

# Beyond the Blind Spot: Enhancing Polyphony Through City Planning Activism Using Public Participation GIS

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**Submitted:** 29 April 2023 **Accepted:** 22 September 2023 **Published:** 16 January 2024

**Issue:** This article is part of the issue “Citizen Participation, Digital Agency, and Urban Development” edited by Simone Tappert (University of Applied Sciences Northwestern Switzerland), Asma Mehan (Texas Tech University), Pekka Tuominen (University of Helsinki), and Zsuzsanna Varga (University of Glasgow), fully open access at <https://doi.org/10.17645/up.i327>

## Abstract

A key advantage of public participation GIS (PPGIS) tools has been seen as increasing the polyphony of urban planning by reaching the wisdom of crowds. However, the challenge is to enable participation for those who do not have the skills or resources. This article describes participatory action research where the authors of the article collaborated with a local city planning activist at the Kontula Mall, Helsinki (Finland) to improve the participation of a group marginalized from the renewal process (i.e., immigrant entrepreneurs) using a PPGIS tool (Maptionnaire). The case study provided insights into the potential for city planning activism to bring out marginalized groups' perspectives and use PPGIS. Moreover, the research also revealed barriers to polyphony in current planning practices. Nevertheless, planning activism can enable the participation of the marginalized by coming into contact with them, providing them with information, and bringing their perspectives to the collaboration. The PPGIS tool can serve as a platform to collect participatory data through different response modes. Local activism can also facilitate the questionnaire's co-design, testing, and marketing. Therefore, a bottom-up approach can be a way to improve the impact of PPGIS and enhance polyphony in urban planning.

## Keywords

bottom-up participation; city planning activism; expanded urban planning; Finland; immigrant entrepreneurs; polyphonic urban planning; PPGIS; public participation

## 1. Introduction

Cultural diversity challenges participatory urban planning as increasingly diverse social and cultural needs and participants with varying abilities and resources accumulate in the same place. Urban planning practices must evolve to meet these needs (e.g., Sandercock, 2003). Therefore, polyphonic planning is required to engage diverse participants (Antadze, 2018) and compose plans that reflect different perspectives (Ameel et al., 2023; Chung & Zhou, 2011; A. Wallin et al., 2018). This article discusses the potential of city planning activism to increase polyphony in urban planning using a public participation GIS (PPGIS) tool (Maptionnaire). We present a case study employing participatory action research in Kontula Mall, an open-air shopping center in a multicultural suburb in East Helsinki, Finland. We worked with a local urban planning activist as bridge-builders between urban planning and immigrant entrepreneurs, who are essential actors in the mall but underrepresented in the ongoing renewal process. We ask: Can planning activism increase polyphony in urban planning by using the PPGIS tool to communicate information between marginalized participants and planners? This is explored through two focused research questions: To what degree were we able to respond to the user needs of immigrant entrepreneurs and planners with the bottom-up PPGIS questionnaire? What kind of participatory data were we able to produce from the perspective of polyphony? Finally, we present our recommendations for the interaction between immigrant entrepreneurs and urban planning, considering what role city planning activism and the PPGIS questionnaire can play.

In this research, we identify a normative objective to improve the participation of immigrant entrepreneurs in planning outside the statutory planning process. However, our research is also pragmatic, as we wanted to find ways in which self-organization can contribute to collecting participatory data. As our research relates to planning that takes place outside the statutory planning process but affects it, we use the concept of expanded urban planning as a framework for our research (Staffans & Horelli, 2014; S. Wallin, 2019). Expanded urban planning recognizes that planning processes are not linear and rational but increasingly complex and influenced by different partnerships and local networks (S. Wallin, 2019, pp. 9–12). The city is identified as one actor alongside others, extending the demand for participation beyond administrative boundaries (S. Wallin, 2019). Participation in expanded urban planning includes self-organization and involvement in one's living environment through everyday practices, not only participation in formal planning processes.

### 1.1. Public Participation and Polyphonic Planning

In Finland, the right to participate in urban planning has been legislated since the 1950s (Vuorela, 1991). Legislation on land use and building supports administrative participation (Ministry of Justice, 1999), but the legislation guiding the activities of municipalities also includes the idea of self-organized participation (Ministry of Finance, 2015). Although more interactive planning practices have been developed throughout the 2000s (e.g., Nummi, 2020), recent studies still highlight the inability of administration-led planning to reach and reflect diverse voices. It seems that contemporary methods support the participation of active and highly educated people with good digital and language skills (Hewidy, 2022; Sjöblom & Niitamo, 2020). Moreover, planning processes produce information that is not necessarily useful or understandable to participants (Leino et al., 2018), and participatory information is scattered in different forms and used vaguely (Harsia & Nummi, 2022; Kahila-Tani, 2015; A. Wallin et al., 2018). Despite the extensive participation, the plans often remain abstractions, failing to consider the conflicting meanings attached to places or to offer alternatives (A. Wallin et al., 2018).

As polyphony refers to the co-presence of multiple equal voices that do not merge but inform and shape each other (Bakhtin & Booth, 1984), planning processes should bring different perspectives into dialogue (Antadze, 2018). Consequently, understanding the needs of minorities and marginalized actors for participation is one of the prerequisites for polyphonic planning (A. Wallin et al., 2018). New types of actors and approaches are required to ensure that those who do not want to participate or have different ways of expressing themselves (e.g., storytelling or public art) are considered (Ferilli et al., 2016). For example, mediators could communicate diverse information needs from participants to planners, between different planning actors, and transmit planning information to participants (Leino et al., 2018).

Additionally, planning documents should better reflect the different, even conflicting, perspectives (Ameel et al., 2023; Chung & Zhou, 2011; Shearer & Xiang, 2009). Therefore, polyphonic planning calls for new ways of producing plans and reflecting diverse perspectives, which poses a challenge for those organizing participation. Planning requires methods that generate broad, polyphonic participatory information, following the demand for small-scale, face-to-face participation for planners to interpret participatory data and develop planning solutions. In the context of planning support systems and digital participation, Staffans et al. (2020) have argued for the essential of context-sensitive planning processes that combine participation, generating broad heterogeneous information, and collaborative planning in small groups with representation of selected perspectives and the ability to develop planning solutions based on participatory input.

## **1.2. Participation of Immigrant Entrepreneurs**

Research on the participation of immigrant entrepreneurs in urban planning is limited. Nevertheless, immigrants develop their living environments through entrepreneurship (Sandercock, 2003). Therefore, urban planning can have a crucial impact on them and the characteristics of their neighborhoods. However, they are often not considered (Sezer, 2018; Zhuang, 2013). Recent studies in Finland suggest that immigrant communities are not consulted in developing ethnic business clusters (Hewidy, 2022). Hence, immigrant entrepreneurship is described as a blind spot in Finnish urban planning, requiring new approaches, for example, to participation (Hewidy, 2022; Hewidy & Lilius, 2022).

Planners require more tailored methods to understand the needs of immigrant entrepreneurs (Schmiz & Hernandez, 2019) as well as new skills and qualities when working in multicultural environments (Sandercock, 2003; Zhuang, 2013). Institutional urban planning should expand its partnerships with local actors and adopt more bottom-up approaches (Salgado & Galanakis, 2014; Sandercock, 2003).

Studies on participation in urban nature (Leikkilä et al., 2013) and people-centered planning (Salgado & Galanakis, 2014) have found that immigrants are interested in participating. However, the accessibility of methods and the impact of participation are problematic (Hewidy, 2022; Salgado & Galanakis, 2014). For example, participation methods must allow self-expression despite the language barrier (Leikkilä et al., 2013). Linguistic and cultural interpreters representing the participant's culture can lower the threshold for participation (Rinkinen, 2004), whereas surveys are considered unsuitable except for highly educated immigrants (Leikkilä et al., 2013; Rinkinen, 2004).

Additionally, immigrants are often unaware of their civil rights, such as participation (Leikkilä et al., 2013; Listerborn, 2007). More recently, information on financial support measures during the Covid-19 pandemic

revealed that immigrant entrepreneurs do not receive the necessary information from society. To reach them, they must be given comprehensible information delivered through informal networks (Tuominen & Kantola, 2022). Similarly, in urban planning, studies highlight the importance of reaching out to immigrants to improve the accessibility of participation while acknowledging the difficulty of cross-cultural dialogue (Leikkilä et al., 2013).

### **1.3. Self-Organization and Public Participation GIS Questionnaires**

PPGIS refers to digital map-based tools and methods enabling citizens to participate in the production of place-based information (e.g., development ideas, opinions, experiential information). Mainly, PPGIS tools are studied and developed in the context of land use planning and management (Brown & Kyttä, 2014; Kahila-Tani, 2015). Encouraging wider audiences to participate and, thus, achieving more democratic decisions by engaging the wisdom of crowds is seen as one key benefit of PPGIS (Brown, 2015). In parallel, there is the aim to empower and involve disadvantaged groups in developing their living environment (Ghose, 2018). Consequently, PPGIS is seen as an enabler for polyphonic planning as it allows the collection of numerous perspectives (Ameel et al., 2023). PPGIS is primarily applied in administrative urban planning in expert-led data collection. However, challenges remain in using the methodology in different planning stages, formulating questions, and analyzing the results (Kahila-Tani, 2015). While there are advantages to adopting a bottom-up approach to gathering local knowledge, especially from marginalized groups (Ghose, 2018), the number of self-organized examples of the use of PPGIS tools remains scarce.

Outside academic research, there are examples of PPGIS tools being employed outside institutional urban planning in spontaneous citizen-driven participation. In Finland, the Urban Helsinki group has carried out a map survey to prepare an alternative plan for the Helsinki Master Plan (Mäenpää & Faehnle, 2021). At a more detailed planning level, in the Helsinki railway station development process, the activists created an alternative plan using Maptionnaire to map the users' views of the area. Nonetheless, these self-organized processes are becoming more common and their integration into urban planning practices is a topical challenge (Mäenpää & Faehnle, 2021; Nummi, 2020). Technology is seen as one enabler of self-organizing participation (Rantanen & Faehnle, 2017), while actors' ability to network is essential for the effectiveness of bottom-up PPGIS questionnaires (Ghose, 2018).

PPGIS accessibility (e.g., access to software or skills to use technology) can be promoted by combining digital and face-to-face methods and creating alternative mapping methods (Ghose, 2018). Planners often prefer open online questionnaires instead of sampling due to cost-effectiveness and their desire to offer an opportunity for all to participate (Czepkiewicz et al., 2017; Kahila-Tani, 2015). However, targeted PPGIS questionnaires (e.g., usability of the tool, design, and marketing) enable them to address the different characteristics of participants (such as age, language skills, and cultural backgrounds; see, e.g., Bartling et al., 2021; Gottwald et al., 2016), and thus increase the participation of hard-to-reach groups such as immigrants (Ministry of the Environment, 2020). Practical examples exist of targeted questionnaires for under-represented groups alongside open surveys or random sampling. For example, in Espoo (Finland), alongside an open PPGIS questionnaire, a questionnaire was designed for children with age-appropriate questions and distributed through schools to ensure that it reached the target group comprehensively and that children had access to support when responding (City of Espoo, 2021).

## 2. Urban Development and Immigrant Entrepreneurship at Kontula Mall

Kontula is a suburb of about 15,000 inhabitants in East Helsinki, built in the 1960s. Since the 1990s, as immigration has increased, Kontula has become one of the most multicultural areas in Finland. Today, 35% of the residents are of immigrant background. In Kontula, the accumulation of inequalities is a challenge, which has, however, led to the development of a robust grassroots democracy (Kuittinen et al., 2011). In 2009, a collaborative group (Vetoa ja Voimaa Mellunkylään, “Attractive and Empowered Mellunkylä”) was established, bringing together local activists and organizations, city officials and decision-makers, and entrepreneurs to tackle local challenges. The group has successfully reached people involved in traditional civic activities and social services, but a lack of representativeness has been identified (e.g., for immigrants; Kuittinen et al., 2011).

The commercial and public services of Kontula are mainly located at the mall (Figure 1), one of Helsinki’s clusters of ethnic retail (Hewidy & Lilius, 2022). Nearly half of the about 80 entrepreneurs are of immigrant background. The City of Helsinki owns the land and has leased it to four real estate companies that own the mall buildings. The city owns two of these companies. The other two are mostly owned by real estate development and wholesale trading companies, although the small business owners who own their premises hold around 30% of the ownership (Colliers International, 2018).



Figure 1. The Kontula Mall.

Several urban planning projects have been undertaken at the mall, such as (since 2009) the local detailed planning and the planning principles for the densification of Kontula (City of Helsinki, 2020a). In 2019, the city granted a development reservation to the four mall companies, as it proved too challenging to prepare a feasible detailed plan (City of Helsinki, 2019a). A development reservation is a procedure whereby the city reserves a site it owns for two years for a private partner to prepare a plan, on which a local detailed plan is prepared (City of Helsinki, 2019b). The case of Kontula Mall is a good representation of the complex planning processes that S. Wallin (2019) describes. The feasibility (e.g., technical challenges) of the local detailed plan led

to the stalling of the detailed planning process and a partnership with the mall companies. Thus, the planning process does not follow the linear and straightforward models describing the planning processes (e.g., City of Helsinki, 2019b).

The mall companies organized an architectural competition in 2020. According to the competition program, the floor area of the mall is multiplied by 2.5, adding 70,000 m<sup>2</sup> of housing (SAFA, 2020b). The city of Helsinki was involved in the jury, provided initial data, and organized participation, i.e., a sparring group and online commenting on the proposals (City of Helsinki, 2020b; SAFA, 2020a, 2020b). However, the competition arrangements did not meet the needs of different participants, and participation remained superficial (Hewidy, 2022). The city's use of power to allow the mall companies a "free hand" to define the objectives of competition and bypass the needs of immigrant entrepreneurs both in participation (e.g., language) and planning (e.g., evaluation criteria, the expertise of the jury) are questioned (Hewidy, 2022).

Furthermore, a local architect and urban planning activist recognized how difficult it was to comment on proposals online. She organized a workshop for locals at the Kontula Library. However, only a few immigrants showed up, which made her wonder about the barriers to participation, especially for immigrant entrepreneurs. The participation gap found through her activism is the practical challenge that we, as researchers, set out to solve with her.

### 3. Methodology

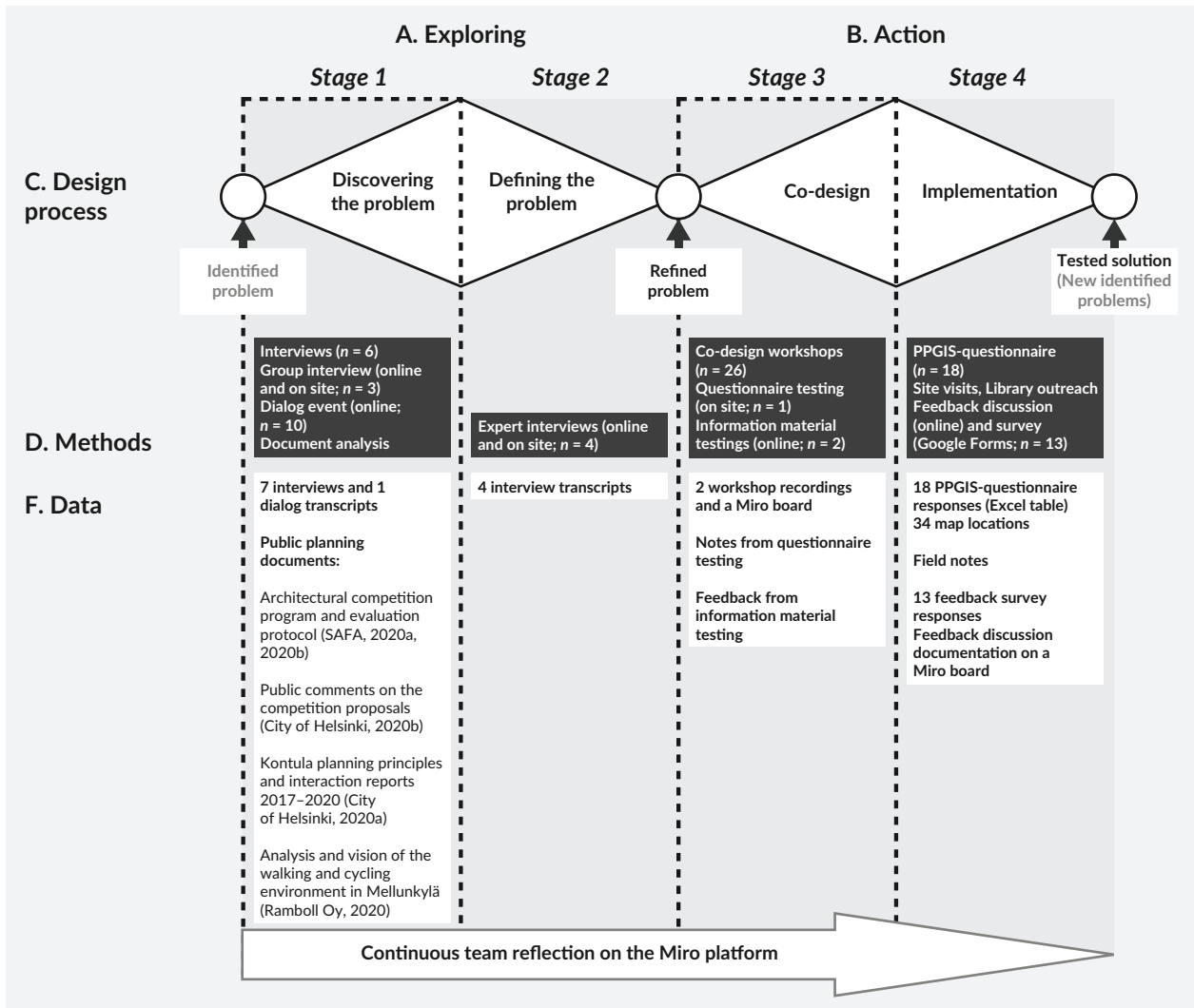
Our research represents participatory action research, which aims to simultaneously generate knowledge about social systems and develop solutions to any identified problems with those concerned (Elden & Chisholm, 1993). Our team of researchers and a city planning activist first explored (Figure 2A) the challenges of participation from the perspective of urban planning and immigrant entrepreneurs, in response to which a PPGIS questionnaire was co-designed and implemented (Figure 2B). Additionally, the planners and immigrant entrepreneurs participated in generating both knowledge and solutions.

As the project was part of a program employing design thinking (The Finnish Innovation Fund Sitra, 2021), the action research process took the form of a double-diamond process (Figure 2C). As with design thinking, action research combines problem inquiry and solving in a cyclical learning process. In addition, action research provides an understanding of a scientific problem (Elden & Chisholm, 1993). Consequently, the results of the research comprise both the practical and scientific findings, as well as the process itself. Typical of action research, we used mixed methods to collect and analyze the data (D in Figure 2; Ivankova, 2015).

#### 3.1. A Planning Activism-Driven Process for Co-Creating a Public Participation GIS Questionnaire

First (Figure 2, Stage 1), we explored the planning and participation in Kontula through interviews and a dialog event. The interviewees and dialog event participants represented different sectors of the city (urban planning, business, communication, and culture), research related to Kontula and immigrant entrepreneurship, and local activism. Additionally, we analyzed planning and other public documents highlighted by interviewees as essential for interaction in Kontula. In the second stage (Figure 2, Stage 2), we took a closer look at the problem through expert interviews covering immigrant entrepreneurship, property development, immigrant integration, and multilingual PPGIS questionnaires. The interviews and the dialog

were conducted and recorded remotely (via Meet, Zoom, and Teams) or on-site at Kontula Mall in spring–autumn 2021 and, after that, transcribed.



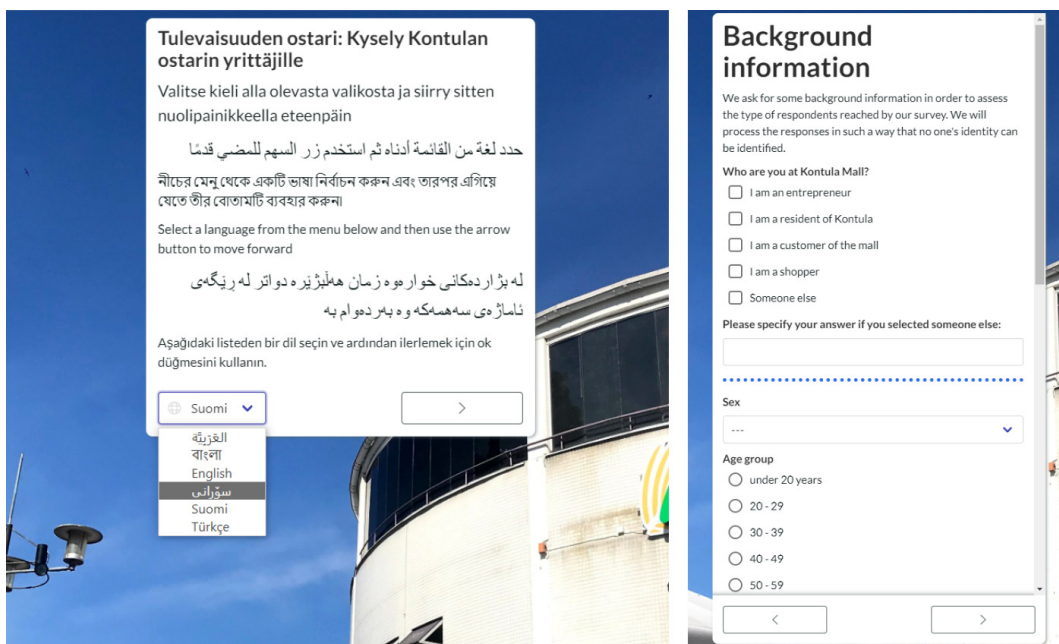
**Figure 2.** Research process and data collection. The research process consists of exploring (A) and solving (B) the problem in four stages that diverge and converge information. We used mixed methods (D) to collect the data (F).

In autumn 2021, we moved from exploring the problem to solving it through action, i.e., co-designing participation methods (Figure 2, Stage 3). We organized two bilingual (Finnish and English) workshops with experts from different city sectors, local activists, and researchers. The Covid-19 pandemic impacted the action phase, as we had to organize the workshops remotely and could not arrange large gatherings. The PPGIS questionnaire was designed based on the workshop findings and a testing session with one immigrant entrepreneur. We have published a separate conference paper on the development of the questionnaire (Nummi & Harsia, 2022).

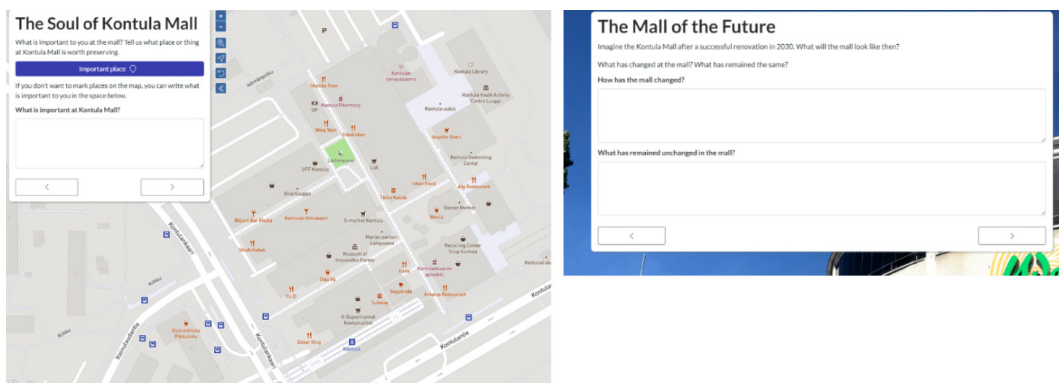
For the choice of questionnaire languages, Turkish, Arabic, and (easy) Finnish were selected through co-design workshops, and Bengali through questionnaire testing. Later, we added English for the Bengali

interpreter and Kurdish (Sorani) at the request of the participating entrepreneurs. In addition, we tested the information material designed for entrepreneurs with two people from immigrant backgrounds. Having tested the questionnaire, we developed a method for assisted answering, as it was easier for the entrepreneur to respond when we recorded the answers.

The different answering modes, i.e., independent and assisted, were considered when designing the questionnaire's layout, structure, and content. The final structure (Figures 3–5) included seven pages: language selection, information on the research, background questions, a map question about important places in the mall, open questions about the future of the mall, feedback, and the map answers of other respondents.

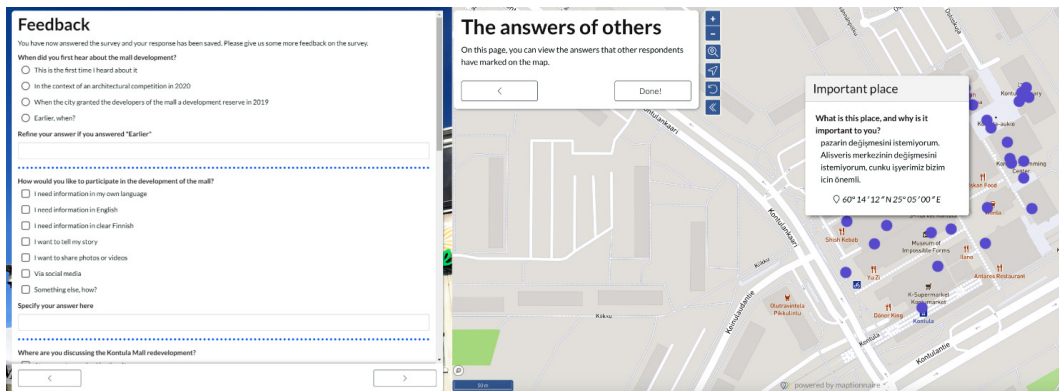


**Figure 3.** Questionnaire pages 1 and 3. First, the respondent chose the questionnaire language. The following pages provided information about our study and asked respondents for background information (role in Kontula, gender, age, mother tongue, other languages, and the possibility of talking about themselves).



**Figure 4.** Questionnaire pages 4 and 5. A map question asked about the important locations of the current mall. Needs and wishes for the future mall were asked in open questions.

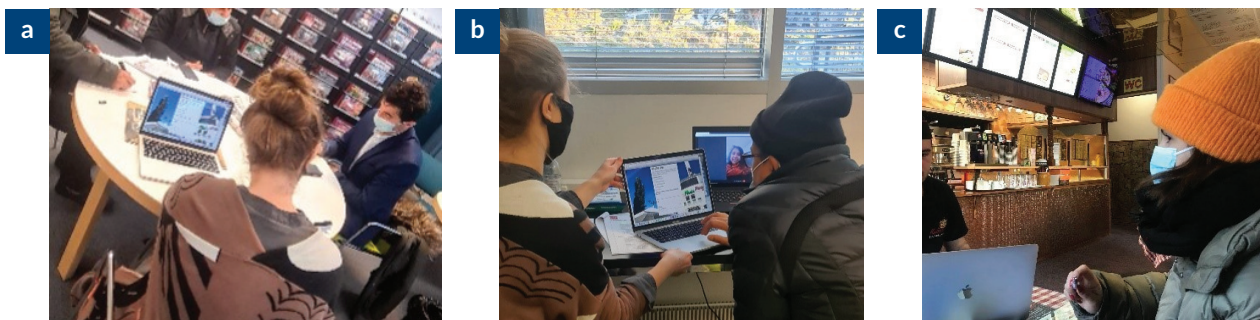




**Figure 5.** Questionnaire pages 6 and 7. We asked for feedback on the questionnaire, respondents' previous participation in the planning of the mall, and how respondents would like to participate in the future. Finally, the respondents could see how others had answered the map question.

At the end of 2021, we implemented the participation (Figure 2, Stage 4) with the mall entrepreneurs. We shared the link to the PPGIS questionnaire and instructions on answering it via a flyer in five languages (Arabic, Bengali, easy Finnish, English, and Turkish) given to all entrepreneurs. We organized a consultation at the library, visited businesses three times with three different interpreters (Turkish, Arabic/Kurdish, and Bengali), and distributed information about planning as a leaflet in five languages (Arabic, Bengali, easy Finnish, English, and Turkish).

Altogether, 18 people responded to the questionnaire. Most entrepreneurs participated through assisted answering at their business premises ( $n = 7$ ; Figure 6c) or the library ( $n = 4$ ; Figures 6a and b). There were also independent responses ( $n = 7$ ), two of which were from immigrant entrepreneurs. At its lightest, the assisted response was an instruction via an interpreter on using the questionnaire tool (Figure 6c). At its most advanced, it was a situation like an interview, where the questionnaire served as an interview framework for documenting responses (Figure 6a).



**Figure 6.** Examples of assisted responses: (a) Writing down interview notes in the questionnaire with the assistance of an interpreter in the library, (b) using a (remote) interpreter and researcher in the library, and (c) using an interpreter in a shop.

The participating entrepreneurs represented various branches (e.g., grocery, restaurant, hairdresser, warehouse). Respondents were mainly men (70%) aged 20–60 from eight language groups. Bengali and Kurdish were the most common native languages. In contrast, Turkish, Finnish, and Bengali were the most used questionnaire languages since not all respondents chose their native language, even if it had been made available.



the results are not based on single findings but are formed from several different perspectives and aspects that emerged at different stages of the process.

## 4. Results

### 4.1. *Understanding and Addressing the User Needs for Participation*

#### 4.1.1. New Approaches and Resources

In the interviews, city representatives called for new approaches to participation based on local activism and recognized that the current processes are insufficient. One city representative described current participation practices as follows:

The city's systems are built for middle-class, well-off people who know how to use the internet, understand where to look for information, want to make a difference and understand how society works. However, many people do not even know that this [public participation] exists.

The local activists who participated in the dialogue and workshops pointed out that in their activities, they encounter different actors, including immigrant entrepreneurs, in the mall daily. The city's services, such as the library, also interact with entrepreneurs. However, planners perceive that involving immigrants in planning is complicated, and encountering them requires more time and resources than they have.

Based on the feedback session, the planners also considered the co-designed methods too resource-intensive. Some of the planners preferred the data to be in GIS form, while others in the form of analyzed summaries. However, they did not have a clear idea of how this information could be used in the planning led by the mall companies.

#### 4.1.2. Accessible Methods

The questionnaire results indicate that many entrepreneurs would have liked to participate in the planning process but were not able to do so. Based on the interviews, workshops, and our questionnaire results, from immigrant entrepreneurs' perspectives, the participation culture in Finland could be more attractive, and the benefits of participation should be more apparent. Often, events are difficult to fit into their schedules or are not culturally appropriate (e.g., religious restrictions such as holy days, as is the case of Fridays for Muslims, or encountering different genders). Also, language skills, lack of networks, or knowledge of the right to participate distinguish them from native Finnish entrepreneurs. Nevertheless, as interviews and our questionnaire results demonstrated, immigrant entrepreneurs are diverse in their background (e.g., education) and skills (e.g., digital and language skills).

For most entrepreneurs who responded, the PPGIS questionnaire was the first real opportunity to participate. The assisted response option made it easy to answer even the map questions, which the city planners considered too demanding. According to one interpreter, the assisted response situation was natural for the respondents since some languages are difficult to write in, and the entrepreneurs expressed their gratitude for the opportunity to have had assistance in giving their response. Most respondents used

the opportunity to share their thoughts in their language, although half reported that they spoke Finnish. Some of the entrepreneurs wished for an opportunity for a dialogue with each other about the mall's development, while others said they discussed the development among themselves in the mall.

All participants reported that answering the questionnaire was easy regardless of the response mode. The multiple-choice questions proved easy to answer, but the opportunity to give their views in their own words was essential for them. Respondents found the language in the questionnaire understandable and the questions well designed.

#### 4.1.3. Understandable and Relevant Information

Both interview and questionnaire results suggest that immigrant entrepreneurs require understandable information about plans, their right to participate in the planning process, the timetable for implementing the plans, and the impact on using the premises. The mall companies had informed some entrepreneurs, but the questionnaire results revealed a lack of understandable information that meets their information and language needs. A third of the PPGIS respondents had never heard of the plans for the mall before. However, the interviews revealed that access to up-to-date information on planning is also tricky for urban planners because of the development reservation. From the planners' perspective, informing entrepreneurs is the responsibility of the mall companies, and participation is not required. The legal obligation for participation does not apply to the companies holding the planning reservation since the planning they carry out is not considered part of the statutory planning process.

The questionnaire and information leaflet could not transmit the information that entrepreneurs required because when designing the questionnaire, we did not have a sufficient understanding of the information needs (e.g., development allowances) and because we did not have access to the information needed by the entrepreneurs (e.g., development schedule). In turn, the questionnaire succeeded in identifying the information requirements of entrepreneurs and revealed communication gaps between the mall companies and the entrepreneurs.

Additionally, we learned that easy Finnish was insufficient to convey complex planning information. Translations and interpreters were necessary to make the planning information comprehensible.

#### 4.1.4. Trust and the Influence of Participation

The interviews, the dialogue event, and the workshops highlighted the importance of trust. All interviewees working with immigrant entrepreneurs stressed that reaching out requires, from the participant's point of view, trustworthy intermediaries who can communicate with them and be understood. Besides us, the interpreters who assisted the entrepreneurs in answering the questionnaire acted as trusted mediators.

Based on co-design workshops and implementing the questionnaire, trust is built through concrete actions demonstrating that the participant's views are taken seriously, and that participation influences the planning process, planning documents, and other outcomes. As the mall companies chose not to participate in our research, we could not guarantee the impact of the PPGIS results on planning. However, we promised to pass the information on to the city and local decision-makers. We also tried to respond to the participants'

needs that emerged during the participation, for example, by adding another language to the questionnaire or searching for the information they required.

The influence of participation is related to problems in interpreting participatory data and the city's role in the development process. An entrepreneur who had already participated in the competition stage and local activists in the interviews pointed out that participation has not influenced the content of the plans as the interpretation of participatory data is superficial. Furthermore, some interviewees stated that multiculturalism is an alien concept to planners and, therefore, is not reflected in planning solutions. The city representatives were also disappointed with the interpretation of multiculturalism in the competition proposals, yet from their point of view, the influence of the participation depends on the mall companies. Nevertheless, as existing research suggests (Hewidy, 2022), the workshops reinforce that the city could have affected the planning objectives and the competition evaluation criteria. However, the preconditions for immigrant entrepreneurship were not included.

The results indicate a demand for more transparent collaboration from the mall companies. Even the active locals require a clearer description to help them understand the ambiguous planning process and are concerned about the position of the disadvantaged. The questionnaire results also indicate mistrust towards the real estate companies, created by a feeling that information is being withheld.

#### **4.2. Polyphonic Participatory Information**

Based on the interviews and interaction documents, there is a requirement for more polyphonic participatory data for planning. From the city's perspective, the debate on mall development has boiled down to demolition versus preservation. According to local activists, those in between dare not participate in the public discussion, and only a couple of immigrant entrepreneurs, specifically bar owners, do so. The same entrepreneurs participated in the architectural competition phase. In the interviews, local actors estimated that mainly the members of the collaboration group and their acquaintances participated in the sparring group and commented on the competition entries. Immigrant entrepreneurs' voices seem to be missing, especially from the broader participation (e.g., online participation; City of Helsinki, 2020b) or official opinions (City of Helsinki, 2020a). However, assessing the participants' roles at the mall based on available data is difficult due to the lack of background information on them. Furthermore, apart from comments on the results of the architectural competition, participatory information is only available in the form of summaries. Thus, the diversity of opinions is not visible.

The workshops revealed barriers in current planning practices to produce participatory data with participants' background information. Firstly, targeting participation for immigrant entrepreneurs can, according to the city representatives, distort the participatory data, and the entrepreneurs' perspectives may be at odds with the other groups, such as children. They argued, for example, that the bar owners may not see excessive substance abuse at the mall as a problem. Another barrier concerns the strict European General Data Protection Regulation interpretation. The city representatives hesitate to ask for detailed background information and think that background information should only be asked in strictly critical situations because of the General Data Protection Regulation. However, other workshop participants pointed out that it is worth asking about qualities related to entrepreneurship and people's relationship with the place, as these indicate their commitment to the place.

The questionnaire revealed that entrepreneurs have diverse opinions on the development. These opinions were influenced, for example, by their future intentions. Therefore, the most relevant question is not whether to demolish or preserve the old mall but whether the entrepreneurs will be able to continue operating after the renewal.

Almost all respondents marked their own business as an important place in the mall on the map, and they also wanted to write about its history and customers. Regardless, there are different perspectives between the extremes of a complete transformation of the mall and the preservation of the present. For example, most of those who wanted change wanted the opportunity to continue or expand their businesses in the area. On the other hand, those who were against the renewal also saw opportunities in it. For instance, this entrepreneur did not want change but also saw it as an opportunity to develop their business if the premises met their needs: “Opportunities for diverse businesses. More opportunities to open new businesses. I need a large commercial space, 400 m<sup>2</sup> for a company selling oriental food and clothing and at least 50–100 m<sup>2</sup> for a car wash company. Preferably a larger space.”

Entrepreneurs with different views on development shared the desire for a cleaner and safer mall and the maintenance of public services. Both bar and other business owners hoped for a reduction in people’s use of intoxicants in the street. Some saw the development of services as a solution, while others would reduce the number of bars or substance abuse services in the area. The preservation of public services also united respondents. Respondents with different attitudes toward the renewal marked the library, the health center, and the swimming pool as important places on the map.

The location of the mall or own shop there was considered advantageous for business and customer accessibility. There were requests for the new development in terms of the characteristics of the commercial space (e.g., the possibility to use charcoal grills, size, and floorplans of premises) and the locating of the business premises (e.g., in relation to housing or clustering similar types of businesses). Most often, the fears underlying the mall renewal were related to the loss of income, suitable premises, and investments.

The attitude of immigrant entrepreneurs towards the development of the mall does not seem to differ from the opinions of other participants if comparing the results of our questionnaire with, for example, the online comments of the architectural competition (City of Helsinki, 2020b). Nevertheless, our data reveals more detailed information on the entrepreneurs’ needs and, therefore, a different perspective on the mall’s development. Whereas many of the competition commentators would like immigrant entrepreneurs to remain in the area after the development, our data provide information on, for example, what kind of planning solutions are preferable to enable the entrepreneurs to continue their activities after the renewal or what kind of impact the development might have on them.

## 5. Discussion

Our research revealed barriers to polyphonic planning and the conditions for reducing them. The results align with previous studies showing that immigrants want to participate but need information about their rights and accessible participation opportunities (e.g., Listerborn, 2007; Salgado & Galanakis, 2014). Furthermore, the results suggest that participatory planning requires accessible and targeted methods. In this case, designing the PPGIS questionnaire by exploring user needs through interviews and co-design workshops helped to

understand the needs of planners and the barriers to interaction for immigrant entrepreneurs. The needs of immigrant entrepreneurs regarding ways to respond to the questionnaire and the questions' wording were discovered when testing the questionnaire in practice.

Our study reinforces that targeting questionnaires to hard-to-reach stakeholders is worthwhile (e.g., Gottwald et al., 2016; Ministry of the Environment, 2020). In contrast to existing studies (e.g., Leikkilä et al., 2013), our case showed that surveys can effectively engage different types of immigrants if combined with methods that increase accessibility, for example, field visits, interpretation, and assistance. We agree with previous research (Ghose, 2018) that particular attention must be paid to how encountering and digital methods are combined. Our research suggests that encounters are critical when participants do not have the resources, such as skills or time, to answer a questionnaire. As in communicating information (e.g., Tuominen & Kantola, 2022), when meeting immigrant entrepreneurs, reliable "bridge-builders" such as interpreters who understand the language and culture make it easier for the participants to respond. Equal language versions of the questionnaire serve independent respondents but also signal that participants have been considered and are welcome to respond.

The planners' perception of immigrant entrepreneurs' opinions and needs seems distorted by the lack of participation of different types of entrepreneurs and the need for more understanding of multiculturalism. The planning uses methods that fail to identify participants' relationship to the place and to identify whose voice needs to be added to the participatory processes. Additionally, the interpretation of participatory information is superficial, and planning outcomes do not reflect different perspectives of participants or the impacts of planning solutions on different actors.

We agree that there is a demand for both processes and plans in which different perspectives are represented, as suggested in previous studies (e.g., Ameel et al., 2023; Antadze, 2018; A. Wallin et al., 2018). The participatory data we collected shows the diversity of opinions among immigrant entrepreneurs and the difference in perspective compared to other participants. Therefore, we argue that targeted PPGIS questionnaires not only fill shortfalls in terms of the representativeness of respondents (e.g., City of Espoo, 2021) but can also enhance the diversity of the opinions in the participatory data and, thus, create the conditions for polyphonic planning.

On the other hand, planning documents should reflect the concrete needs of participants, which may conflict with each other and with the objectives of the development (A. Wallin et al., 2018; see also Ameel et al., 2023; Chung & Zhou, 2011; Shearer & Xiang, 2009). The questionnaire tool allowed us to generate a participatory dataset in which the responses are linked to the respondents' background information. Referring to the call to consider immigrants' perspectives (Hewidy, 2022), when the participant's relationship to the place and background information is known, participatory data can be relevant when setting planning objectives or evaluating plans. Thus, the impact of urban development on immigrant entrepreneurs, and consequently on the character of the place (Sezer, 2018; Zhuang, 2013), can be understood and discussed.

However, although the map questionnaire allowed participants to read other respondents' answers and showed that some respondents wished for an opportunity to discuss the topic with each other, it did not create a polyphonic dialogue between entrepreneurs (Antadze, 2018). Therefore, as in any other urban planning process (Staffans et al., 2020), the participation of marginalized participant groups should be

accompanied by collaborative methods to bring different perspectives together to form planning solutions. Nevertheless, the library outreach and the business visits revealed that finding a suitable time for the entrepreneurs to meet can be challenging. Multilingualism challenges joint discussion as communication becomes mediated with interpreters or digital translation tools. Thus, we wonder whether planning activists with a comprehensive knowledge of the needs of a marginalized group could communicate these perspectives in planning and help overcome the challenges of cross-cultural dialogue (Leikkilä et al., 2013).

Ultimately, our biggest challenge was conveying the participatory information in planning. The questionnaire was not a tool for communicating information to planners or property developers. The data in different formats required analysis and visualization, an essential step between collecting participatory data and formulating the plan (Kahila-Tani, 2015). However, we tried to do this in a way that would allow different perspectives and different preferences to emerge. On the other hand, since answering the map question was not a problem for the respondents, mainly since help to use the tool was provided, more spatial participatory data, which is useable for some planners, could have been collected from this group of participants.

Moreover, the development reservation is a barrier to the transfer of information between the participants and the planning. Thus, we agree with Ghose (2018) that the impact of a bottom-up PPGIS depends on the success of building networks, in our case, with those who have the power to define planning objectives and evaluate plans. Our research suggests that in urban development projects such as Kontula Mall, planning and participation should be expanded to include self-organization, as proposed by S. Wallin (2019). Drawing on Leino et al. (2018), self-organization, such as city planning activism, could mediate information between urban planning and marginalized participants. The city has the tools but needs the necessary resources to use them in an accessible way. On the other hand, local activists have the capabilities for outreach and the trust of local communities but not the expensive tools or the power to make planning decisions.

## 6. Conclusions and Recommendations

This article discusses using a PPGIS questionnaire as a tool for city planning activism to improve the polyphony of planning. We collaborated with a local planning activist at the Kontula Mall in Helsinki and co-designed a targeted PPGIS questionnaire, using various methods to improve the participation of immigrant entrepreneurs—a diverse group described as a blind spot in Finnish urban planning. Our research also revealed barriers to polyphony in current planning practices.

As the immigrant entrepreneurs' perspectives should be more comprehensively reflected in planning, more than the mere representation of individuals in the interaction is needed to bring out the diversity of their views. Hence, targeted but broad participatory data collection that reveals the different perspectives within the group is required. Otherwise, the perception of the group's needs, opinions, or essential features can become distorted and reduced to one-dimensional simplifications.

Therefore, we see potential in PPGIS tools for the participation of marginalized groups in urban planning. Understanding the needs of participants allows for targeting the questionnaires, for example, selecting tools and methods for participants with different skills and resources. In Kontula, using culturally sensitive and encountering methods, such as visits to businesses at appropriate times, enabled immigrant entrepreneurs to respond to the questionnaire. Assistance and interpretation compensated for the participant's lack of skills



and made participation more accessible. Furthermore, the threshold for participation was lowered because entrepreneurs were able to reflect on their responses and ask questions in their language.

Although the PPGIS questionnaire does not provide ready-made planning solutions, it can be used to bring different planning perspectives to the table for dialogue. The challenge for engaging immigrant entrepreneurs remains to enable accessible discussion situations and to consider different perspectives in the planning documents. Therefore, we recommend dialogue-based interaction situations alongside questionnaires to bring interpretations of the collected data and planning solutions for evaluation. More real-life planning cases are required to develop ways of expressing and using polyphonic participatory data in different planning phases together with planners.

For urban planning to respond to increasingly diverse needs, more polyphonic participatory information and plans that reflect these different perspectives are required. Therefore, the participation practices should expand to include self-organization, but the challenge remains to link it to administrative planning. Our study suggests that in a place like Kontula, with plenty of local activism and existing structures for collaboration, self-organization can play an essential role in enabling interaction between marginalized participants and urban planning. Planning activism can enable the participation of a marginalized group by mediating information, encountering participants, and bringing their perspectives to the collaboration. The PPGIS tool can serve as a platform to collect participatory data through different modes. Local activism can also facilitate the questionnaire's co-design, testing, and marketing. Thus, a bottom-up approach can be a way to improve the influence of PPGIS and enhance polyphony in urban planning.

### Acknowledgments

We want to thank the two anonymous reviewers and the journal editor for their constructive comments, which helped significantly improve the article. We are grateful to all those who participated in the Case Kontula Mall research project. Special thanks to the third member of our team, city planning activist and architect Anni Hapuoja from Kontula.

### Funding

The work of Eveliina Harsia has been supported by the Finnish Cultural Foundation (Grant No. 00190294). The work of Pilvi Nummi has been supported by the European Commission through the H2020 project Finest Twins (Grant No. 856602). The case is part of The Finnish Innovation Fund Sitra's Sitra Lab: Bottlenecks to Democracy program and received pilot funding through the program.

### Conflict of Interests

The authors declare no conflict of interests.

### Supplementary Material

Supplementary material for this article is available online in the format provided by the authors (unedited).

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