to placing people at a disadvantage. This fosters mutual understanding and enables communities to participate actively in decision-making processes. > see Chapter 3.3

8. The engagement of a researcher within a community is a ‘reverse’ form of participation, revealing community-captured knowledge that would otherwise go unrecognised. This immersive approach can engage immigrant communities in creating sensitive architectural interventions that promote integration and conviviality between different groups, without erasing a culture. > see Chapter 3.4

9. Citizen engagement should move beyond formality toward processes that produce real influence/ impact, fostering both equitable outcomes and stronger democratic legitimacy. > see Chapter 4

1. Introduction: Community Engagement Methods for Resilience

Given the increase in citizen engagement initiatives, it is vital to take stock of current practices: Which forms of engagement exist? What tools are available, and which innovations hold promise? How much influence do participants wield? Where do we stand now, and how should we move forward? Can scientific research help to assess the value of existing practices and lead the way to future approaches?

At the Delft University of Technology Faculty of Architecture and the Built Environment, we see the challenge of engaging with citizens in our research projects. Moreover, we organise research projects to support various professional stakeholders in their ambitions on citizen involvement. We are keen on exploring how this research and these collaborative efforts contribute to both scientific understanding and societal advancement.

In this position paper on community engagement as part of the BK Festival 'Resilient Neighbourhoods', we outline our research activities regarding community engagement related to the built environment. We address why we think this is important, what we have learned from this research, what we can offer, and what can be further improved in future research.

This position paper begins in Chapter 2 by clarifying the definition of citizen engagement and related terms and discussing the relevance and necessity of participation. We identify different goals and successive phases in engaging citizens in the development of the built environment, encompassing a wide range of methods that can be employed. In Chapter 3, these methods are discussed with a theoretical explanation and illustrated by example projects from TU Delft. They are grouped into four categories: citizen engagement methods for co-creation (Chapter 3.1), evaluation (Chapter 3.2), empowerment (Chapter 3.3) and finally translation (Chapter 3.4). The paper concludes with reflections and recommendations, aiming to link the results of our academic research to insights and applications that are useful for stakeholders in practice.

2. Relevance and Definitions

Cities have been increasingly understood and embraced for their complexity and diversity. This means that cities are not only the built environment we can see, touch and build, but also the meanings, symbols, and perceptions people attach to the places where they live. In terms of planning and designing, this mindset shift brought about a paradigm change from rational planning to more communicative and participatory ways of planning and designing cities. A key implication of this shift is the need to recognise urban communities and urban lived experiences in their diversity. As urban professionals and experts can never be fully attuned to this lived diversity, participatory practices appear as a channel to connect to this information and bring it to the forefront of planning and design, while also recognising the need for a pluralistic engagement approach, one that employs multiple forms of communication to ensure all voices are heard and considered.

Here, it is important to highlight that definitions around public participation, participatory planning, and citizen engagement are usually blurry. In this paper, we refer to *public participation* as an umbrella term defined as "a collective act and a moment, or a series of moments, in which people come together to jointly tackle a task and contribute to shaping a place" (Hofer & Kaufman, 2022) This emerges from a broader definition of planning as "a process that is focused on the development and design of a place, which also includes community-led and insurgent forms of planning" (ibid). It can also refer to bottom-up initiatives and social movements.

In contrast, the term *citizen engagement* has a narrower connotation, historically referring to interactions between citizens and governments or the private sector. Initially, these interactions were one-way, where citizens would provide input upon request. However, more recently, mechanisms have been implemented for governments to respond to citizens' voices in a two-way interaction. We also note that, with the recent emergence of transdisciplinary and co-creation approaches in both research and practice, citizen and community engagement has become more complex, with all involved playing multiple and sometimes unusual roles.

Nevertheless, following these definitions, we understand citizen and community engagement as a participatory practice where citizens are deliberately engaged by an engagement "initiator", which can be a government, as well as a private or public party, including planners, designers, and academics. In any case, both broader participation and intentional citizen engagement are essential for building resilient neighbourhoods, as they foster trust, collective ownership, and locally grounded spatial interventions that are more attuned to communities' needs and aspirations.

2.1 The purpose of citizen and community engagement and consideration of ethics

Although many tools and methods for citizen and community engagement exist, many remain disconnected from planning and design practice. This disconnection is problematic because it leads to tokenistic approaches, undermining the potential of participatory practices and raising questions about their real impact on decision-making processes and outcomes. Others add that the institutionalisation of participation has reduced it to a series of mandatory methodological packages in the form of checkboxes with no transformative, empowering or democratic purpose. Moreover, public institutions are increasingly outsourcing participation to private consulting companies – who have a responsibility to their shareholders and not to the public good – further eroding public trust and preventing in-house capacity-building.

Clarifying the purpose of engagement is crucial to ensuring it leads to real, measurable impact. Engagement can fulfil multiple roles: social learning and awareness, empowering communities to shape their environments, generating innovative ideas, and addressing local challenges. However, without transparency about its intentions, participatory processes risk creating unrealistic expectations or eroding public trust.

By clearly defining the role of engagement—whether to democratise decision-making, tackle specific issues, or pursue an alternative objective—we can ensure that community input translates into meaningful action. This requires establishing stronger connections between community voices and institutional decision-makers, fostering ongoing dialogue and collaboration that result in more equitable and sustainable outcomes. Engagement should be grounded in ethical practices that emphasise trust, transparency, and reciprocity. It is not sufficient to merely collect input from communities; meaningful engagement requires careful consideration of what is being asked of participants and ensuring they receive something valuable in return—whether it be influence, information, or tangible benefits.

Too often, participatory processes are isolated from real decision-making, leading to frustration, disillusionment, and a decline in institutional trust. To address this, we advocate for engagement processes that are thoughtfully integrated into ongoing planning and design efforts. Involving communities at various stages—such as identifying challenges, setting goals, implementing, and evaluating solutions—can create more transparent processes that reflect and prioritise the community's needs and aspirations.

2.2 (Re)defining the meaning of participation and engagement

Scholarly debates about public participation and community engagement are often encapsulated in a binary discussion: normative/critical vs. pragmatic/optimistic viewpoint (Zakhour, 2020). A normative perspective argues that engaging citizens and communities have the right to be involved in decisions that affect them, which is essential to ensure legitimate planning outcomes. In contrast, a pragmatic approach to participation contends that by tapping into public/local knowledge and expertise, public participation leads to more innovative and context-appropriate interventions. Here, some scholars argue, public participation may not always be desirable, especially when decisions impact a broader community beyond participants (Fung, 2003). In practice, participatory processes may be driven by both normative and pragmatic reasons, which is not always clear to participants. This leads to tensions around the intentions of public institutions as initiators of participatory processes (Goncalves et al., 2024).

We argue that it is important to (re)define the meaning of public participation and community engagement, taking into account the evolving role these concepts play in both formal and informal urban planning and governance. There is a need to reflect on whether participation should be a democratic tool that appeals to intrinsic and societal motivations of citizens and communities, fostering a shared responsibility and social cohesion. Or as a problem-solving tool, which appeals more to the personal, often pragmatic, motivations of individuals to address specific issues or fulfil personal needs. Or could public participation be both, where one can strike a balance between collective democratic values and individual self-interests? These are important points to consider when defining and designing participation and engagement.

To effectively capture the diverse needs and aspirations of different stakeholder groups and address the practical challenges and value conflicts arising from urban complexity, varied methodologies and tools are essential. There is no one-size-fits-all approach to public participation and community engagement. We argue that engagement tools and methods must be embedded and contextualised within planning and design processes. This calls for a shift toward situated participation processes that cultivate participatory mindsets across all stages of the planning process, from the early identification of community needs and the creation of a local vision, and, from there, to the co-designing of urban interventions and later implementing and monitoring them.

We argue that creative engagement methods embedded in transdisciplinary settings provide a promising avenue to understand how citizens and communities perceive and experience their environment. These insights are not captured by traditional urban data, which are either standardised, such as census data, leaving no room for subjectivity and lived experiences, or collected through urban activity, such as mobile apps and chip cards, which usually misrepresent the experience of marginalised groups and communities. By providing alternative representations of space through creative approaches, we can democratise urban decision-making and ensure that the voices of citizens and communities are heard and valued in urban research and practice.

To achieve meaningful and inclusive public participation, it is essential to use a range of engagement methods that reflect the different ways in which people experience and interact with their environments. By integrating multilingual outreach, digital tools, in-person discussions, and creative approaches, we can broaden participation and ensure that all voices are heard. A critical aspect of this engagement is amplifying marginalised voices, ensuring that those typically excluded from decision-making processes have a platform to express their views.

3. Community Engagement Methods

Community engagement plays an important role in shaping inclusive and effective urban planning. However, the process of achieving meaningful participation presents many challenges. Over the years, numerous techniques to overcome barriers and challenges to participation have been developed, applied and tested by researchers and practitioners. In this chapter, we present some of our empirically grounded work and share participatory methods we have explored, along with reflections on conducting these engagements. We recognise that no single format can adequately address the diverse requirements and interests of stakeholder groups, instead, a combination of methods is often necessary to achieve a truly inclusive and effective process. By offering these methodologies, we believe we can foster deeper connections and encourage meaningful and inclusive dialogue.

3.1 Citizen Engagement Methods for Co-Creation

The most successful urban transitions are citizen-driven, in collaboration with local societal and governmental actors (Schütz et al. 2019). Through their participation, citizens are empowered to steer local changes to meet their needs and wishes during such transitions. Co-creation brings a promising approach to support citizen-driven urban transitions and is becoming increasingly popular.

Co-creation supports the understanding of the needs and wishes of the various stakeholders in the process, and formulating a shared problem definition and solution space (Sanders & Stappers, 2008; Steen, 2013). A variety of tools and methods, grounded in social sciences and design practice, exist and are under constant development. While co-creation is still often executed in an in-person setting (through workshops, using sticky notes and pencils), the COVID-19 pandemic has also led to many explorations using digital tools to facilitate remote co-creation between urban actors (Slingerland et al., 2024), such as Miro. Co-creation is never the perfect solution. This practice inevitably introduces inclusion and exclusion dynamics, conflicting views and a need for tactics to reach consensus, and difficulties to showcase long-term impact (Visser et al. 2023). There is no single straightforward way to facilitate fruitful co-creation, but it depends on the specific context, participants, and project, researchers need to navigate complex dilemmas (Slingerland & Wang, 2024).

Besides the extensive body of work on methods and tools for urban co-creation to support citizen engagement, co-creation can also be studied from a competence point of view. It requires a creative way of working together, and this needs to be supported by creative skills and competencies of the involved actors. Examples of creative competences are empathy, (self-)reflection, ideation, and imagining and prototyping of solutions. These competencies are not only required of the participating citizens, but also of the civil servants. Fruitful collaboration with local governments is usually dependent on creative civil servants, acting as boundary spanners to bridge the (proverbial) gap between system world and life world (Williams, 2002). When co-creation is applied in citizen engagement, the roles and responsibilities change, specifically the role of the (urban) designer. This brings a new dynamic to citizen participation and the design of urban spaces.

Engaging with urban co-creation is therefore not only a matter of studying methods, tools, and practices, but also reflecting on the roles and responsibilities of each of the involved actors. Citizens are invited to be members of the design team (Sanders & Stappers, 2012). What does this mean for the role of the urban designer? And how can we equip citizens with the appropriate and adequate tools to act as designers in an urban co-creation process? Are the resulting designs to be interpreted as speculation for possible futures, or realistic designs that can be implemented by tomorrow? These questions are what we explore when

studying citizen engagement methods for co-creation.

See project examples for Co-Creation in chapter 5.1

- *Urban safety for young women*
- *Co-creating biodiverse urban spaces – Bio CiVo*

3.2 Citizen Engagement Methods for Evaluation

Through their daily and varied use of a place, citizens possess knowledge that experts often lack but could definitely benefit from. Their lived experience, insider knowledge and local expertise are valuable sources of information. By tapping into these sources, opportunities arise to assess buildings, neighbourhoods and cities and consequently use this information for future developments.

The evaluation of aspects of the built environment is related to testing the operation of buildings, known as post-occupancy evaluation (POE). POE is commonly defined as "the process of evaluating buildings systematically and rigorously after they have been built and occupied for some time" (Preiser et al., 1988; Oseland, 2023), in which the occupant perspective is central in the evaluation. The purpose of POEs is to learn lessons from the feedback received, which can be applied in future projects and to evaluate the success of a project. These methods were initially designed to assess new constructions. However, as our main challenges now shift toward adapting and enhancing the existing built environment, they may be used to evaluate interventions in existing buildings, neighbourhoods, or public spaces. Evaluation is also a key aspect in the field of heritage management. Although in heritage the evaluation time period is typically much longer than in POE, their purpose is similar. In heritage assessment, both tangible and intangible attributes are taken into consideration. This assessment is based on historical value, although 'original and subsequent characteristics of cultural heritage, and their meaning as accumulated over time' is mentioned in the criteria for authenticity (UNESCO, 2024).

Especially when considering resilient neighbourhoods, as the topic of this paper, the built environment often comprises a mix of old and new, housing and other functions, special objects and everyday urban structures. The current Dutch debate acknowledges both the broadening of what can be regarded as significant, e.g. in the assessment of recent heritage, such as the Post 65 program[6], as well as the importance of including communities in the evaluation of what is valuable, as addressed in the European Faro Convention[7]. This argues for merging both approaches, between heritage and POE, providing a framework suitable for assessing the everyday existing built environment, as it blends the use value of buildings and neighbourhoods with their heritage value (Veenhof and Spoormans, 2025). This approach can bridge the gap between listed heritage and everyday neighbourhoods, ensuring good care for all of our neighbourhoods. Moreover, it can support the sustainable (re)development of our living environments, informed by stakeholders' opinions on urban qualities and (heritage) significance.

Various methods of citizen engagement are available to involve individuals and groups in evaluating our existing built environment. As participants exhibit varying abilities and willingness to employ methods such as digital methods, drawing, and speaking in a group a broad range of approaches is necessary to engage different groups on their own terms. Moreover, to invite for inclusive and unexpected

[6] https://www.cultureelerfgoed.nl/onderwerpen/post-65-erfgoed

[7] https://faro.cultureelerfgoed.nl/welcome

insights, open-ended questioning and inductive analysis are required for identifying 'new' non-expert attributes. A POE can include both objective and subjective measures, as well as qualitative and quantitative methods, and can range from general reviews and walkthroughs to more technical and specific methodologies, such as a sustainability audit. In heritage assessment of housing neighbourhoods, mixed and creative methods have been explored, e.g. photo elicitation, individual and focus group interviews, paper diaries with textual and visual tasks and digital walking survey using a mobile application. As the specific method influences the resulting attributes through the participants and the process, including multiple methods, scale levels and stakeholders is recommended. Using digital tools for citizen participation, makes it possible to reach out to a larger and more varied stakeholder group, making it accessible for people with limited participation resources by avoiding expert language, combining visual and textual information and by making limited time demands.

Findings from various research show that the interests of stakeholder groups and individuals are not conflicting but rather have a different focus. Residents and other locals have a broader scope on what can be significant, including more intangible attributes, e.g. stories and activities, while professionals focus on tangible attributes. In addition, users have a broader temporal view than professionals, e.g. mentioning the influence of different seasons, day and night on the appearance of public spaces. Insight into the 'blind spots' of professional groups, is important to inform more equitable decision-making processes. Participatory methods of a current assessment by today's stakeholders, leads to a wider range of attribute categories and can be complementary to more traditional expert assessments. Inclusion of multiple voices, results in specific and generic attributes, originally intended but also later developed attributes. The broad assessment of the significance of living environments, is considered a necessary step to inform values-based (re)design.

See project examples for Evaluation in chapter 5.2
- *WijkWijzer - Co-assessing heritage attributes of Dutch New Towns through a digital walking survey*
- *CmC and Bio-CiVo platforms – creative and interactive design to enhance citizen engagement*
- *Integrating Soundscapes and Community Experiences: The Role of Sound in Public Spaces through Participatory Research in Katendrecht, Rotterdam*
- *"What I Love about my Neighbourhood" - Identifying heritage attributes in Almere*

3.3 Citizen Engagement Methods for Empowerment

Citizen engagement should specifically target the inclusion of individuals and groups who are typically unheard. Because they are often underrepresented in decision-making, decisions then impact them without their influence. This is particularly relevant in climate-related issues within the built environment. Climate change has undoubtedly taken a significant toll on countless individuals, households and communities, particularly those living in areas that are at heightened risk of environmental hazards such as flooding, extreme heat stress, and land subsidence. Each of these climate-related threats poses unique challenges, but the issue becomes even more complex and urgent when multiple hazards converge in a single geographic area (Esteban, 2025). In many cases, these at-risk locations are also areas or neighbourhoods marked by long-standing socio-economic inequalities. Residents in these communities, many of whom are financially disadvantaged, must contend with intersecting environmental risks that severely impact their housing stability, health outcomes, and general well-being (Enriquez, et al., 2024).

To effectively address these issues, it is critical to not only understand the immediate climate-

related risks but also the broader historical, political, and socio-economic factors that have led these residents to live in and shape these neighbourhoods (Esteban, 2025). Many of these areas have been neglected or underfunded for decades, but the rising climate related threats coupled with housing needs make these areas in need for redevelopment. Climate change issues expose and intensify existing vulnerabilities in these neighbourhoods. Social housing blocks, built on unstable land or poorly maintained over decades, are now susceptible to land subsidence. Heatwaves disproportionately affect residents in dense, under-vegetated neighbourhoods with little access to cooling infrastructure.

Addressing these challenges requires far more than reactive climate change adaptation strategies, risk management or surface-level infrastructure fixes. Instead, there is a need to confront the broader context in which these communities have developed. It is not enough to simply adapt to climate risks—we must understand the layered historical, political, and socio-economic processes that have contributed to placing people at a disadvantage. To find sustainable solutions, we must take a holistic approach that recognises these underlying factors and the lived experiences of those affected.

A powerful way to gain a deeper understanding of these challenges is by using reflective methods that engage with various stakeholders, including community members, local governments, scientists, and urban planners (Esteban, et al., 2024). Through inclusive dialogue and sustained engagement, we can gather a richer understanding of the diverse needs, concerns, and aspirations that exist within these communities. By engaging in dialogue and listening to diverse perspectives, we can uncover valuable insights that help us appreciate the complexity of the situation and build solutions that are more inclusive and effective. This process not only fosters mutual understanding but also empowers communities to actively participate in decision-making processes, ensuring that the solutions we create are more aligned with the needs and aspirations of those most impacted by climate change.

At the heart of this work lies a critical and often overlooked question: For whom, and for what purpose, are we developing these solutions? This question challenges us to think beyond technical fixes or top-down planning models, and instead focus on the deeper ethical and social implications of our climate responses. If we are to truly address the climate crisis in a just and inclusive way, our efforts must be grounded in a commitment to those who have historically been left out of planning processes, policy decisions, and environmental advocacy. By rooting solutions in the lived realities of those most impacted, we can begin to design responses that are not only environmentally sound but also socially equitable. This requires a shift toward collaborative, community-led approaches that redistribute power, resources, and decision-making authority. This understanding should serve as the foundation for collaborative, community-centred solutions that are just, equitable, and sustainable for all.

See project examples for Empowerment in chapter 5.3
- *Where We Stand – Engagement for resilience in Climate Change*
- *CIVILIAN case – Giving data back to citizens*
- *Platform Zuid dashboard – Mapping Climate Resilience*

3.4 Citizen Engagement Methods for Translation

Lastly, we discuss citizen engagement as a means to translate community-captured knowledge that is often hidden, unacknowledged, or otherwise ignored. The methods are explained by zooming in on one research project from outside the Netherlands. However, its approach and insights can provide relevant knowledge that can be applied in the multicultural setting of Dutch neighbourhoods. The research in the Zapotec artisans' community constructs an epistemological assemblage that brings together indigenous practical and theoretical knowledge (Díaz, 2007) with contemporary Western posthuman theory (Braidotti, 2019a, 2019b). By highlighting the historical divergence between ancestral and Western scientific knowledge, this research seeks to bridge the distinct ways of engaging with the world, creating a language framework that allows both cultures, historically set apart, to find common ground. Since the need to find socially and environmentally resilient solutions is highly pressing, the research aims to foster a shared dialogue of expertise, in a world to care and to share.

To understand these views as they manifest in daily life, the research focuses on a series of house-workshops in various Zapotec communities in Mexico. These house workshops are deeply embedded in the cultural identity of the communities, with trades and practices rooted in Mesoamerican traditions. Architecture and urban spaces including their use and meaning are approached as cultural artefacts and studied through symbolic hermeneutics. This involves examining how belief systems, myths, rituals and daily living shape and give meaning to architectural space. By studying the complex cosmos-corpus-praxis, this is, "the gearing" of the cognitive and practical world (Toledo & Barrera-Bassols, 2008), a new lens through which we can look at other notions of space, place and time is revealed.

The methodology applied is immersive and participatory, emphasising the importance of engaging from within the community, and it follows the scheme of making-living-sharing. This scheme structures the life in these communities through their communal laws which are guided by principles of reciprocity called *tequio*[8]. Since Zapotec ontology and epistemology is built over a dimension of being intimately weaved into a dimension of doing in the quotidian experience, the research method starts necessarily with the researcher's personal active engagement through making. Making not only allows to understand this natural interconnection between doing, myths, rituals, belief systems and technology, but it also allows to build the necessary bonds and trust, due to the investment of time that the action involves. Understanding the material and the spaces where work activities occur, allows to deepening into the dynamics of the house and how these are framed within the communitarian life[9].

What sets this project apart is not only its fieldwork methodology -rooted in artistic actions and indigenous propositions- but also its innovative approach to knowledge transmission. The research outcome is an assemblage of various narrative formats, including local voices and stories as primary sources, myths and poetry (a field cultivated by oral cultures), and scientific material, presented

[8] *Tequio*, is a word derived from the nahuatl word "tequitl", which means "mutual help" or "help through friendship". It is a form of communal work and self-organization of indigenous communities from Mexico. The terms in Zapotec for *tequio* varies among different Zapotec groups (Zapotec language has sixty-three different variants, sometimes unintelligible among them). Thus in Zapotec from the Isthmus (Coast Region of Oaxaca) for example, they use the term *guendaliza'* (if not just tequio) or *raakne'* in other Zapotec communities from the Central Valley of Oaxaca, such as Teotitlán del Valle. For more information about this concept see (Zolla & Zolla-Márquez, 2004).

[9] This refers exclusively to the daily life in indigenous communities of study from Oaxaca, with their own communitarian laws and obligations. These communitarian laws are defined as *comunalidad,* an anthropological work made "from the inside" by indigenous intellectuals from the region, that explains how life is structured in these communities. For more information, see (Aquino Moreschi, 2010, 2013; Díaz, 2001, 2007; Martínez Luna, 2010)

through videos, installations, artefacts, and symbolic-descriptive drawings, that create a complex yet interconnected unitary fabric of meaning. These assemblages serve as intercultural language frameworks that make the research accessible to both specialised and non-specialised audiences, within and beyond academia. The intention is to stimulate an open discussion and foster cross-cultural conceptual communication for collaborative practices: "The approach of science to traditional wisdom, which is endowed with its own intrinsic characteristics, must be assessed through a shared dialogue of expertise" says geographer Víctor Toledo (Toledo and Barrera-Bassols 2009, 101). Or as architect Lina Bo Bardi shows us through her practice, "it is not a balance of folklore, always paternalistically assisted by high cultures, it is […] a participating balance." (Bo Bardi 1994a, 235). Here relies the importance for this research of creating *new alliances* and *epistemological assemblages* between indigenous and occidental traditions, and between the sciences and the arts (and myths), in order to overcome stagnated ways of thinking, and avoid patterns of exclusion, to think creatively some of the challenges of our current historical condition. In this context, the researcher takes the role of a translator opening a world that is often overlooked or misunderstood, bridging different communities of knowledge. This translation process enables traceability for repair, fosters awareness of existing cultural practices, and promotes empowerment and a sense of belonging. It helps prevent generational disconnections, preserves memory and supports historical continuity, or what Bo Bardi used to call "historical present" (Bo Bardi, 1993).

This approach has broader significance for understanding cultural differences among vital forms of living in various contexts, including different immigrant communities and diverse urban neighbourhoods. This has tremendous implications for example, for the maintenance and care of the architectural space by a community (while that cultural basis is not broken, and the sense of belonging and identity are sustained), for uprooting avoidance, for sensitive architectural interventions where architecture responds to citizen's reality, or for finding architectural solutions that allow integration and conviviality among different communities, without the erasure of a culture that could result in problematic tensions. Ultimately, it will contribute to more inclusive and resilient urban environments over the long term.

See project examples for Translation in chapter 5.4

- *Xunaxidó. Wor(l)ds within Wor(l)ds: Understanding how Zapotec dwelling philosophy and daily practices structure and give meaning to the house-workshop of a black-clay woman artisan.*
- *ParticipAIte*
- *Lentefeest - Situated participation + Public commitment*

4. Reflections and recommendations

Urban complexity requires an approach beyond physical infrastructure to address the social, political, cultural, and environmental factors influencing city life. In this setting, citizen engagement and participation must be seen not as procedural checkboxes, but as contextual, power-sensitive activities that acknowledge urban residents' different lived realities and capacities. Participation is no longer a one-dimensional practice; rather, it must navigate diverse identities, values, and priorities while responding ethically and practically to critical social and environmental issues. It demands flexible, contextually grounded methods that respond to both structural conditions and the specific ambitions of different entities.

One of the key issues identified in this position paper is the duality of participation as a normative or pragmatic tool. On the one hand, public participation is framed as a democratic right: citizens should participate in decisions that affect them. On the other hand, participation is frequently utilised as a tool to gather local knowledge to generate more relevant, context-specific solutions. In practice, both objectives often coexist, which can be difficult to navigate, especially when community members are unclear about the underlying purpose. If it's not made explicit whether their input is meant to lead, influence, or simply inform decisions, the engagement process can come across as performative or even exploitative, rather than meaningful and respectful. This argument is consistent with many real-world planning experiences in which engagement becomes a bureaucratic requirement, frequently stated in policy texts but detached from practice. What is required is institutional capacity building, with public entities genuinely investing in participatory activities.

How do we contextualise engagement? There is no universal method that fits all communities or planning challenges. Instead, engagement must be designed with sensitivity to place, culture, language, age, and socio-economic status. Emphasising pluralism through diverse forms of outreach, such as digital, visual, in-person, and multilingual strategies, is essential to countering exclusion.

Digital tools, such as the Bio-CiVo and WijkWijzer, exemplify how digital tools, if thoughtfully designed, can broaden participation without diluting quality. Residents contribute nuanced, often intangible insights and experiences that challenge dominant understandings of value in the urban environment. Yet to fully capture these perspectives, open-ended inquiry and qualitative methodologies can be used. The method of collective introspection used in the Where We Stand project provides depth by bringing to light underlying tensions or blind spots. It also raises an important question: for whom are we designing? This basic but powerful inquiry compels planners and designers to address the power dynamics and histories that affect urban space.

Similarly, research on urban safety for young women emphasises the ethical challenges of co-design. It is problematic to ask young participants to imagine public areas when unsure whether their suggestions will be taken seriously. The tension between creative empowerment and pragmatic implementation highlights a larger issue: co-creation necessitates not only facilitative abilities, but also institutional commitment. The discovery that designers require new abilities, empathy, feedback systems, and cultural awareness indicates a systemic gap in education and professional practice.

Perhaps the most evocative example in this position paper, coming from outside the Netherlands, is the Zapotec artisan community study, which reminds us that participation is not just about procedures but about worldviews. The attempt to create an "analytical architectural language" that connects Western and indigenous perspectives challenges the dominance of Eurocentric planning traditions. Importantly, the approach focuses on the researcher as a translator rather than someone who extracts knowledge. This methodological

humility is both rare and necessary in a globalised, pluralistic world.

In all of the methods highlighted in this position paper, a common thread is the need for inclusive, responsive processes that reflect the realities of diverse communities. To foster meaningful community engagement in urban planning, the following principles should guide policy and practice:

1. Clarify the Purpose of Participation
   Ensure communities understand how their input will influence outcomes.

2. Embed Engagement Throughout Planning Cycles
   Involve communities in identifying issues, designing interventions, and evaluating impact—not just at isolated points.

3. Adopt Context-Sensitive, Mixed-Method Approaches
   Combine digital, creative, in-person, and language-adapted tools to reflect diverse experiences and capacities.

4. Prioritise Ethical and Reciprocal Engagement
   Avoid extractive practices by ensuring participants gain influence, information, or tangible benefits.

5. Invest in Institutional Capacity
   Build in-house expertise and reduce reliance on external consultants to foster long-term trust and accountability.

6. Amplify Marginalised Voices
   Create specific strategies to include groups historically excluded from decision-making, such as youth, low-income residents, and indigenous communities.

7. Redefine Professional Roles
   Train urban designers and planners to act as facilitators and translators, not just experts, in co-creation processes.

As cities become increasingly complex and diverse, traditional models of participation are no longer sufficient. To reimagine community engagement in urban planning, we must move beyond procedural participation and toward strategies that are ethically grounded, power-aware, and context-responsive. In doing this, urban planning can become more just, equitable, and effective.

Citizen engagement in the Netherlands is evolving from a policy ideal into a legal requirement. The challenge now is to ensure that participation delivers more than consultation by embedding it meaningfully in planning and design, strengthening institutional capacity, and ensuring that the voices of all communities are valued. Doing so will not only enhance democratic legitimacy but also contribute directly to the resilience, equity, and sustainability of Dutch neighbourhoods.

All but one of the project examples in this position paper are developed and tested within Dutch practice. However, the impact and long-term effects are not always included in the scope of these projects. It is recommended that this research be continued, extending beyond intentions to evaluate the actual influence and sustained policy integration over time. This is a call to all stakeholders involved in built environment development—policy makers at local, national, and European levels, industries, designers, advisors, and ourselves as academics—to support this ongoing investigation.

5. Project Examples

5.1 Projects of Citizen Engagement Methods for Co-Creation

(reference to Chapter 3.1)

Project: Urban safety for young women
Team: Geertje Slingerland, Krista Schram (PI), Linda Zuijderwijk, Wenda Doff, Joost Jansen, Tamar Fischer
Funding body: Kenniswerkplaats Leefbare Wijken
Duration: 9 months
Contact: Geertje Slingerland

The research project aimed to redesign public spaces with young women, because they often feel unwelcome and unsafe there. Next to the fact that we encountered challenges to attract young women to participate in co-creative workshops, we identified some dilemmas related to the co-creation process.

“What are we designing? And what will happen with the outcomes?”
Before they decide to participate, young women want to know that their contribution is meaningful, i.e. that it will make a change. This requires commitment from the local government beforehand, that the input of young women on the public space design is going to be implemented. When in the urban development is the best moment to gather this input, so it can be implemented? And how open should the design assignment be?

“but their designs will be unrealistic!”
Most young women are not trained as urban designers, so how do we support them in coming up with meaningful designs for public spaces? There will always be a translation necessary from the ideas and input of participants towards the final urban design. In my view, this is the (new) role that designers should take in participation processes. However, this may require some skills (e.g. communication, feedback loops) that are not part of current education and practice.

Image: Co-creation session with girls where they created a collage on their ideal neighbourhood (Geertje Slingerland)

Project of Citizen Engagement Methods for Co-Creation
(reference to Chapter 3.1)

Project: Co-creating biodiverse urban spaces – Bio CiVo
Team: Juliana Gonçalves, Geertje Slingerland, Maria Gil Falcon, Isabella Jaramillo Diaz, Jing Spaaij
Funding body: Resilient Delta Initiative
Duration: 8 months
Contact: Juliana Goncalves + Geertje Slingerland

Bio-CiVo (Citizen Voices in Biodiversity) is a project that is part of the TU Delft Citizen Voice Initiative (see more on p. xx [whether CMC & BIoCivo are presented]). The aim of this project is to explore how citizens can co-create, supported by other urban actors, urban spaces that are more biodiverse. Through a digital tool, residents can design a scenario for their own neighbourhood, where they explore biodiversity and greening in combination with other metrics.

The digital tool was tested during multiple instances with students, researchers, and citizens in Rotterdam. Questions on what will happen with the formulated scenario and who owns it, repeatedly came up. This reflects the importance of highlighting these questions around who the designer is and who has agency in urban co-creation practices.

Image: Biodiversity Scenario builder with the Bio-CiVo prototype.

5.2 Project of Citizen Engagement Methods for Evaluation

(reference to Chapter 3.2)

Project: WijkWijzer- Co-assessing heritage attributes of Dutch New Towns through a digital walking survey
Team: Lidwine Spoormans and Rienje Veenhof
Funding body: Rijksdienst voor het Cultureel Erfgoed (Dutch Cultural Heritage Agency)
Duration: 1,5 years
Contact: Lidwine Spoormans

The project CoWaDiPa (i.e. Co-Waarderen door Digitaal Participeren) aims to reveal heritage attributes of everyday neighbourhoods. Although the housing stock of the late 20th century constitutes a significant part of the built environment, it is often overlooked in heritage discourses. At the same time, many of these residential neighbourhoods are now confronted with energy transition, densification, and social challenges. In upcoming transitions, it is vital that valuable attributes are acknowledged and preserved. By applying participatory methods, a wide range of attributes can be revealed, in addition to expert assessment.

To collect data on various stakeholder perspectives, a digital survey tool was developed, named the WijkWijzer. The choice of a digital participation tool was motivated by its potential to reach a larger and more varied audience and make heritage participation more widely accessible and engaging. The survey design aims to be accessible for people with limited participation resources by avoiding expert language, combining visual and textual information and by making limited time demands. While walking through the neighbourhood, participants contribute their opinions through text or photographs in open, semi-open and closed questions. This mixed survey approach enables researchers to collect extensive data on (heritage) attributes while maintaining a relatively bottom-up approach, ensuring an open perspective on contributions from a diverse range of participants. The question formats allow for both quantitative and qualitative analysis; for the latter, a natural language processing model is employed.

In 2024 and 2025, five neighbourhoods have been researched in the CoWaDiPa project. Partners include Almere municipality, Ymere housing corporation and the Dutch Cultural Heritage Agency (Rijksdienst voor het Cultureel Erfgoed). Currently, new surveys for more neighbourhoods are under development, growing the database on neighbourhood attributes.

The findings show that heritage appreciation of everyday, late 20th-century neighbourhoods is broad, multifaceted and context-dependent. The method provides insight into the differences and similarities between neighbourhoods. It also shows differences between the opinions of professionals, residents and visitors. Together, these perspectives create a richer and more complete understanding of what heritage value signifies in these neighbourhoods. By recognising different voices and mutual differences, and by viewing residents as local heritage experts, the traditional heritage approach can be connected to the everyday experience and significance of that heritage. It is precisely in these neighbourhoods, which are active and evolving, that there is a need for a heritage approach that better aligns with local residents' daily lives.

More information on: https://wijkwijzer.tudelft.nl/

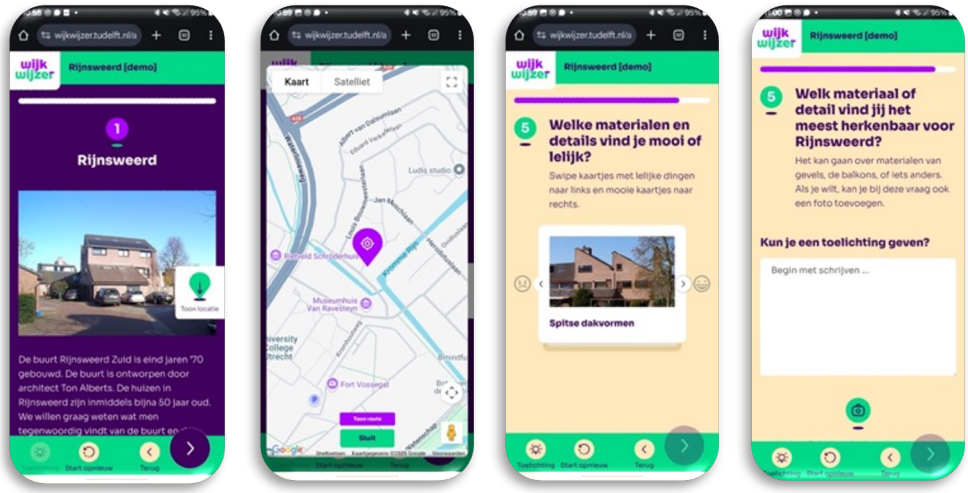


Image: Screenshots from walking survey on mobile phone

Project of Citizen Engagement Methods for Evaluation
(reference to Chapter 3.2)

Project: CmC and Bio-CiVo platforms – creative and interactive design to enhance citizen engagement
Team: Juliana Gonçalves, Carissa Champlin, Johanna Zehntner, Virginia Facciotto, Inger van Dok
Funding body: TU Delft Climate Action Program
Duration: 1 year
Contact: Juliana Goncalves + Geertje Slingerland

Bio-CiVo and Citizens Meet Climate (CmC) are two projects of the TU Delft Citizen Voice initiative. Both projects followed the Citizen Voice approach, an iterative research approach grounded in the principles of Critical Action Research, a participatory and reflexive methodology that integrates action and inquiry to confront and transform power imbalances and injustices within specific social contexts.

Bio-CiVo addresses the challenge of biodiversity loss, which municipalities increasingly seek to counter with monitoring and greening measures. Yet biodiversity is often perceived by citizens as abstract, complex, or irrelevant, limiting public support. Since around 60% of urban space is privately owned, citizen engagement is crucial. Bio-CiVo takes people's daily concerns as an entry point to discuss biodiversity, exploring how interactive tools can help residents connect biodiversity to their own values and interests. Using a research-through-design approach in the Oud-Mathenesse neighbourhood, the project developed prototypes for citizens to both evaluate and create biodiversity scenarios at appropriate spatial scales. Tested iteratively with students, researchers, and residents, the prototypes enabled citizens to imagine and shape local biodiversity futures, while providing guidelines for embedding such tools in participatory planning.

Citizens Meet Climate (CmC) responds to the growing impacts of climate change on urban life, from flooding to heat stress. Many adaptation measures depend on citizen support, yet climate risks often feel distant, overwhelming, or unclear. To bridge this gap, CmC developed a digital participatory platform empowering citizens to understand risks and take meaningful action. A comparative analysis of 13 platforms revealed that existing tools lacked accessibility, relevance, and opportunities for interaction. Guided by a six-point rubric, including valuing citizen knowledge, balancing negative and positive framings, and providing actionable pathways, the project co-designed and iteratively tested prototypes with citizens. The resulting platform informs citizens through personalised storytelling, connects them with community initiatives, and enables them to share experiences linked to concrete opportunities for both individual and collective climate action.

Together, Bio-CiVo and CMC demonstrate how Citizen Voice builds resilience by grounding abstract issues—biodiversity and climate change—in citizens' lived realities. By combining inclusive design, reflective dialogue, and co-created tools, the projects show that resilient neighbourhoods emerge when people are not only informed but empowered to act, collectively shaping sustainable urban futures.

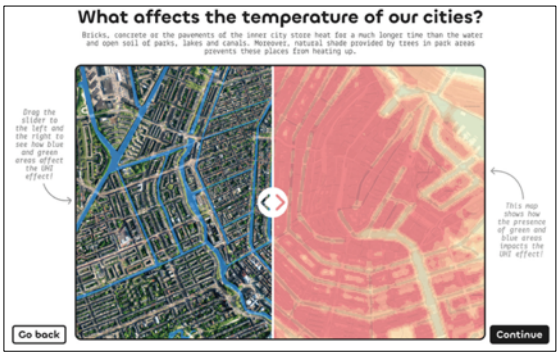


Image left: Climate awareness through heat data in the CmC platform. Right: Biodiversity Scenario built with the Bio-CiVo prototype.

Project of Citizen Engagement Methods for Evaluation
(reference to Chapter 3.2)

Project: Integrating Soundscapes and Community Experiences: The Role of Sound in Public Spaces through Participatory Research in Katendrecht, Rotterdam
Team: Vincent Baptist, Sahar Asadollahi Asl Zarkhah, Rosa de Kruif
Funding body: Resilient Delta Initiative_ Kick-starter Grant for Early Career Academics
Duration: 1 year
Contact: Sahar Asadollahi Asl Zarkah

The NOISE® (New Outlooks in Sonic Environmental Resilience) research initiative, supported by Resilient Delta, reveals how sounds—from ship horns and distant traffic to local chatter—convey the rhythms of urban life and influence how people connect with their surroundings. Through fieldwork and dialogues with the local community, the research explores the intricate relationship between sound and place, showing how layers of auditory cues and urban rhythms define neighbourhood experiences, shaping both collective memory and individual perceptions. Reflecting the complexity of Katendrecht's soundscape, the outcomes of this work include several drawings that interweave three interconnected layers—space, sound, and perception—as well as a neighbourhood event, a policy paper, and other community-based outputs. Together, these elements capture how sound uniquely shapes place, identity, and memory in this vibrant, evolving neighbourhood.

Image top: Local event and exhibition at Verhalenhuis Belvédère.

Image bottom: Exhibition at Faculty of Architecture and the Built Environment, TU Delft: Interweave three interconnected layers— Socio-spatial, sound, and perception (image Sahar Asadollahi Asl Zarkhah and Nadia Nena Pepels)

Project of Citizen Engagement Methods for Evaluation
(reference to Chapter 3.2)

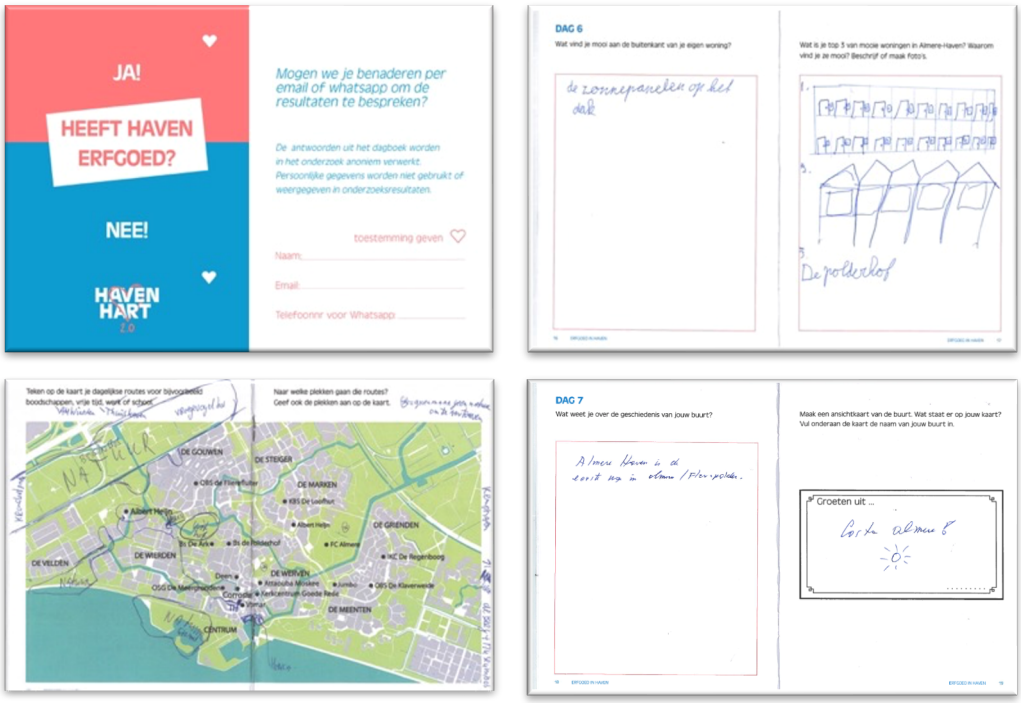
Project: "What I Love about my Neighbourhood"- Identifying heritage attributes in Almere
Team: Lidwine Spoormans, Sean Huizinga, Linde Petit dit de la Roche, Leila van Coeverden, Rada Ruijter, Ebu Bayram
Funding body: Planbureau voor de Leefomgeving (PBL)
Duration: 1 year
Contact: Lidwine Spoormans

The project studies Almere-Haven, which is the first neighbourhood in the Dutch new town Almere. Neighbourhoods like Almere-Haven are in-between old and new and are seldom found listed as cultural heritage, although recently there is increasing attention for 'Post 65 heritage'. The current lack of consensus about their cultural significance provides a good base for open investigation into what is significant for citizens and why. This contributes to the recognition, acknowledgement and preservation of everyday living environments and the heritage significance conveyed by its users.

The method used was inspired by 'The West London Social Resource Project', conducted by Stephen Willats (1974). Respondents have been asked to keep a diary in a paper notebook or a digital version, asking two questions per day during one week. The assignments include open questions, drawing tasks, indication of places on a map and 'top 3' lists. The questions relate to the living environment in concentric levels of scale representing the daily life of the individual resident. This scale is not limited in physical terms, but is defined by all urban elements that respondents experience as relevant to their living conditions. Over two weeks, diaries have been distributed to residents in Almere-Haven, including street encounters, snowball method, a weekly meeting of an elderly group, and a class at an elementary school. The project was organised in collaboration with Havenhart 2.0 of Almere and Planbureau voor de Leefomgeving (PBL).

The diary format provides advantages over the interview technique. First, the 'stand-alone' format of the diary makes the participant more independent from the influence of the researcher, possibly leading to more 'authentic' opinions and expressions. Moreover, the participants can develop a perception and sensitivity in observing their environment during the one-week process. The results show that participants display different preferences in how to formulate their answers, with children, for example, often using drawing, while adults favour textual explanations and photographs. The results show that participants display differences in how to formulate their answer, in which children, for example, often use drawing, while adults prefer textual explanation and photos.

The project was carried out in collaboration with the Planbureau voor de Leefomgeving:
https://themasites.pbl.nl/leefomgevingskwaliteit-erfgoed/ontdekken and was published in an open access article:
https://link.springer.com/article/10.1007/s10901-023-10042-0



Images: Examples of participant responses on the diary format Images: participant responses on the diary format

5.3 Project of Citizen Engagement Methods for Empowerment

(reference to Chapter 3.3)

Project: Where We Stand – Engagement for resilience in Climate Change
Team: Theresa Audrey O. Esteban, Mahardhika Sjamsoeoed Sadjad
Funding body: Resilient Delta Initiative
Duration: 1 year
Contact: Audrey Esteban

The Where We Stand project uses collective introspection/reflection to make abstract issues like climate change tangible to individuals based on their personal experiences. This method fosters communication among diverse stakeholders by responding to carefully curated statements by movements. The method is designed to help us learn about each other's experiences living in and navigating within our environment, and how we position ourselves in our communities.
This method which we have used with more than 150 participants provides a visual representation of their perspectives and positions on key topics and situations. This method is very effective for encouraging discourse between persons with different viewpoints and lived experiences. It can be used to reach an agreement or identify points of contention in urban projects about sustainability or justice.

The main inquiries of the Where We Stand project are: how do people actually experience climate change in their neighbourhoods? And how do they see and feel the changes happening around them? To explore this, the workshops conducted at the communities were designed to foster open conversations and help participants understand each other's perspectives and experiences. The researchers created a space for where everyone felt equal and comfortable in sharing their thoughts. The workshops started with a presentation on the risks and challenges of climate change in the specific neighbourhoods where the workshops were conducted. This was followed by the collective introspection exercise with the participants (residents and community members of cooperatives). After the exercise we had a group reflection and discussions on the topic and the experience we have in the workshop.

The stories gathered from the workshops were collected and compiled in a booklet Where We Stand: 'Verkenning Ongelijkheden in Klimaatadaptatiebeleid' to help amplify the voices of the people living in these neighbourhoods. In this way, project tried to ensure their voices are heard and their needs are prioritised. This booklet is a call to policymakers and city planners to involve residents at every stage of climate action. Empowering these communities with a real voice can help Rotterdam adapt to climate change and become a more equitable and resilient city for all its people.

The booklet can be downloaded from these links: English https://www.publicatie-online.nl/publicaties/patricia-enriquez-liona-li-eng. Dutch https://www.publicatie-online.nl/publicaties/patricia-enriquez-liona-li-nl Please use the code 177760 to download (same code for both versions).

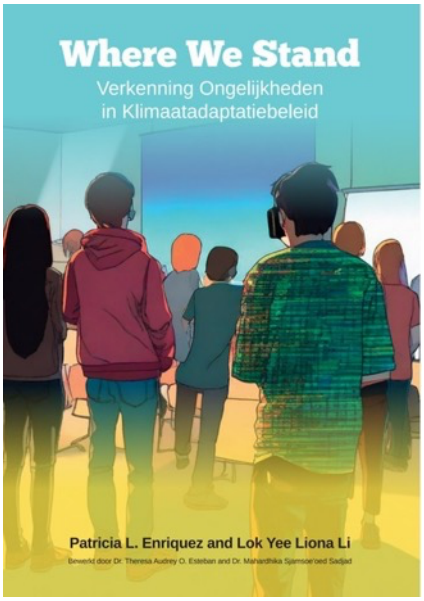


Image left: Cover of the booklet 'Where We Stand Verkenning Ongelijkheden in Klimaatadaptatiebeleid'
Image right: Where We Stand workshop at Bloemhof, Rotterdam Zuid

Project of Citizen Engagement Methods for Empowerment
(reference to Chapter 3.3)

Project: CIVILIAN case – Giving data back to citizens
Team: Juliana Gonçalves, Geertje Slingerland, Manuel Garcia Alvarez, Selin Kubilay, Isabella Jaramillo Diaz, Jing Spaaij, Virginia Facciotto
Funding body: NWO
Duration: 1 year
Contact: Juliana Goncalves + Geertje Slingerland

Citizen engagement is crucial for building liveable cities and for achieving climate goals. Digital platforms can play a role in the process of involving citizens but are generally not citizen-friendly: they are not attractive to citizens and require technical expertise to act on the information from the platform. One way to make digital participatory platforms more effective is to give "data back" to citizens. Returning data empowers citizens by increasing transparency, building trust, and making participation more meaningful. When citizens can access the outcomes of their contributions, compare perspectives, and see how decisions are made, they are more likely to stay engaged. This means platforms should not only collect input but also communicate results in clear, accessible formats. CIVILIAN is an NWO-funded project aiming at giving data collected through spatial surveys back to citizens by means of a map-based community dashboard. The dashboard is coupled with the Citizen Mapping Tool and provides insights into how citizens experience their living environment. An important aspect of CIVILIAN is that all outputs are open access and open source, with dedicated documentation.
See: https://citizenvoice.tudelft.nl/cv-portal/

Image top: Community Voice Dashboard created in the CIVILIAN project.


Image bottom: Users testing the Community Voice Dashboard created in the CIVILIAN project.

Project of Citizen Engagement Methods for Empowerment
(reference to Chapter 3.3)

Project: Platform Zuid dashboard – Mapping Climate Resilience
Team: Janna Michaels, Celine Janssen, Donagh Horgan, Jonas Althuis, Maryam Naghibi, Audrey Esteban, Amanda Brandellero, Tom Daamen
Funding body: Resilient Delta Initiative
Duration: 1 year
Contact: Audrey Esteban

The Mapping Climate Resilience (Mapcres) and Cultuur & Campus Putselaan collaboration developed the Platform Zuid dashboard an interactive digital platform that integrates both quantitative and qualitative data to provide a comprehensive understanding of neighbourhood-level resilience in Rotterdam South. The dashboard serves as a centralised tool for exploring how different communities in the area are affected by, and responding to, climate-related challenges such as heat stress and flooding.

On the quantitative side, Platform Zuid includes data sets on climate indicators (e.g. temperature fluctuations, flood risk zones), demographic statistics (such as income levels, housing conditions, and population density), and land subsidence. These are visualised using maps, graphs, and comparative metrics across neighbourhoods based on the 'Klimaateffectatlas'.
On the qualitative side, the dashboard features insights from community interviews, participatory workshops, personal stories, and research, capturing lived experiences, local knowledge, and perceptions of climate resilience from residents themselves.
By combining data-driven analysis with human-centred narratives, Platform Zuid aims to support policymakers, urban planners, and local communities in designing more equitable and effective climate adaptation strategies for Rotterdam South.

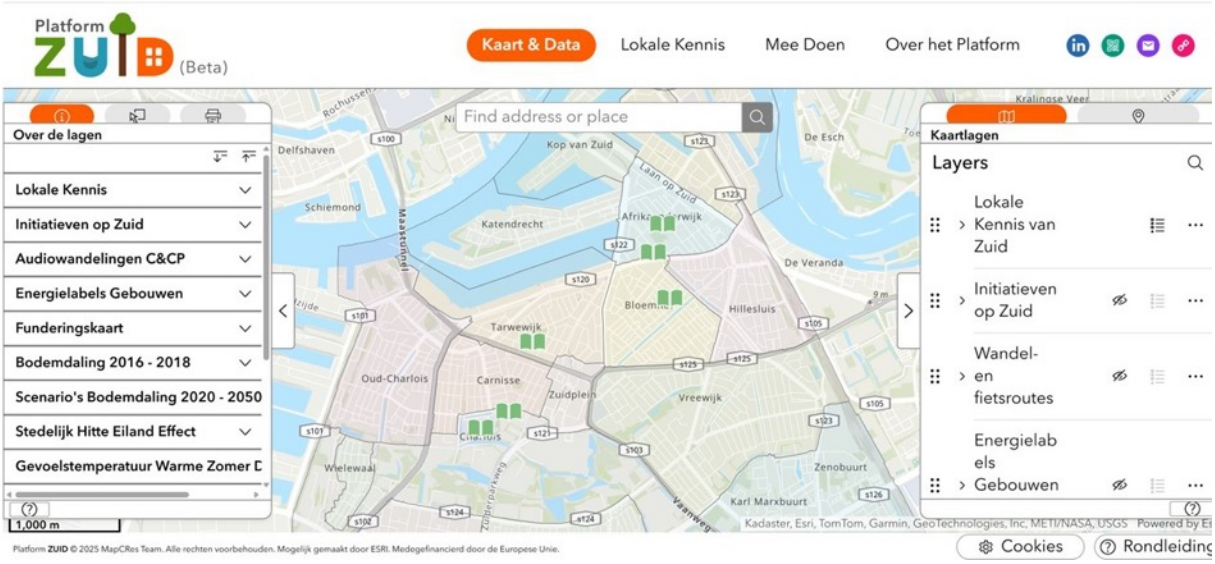


Image: Platform Zuid dashboard

5.4 Project of Citizen Engagement Methods for Translation

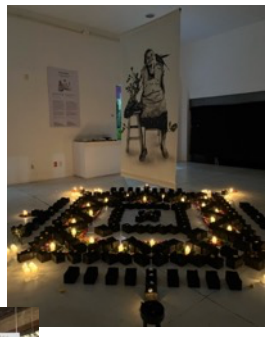
(reference to Chapter 3.4)

Project: Xunaxidó. Wor(l)ds within Wor(l)ds: Understanding how Zapotec dwelling philosophy and daily practices structure and give meaning to the house-workshop of a black-clay woman artisan.
Team: Elena Pérez Guembe
Funding body: Stimulerings Fonds Creative Industrie
Duration: 1 year
Contact: Elena Pérez Guembe

The project Xunaxidó (Mother Earth in Zapotec) is an artistic collaborative project with local artisans from San Bartolo Coyotepec (Oaxaca) and other Zapotec women from nearby and coastal region towns –areas most devastated by the 2017 earthquake. The project involved various multimedia installations, adapted to different locations and audiences, yet unified by a central theme: conveying the lived reality of local communities through women's voices. It is framed within the Zapotec myth of creation and the COP28, emphasising women as knowledge holders and weavers of their community bonds.

The method centred on producing 200 unique ceramic pieces that I crafted in the house-workshop of a Zapotec woman artisan who hosted me for two months. This immersive experience allowed me to absorb daily life dynamics, local symbols, celebrations, communal laws and obligations. Through this, I gradually understood how the complex cosmos-corpus-praxis structures space –from the house to the community, the territory and the Earth- revealing a law of interdependence and reciprocity across scales and actions. Maintaining it ensures a cared balance within the community and between humans and the environment.

Consistently following these principles of reciprocity throughout the project, the final installation was placed in the community museum. It symbolised Earth as a fabric weaving life, death, renewal, nature, myth and rituals –with women at the centre. It served as a renovated cosmic centre, a ritual platform where women from nearby communities taught younger generations about their traditions and reinforced their role in sustaining communal cohesion. The work was later shared with RCMC Amsterdam, EKWC Oisterwijk, TU Delft School of Architecture and other venues, creating intercultural dialogue openings and exchange among diverse communities of knowledge and generations.

Images: Installation at the MEAPO museum in San Bartolo Coyotepec (Oaxaca, Mexico) and women after performing a ritual.
Installation at EKWC (European Ceramic WorkCenter at Oisterwijk, Netherlands).Bottom left: Work showcased as part of the Indigenous Intelligence exhibition at TU Delft School of Architecture (Netherlands)

More info: Lava Brick – TACK, CA²RE / Pérez Guembe / Architectures of Care., ca2re.eu/wp-content/uploads/2025/05/ca2re-milano-25-perez.pdf
XUNAXIDO'. Wor(l)ds within Wor(l)ds. (Video English subtitles)

Project of Citizen Engagement Methods for Translation
(reference to Chapter 3.4)

Project: ParticipAIte
Team: Juliana Gonçalves, Carissa Champlin, Tomasz Jaskiewicz, Betsie Loeffen, Charlotte De Jonghe, Joris Dietz, Juwe van Vliet, Kumsal Kurt, Maartje Roggeveen, Ryan Tsai, Robin Smits, Sander Aalbers, Valentina Guadagno, Virginia Facciotto, Yara Boom
Funding body: TU Delft Climate Action Program & Resilient Delta Initiative
Duration: 6 months
Contact: Juliana Goncalves

ParticipAIte is a speculative design project that explores the role of artificial intelligence in the future of public participation. Rather than aiming to deliver definitive solutions, the project critically examines both the opportunities and challenges that emerging technologies present in this context. Its goal is to uncover the complexity of the topic and encourage viewers to reflect on it. It has been presented in public as an installation, bringing together three speculative concepts: Bruno the bench, Under the Loop, and kAIte, to explore the flow of citizen-generated data from neighborhood buzz into a high-stakes municipal board room. It presents a critical and speculative vision of how AI might mediate and amplify public voices in urban planning.

The installation uses Rotterdam as an experimental site. By the year 2070, parts of Rotterdam will experience frequent flooding caused by rising sea levels and intense heavy rainfall events. The Municipality will have to choose between several courses of action to address the issue: from raising the level of the dikes to redesigning low-lying areas into floating neighbourhoods. ParticipAIte presents the dilemmas of people living in a Rotterdam neighbourhood who are grappling with an uncertain future for their community. By embedding AI into a fictional citizen engagement process, the installation explores how community values, local knowledge, and speculative technologies might converge to shape inclusive, participatory urban futures.

Images top to bottom: Bruno the Bench, Under the loop, and kAIte,

Project of Citizen Engagement Methods for Translation
(reference to Chapter 3.4)

Project: Lentefeest - Situated participation + Public commitment
Team: Juliana Gonçalves, Geertje Slingerland, Maria Gil Falcon, Isabella Jaramillo Diaz, Jing Spaaij
Funding body: Resilient Delta Initiative
Duration: 8 months
Contact: Juliana Goncalves + Geertje Slingerland

As the culminating public moment of the BIO-CiVo project, the Lentefeest (Spring Festival) held on May 25th, 2024, in Serumpark (Oud-Mathenesse, Rotterdam) offered an ideal setting to engage directly with residents in a festive, informal atmosphere. Co-organised by student assistants from the Citizen Voice team and local residents from the citizen organisation Mathenesse aan de Maas (MaM), the event served both as a celebration of local culture and a testbed for the final version of the biodiversity prototype. Approximately 150 visitors attended the festival, which featured 23 booths, including ten showcasing green initiatives, a diverse food program prepared by residents, and live performances by local bands. This setting enabled easy access to participate in the testing and meaningful interaction with the prototype. During the preparation, feedback from a local resident helped contextualise the scenarios and inform important adjustments to the prototype. At the festival, visitors from all ages explored the tools and engaged in conversations about biodiversity. The presence of Mayor Aboutaleb, who engaged with various booths and initiatives, further validated the relevance of local voices in shaping biodiversity policy. Through this setting, the Lentefeest illustrated how biodiversity can be brought closer to people's everyday concerns and neighbourhood-dynamics.

Image Left: Bio-Civo team at the festival. Right: Testing the interfaces during the Lentefeest (Geertje Slingerland)

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