

Case Study Report

JUSThood

Uncovering local knowledge and mapping visions of equitable neighbourhood with participatory futures

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Abstract

The report explores the new community-based method 'JUSThood' that empowers inhabitants to envision their neighbourhoods to become spatially equitable. Based on the design-driven approach, the new method is positioned at the intersection of three topics in urban design - masterplanning, spatial equity and participatory design. With the help of Design Foresight, the developed methodology brings a bottom-up perspective to masterplanning process in a creative way, where inclusive design is based on an inclusive process. The report describes the pilot study of the methodology in three neighbourhoods in Katowice, Poland. It concludes that the new methodology (1) can offer diverse insights of local inhabitants to inform the work of professionals, (2) help inhabitants to expand their imagination and find their desires about their neighbourhoods, (3) raise awareness about different users and develop empathy for them, (4) and become conscious about the spatial surroundings beyond their private home units.

Keywords

Master Plan, Participatory design, Spatial equity, Urban design, Design foresight, Participatory Futures

1. Problem statement

1.1. Relevance of the master plans

Master plans have been used to understand and guide urban development over the course of past, present and future times. They help to better realise holistic place strategies and approach systemic urban challenges. However, there are two challenges underpinning the current state of the masterplanning.

First, traditional master plans usually represent the scale of cities and districts with zoning and listed rules. However, they are difficult to comprehend and get access to for the general public. Thus, there is a need to additionally create human-scale neighbourhood-, street-, and square-based plans for more effective implementation. Current urban trends like 5-minute city, 15-minute city, 20-minute neighbourhood focus on catering to all human needs by commuting for a quarter-hour or less with daily services in a radius of 250 metres. The importance of working with smaller decentralised areas is growing.

According to the World Bank, the implementation of improvement is also more effective on the scale of detailed area or neighbourhood-level plans (Huang and Cantada, 2019).

Second, when developing master plans, architects and planners frame the quality of life of people and make decisions about the way they live in cities. However, as Myrick (2021) argues, masterplanning mostly considers the physical environment based on spatial analysis, but it cannot count for what community life looks like. This is a top-down approach, where the planners exercise their own imagination of future cities. As a result, the lack of community input can alienate it from the future vision of the area (Addis Ababa Urban Age Task Force, 2022). Therefore, it is necessary to create smaller-scale and flexible master plans and shift to a bottom-up approach by democratising master plans to create a rich urban social life.

1.2. Lack of spatial equity in urban design

The fields of architecture and urban planning have been historically dominated by men, and it mainly responded to their existing behaviours and uses, rather than creating new ones for others. As a result, the figure of a man has informed the needs of all other users (human and non-human) in cities, which, as Saskia Sassen noted, made the practice of urban design far from gender neutral (Sassen, 2015). Nevertheless, women, men, children, disabled people, gender minorities and other groups use urban spaces in different ways.

Currently, academia, practitioners and policy makers attempt to promote inclusion practices. However, existing inclusive design strategies are either based on the needs of a specific group, for instance, disabled people, without referring to age or gender within the group (e.g. 'Designing without barriers - guidelines', the material was developed on the basis of *Polish Construction Law Act* (Journal of Laws 1994, No. 89, item 414), or simply for getting funding or reporting to the authorities.

In turn, inclusivity should become a core guiding principle in urban design. Inclusion should come not only in the form of gender, but also age, abilities, ethnicity, and other factors, such as the use of urban places (homeless, tourist, skateboarder, etc.). In addition, we call for the necessity to move away from the dominant human-centred approach and integrate non-human perspectives (Rice, 2017).

1.3. Lack of innovative participatory approaches

Participatory approaches in urban design aim to democratise the planning process, create transparency and provide access for professionals to local knowledge of urban places. Today, even though participation is seen as a requirement for many private and public bodies engaged with urban development, the current planning paradigm fails to incorporate local knowledge and expertise.

Moreover, conventional urban participatory workshops do not aim to expand the imagination of participants. Most of the participatory events try to solve specific problems in the areas, and being solution-oriented, it is difficult for participants to uncover their desires, or what could be imagined beyond typical interventions.

Thus, there is a need for more participatory alternatives (Keeton et. al, 2020). Ramos et. al (2019) argue that there is a need to "move beyond citizens' assemblies and traditional public engagement" (p.7). New innovative, artistic, experiential approaches could have a great influence on citizens' sense of belonging, imagination and commitment to action.

2. What could be the solution?

2.1. Searching for the methodology ground

To tackle the above-mentioned challenges, there is a need to develop a new methodology for participatory urban design that would combine three domains - masterplanning, spatial equity and citizen participation. The new method should answer the question - *What is the way to uncover the local knowledge of people and enhance them to envision equitable neighbourhoods?*

Referring to two key phrases in the question, “*uncover the local knowledge*” and “*envision the equitable future*” we started to map possible directions for developing the method. Uncovering the local knowledge can only be done through participatory activities, while envisioning an equitable future can be implemented with the future thinking approach. The goal of the participatory approach is to devise the course of future development of the urban area and community’s life, while the goal of future thinking is to explore the number of possible futures in a creative and exploratory process (Mountford and Christensen, 2022). This is where the overlapping of participatory thinking and future thinking lies, which can be called participatory futures (Figure 1).

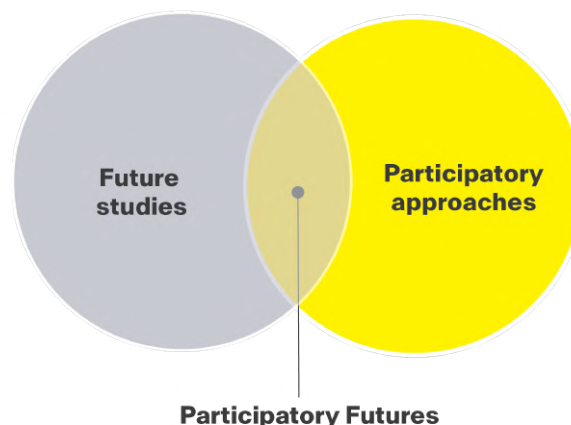


Figure 1. Framework of Participatory Futures. Source: Authors (adapted from Ramos et. al, 2019)

Participatory futures emerged as an approach that helps people diagnose problematic issues, analyse opportunities and develop collective images of the futures they want (Ramos et. al, 2019). Participatory futures draws its roots from the field of future thinking which offers a broad range of foresight techniques from forecasting, trend spotting and scenario planning.

2.2. Design Foresight meets Urban Design

Innovative and creative methods, such as future thinking and scenarios, can help master plans to become a bridge between residents, designers and local planning authorities. Thus, participatory foresight has the potential to inform the masterplanning process, since they both share the components of analysing the present and envisioning the future. Since master plans are not finished products, but part of the process, they should act as the embodiment of continuous future thinking. They are tangible and representative visions of what exists now, what is the preferred vision in the future and what pathways are required to get there.

2.3. Positioning methodology in the process of urban projects

Participatory activities should always be done at the beginning of urban design projects to consult residents as true experts and knowledge-mines of places. Only after honestly listening to inhabitants, their input has to be translated into the master plans by architects and urban planners, and then given to the consultation of professionals, such as traffic and infrastructure specialists. Thus, the JUSThood method is placed as a bridge between the participatory activities and designing the master plan by planners (Figure 2).

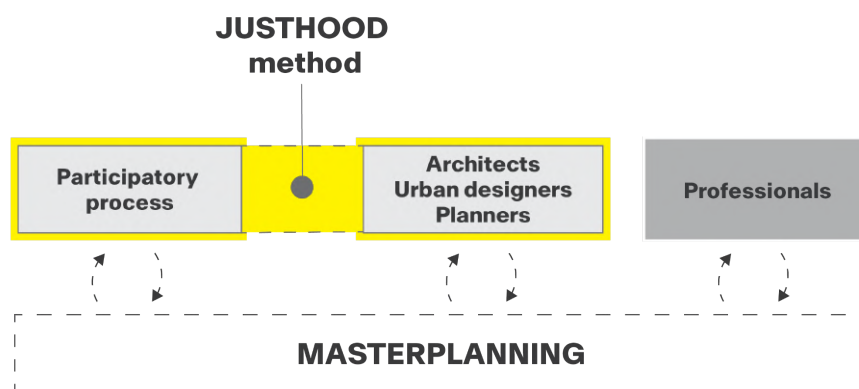


Figure 2. Positioning the JUSThood method in the process of urban design. Source: Authors

3. Developing the JUSThood method

JUSThood method has been developed as an interdisciplinary collaboration between practitioners specialised in urban design with a spatial equality focus and academia specialised in design foresight. The method consists of three phases: 1) bidirectional cooperation with community leaders; 2) participatory workshop with residents; 3) development of the master plan.

3.1. Bidirectional cooperation with community leaders

In this phase, a community leader has to fill out a “Neighbourhood template” to provide basic information about the neighbourhood. The JUSThood mentor introduces the concept of spatial equity and the importance of masterplanning. Training the community leader is crucial to ensure a bigger impact on the community. Afterwards, community leaders reach out and invite communities to the workshops. This phase helps to prepare the base plan for the neighbourhood area for the workshop and provides basic master plan resources to the community leaders, who often lack any sort of maps and plans.

3.2. Participatory futures workshop with residents

In this phase, residents join a participatory workshop. Design-driven foresight approach (Buhning, 2017) has been used to develop a workshop methodology. Three sets of cards were designed to engage people in creating scenarios and working with master plans: cards with (1) What-If questions; (2) Persona; (3) Urban Design Elements. Several prototypes of the cards have been developed and tested before the actual implementation of the project. Below is the description of the development process of the cards.

Developing what-If questions

What-if questions are used in design practice to imagine different scenarios of the future. What-if questions help to create possible futures to provoke and inspire ideas (Dunne and Raby, 2013). In the JUSThood methodology, what-if questions are connected to human and non-human personas in cities to emphasise their agency and foster equity in the urban environment. In addition, “bonus” questions have been developed which are not connected to personas, but ask to imagine different scenarios in general (e.g. global warming, flooding, pandemic, etc.). The goal of the “what-if” cards is to set up the scenario context during the workshop to help participants to imagine how the neighbourhood would look in a particular situation (Figure 3).

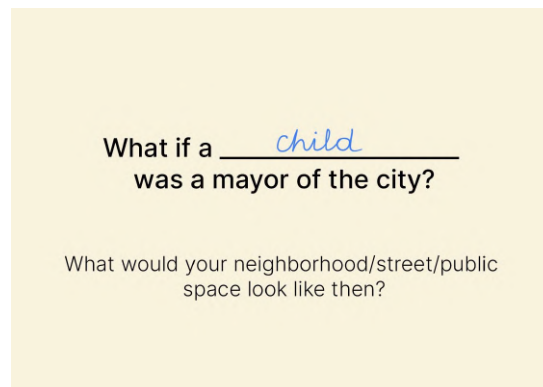


Figure 3. Example of the card with What-if question. Source: Authors

Developing personas

Within the design practice, personas are used to communicate the needs of different stakeholders, who would otherwise be excluded from the design process (Siddall et al., 2011). The goal of persona cards is to help participants to imagine the persona to which the What-if scenario refers (e.g. child). The card describes the characteristics, needs, and preferences of the persona (Figure 4). Besides human personas, non-human personas have been developed, as they are of similar relevance and importance in designing urban places. Developing personas was based on field research (interviews and observations), and academic literature and reports.



Figure 4. Example of the Persona card. Source: Authors

Developing urban design elements

Working with master plans requires input for various elements in urban space. The goal of these cards is to help participants to imagine the physical layout of the neighbourhood within each scenario. Urban design cards are designed in a playful way to ask about specific elements (Figure 5).

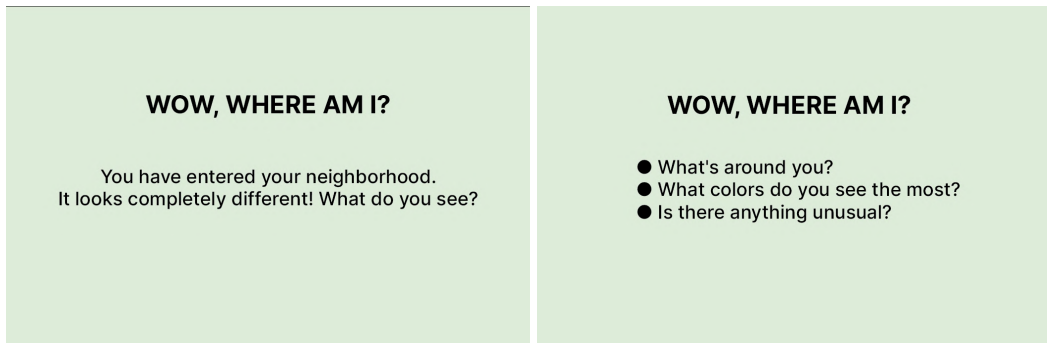


Figure 5. Example of the card with Urban Design Elements. Source: Authors

3.3. Development and installation of the master plan

Based on the input from the first two phases of the JUSThood method, the master plans of the areas are created by professionals - city planner, urban designer, urbanist, architect, landscape architect. After, the plan is permanently located in the project area in the neighbourhood. The goal of this phase is to democratise and make master plans more accessible and visible to inhabitants.

4. Description of the JUSThood pilot project in Katowice, Poland

The project was carried out in three neighbourhoods on different scales (neighbourhood, street, block) in Katowice, Poland (Figure 6).



Figure 6. Three neighbourhoods in Katowice, participated in the JUSThood pilot project

The workshop process for piloting the methodology in Katowice has been designed in the following sequence:

- First, workshop #1 was conducted as a conventional approach to participatory workshops, where participants answered the question “What would you like to improve in your neighbourhood?”.
- Second, workshop #2 was conducted, where participants developed their ideas based on the JUSThood methodology.

4.1. Phase 1: Bidirectional cooperation with community leaders

An online meeting with the representatives of three neighbourhoods in Katowice was carried out on August 10th, 2022, where the topics about future thinking, spatial equality and masterplanning were presented by the JUSThood team.

Community leaders participated in such a workshop for the first time. In the beginning, they did not see the value in discovering residents' desires and visions for the neighbourhood, as they were too focused on solving specific existing problems in the area. However, by the end of the conversation, all participants expressed interest in learning more about different users in the neighbourhoods.

4.2. Phase 2: Participatory workshops with residents

Neighbourhood 1: Murcki

Neighbourhood profile

Murcki is located in the south of Katowice. The workshop was conducted on September 9th, 2022 in the local public library with ten participants formed into one group (Figure 7). It was the first participatory event residents ever had in the neighbourhood.



Figure 7. Participatory workshop in Murcki neighbourhood. Source: Authors

Participatory workshop

The workshop started with the workshop #1 and question “What would you like to improve in your neighbourhood?”. As it was their first participatory meeting, they discussed a lot of ideas for improvement based on the problems they have (installing more benches, trash bins, public toilets, bike lanes, and a senior club).

Then, the workshop #2 and the JUSThood methodology were introduced, and it was fully facilitated by the mentor, where first what-if questions, persona and urban design element cards were introduced to develop more specific ideas in comparison to workshop#1. They also used more qualitative descriptions for the ideas (e.g. clean, polite people, quiet and hidden places), unlike in the workshop #1.

Summary

Throughout both workshops, participants did not engage with the map, and they struggled to map their ideas. In one situation, the map helped to agree on the location for an intervention, as initially one of the participants suggested the wrong location. Persona cards gave an opportunity to the participants, who were mostly senior people, to think about a different persona (young mother) and imagine her needs, unlike the workshop #1.

Neighbourhood 2: Koszutka

Neighbourhood profile

Koszutka is a centrally-located neighbourhood in Katowice. The workshop was conducted on September 10th, 2022 in Kino Kosmos with nine participants divided into three groups (Figure 8).



Figure 8. Participatory workshop in Koszutka neighbourhood. Source: Authors

Participatory workshop

The workshop started immediately with the workshop #2 to test its implementation without prior preparation. Each group received 2 what-if questions, 1 bonus question and a set of urban design cards. For each what-if question, they could choose human and non-human personae. After the facilitator explained the rules, participants began the process by themselves. Groups have developed concrete ideas for different users based on their knowledge of the neighbourhood, such as playgrounds with specific natural elements, adaptable urban furniture, routes for scooters, rain gardens, etc. Moreover, they were able to identify specific locations for the ideas on the map.

Summary

Even though Koszutka residents had participatory meetings before, it was the first time they worked with the master plan. Previously, they proposed solutions to fix infrastructure in the neighbourhood (put more benches, fix the trash bin), but never looked holistically at the neighbourhood. Throughout the workshop, all groups worked with maps by drawing, sketching and writing ideas on post-its and paper. Personas helped to imagine the needs of different users, as one participant (a 25-year old guy) said, "I have never imagined how it is to be a pregnant woman in the city. I was quite surprised by this method and would like to think about different users more". Besides, only one group extensively used the urban design cards, other two groups referred to them very little.

Neighbourhood 3: Dąbrówka Mała

Neighbourhood profile

Dąbrówka Mała is a neighbourhood located in the north-east of Katowice. Residents have never had any participatory meetings in the neighbourhood. The workshop was carried out on September 10th, 2022 in the open air during the event dedicated to the days of Katowice, and 25 people joined.



Figure 9. Participatory workshop in Dąbrówka Mała neighbourhood. Source: Authors

Participatory workshop

Master plans were placed on the tables, where residents of different age groups were stopping by, telling their ideas, and then leaving. Due to the setting, there was no opportunity to test workshop#2. Nevertheless, facilitators managed to cover each age and gender group. Adult participants were mainly involved in discussions and rarely sketched on the map, unlike kids who drew a lot. Thanks to the diversity

of participants some specific ideas were revealed, such as the need for a father's bar while looking after kids, a water park designed by a kid, or family area for picnics.

Summary

Overall, it is a rather poor neighbourhood with safety issues, which was the priority problem to be fixed by participants. The main problem identified was the lack of a central place to meet, which results in the lack of community feeling in the area. The workshop setting outdoors during the neighbourhood festival was not a suitable location to conduct the JUSThood methodology.

4.3. Results of the workshops

Reflection on master plans

It was the first time the participants in all neighbourhoods worked with the master plans, while the majority had never seen the maps of their neighbourhoods before. When the JUSThood methodology was not used, participants did not use the maps to discuss their ideas. All ideas were expressed out loud, and they did not mention or refer to any specific places where the changes could have happened. Only when the facilitator asked where exactly they would place their ideas, participants could point on the map, but still were reluctant to draw or sketch. Overall, young people and kids were more inclined to use maps for drawing.

In turn, working with the JUSThood methodology, participants have extensively used maps to develop their ideas because they followed the instructions of the methodology. As they possessed the local knowledge, they were able to identify very specific locations for various interventions.

Reflection on personas and what-if questions

Personas helped to acknowledge the existence and imagine the needs of different users. Several interventions for human and non-human beings have been developed and placed on the map, for instance, a walking path for hedgehogs living in the neighbourhood, hidden places for reading, using natural elements for playgrounds, etc. With the help of the persona cards, participants started to think about other human and non-human beings, which, otherwise, they would never think about or make wrong suggestions about them.

5. Discussion

5.1. Master plans as a medium for collaboration

During the development of the JUSThood method, the master plan became a platform for collaboration between practitioners (urban design), academics (design foresight) and the public (community leaders and neighbourhood residents) to find a common language and engage in creative ways.

During the workshop process in the neighbourhoods, the master plans served as a common ground to reach agreements between participants, discuss and map interventions for proposed ideas. With the help of methodology, participants also identified more descriptive qualities for their ideas for interventions, which is very important for developing master plans. Without it, a master plan is just another technical document without accounting for public social life for all users.

5.2. Participatory approach as a way to raise awareness

The JUSThood method demonstrated that the value of participation lies not only in developing ideas for urban design. Besides, it helped participants to (1) acknowledge the diversity of users in their neighbourhoods and develop empathy for them during discussions, (2) acquire a holistic and systemic view of their neighbourhood, (3) understand their agency in the neighbourhood and acquire the feeling of ownership, responsibility, and respect for their places.

5.3. Uncovering the users' desires and visions

City inhabitants are often very distanced from the urban design processes as it is a very professionalised domain. Thus, people rarely question what they wish to have or what they can change in urban places. Most of the time, people think of typical solutions like putting more benches, trash bins, and chess tables, because this is often what the city authorities offer. As a result, there is no thorough analysis of what is actually needed in urban places, and inhabitants do not think beyond the categories of possible. More inclusive and equitable futures can only happen when we recognize that the future for all cannot be envisioned by a few. Answering to this challenge, the JUSThood method helps to stimulate the imagination of participants and uncover the tacit knowledge to envision the physical and social layout of places.

5.4. Advocating for diverse human and non-human stakeholders

Human and non-human personas are useful to support not only urban designers, but also the public to recognise the presence and imagine the needs of different users during participatory design process. It can be an alternative to a wide-spread challenge of involving different users, especially marginalised, in participatory activities. Imagining personas' needs and preferences become visible and tangible when they are put on the map. In addition, it allows the inclusion of non-human stakeholders, whose needs it is difficult to know and capture.

6. Next steps

The next step of the JUSThood method is Phase 3 "Development of the master plan". After the master plans are developed, the installation and exhibition will take place in Katowice in October 2022, where the residents, municipalities and media will be invited. Having master plans installed in three neighbourhoods would allow residents to have easy access to them, comment and discuss existing or new ideas at any time.

At the same, the JUSThood package will be created including the training format and the workshop methodology. In order to have a bigger impact and promote spatial equity in urban design, the JUSThood method is planned to be widely distributed.

7. Acknowledgements

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8. References

- Addis Ababa Urban Age Task Force. (2022) 'Participatory City Making: Polycentric governance and human-centred, inclusive urban design'. *Technical Report of Addis Ababa Urban Age Task Force*. [online]. Available at: <<https://urbanagetaskforce.net/media/pages/addisababa/publications/4-1-participatory-city-making/2664203bea-1657792330/4.1-participatory-city-making.pdf>> (Accessed: 14 September 2022).
- Buhring, J. (2017). 'Design-inspired Foresight: Strategic foresight techniques for preferable futures'. *Design Management Academy Conference*. Hong Kong: The Hong Kong Polytechnic University. Available at: <<http://doi: 10.21606/dma.2017.48>> (Accessed 14 September 2022).
- Dunne, A. and Raby F. (2014) *Speculative Everything: Design, Fiction, and Social Dreaming*. Cambridge, MA: MIT Press
- Huang C., Cantada I. (2019) Challenges to implementing urban master plans – what are we missing?, World Bank Blogs, February 25 [online]. Available at: <https://blogs.worldbank.org/sustainablecities/challenges-implementing-urban-master-plans-what-are-we-missing>
- Keeton, R., Mota, N., & Tan, E. (2020) Participatory Workshops as a Tool for Building Inclusivity in New Towns in Africa. *Research in Urbanism Series*, 6, pp.281–300.
- Mountford, A.V., and Christensen, B. (2022) Two approaches to foresight-driven design, in *Lockton, D., Lenzi, S., Hekkert, P., Oak, A., Sádaba, J., Lloyd, P. (eds.)*, DRS2022: Bilbao, 25 June - 3 July, Bilbao, Spain.
- Myrick P. (2021) 'The Trouble with Master Plans', *Empty Square Journal*, 23 February [online]. Available at: <https://www.theemptysquare.org/editorial/the-trouble-with-master-plans>
- Ramos, J., Sweeney, J. A., Peach, K., & Smith, L. (2019) 'Our futures: by the people, for the people'. https://media.nesta.org.uk/documents/Our_futures_by_the_people_for_the_people_WEB_v5.pdf
- Rice, L. (2017) 'Nonhumans in participatory design'. *CoDesign*, 14(3), pp.238-257.
- Sassen, S. (2015) 'Built Gendering', *Harvard Design Magazine (Family Planning No.41)* [online]. Available at: <https://www.harvarddesignmagazine.org/issues/41/built-gendering>
- Siddall, E., Baibarac, C., Byrne, A., Byrne, N., Deasy, A., Flood, N., Goulding, C., O'Driscoll, S., Rabbitt, N., Sweeney, A., Wang, Y. and Dyer, M. (2011) Personas as a user-centred design tool for the built environment. *Proceedings of the Institution of Civil Engineers - Engineering Sustainability*, 164(1), pp.59-69.