

Democratizing

Design

Planning

Participation

Digital Age



Democratizing the Design and Planning of the Built Environment Through Participation in Digital Age



Figure 1: Invitation to participate
Source: (Downs, 2017)

HafenCity University

RESOURCE EFFICIENCY IN ARCHITECTURE AND PLANNING

Asad Tayyebi Fallah/December 2022

HafenCity University

RESOURCE EFFICIENCY IN ARCHITECTURE AND PLANNING

This thesis was presented to HafenCity University, in fulfillment of the requirements of the Master of Science Degree Program in Resource Efficiency in Architecture and Planning

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Acknowledgments:

Architecture and planning beyond material world has numerous aspects that we can not shrug off lightly. The new age of data shifted the borders of our reality for built-environment. The role of architects is to redefine the structure of architecture and space by considering the fact that we have to be more sensitive against our environment. Architectural qualities are now perceived not as a mere physical element, but as part of the nature throughout its life cycle. This matter made architecture more a constant, non-linear, interactive act. If i want to highlight a time frame, or a person, teacher or any specific colleague of mine in these past 10 years of working and studying in architecture field, it would be undoubtedly unfair. However, I should thank my advisors, Prof. Dr. Udo Dietrich, Prof. Dr.-Ing. Annette Bögle and CityScienceLab to provide a chance for me to write and research about this topic. Moreover, in this process of getting closer more and more to the virtues and human values, i felt the support of my family, friends and colleagues all the time. They helped me always rethinking and being skeptical about plethora of issues in our environment. I hope this master thesis would shed light on a few matters, or at least bring skepticism about different issues.

Abstract

Contemporary approaches and attitudes toward participation and digital participation are drawn from articles, legislation, and guidelines. However, It was observed that a lack of material covering critique of the subject. This includes past digital participation experiences in the city of Hamburg and other European cities, debates, and presentations, as well as conversations with professionals who work in connection to digital participation. Additionally, fields outside of architecture were also considered, looking at texts by theorists in sociology, political theory, architecture, and urbanism. The aim is to go beyond architectural discourse through a lens of an architect, to provide a critical point of view for digital participation. Through this, It was intended to offer new perspectives and contribute to better digital participatory design. In this paper, digital participation and participation in the built environment were considered. The sector of design is public projects, both publicly and privately funded. From the theoretical view, It is planned to start with explaining why the democratic approach is important and see participation as a backbone of democracy. Then, participation was considered as a design and planning tool and by having a critical view of it, the threats and dangers of participation are being discussed especially in the digital age. In the next step, It was observed in which area the digital format of participation could provide possible solutions and also in which area they are facing the same hindrances. The context for the topic of digital participation is mostly happening at the urban level. The focus of these projects is on a wider scale and mostly they are pilot projects to understand the way people communicate with these tools. The participation domain may stretch widely in different layers of a project from design to construction. The only motive for the involvement of people is the strong belief of the architects that with the participation we have a higher quality design. In the end, after a comparison of different projects with the approach of participation and expert interviews, a set of guidelines for participation with the help of digital tools is being concluded.

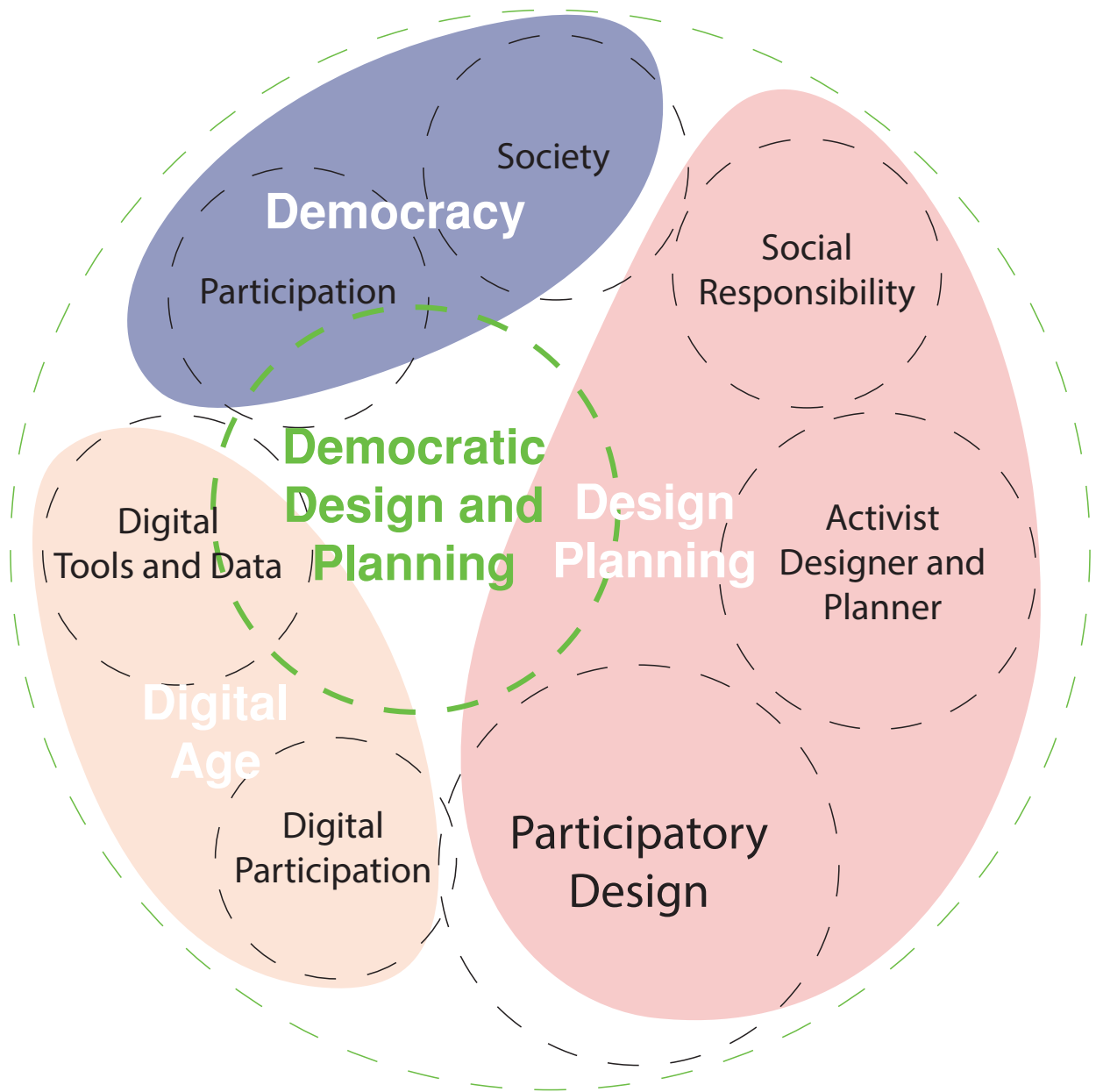


Figure 2: Road Map
Source: Author

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Source: (Ketelhut, 2020)

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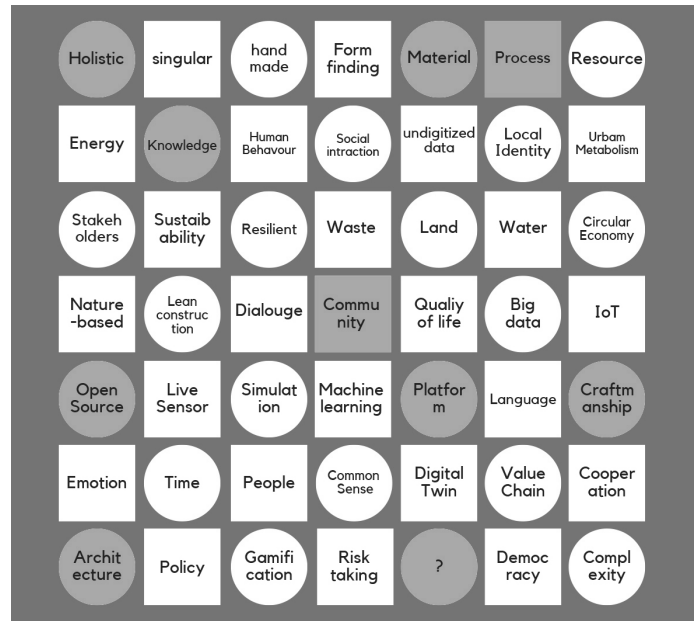


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Chapter 1:

Introduction

1.1 Problem Statement

It is now widely accepted that citizens should have a say in urban change, and citizens have an important role in understanding and sharing their vast knowledge and experience about where they live and that citizens should participate in the future of their neighborhoods, however, engaging with the planning system has never been a straight forward in respect of questions about how this is to be achieved. Urban planning relies on local knowledge (and assessment of place challenges place needs and place opportunities) and assesses development proposals that are subject to democratic scrutiny (Wilson & Tewdwr-Jones, 2022). **Citizens should have a say in urban change, and citizens have an important role in understanding and sharing their vast knowledge and experience about where they live and that citizens should participate in the future of their neighborhoods.**

The participation of people in the decision-making process is situated under the umbrella of democracy. The democratic process is a multi-faceted issue that made the process of participation a complex one, and when these phenomena solidify in the digital age, it causes even more intricacies. Participation from the beginning and even now is being used as an advertisement tool for many city planners and authorities, which may cause a wrong perception about the involvement of people in the process. Inviting the communities to different meetings and asking their opinions about the planning and design of a project, and then ignoring their opinions and concerns in the end, will cause exclusion and alienation of people from the built environment. Participation is a time-consuming process. Many architects and urban planners prefer to reduce the number of participants and stakeholders in the decision-making process, which makes the

procedure easier to manage. In most cases, the project can not afford participation, because it is public-funded or being funded by the private sector. I think the monetized point of view about the small projects for the private sector will reduce the chance of participation because the owner has no motivation to invest time and money to bring people from the community to interact with the project. In contrast, using the labor of community volunteers under the flag of participation will mask the exploitation of resources in the communities too.

Furthermore, participation in the current era could also exacerbate the situation when there is a lack of infrastructure. The exclusion of communities may happen due to a lack of technological infrastructure. Digital participation requires certain technological tools, and many societies can not afford the tools to fully engage in the process. Abundant of Data is also another issue. In the current age, there are many datasets for different purposes and the new role of designers and planners is filtering out unnecessary data to reduce the complexity of participation. This matter could be viewed from two different perspectives. One is making the datasets understandable for the masses and, the other is making them usable for the experts after the translation of data that comes from the participants. The participatory structure always got along with transparency. The age of big data enabled us to find the roots of trends, stakeholders, and the notion behind all matters. If the data become available on digital media the chance to manipulate the data will be reduced especially when there is a chance to comment and communicate in this realm. (Figure 7) shows a participatory process.



Figure 7: At the studio review local members of the planning and design community questioned a team member's decision to minimize green space in her proposal. She had the data to show that residents of condominiums in the neighbourhood felt adequately served.
Source: (la Pena, 2017)

Moreover, the role of experts and professionals should also be reassessed. Experts studied and worked in this field for many years and they can provide an educated point of view about the built environment, but it could be considered that this issue is in the scale of the project. For example, in urban projects, this method is already being used and when we consider digital participation on a smaller scale, a house, for example, it could not be very convincing. If we rethink the role of the architects in this domain and consider in which area people can be there to provide input, then participation will be more practical. Although the nature of participation is contentious, the number of people participating remains low. For example, a recent report in the UK found that 75 percent of people feel they have little or no influence on local decision-making. People who put forward their views are expected to do so within a rigid system, requiring them to engage with legalistic language, policy documents, and matters of relevance to planning with a strict

“Although the nature of participation is contentious, the number of people participating remains low”

understanding of what is and is not permissible. These opportunities for participation do not suit most people, with only a minority engaging with the planning system even if they possess views about urban change around them. Although statistics on who engages with planning are difficult to find, it is widely recognized that involvement is likely to be limited to the articulated and educated few, (Wilson & Tewdwr-Jones, 2022). Finally, during the research, it was found that there is no critical point of view on digital participation through the lens of architecture. The architects tried to respect the needs of the communities for a long time, through participation. Now with the emergence of digital tools for participation, the lack of critical views is tangible.

1.2 Research Questions and Objectives

The master Thesis aims to provide a critical point of view on participation in design and planning. The participation is going to be framed first in the context of democracy, and see the design as a democratic act. The issues related to the participation itself, is going to be discussed and then digital participation and participation in different projects are going to be compared. In the end, it is tried to come up with a framework for digital participation that could to be used in present.

1.2.1 The Research Question

How far participation as a design method with the aim of democratizing the design and planning of the built environment, in the digital age is possible?

Sub questions:

- 1- How is it expected that the whole process of participation will have deeper impacts on the quality of built-environment for the participants beyond the specific project outcomes?
- 2- Does participation promote democracy, and widen people's imaginations rather than restricting them?
- 3- Is the complicated process of participation bring added value to the design and planning to justify its cost and time consumption?
- 4- How far is it possible to use digital participation in case of a lack of infrastructure?
- 5- Could architects play an important role in the transition of non-digital to digital participation?
- 6- How is it possible to engage more people in the process of participation?
- 7- How architects can play a role as designers and planners for the process of participation regardless of the scale of the project?

1.2.2 Objectives

- 1- To perform an in-depth literature review on the topic of Participation, Democracy, Design and planning, and the Digital Age from research papers, articles, and design manuals.
- 2- Based on the research, formulate holistic guidelines that would help to implement digital participation and prevent its misuse.
- 3- Select and analyze digital participation practices launched by cities or individuals that share the same criteria and address the same issues as this thesis, at the same time.
- 4- Navigate the role of architects in framework of digital participation and how they can play a role as a mediator

1.3 Methodology

The discussion in this master thesis was gained through observations and the investigation of the available tools. In another step, the collection of data was supported by the interviews with two experts who represent two important stakeholders in this master thesis.

1.3.1 Literature Review

Approximately 30 scientific papers, 10 books on the topics of Democracy, Participation, Digital Participation, and Digital Age and various Online articles were explored prior to stating the research questions and the objectives of this thesis. Furthermore, the literature research played a key role in identifying the main guideline for digital participation.

1.3.2 Reports

The availability of digital participation tools at the CityScienceLab(CSL) of the Hafencity University of Hamburg contributes to two surveys on the usage of different tools for digital participation. On each visit, the description of tools and how they function were documented. During the survey also a few questions were asked about the concept of the projects.

1.3.3 Interview

The first Interview was held on 23.09.2022 through a phone call with Rosa Thoneick. She is a Ph.D. student and she is working on the topic Co-Creating The Digital City". She wrote many papers and articles on the subject of digital participation. The list of questions was sent beforehand to the interviewee to have a better understanding of the questions.

1.4 Limitations

1 During the research, some issues were tackled. The first issue was the problem of fewer publications, due to its new emergence. The topic of digital participation is a vast and a new topic, which has many brand-new fields of discussion. On one side it is related to the social aspect of participation, and democracy, and on the other part, it reflects on the design and planning issues.

2 In terms of technology, the digital participation tools are not being used on a large scale, and only in Hamburg, there is one laboratory that has different tools it is expected that, in the future, when these tools become more popular in participation practices, then there will be more research and studies.

3 Due to the data protection law in Germany, there was no access to some data that was related to the research that was done in the CityScienceLab, because of preventing the misuse of data like details about the participants (age, sex, and profession,...).

4 The other issues were related to a lack of expertise in this subject. The number of people who are working under the umbrella of digital participation is reduced to the number of people that are working in the CSL or previously were working there. This matter was problematic when you have fewer opportunities for interviews. In two cases, the interviewee did not answer and in the other case, she refused to have an interview due to a lack of human resources and time. In the future, this subject may become more relevant and hopefully, there would be more experts in this field.

“The number of people who are working under the umbrella of digital participation is reduced to the number of people that are working in the CSL or previously were working there.”

1.5 Case Studies

In this research, more than 60 case studies were considered, and among these projects, most of them were on the urban scale and only a few of them were on the small scale like a building. Moreover, it is tried to look for the projects that, there is enough information about the process of participation for them, so the analysis will be more practical. Additionally, since this project considers participation in the digital age, it tried to select the projects that are using technology in the process of participation. Although most of the selected projects are on the side of city planning, the intention would be to consider the potential of digital participation in future as an architect or an urban planner. Finally, the intention was not to distinguish between design and planning role for an architect.

1.5.1 ChangeExplorer

The technology is intended to make people aware of changes that are proposed whilst they are in the built environment and provide the opportunity for them to give quick comments about their views on planning proposals, as well as encouraging them to share their wider place-based experiences and aspirations.



1.5.2 JigsAudio

This project is about a designed and constructed device named "JigsAudio". The device encourages people to express themselves through drawing and talking. Participants are required to draw on a large card or wooden jigsaw piece on the reverse of which is an electronic tag, and then place it on the JigsAudio device to make a simultaneous audio recording that is attached to the drawing.



1.5.3 DIPAS

The Digital Participation System, is the result of an extensive series of local participation projects carried out throughout Hamburg. As a co-operation project in CityScienceLab, the objective of DIPAS is to develop, test, and implement a digital workshop tool to be used for physical participation workshops, building on a prevailing online participation platform.



1.5.4 Machizukuri: Visualizing Sequential Futures

The Machizukuri Visualizing Sequential Futures is a simulation technique for presenting alternative design proposals at eye level. The technique uses building models with the pictures of actual facades on them and a small camera to create realistic, moving pictures.



1.5.5 Preemptive Comparison

Preemptive Comparison is a technique to evaluate the costs and benefits of alternative plans before construction to determine which best meets the specific needs of the community. Developed from methods of postoccupancy evaluation (POE).



1.5.6 Cellphone Diaries

Cellphone Diaries was developed for community members so they could document their placebased stories independently, on their own time, and in their own voices.



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Chapter 2:

Theoretical Standpoint

2.1 Democracy

This research it is tried to look through the lens of an architect on the topic of democracy. The process of decision-making in every step of the design and planning made architecture navigate through the path of realizing the built environment constantly. As an architect, the utopian form for the process of decision-making means considering the opinions of all involved people from the architects and engineers to stakeholders and final

Most of the time, decisions are top-down and even if the intention of architects is the inclusion of people, there are numerous hindrances along the way that may jeopardize the democratic environment for the expression of opinions and feelings.

end-users. However, this holistic concept is far from realization. Most of the time, decisions are top-down and even if the intention of architects is the inclusion of people, there are numerous hindrances along the way that may jeopardize the democratic environment for the expression of opinions and feelings. Critical studies of the design note how design enfolds power arrangements but also enables new potential possibilities to unfold. The complex interplay between the logic already contained within a particular design and those that unfold in unexpected ways, open up designs to becoming political (Elinoff, 2021), but to discuss further it is considered to see design as a political tool, in a democratic environment.

2.1.1 Definition

The first democracy that ever really worked was the Athenian democracy. It was a pure democracy in Hamilton's sense and it worked because all the citizens could come together to make their

decisions. With the growth of societies, coming together became impracticable and we had to switch to Madison's representationalism. Now with the Internet, so the chain of arguments continues, we can finally come together again; not in the real world but in cyberspace as the new global village (Dege, 2016). Moreover, "All State power emanates from the people". The power to determine what community citizens live in rests with them. But making every decision together with all citizens cannot work in such a large society (Casper, 2019). This is the reason that it is necessary to define democracy first.

The word (Democracy) is a term that comes from Greek and it is made up with two other words demos= People and kratein= to govern, to rule. "Democracy" can then be literally translated by the following terms: Government of the People or Government of the Majority. Democracy, as a state form, is to be distinguished from monarchy, aristocracy and dictatorship. It can be said that a government comes from the people; it is exercised by the people, and for the purpose of the people's own interests (Becker & Raveloson, 2008). Defining democracy is notoriously difficult. Democracy might be an essentially con-

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tested concept, but it is not an entirely empty signifier. A degree of family resemblance between different usages allows certain core values to be ascribed to democracy. An obvious starting point is the notion that democracy refers to rule by the people (Barnett, 2003). Procedural definitions of

democracy identify the minimum requirements for upholding participatory competitive politics. Liberal definitions include the full protection of civil, political, property, and minority rights, which are meant to curb the possible negative consequences of democratic governance based on majority rule only (Landman, 2007).

The word "democracy" indicates a complex form of government with a history that stretches over many centuries and many different models. One of its most wildly adopted forms today is based on governing through elected representatives. The representative model of democracy became popular in the eighteenth century, when the amalgamation of the old Greek ideal of democracy and that of representation seemed the best possible solution for governing large nation-states. "Extend the suffrage, and democracy would be enabled by representation" As John Selden put it "the room will not hold all" (Amna, 2010) Democratic structure is a common and understandable structure for all societies. It is necessary to focus on the values embedded in the dignity of humankind. To promote

such values, it is imperative to present sustainable development as a set of values linked to the rights and dignity of humankind (Rand, 2014). It is clear that democracy can bring an important contribution in making citizens feel that it is good to live in a State, to express themselves freely, to know that the economy is thriving, and security guaranteed. We must not forget that democracy represents a path to development. The democratization process then leads to development, through democracy. The newly created procedures, mechanisms, structures of power and development conditions must evidently be consolidated (Becker & Raveloson, 2008).

In a typical representative democratic system, the traditional fundamental role of citizens is to take part in regular elections to choose representatives who then govern on their behalf. The simple act of casting a vote, of choosing one

candidate (or one party) over others, has ideally, two main advantages: it guarantees the people a chance to periodically evaluate their political leadership and, at the same time, provides the members of that political leadership sufficient time to earn their voters' trust for a new mandate. Ideally, in this context citizens should rarely be called into action between elections. This particular system of democratic government, however, is far from perfect and too often (at least in some established representative democracies), a government or coalition majority in Parliament is equivalent to a "free pass" to do whatever they wish, at least until the next election (Amna, 2010).

Democracy, in short, is characterized by a distinctive future-oriented temporality, in which institutional procedures guarantee 'the legitimacy of a debate as to what is legitimate and what is illegitimate _ a debate which is necessarily without any guarantor and without any end'. There is a long tradition of imagining forms of participatory democracy in terms of direct involvement by citizens in both discussion and decision-making. This is an ideal model of the self-presence of the people to itself through the medium of public debate. It rests on the assumption that the same social subjects, gathered in a forum of mutual communication,

should participate in deliberation, and carry out decision-making (Barnett, 2003). If the decisions are made by the political institutions overtaking the importance of people's participation then we are talking about top-down flows of power. On the other hand, if the decisions are being taken by shared conjunction between politicians and citizens, then we are talking about bottom-up power flow. While in top-down flows citizens experience domination, in bottom-up ones they experience democracy, liberty, and liberation (Erlhoff & Rezai, 2022).

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2.1.2 Problems related to Democracy

The last decade has seen a wave of real-world democratization, which has coincided with increasing soul-searching about whether or not the ideals of democracy are in deep crisis. A number of commentators identify the media as bearing primary responsibility for the decline of active citizenship and the decay of democratic institutions. The media are charged with encouraging cognitive dependence, narcosis, and the attenuation of critical faculties; with eroding the capacity of citizens to trust in public institutions and hold them accountable (Barnett, 2003); Everything indicates that the population is tending to miss participation, and as Laura Haynes puts it, 'a portion of the electorate has lost faith in the democratic process and trust in its leaders. This is problematic for two reasons: politically, it means an ever-dwindling political base and therefore ever-closer election results with no outright winner; and socially, a disengaged electorate is more likely to become a disenfranchised population'. Therefore, a lack of participation closes the gate of self-determination, undermining freedom. This compromises democracy at its roots, whilst it should be fostering a critical consciousness not yet taken into account (Erlhoff & Rezai, 2022). Most of the world's population lives in a formal

democracy today. But in both established and new democracies, trust in parliaments and political parties is plummeting. Worldwide, they are being torn apart by inequalities, political polarization, and a politics of hate. Citizens are using the streets and the courts to challenge authority and to seek the accountability that is often missing at the ballot boxes. The form, content, institutions, practices and, ultimately, the very principles of liberal democracy are being called into question from India to Hungary and from Brazil to the US (The Institute for Human Sciences, n.d.). Public trust in government remains low, as it has for much of the 21st century (Figure 8). Only two-in-ten Americans say they trust the government in Washington to do what is right - just about always - (2%) or 'most of the time - (19%). Trust in the government has declined somewhat since last year, when 24% said they could trust the government at least most of the time (Pew Research Center, 2022). In this context, it is way important to address the thrust in government's decision making because the democracy will also influence democratic procedures based on people inclusion in decision-making. When the trust in political system is diminished, the democracy, itself can also be questioned. if people loose their interest in the political systems, it threatens the active participation of citizens in societies too.

“a portion of the electorate has lost faith in the democratic process and trust in its leaders”

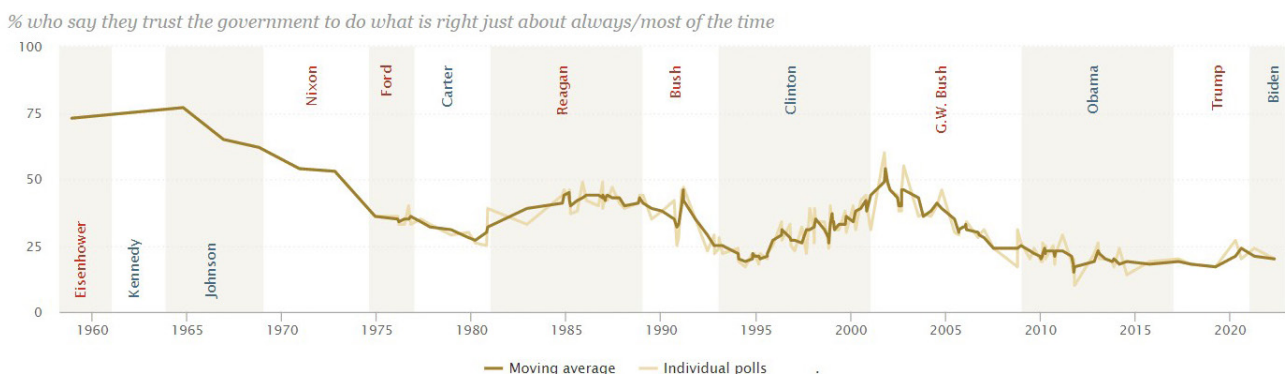


Figure 8: Public Trust in Government: 1958-2022
Source: (Pew Research Center, 2022)

Democracy unfortunately is not considered as a permanent building, like a stable and well-constructed house for instance, that will stay unchanged beyond the centuries. Democracy is rather a process that must be maintained and consolidated permanently. It is not just a type of State, with simple procedures and simple mechanisms. It is not enough then to have three separate State powers, to have citizens ready to run for the legislative elections, that a head of State or a mayor be elected every four or five years and that there are several political parties, etc. Democracy must be taken on by the whole population and all the aggregate of political elite. It can only be established and consolidated when it put forward a conviction that is shared by all the members of society: thus, ways of thinking and behaving, e.g., the political culture, must be based on and directed to democratic values (Becker & Raveloson, 2008).

Democracy is often associated with the image of the assembly of a collective people to decide on matters of shared importance. Even if it is admitted that face-to-face

Democracy unfortunately is not considered as a permanent building, like a stable and well-constructed house for instance, that will stay unchanged beyond the centuries. Democracy is rather a process that must be maintained and consolidated permanently.

deliberation cannot be practically implemented, the continuing idealization of one territorial scale or another as the proper container of democratic politics is indicative of a conception of democracy which presumes that the scope and identity of participants, actions and consequences can be more or less easily delineated. Democracy

and representation are closely connected, not least through the affirmation of pluralism and difference as the means of squaring norms of autonomy and Participation. Participants in many projects also lack democratic legitimacy due to unequal representation: there often is a rather limited group that has the means and the motivation to be fully active members (Ekenberg, Hansson, Danielson, & Cars, 2017). In practice, principles of popular sovereignty have been realized by establishing the right of ordinary citizens to organize and to choose their own representatives. They seem to offer the hope that opinions will be instantly transmitted without delay or intermedi-

ary. Ironically perhaps, the allure of direct digital democracy rests on appealing to an image of a unified social whole finally able to express itself. However, the proliferation of information that results from communication innovations only intensifies age-old problems of representation, accountability, and trust (Barnett, 2003).

Inaccessibility to the necessities of everyday life, information, and decision making prevents many people from an opportunity to thrive. For example, land-use segregation and remote employment centers handicap those without cars. A map of these locations overlaid by carless households can be compared with a similar map for households with cars showing the burden of inaccessibility. Similarly, distribution of desired resources and unwanted land uses is typically skewed. Maps showing relative distribution of parks, decent housing, healthy food or water as well as polluted air, dangerous industries, or toxic sites usually reveal patterns of environmental classism and racism (la Pena, 2017). It means, democracy failed at a decisive point, namely when it comes to accepting minorities. The latter sometimes speak up but will never be able to succeed: democracy, at least democracy as we know it, is always determined by the majority - although this majority is actually composed of diverse minorities with their respective individual concepts of convivial life (Erlhoff & Rezai, 2022). There are different forms to be considered when you set up and implement democracy. There is no fixed recipe, valid as a rule, concerning elections and the two polling systems. Each country must take into consideration specific circumstances that define, with regards to the existing cultural, political and social fields (Becker & Raveloson, 2008), but according to the research, democratic processes can be understood as distinguished by the three interconnected levels: monitorial, deliberative, and participatory (Thoneick, Degkwitz, & Lieven, 2022) in this research the focus is participation and how it can empower the democratic process. The participatory democracy, the active engagement of citizens is encouraged, while collaboration is employed to find solutions to public challenges. As collaborators in the decision-making process, citizens become co-creators of public policy, transforming the role of government from service provider to partner (Thoneick, Degkwitz, & Lieven, 2022).

The definition of democracy and the problems related to it created the concern of inclusion for

the people in societies. As long as there is a lack of thrust due to the misrepresentation of ideas in the decision-making process, the cities and societies can not prevail over the autonomy.

2.1.3 Different Models of Democracy

If the discussion of procedural variants and details are set aside in favour of a higher-level of abstraction, the large number of different normative understandings of democracy can be related to the essence of three ideal-typical models of democracy: the liberal, the republican (or participatory) and the deliberative model. Most democratic systems in the world are based on key elements of the liberal model. A chief characteristic of this model is its strong emphasis on procedures. Instead of attempting to realize a predefined form of society, this model concentrates on processes and institutions that ensure generally binding decision-making (Lindner & Aichholzer, 2020).

The main differences of these and related models can be mapped in a two-dimensional space, depicting the chief aim of the democratic process (efficiency vs. inclusiveness) and the preferred mode of decision-making (indirect/representative vs. direct/plebiscitary) (Lindner & Aichholzer, 2020).

The various conceptions of democracy (Figure. 9) differentiated into six ideal-typical sub-models or variants as following:

- 1- **Legalist Democracy:** The classical Western-type procedural view of democracy as defined by the constitution and other basic laws. The role of new media is mainly to enhance information provision by appropriate measures and information retrieval by citizens.
- 2- **Competitive Democracy:** Parties and leaders competing for the electorate, focused on representation and efficient decision-making. The primary use of ICT¹ is for information and election campaigns.
- 3- **Plebiscitary Democracy:** Puts forms of direct-democratic decision-making such as plebiscites and referenda centre stage. Here, ICT is pivotal for holding online polls, referenda and discussions.

The essence of three ideal-typical models of democracy: the liberal, the republican (or participatory) and the deliberative model.

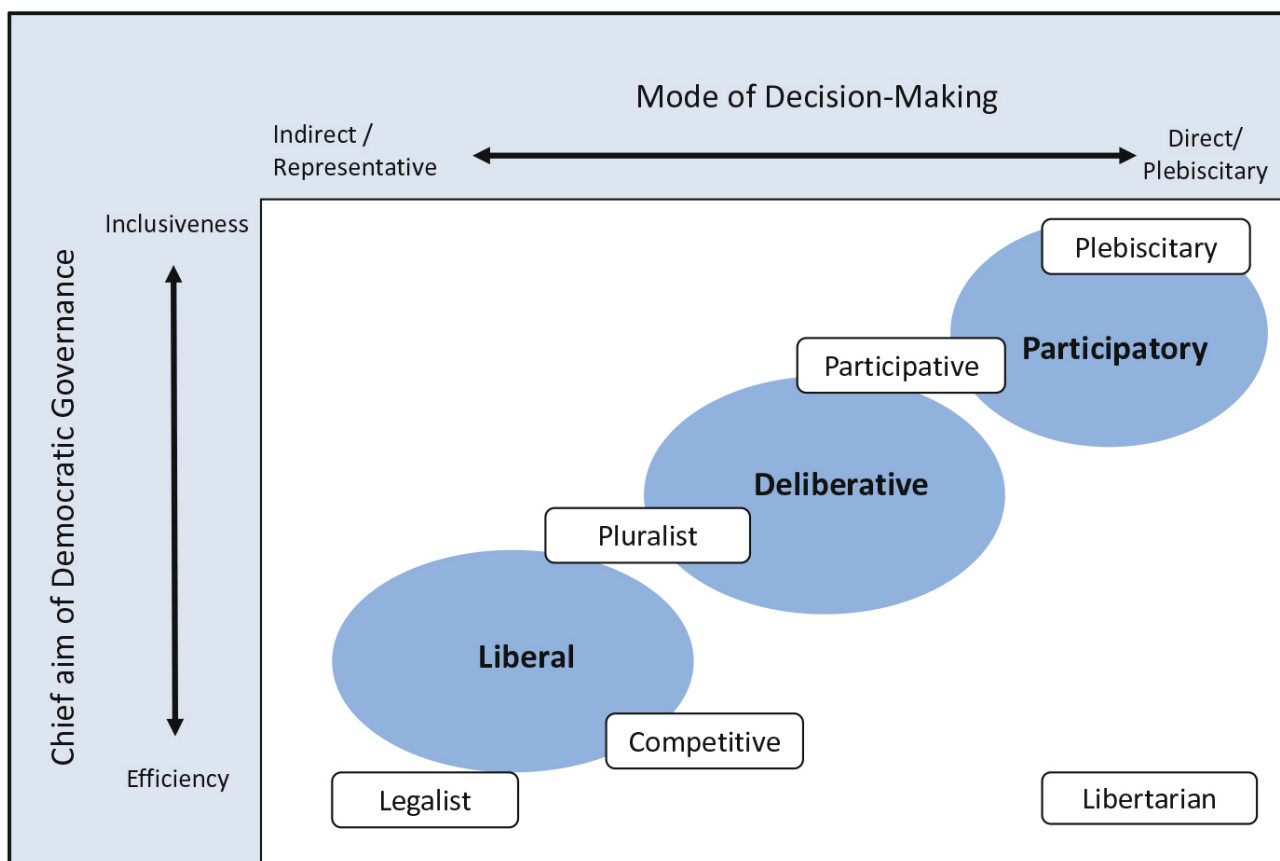


Figure 9: Models of democracy: Aims and preferred mode of decision-making
Source: (Lindner & Aichholzer, 2020)

4- Pluralist Democracy: Pluralism in political processes and discussion is seen as most important, combining practices of direct and representative democracy. There are plenty of options for support by ICT, especially for discussions and debates. Deliberative democracy shares much with the pluralist model and focuses still more on open and free exchange on political issues. The importance of digital media is especially seen in their functions for online discussions. 5- Participative Democracy: The focus is on promoting active citizenship, political opinion formation on a broad scale, based on the principle of combining direct and representative democracy. ICT is important for many functions, from public debates and education to all kinds of participation, access for all being a value. 6- Libertarian Democracy: Shares some views with the pluralist and plebiscitarian visions and focuses on autonomous politics by citizens in their own associations. Digital media are especially relevant in their networking functions, among others even bypassing institutional politics with Web 2.0 applications and content generated and shared by citizens (Lindner & Aichholzer, 2020). The diagram shows the relation of decision-making in different modes and its relation to inclusiveness and efficiency. According to this diagram by increasing the participatory decision-making the level of inclusiveness is increased but the efficiency will be reduced, in another word, participatory decision-making comes with the direct influence of communities. It could be concluded that there is a strong link between participation and democracy.

2.1.4 Participation and Democracy

In a participatory democracy, citizens actively collaborate and engage in solving public challenges, while governments offer a collaborative environment that enables this collective decision-making. In this light, institutional commitments need to be prioritised and re-assessed, shifting focus to communities and cooperative processes. Possible vantage points are integrating data gathered from informal participation, into formalised participation procedures, to ensure a higher coherence and uptake of citizen data, thus cultivating communities of participation. In pursuit of participatory democratic processes, a culture and institutionalisation of open government, alongside the provision of instruments and tools, must be nurtured (Thoneick, Degkwitz, & Lieven, 2022).

The tools generated by incorporating this suggestions are valuable for democratic procedures (Thoneick, Degkwitz, & Lieven, 2022). There is simply no other democratic way to solve an issue despite involving the community that is affected (Erlhoff & Rezai, 2022) Indeed participation has not only spurred academic engagement, but also emerged within discourses of policy, management, urban planning and the public imagination. Although some call it a nightmare, the idea of participation in almost every possible sphere has been normalized. In this context it is hardly surprising that participation has been revived as a successful concept and has been recognized as a condition of our time. Participation is about the presence while pointing towards the future and it binds the realm of experience (present) to the horizon of expectation (future of how things ought to be) (Denecke, Ganzert, Otto, & Stock, 2016). At the same time, democracy and its adjunct body of bureaucracy often appear to be slow, ineffective, and always one step behind a truly just

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society. This is particularly true for forms of direct democracy, which only seem to be effective on a small-scale level but can hardly be applied on a nation-state level (the prominent exception here is, of course, Switzerland). It is in this context that the public often turns to charismatic leaders in the hopes that they might best represent their interests while at the same time lowering the need for individual involvement. As such, the system we (so far) consider ideal still appears to be extremely imperfect. Democracy prevails not because it is a pristine system but because other systems of government have historically not worked out; that is, no one has, as yet, proposed a better system (Denecke, Ganzert, Otto, & Stock, 2016).

Participation consists in willingly exercise influence on decision making processes, on whatever field and whatever level that is. It is only in this way that democracy can be built, interior-

The ideal of universal participation is undermined by its practical realization in the form of mass democracy. From this perspective, demands for more areas of life to be opened up to democratic accountability and decision-making generate more and more bureaucracy, which curtails participation.

ized and kept alive! You too, and you indeed, are an actor of democracy! (Becker & Raveloson, 2008), but problematic relationship between representation and scale underlies the tendency of political theory to see modern democracy as having an essentially tragic trajectory. The ideal of universal participation is undermined by its practical realization in the form of mass democracy. From this perspective, demands for more areas of life to be opened up to democratic accountability and decision-making generate more and more bureaucracy, which curtails participation. The new form of democratic power depends upon the active participation of equal individuals in public discussion and debate. This replaces a form of representative public sphere, in which power is displayed before a passive people (Barnett, 2003).

Democratic participation is equated with involvement in highly rational forms of communication that are pre-oriented to universality, requiring the exchange of ideas between subjects who should ideally be indifferent to their own particularistic interests and embodied identities (Barnett, 2003), however level of participation differs from one country to another because of many associated factors such as development level of countries. In (Table 1) it is shown that the general expectation is that participation levels will be significantly higher in countries with a higher level of economic development. This might be caused by 1) higher levels of education and income in more developed countries, or 2) the fact that in more developed countries (most of which are older democracies) political participation is legally allowed and even protected. These nation-

al differences also become apparent if we plot the prevalence of unconventional participation across countries. It seems, then, that unconventional participation rates are higher in countries with higher levels of economic development. Indeed, if we divide the countries according to economic development, we find that the types of political activities that can be considered unconventional are more popular in countries with high and medium income levels (Amna, 2010). However, to consider broader contemporary political and social shifts, we can look at the decline in democratic participation across Europe in the last 30 years (Appendix 1). There is a surprising turn to the rejection of traditional modes of democracy. This turn could be due to the rejection of the partisan system of politics, not democracy itself. Party membership and voter loyalty are declining, with voters likely to change allegiance right up to the day of the election. And the general indifference towards politics comes from a spectatorship attitude to politicians who are seen to be 'out of touch with the general population. There is also a link between issues of effective political participation and design participation, as they

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both hinge on a citizen's sense of self in society (Downs, 2017). Society members should feel included both in terms of opinions and their demands. one of the frontiers of the extension of their needs or participation in a democratic manner is the built environment. People have the right to have an opinion about the shape of the environment they occupy and participation in design and planning seems to be the right path.

Percentage of Respondents Participating				Ratio
	Low GDP (n=18350)	Low GDP (n=17545)	Low GDP (n=16655)	High/Low
Voting	74.55	78.69	82.37	1.10
Signing the Petition	11.11	18.46	32.01	2.88
Donating Money	13.78	17.58	28.49	2.07
Boycotting Products	6.45	12.63	29.25	4.53
Attending a political Meeting or Rally	8.29	7.29	8.75	1.06
Contacting a politician	5.73	6.14	11.81	2.06
Demonstrating	4.62	8.39	5.85	1.27
Joining an Internet Forum	2.07	2.93	2.87	1.39

Note: GDP is measured in \$US per capita. “Low GDP” = GDP < \$11,041; “Medium GDP” = \$11,042-40,416; “High GDP” = > \$40,417

Table 1: Participation according to GDP per capita
Source: (Amna, 2010)

Underlying the topic of participation runs the question of freedom. In current society, some desire greater freedom and autonomy in some form. Participatory practices that respect the knowledge of autonomous individuals can lead to design that promotes positive liberty. This goes beyond the effectiveness of the project to affect social and political processes. However, "participation is not a liberating technique in itself. A problem of participation is that, with unclear ambitions and expectations, the notion of a democratic process is blurred. This can end with participants feeling cheated out of having their voice heard in the discussion. Collective freedom is more important than individual freedom, because we co-exist in society affects our sense of freedom of possibility as individuals. Architects can design for this kind of collective freedom, promoting social cohesion and recognizing the value of maintaining community or its spirit. In turn it manifests in the "cityness" or a vibrant social life of the streets. Additionally, the urban as the site for reclaiming democratic control. In many cases, citizens, designers and policy makers struggle to articulate the problem, the right questions and the necessary solutions. The lack of cross-disciplinary critique needs to be addressed so that new modes of urban living can be found that challenge the inequality and alienation prevalent today (Downs, 2017).

2.1.5 Conclusions

1 Democracy is the most well-known structure that works in different societies. By its definition, it also refers to the governance of people. One of the fundamental parts of democracy is participation. However, the participation of people in decision-making is implemented at different levels. Usually, people select a few representatives to implement a specific agenda, but this system of democracy has a few downsides.

2 The inclusion of people is reduced to only early phases of the process and the role of people in the whole picture is going to fade away when the decision-making is expected to happen. Unequal representation of communities hinders self-determination and undermines freedom, which compromises democracy at its roots. This is one of the reasons that people lost their faith in participation during the last decades.

3 Democracy is not an accidental, everlasting structure. It needs care and continuous fixation. People tend to believe as soon as they select a few representatives to take of things, their duty toward the democratic system is fulfilled, but they should always stay active in the process and prevent their representatives to deviate from the imagined path. In this sense, different models of democracy were considered by the level of inclusion and the degree of direct and indirect influence

of people, and it is concluded that there is a strong link between participation and democracy. Lastly, the usage of Information and Communication Technology (ICT) in different models of democracy is tangible, especially when the participatory process has a pivotal role. Citizens actively collaborate and engage in solving public challenges, while governments offer a collaborative environment that enables this collective decision-making, because, there is no other democratic way to tackle an urban issue without including the people in decision-making.

4 Although participation is still a doubtful path for many designers and planners in the realm of the built environment, this issue spreads over many discourses and design and planning are not an exception. People should always remember the idea of choosing a political representative to assign the policies is like choosing an architect to provide and execute a design in the cities. As societies rethink the concept of people's participation in only choosing the right persons as the only way for decision-making, not participating in the design process could also be questionable.

5 Active citizens try to communicate their ideas with city administration, by creating discussions about their demands. These demands could range from social and economic welfare to the built environment. However, the institutions inside the country should also be present. As it was shown, even economic and social stability can encourage people to be present in political accountability. It seems, the older the democracy lives in a country people are more eager to participate in decision-making. However, the evolution of participation requires other alternatives for decision-making like informal participation.

6 In the end, it should be considered that as democracy provides freedom for everyone it encourages co-creation in a collective manner. Collective freedom for decision-making requires a critical point of view to address how citizens can participate in creating a vibrant city for all, that pulsates life in every corner of the city. In the following Chapter, the topic of participation is discussed, because it seems necessary to explain the concept of participation before elaborating on other issues (Figure 10&11).

"Collective freedom for decision-making requires a critical point of view to address how citizens can participate in creating a vibrant city for all, that pulsates life in every corner of the city"



Figure 10&11: An urban development workshop, seeking out conversations with residents engaged in their daily routines
Source: (la Pena, 2017)

2.1 Participation

Participation is practically valuable because it ensures the inclusion of all relevant information in decision-making, but also normatively valuable because it contributes to the development of the capacities of participants as citizens (Barnett, 2003). It is beneficial to see participation as a process of re-learning the context from the locals' perspective. Overall, there needs to be a continual re-thinking of the brief, challenging presuppositions, and permitting everything to be up for questioning by which an open-ended process is promoted (Downs, 2017). A commitment to engage with the community means that the team, collectively and individually, is a participant with formative experiences, values, and ideas. To suit up is to ready yourself and your team for the role you will

A commitment to engage with community means that the team, collectively and individually, is a participant with formative experiences, values, and ideas.

play given the project at hand, but also to shed the pretense that participatory design is a neutral process and the designer is a neutral facilitator (la Pena, 2017). Participation simply illustrating a vision of the future could be perceived as futile, or on the other hand as hinting at this alternative economy and bringing such ideas into the public imagination; opening the way for change to occur in the future. Participation calls for collectivity - the individual acting with regard to the mutual benefit of the whole. The need for collectiveness and collective action is discussed in a set of essays titled *Collectivize!* It is stated that many of the world's major problems can only be solved collectively (Downs, 2017). The sociologist Richard Sennett describes it as an art to be cultivated. He writes of how changes in modern labor have weakened our ability to collaborate. Communication in dialogue, rather than merely sharing information, is key. Sennett promotes open-ended discussions that involve listening well and responding confidently. Such methods contribute to a generative debate rather than disagreements leading to

forced consensus. This is similar to the agonistic model that Mouffe and Miessen discuss, in the *Nightmare of Participation*. 'Conflictual consensus' is more useful than flat consensus avoids conflict and is considered a form of 'pseudo-participation'. Some may be wary of participation due to the challenge of dealing with dissenting opinions. If false consensus could be avoided, and 'collaging' conflictual views together appreciated as a constructive method, then a participatory process would be more effective. Understanding participation in this way is appreciating the depth of lively humanity. False consensus, compromise, and appeasement avoid this principle and deny the citizen's right to a unique voice (Downs, 2017). Participatory processes still need to be assessed better with respect to their outcomes (e.g. democratic, inclusive and just?) rather than on the process design. To assess the outcomes of participatory processes some of the interviewed urban experts also addressed the integration of psychological concepts in this context (e.g. place attachment, sense of place, happiness, well-being) as well as sociological concepts (e.g. social cohesion, justice, social change) to be further related to theories and methods of urban planning (Stiftung, 2019). Participation at an earlier stage has the opportunity to inform and shape planning policy, which has much more weight in governing the future of a place. This can also be a factor in people not trusting the planning system or planners, and a belief that their participation in the discussion has little or no impact (Wilson & Tewdwr-Jones, 2022).

"Conflictual consensus' is more useful than flat consensus avoids conflict and is considered a form of 'pseudo-participation" If false consensus could be avoided, and 'collaging' conflictual views together appreciated as a constructive method, then a participatory process would be more effective.

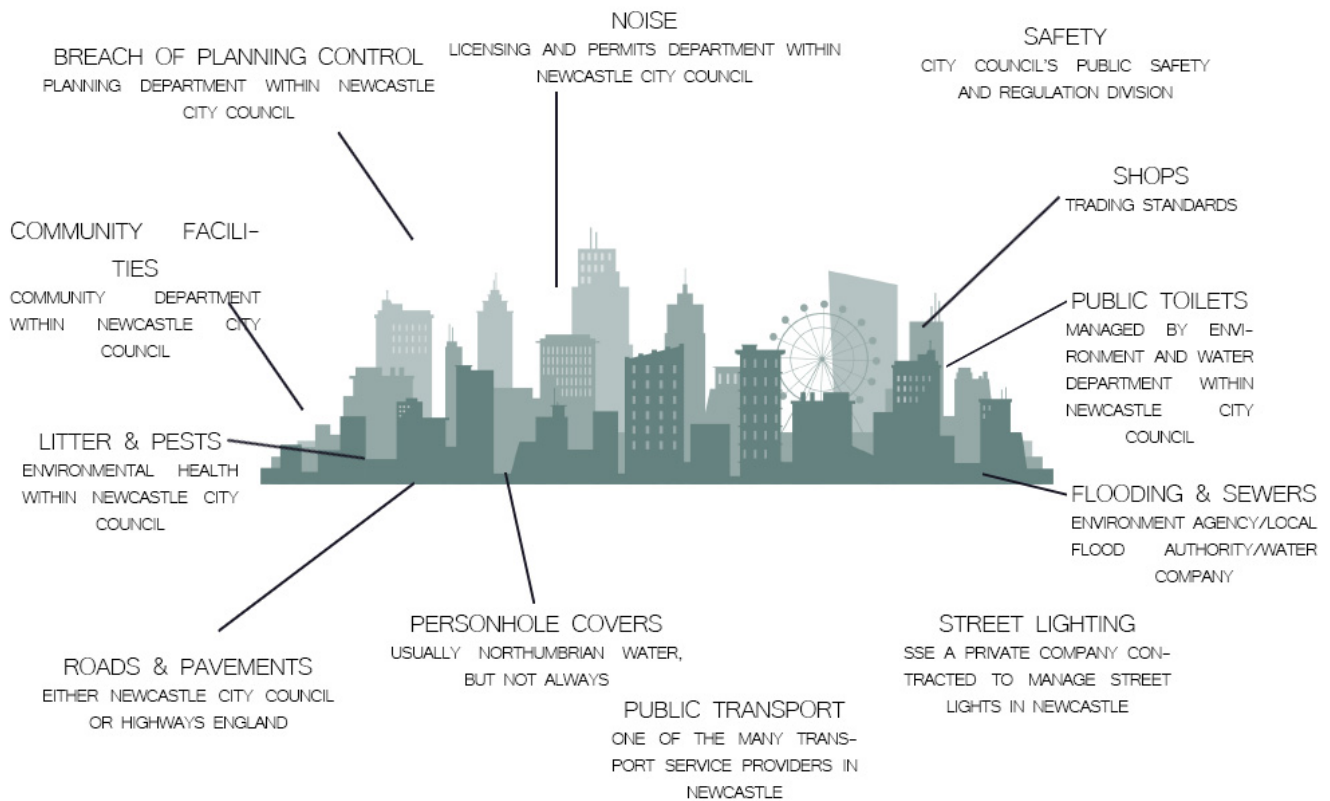


Figure 12: Organizations governing places
 Source: (Wilson & Tewdwr-Jones, 2022)

One of the reasons is the complexity of the urban issues and most of the time it is hard to grasp for both citizens and even experts. (Figure 12), Taking the example of Newcastle upon Tyne illustrates how it is difficult for citizens to understand or know in advance where their concerns should be directed within local government, depending on the issue they wish to raise, and how to engage even formally (Wilson & Tewdwr-Jones, 2022). Complexity is a challenge that was noted 100 years ago, and it continues to be with us. The implication here is that there is a warning whenever we talk about cities, in the present, and in the past, these are always interpretations. These are selective accounts of vast totalities that are in a way ungraspable (Aibeo, Keane, & Sassen, 2022). The researchers in the domain of participation proposed different models to frame the concept of participation and cope with the complexity of participation. This matter contributes to a better understanding of this issue.

2.2.1 Participation Models

In this part two models of participation, which are ladder of participation and Cube of participation will be discussed.

2.2.1.1 Ladder of participation

Arnstein's frequently referenced Ladder of Participation as an early conceptualization of participation, seeing it not as binary but with varying degrees of citizen power. She placed participation between two extremes, with complete citizen power at the top, and non at the bottom (Wilson & Tewdwr-Jones, 2022).

The diagram was devised for citizen involvement in US planning in the 1960s, an early stage in the development of participation. In the current context, it is highly unlikely that those in control will hand over major decision making powers to the community to attain the top of Arnstein's ladder - 'citizen control' (Downs, 2017). With regard to the handling of the results, citizens can be given more leeway in informal participation processes than in formal procedures. Very popular model of the ladder of participation is used to classify participation processes in terms of participation of citizens in decision-making processes (Figure 13) (Casper, 2019).

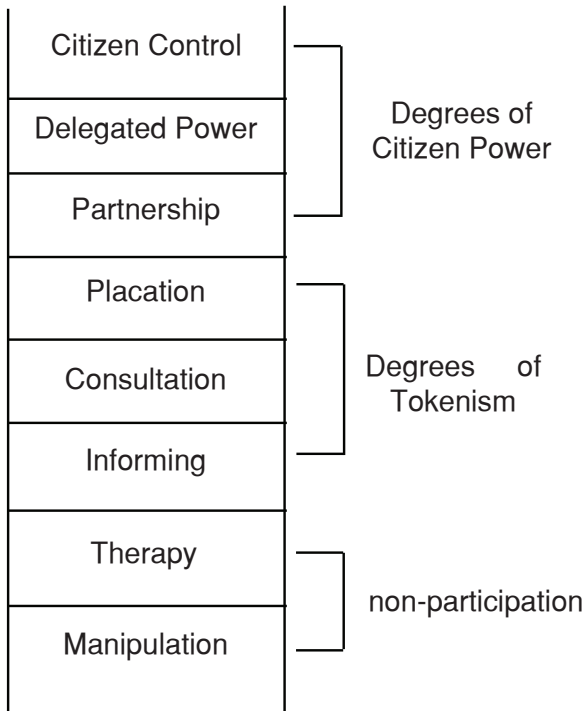


Figure 13: Ladder of Participation, Sherry Arnstein
Source: (Downs, 2017)

The appeal of Arnstein's Ladder of Citizen Participation lies in its simplicity and ability to reveal, in pictorial form, the power agendas implicit in many institutionalized narratives and the differences in the forms and strategies of participation that are desired or result. However, there are criticisms of Arnstein's Ladder of Citizen Participation. Arnstein's ladder, with its focus on power, is insufficient for making sense of participation at a con-

ceptual or practice level. Academics cite various limitations for Arnstein's Ladder of Citizen Participation, such as the assumption that participation is 'hierarchical in nature with citizen control held up as the 'goal' of participation ' an assumption that does not always align with participants' own reasons for engaging in decision-making processes'. Additionally, researchers emphasize the limitation that Arnstein herself cites, that each problem or decision is unique and can require different levels or types of participation that are not reflected in the broadness of the ladder. At a conceptual level, Arnstein's notion of participation is both devoid of context and, critically, has no means of making sense of the context in which the ladder is used. In situations when the nature of the issue is highly contested or undefined, Arnstein's ladder provides few insights into how participation might be progressed as a collective process between all of the stakeholders involved (Theyyan, 2015).

2.2.1.2 The Participation Cube

Another model of participation emanates from, Fung's concept of the three dimensions of participation (Figure 14): the selection of participants, the modes of communication, and decision making and the extent of authority and power. Fung set the framework to analyze participation pro-

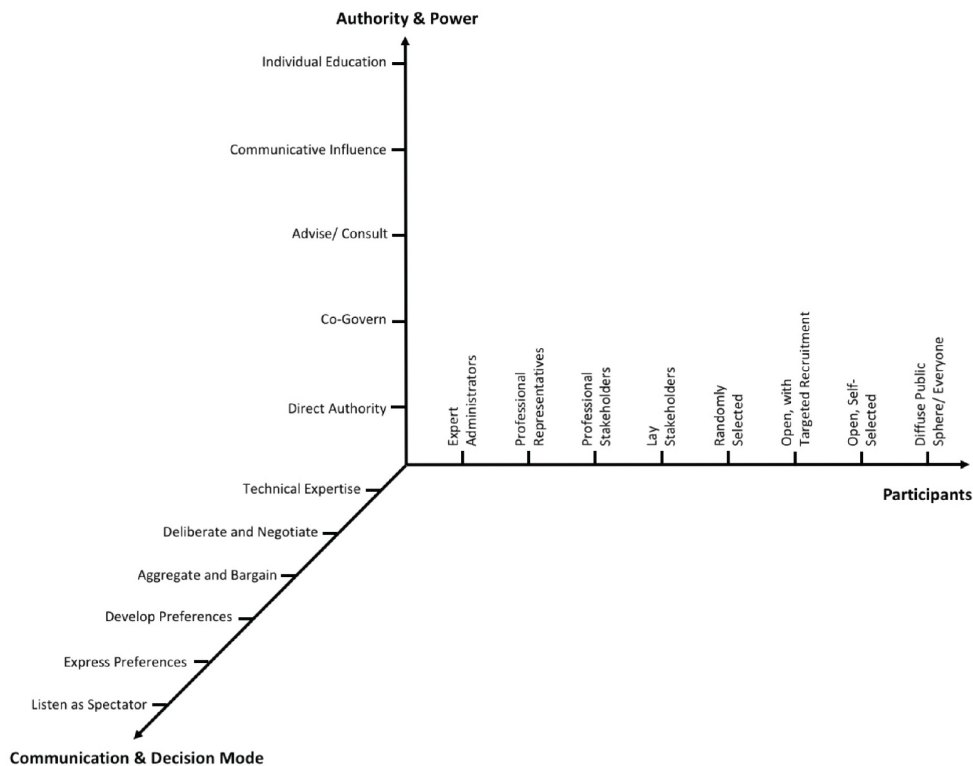


Figure 14: The democracy cube as introduced by Archon Fung
Source: (Schroegel & Kolleck, 2019)

cedures in a visual figure, the Democracy Cube. He aligns the three features along three axes with scales. Mapping a participatory event within these axes creates a three-dimensional space visualizing the characteristics of each approach. These characteristics are: (1), selection of participants, (2) modes of communication, and (3) the extent of authority and power (Thoneick, 2021). Having a political voice. There is a significant increase of local populations that are affected by planning decisions. This emerges as a key question for e-participation over the past years. As Fung outlines, participation of citizens can remedy a lack of knowledge, competence, public purpose to command compliance and cooperation. But the success of participation processes heavily depends on who participates; whether the subset is representative of the relevant population, whether important interests are included, whether participants possess information to make good judgements, and whether they are accountable to those who do not participate. To scrutinize the inclusiveness in the selection of participants, Fung's Democracy Cube shows a diversified definition of the public. Running the scale from more exclusive to more inclusive, the cube lists Expert Administrators, Elected Representatives, Professional Stakeholders, Lay Stakeholders, Random Selection, Open, Targeted Recruiting, Open, Self-Selection, Diffuse Public Sphere (Thoneick, 2021).

Modes of Communication

The second aspect responds to the mode of communication. Depending on the design of the participation procedure, the range of modes of communication and decision making can vary from purely conversational modes where citizens can express and exchange concerns and preferences, towards more deliberative modes, where individual choices are exchanged and mutual agreements are established. Therefore, the Democracy Cube arranges the modes of Communication range from least intensive to most intense: Listen as Spectator - Express Preferences - Develop Preferences - Aggregate and Bargain - Deliberate and Negotiate - Deploy Technique and Expertise (Thoneick, 2021).

The Extent of Authority and Power

The third aspect regards the scope of the procedure and the authority in decision making. Research has shown that although participatory processes are increasingly employed, they usually lack anchoring within democratic structures.

Especially when the procedure appears closed rather than open and unbiased, the unfolding power might be perceived as limited, which can lead to frustration and can harm trust in democratic and participatory procedures (Thoneick, 2021).

The use of the participatory cube contributes to structure the analysis around three suggested axes. This model does not include technology in the analysis. So the characteristics of technologies and their accessibility for different user's groups have not been considered (Poplin, Pereira, & Rocha, 2013).

2.2.2 Conclusion

As discussed in the previous chapter, participation could not be detached from democracy, and it seems essential to discuss it in the context of the cities. In this part, it tried to stress the importance of participation and how citizens could play an important role in this matter. Participation in creating a common ground for decision-making seems necessary because the complexity of issues within our cities reached a very tangible level. A collective decision-making process leads to better solutions, and experts and communities should work together to reach them. In the literature review, two different participation models were proposed. It seems the Cube of Participation could provide a better model to describe the practice of participation. This model could provide a different range of specifications at the same time. In this research, it will be tried to consider this model as a model for analysis of the case studies.

2.3 Participation in Design and Planning

Making is deliciously engaging. There is really nothing like it. When something is being created in public, it invites attention -a spectacle, minor or supersized, that passersby cannot resist. It doesn't matter whether the construction is a skateboard park or volunteer-built housing, protest murals or pallet furniture. They observe the energy and joy of the builders; the bold invite themselves to join in. Others may need a "Hey, do you want to help out?" Soon the workforce is doubled, reinforced with participants who might never have attended a planning meeting or a public hearing. Grass-roots democracy has expanded its active membership.

And many become active in other community projects (la Pena, 2017).

The planning system is based on an administrative, technocratic, and political processes, that, it has been argued, has not kept pace with the growing role of and expectations in planning to manage change in the built environment, or for that matter to meet the needs of citizens and communities. The practice of planning is usually undertaken as two parallel activities- creating planning policy to shape the future of places and deciding planning applications for new development management. The final stages of plan production provide less opportunity for public engagement, even if several years have passed since the plan was commenced and can only question a plan's conformity with national planning policy; this is largely a technical exercise, rather than an opportunity to put forward new ideas (Wilson & Tewdwr-Jones, 2022).

Discussing spaces in cities raises questions of, for example, land use, acreage, and propensity to flood, whereas place focuses on symbolic meanings such as feeling, attach-

ment, and statements such "I feel that I can really be myself there", and "I really miss it when I'm away too long". Citizen participation in planning is complicated by these different views, where "many planners in practice continue to maintain the reductionist assumption that cities and places can be considered unproblematically as single, integrated, unitary, material objects, to be addressed by planning instruments", and "that space and time act as little more than objective, external containers within which human life is played". This distinction, in part, can be used to explore and unpick some of the barriers identified earlier that prevent people becoming involved in planning, and how a different type of planning might engage with more experiential accounts of people; this would then encourage heightened participation on the terms of what is important to local people, rather than important to planners (Wilson & Tewdwr-Jones, 2022). This new ideal community only emerges in as much as it is anticipated by design thinking and praxis and mediated by information technologies and networks. The appeal to "co-design" represents a challenge to the old ways of modern individualism and mass consumption. It will require a specific ethos and also specific new literacies. In spite of the challenging proposals of the avant-garde, not everyone has become an artist, but maybe a lot of us will be ready to co-design (Cruz, 2016).

Our preferences are very different compared with what they were some decades ago. Today "urban quality" is a concept widely embraced. When the outcome of dialogues and other

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"many planners in practice continue to maintain the reductionist assumption that cities and places can be considered unproblematically as single, integrated, unitary, material objects, to be addressed by planning instruments", and "that space and time act as little more than objective, external containers within which human life is played".

public meetings are summarized it is possible for the municipality to identify key ingredients that would improve the attractiveness of the municipality's social and living environment. An urban development project involves many stakeholders, including the municipality, builders, investors, organizations, and citizens. Typically, all of these stakeholders have expectations and address issues and qualities that they would like to see realised in the project. Sometimes stakeholders' interests coincide, but often they are in conflict. The objective is clearly expressed. Urban development projects should progress based on an analysis of their social, environmental, and ecological impacts. As the concept of sustainability is often considered on a very abstract level, consensus can usually be achieved among stakeholders (Ekenberg, Hansson, Danielson, & Cars, 2017). However, designers' values may or may not mesh with those of the community. There are techniques for drawing out a designer's own inspirations, personal working style, demographic profile, spatial preferences, and everyday life behavior patterns. Whether you are an experienced designer with many past projects to draw from or a young designer just starting out, part of the unique contribution you bring to a project comes from within. Although providing technical assistance to a community in need is a critical role of participatory design, responding with sorrow or pity hampers one's effectiveness. Sympathy, even when it is grounded in understanding, can subtly convey to residents that only the designer's expertise counts. Another pitfall lies in creating a patronizing process that diminishes the community's self-worth (la Pena, 2017). However, increasing the treatment of the citizen as a consumer rather than an inhabitant, within the use of participation is the implicit ambition to facilitate inhabiting, rather than consuming the city (Downs, 2017).

Up to this point, the idea of traditional participation, and how to interact with communities in case of interaction with the participatory design, was discussed, but in the current era, new forms of participation emerged. The planners and architects use Human-computer interaction (HCI) to create different tools which facilitate the process of participation. However, it seems necessary to elaborate more on the spirit of the digital age before starting to discuss the digital form of participation.

designers' values may or may not mesh with those of the community. Although providing technical assistance to a community in need is a critical role of participatory design, responding with sorrow or pity hampers one's effectiveness.

Increasing the treatment of the citizen as a consumer rather than an inhabitant, within the use of participation is the implicit ambition to facilitate inhabiting, rather than consuming the city

2.4 Digital Age and Participation

Throughout the history of human settlement, from governance to religious ritual to shared child-rearing, the village or town has been a standard unit of social collective experience, its size defined by the extents of direct human contact. Even before these social units emerged, the invention and implementation of cultural products " language, cooking, or architecture " have always advanced slowly, over centuries, in the context of individual communities. And then suddenly, at the turn of 20th century, for the first time since the printing press, a new means of communication wildly skewed the neighborhood-metric by orders of magnitude: wireless radio. The elements of the village - whether social or functional - took on new reactive properties as they amplified explosively. Canadian social media theorist Marshall McLuhan described this new human connective paradigm as a "global village" - an entire planet talking as if neighbors, suddenly given the tools to access each other's ideas (Ratti & Claudel, 2015).

McLuhan's village, however, does not point toward cohesiveness within the Catholic church " far from it- he qualified the term with its inherent tensions. "The more you create village conditions, the more discontinuity and division and diversity. The global Village absolutely insures maximal disagreement on all points. It never occurred, that uniformity and tranquility were the properties of the global village. The emerging networked condition of the Internet era is markedly different. It brings together conflicting ideas and ideals, but most importantly, it is a conversation. It returns to the original, age-old village metric. The internet allows a two-way exchange of ideas, not just a broadcast, and this cocktail of discord and collectivism can be remarkably, productive, as proven by open-source software. Linus Torvalds embraced the cacophony generated by Linux, believing that ultimately it enriches the final product. The number of such creations, circulations, and borrowings has exploded," ob-

served cultural theorist Christopher Kelty, "and the tools of knowledge creation and circulation (software and networks) have also become more and more pervasively available". All of these concerns amount to a reorientation of knowledge and power." (Ratti & Claudel, 2015). Since the early days of the World Wide Web, the idea of using new media for political participation and democratic practices has been framed as novel, modern and highly innovative. While these claims seem justified with regard to the information and communication technologies, which enable Internet-based democratic processes, it is important to keep in mind that the different proposals for electronic democracy draw on "explicitly or implicitly" well-established concepts of democratic theory. In this sense, the normative views, aims and approaches represented by the different conceptualisations of e-democracy are based on, and can thus be traced back to, the fundamental tenets of democratic theory. As is the case with any normative conception of democracy, each variant of Internet-based democracy is driven and inspired by a specific understanding of an ideal-typical view of the political community and the political decision-making process (Lindner & Aichholzer, 2020). The idea of the Internet as a "virtual" or a "networked" public sphere "as articulated by Castels" starts from the notion that due to the option of interactive communication which is unrestricted with regard to time and space, the web is enabling a new and enhanced public sphere that transcends national boundaries. For example, it provides new options for civil society actors to make their demands visible and reinforces communication between constituencies and their political representatives. Recent years have brought about more detailed empirical analysis of the Internet's relevance for political communication, thus complementing the previously mass media focused research on the public sphere. With a view to the widespread use of political blogs and social media by political actors of all kinds, there can be no doubt that the web has developed into a new space of political exchange alongside the mass media. Political actors can address their communities and followers directly and forward their comments and news via Inter-

The more you create village conditions, the more discontinuity and division and diversity. The global Village absolutely insures maximal disagreement on all points.

net platforms and social media (and vice versa). Mass media has built up web-based news platforms and uses the web as a source for news production. However, research and scholarly debate on the virtual public sphere "an overview of which is given in the following pages" do not give uncontested evidence for a new or revitalized public sphere being realized by the options of political Internet communication. Whereas the new means of communication among citizens as well as between policymakers and their constituencies have been seen initially mainly as drivers towards a more vivid public sphere of open debate, (Hennen, 2020) meanwhile participation in the digital form through technology became possible in all layers of the society and democracy.

2.4.1 Technology and Democracy

Technology alone can't save democracy. When technology is designed and used well, it can make it easier for people to participate in elections and other activities of civic life; but when it's not, technology that promises to help, ends up being harmful (Erlhoff & Rezai, 2022). Democracy means voting and the problem of democracy is how to organize that vote. A rather reductionist understanding of the complexities of which deliberation that democratic politics actually consist (Dege, 2016). However, we should be careful not to dismiss such attempts of the technological sphere to fix the public too easily (Dege, 2016). We should ask how technology can be democratized. Not 'how does technology fix democracy?', but 'What is a democracy like in a technological age?' It seems that technology is the student here and democracy the teacher. For that, instead of neutral technological development, we need an agenda setting phase for technological development. Just as it is important to empower citizens to participate in forming legislative agendas in politics, (Dege, 2016) it is crucial to understand the threats and advantages of digital technology, especially when the tools for participation are the digital tools.

"Technology alone can't save democracy. When technology is designed and used well, it can make it easier for people to participate in elections and other activities of civic life; but when it's not, technology that promises to help, ends up being harmful"

2.4.2 Downsides of Digital Technology

It may harm democracy and human rights

Companies, could exploit users' personal data to make profits, at the expense of 'massive violations' of privacy and security: 'They can shape your experience, they can control what you see when you see it and you become essentially a cog in their machine'. Sanger who is advocating 'decentralized' social networks, criticized executives in Silicon Valley like Mark Zuckerberg for being 'too, and controlling' Exposing personal information of 267 million accounts on Facebook is a living proof for that (Erlhoff & Rezai, 2022).

Fake accounts

One study estimates that between 9 and 15 percent of Twitter's active 'users' are in fact bots. Also, in September 2018, Facebook told a US Senate committee that from October 2017 to March 2018, her company had deleted 1.3 billion fake accounts. All these fake accounts/identities in future elections can be the most helpful to populist leaders and help to change the direction of the minds and strike a blow at democratic processes (Erlhoff & Rezai, 2022).

False information and authoritarian inclinations:

Another problem of current age is 'the actions (or inactions) of them that appear unwilling or unable to weed out malicious or false information/disinformation'. A 2018 study found that 'more than 80 percent of accounts that repeatedly spread misinformation during the 2016 election campaign are still active, and they continue to publish more than a million tweets on a typical day'.

It can be concluded, people with authoritarian inclinations are actively taking advantage of the propitious environment that social media offers and this is one of the main challenges. (Erlhoff & Rezai, 2022).

harm people/users

Making money through social networks: It's a big opportunity and at the same time, a great threat. Social networks are a fantastic platform for advertising businesses without spending a lot of money by using some instruments including copywriting, using hashtags, sharing advertising photos and videos, and new business players called 'influencers'. At the same time, social networks like Instagram or Facebook are the best place for buying and selling everything, including illegal goods like pistols, drugs, and even pornog-

graphy videos and prostitution. Controlling this big marketplace is one of the most important duties of platforms, without the restrictions of companies and the possibility of advertising. Therefore, to become safe and democratic, it seems necessary to review the economic and moral system of social networks, while respecting the principles of freedom of expression (Erlhoff & Rezai, 2022).

Producing violence:

The social network, now, is not only the place of human networking, information development, and growth of knowledge but also the ideal media for publishing thousands of bullying and hate in daily comments and a fantastic media for terrorist groups. Therefore, one of the other crises of the social network, today, is the generating of violence. This aspect, unfortunately, grows day by day, and companies are forced to spend a lot of money to control it; the control sometimes works as a kind of censorship. Facebook leads three great and popular networks (Whats App, Instagram, and Facebook) and is spending millions of dollars per year for decreasing violence and its consequences on these platforms. The method Facebook uses for decreasing verbal violence crisis is to read comments and examine the posts, and if the rules are violated, remove the post or comment from the platform. It seems, there is a need for a free and safe platform with global dimensions and a worldwide function under United Nations protocols and international covenants (Erlhoff & Rezai, 2022).

Addictive machines:

According to a study, 'most students from [ten] countries failed to go the full 24 hours without media, and they, all used virtually the same words to describe their reactions, including Fretful, Confused, Anxious, Irritable, Insecure, Nervous, Restless, Crazy, Addicted, Panicked, Jealous, Angry, Lonely, Dependent, Depressed, Jittery and Paranoid'. One of the reasons for these reactions returns to the importance of a presence in social networks for consolidation of a social position; as it is, it seems without activity in social networks, you are not in real life. Moreover, 'social media stimulates us in a powerfully subconscious and hormonal way'. It affects the human brain in the same way that falling in love does. Levels of oxytocin or 'love hormone' rise as much as 13 percent when people use social media for as little as ten minutes (Erlhoff & Rezai, 2022). However, digital technologies provide many advantages to society too.

2.4.3 Advantage of Digital Technology

Powerful Visualization:

The visualization possibilities are changing away from the analogue map towards process-accompanying online participation portals, digital three-dimensional city models, virtual reality and scenario simulations (Casper, 2019).

Time and Cost Efficiency:

These technologies can reduce the time or cost required to participate in planning matters, and "potentially improves relationships between citizens and government, and it relaxes time and geographic constraints faced by citizens who want to participate"; it also allows people to participate in places that might be more convenient for them (Wilson & Tewdwr-Jones, 2022).

Engagement:

Technologies offer opportunities to engage people more widely than traditional methods, due to their familiarity with technology and the new methods of participation that digital technologies afford, and include those "who typically do not participate in planning process" - although there has been little work that conclusively proves that these new approaches to engagement do in fact engage "new" people and may intensify social injustices, they are generally shown to be effective at broadening participation (Wilson & Tewdwr-Jones, 2022).

Transparency:

Informal participation processes do not replace formal decision-making processes, but they can support them in a special way and thus improve not only the transparency and quality of individual projects, but also of governance in general (Amt für IT und Digitalisierung, 2020).

Non-Hierarchical:

When the internet spread to broader layers of citizens in western societies in the 1990s, expectations were high regarding its potential to deepen political engagement and participation on the part of the public. Internet facilitates meso-mobilization, or the creation of non-hierarchical networks of NGOs and social movements, and also reduces the importance of geographical distances. The Internet enables activists to explain the motives of their actions themselves, making them less dependent on how they are portrayed in traditional news media. Civil society actors can use the Internet to bypass governmental institutions and mobilize activists around the world against

global political actors such as multinational corporations and/or institutions (Amna, 2010). In general, the advantages of these tools were not studied thoroughly, due to the fact they are a new emergent phenomenon.

2.4.4 Digital tools in participation

Design is inherently about change - not just in the creation of new material artefacts, but in the ways that new technological objects afford new practices, social habits, and ways of living and interacting. New technologies that are developed to digitize planning and make it more accessible for wider groups in society are not intended necessarily to solve problems rather they are designed and deployed to understand reactions to those problems, and so they can play a role in the future by communicating change and providing a platform for enhancing voices in planning (Wilson & Tewdwr-Jones, 2022). In the last 15 years, digital technologies and new methodologies have been implemented in participatory processes. The web as an evolving platform of communication and exchange has lead to a paradigm shift:

New technologies that are developed to digitize planning and make it more accessible for wider groups in society are not intended necessarily to solve problems rather they are designed and deployed to understand reactions to those problems, and so they can play a role in the future by communicating change and providing a platform for enhancing voices in planning

users move from being consumers to producers of content. Adding to this, digital services are increasingly utilized on mobile devices (Thoneick, 2021).

In a world where more and more things in everyday life are digitally controlled, digital participation becomes a prerequisite for social participation.

Society must ensure that all people can fully participate in its social processes. It must actively help to break down any barriers or concerns, and make it possible to experience the opportunities of digitization in a positive way. For all those who cannot or do not want to use digital solutions adequate access and suitable support must be offered to make administrative services easily available to them (Amt für IT und Digitalisierung, 2020).

In planning, this is represented by an increase

in the use of digital tools including, geographic information systems, virtual reality technologies, computer supported working environments, and interactive social media tools. Several researchers focus specially on participation that is grounded in geoinformation systems (GIS). To refer to this particular type of public participation, establishes the term GeoParticipation or public participation GIS. Kyttae and Kahila, arguing for new participation methodologies, set out to categorize localized experiential knowledge that is collected via user-friendly digital applications under the umbrella term softGIS referring to resident's knowledge repositories. Additionally, knowledge and capacity building need to be taken into consideration because levels of knowledge on the usage of mobile platforms might create new thresholds and thus pose a potential bias of social segregation linked to access and usage of technology (Thoneick, 2021).

2.5 Digital Participation

Human-computer interaction (HCI), as a sub-discipline of computing studies or computing science, has increasingly focused on how technology exists within society, rather than on the computer and the "user". To do this, HCI has engaged the social science (sociology, anthropology, etc) and is blurring the boundaries between the disciplines, which has occurred in three waves. Early HCI focuses on investigating how one person uses a computer whilst carrying out a task_ referred to as "first wave" HCI. First wave HCI used cognitive modelling approaches and human factors adopted from psychology, focusing on improving the efficiency of work. The second wave sought to understand the role of humans as actors _ groups of people working within the context of groups of applications. It sought to understand how tasks were completed in the context of their surroundings (rather than the earlier notion of the human and computer being isolated from their environment). Current era is known as a "turn to the social", with HCI bringing in new fields, and new frameworks of analysis, traditionally associated with the social sciences. This change led HCI to go beyond how users interact with a single computer or system, towards understanding how technology exists within a wider context. (Wilson & Tewdwr-Jones, 2022).

Digital Participatory Planning outlines developments in the field of digital planning and designs and Trials a range of technologies, from the use of apps and digital gaming through to social media, to examine how accessible and effective these new methods are. It Critically discusses urban planning, democracy, and computing technology literature, and set out case studies on design and development. It assesses whether digital technology offers an opportunity for the public to engage with urban change, to enhance public understanding and the quality of citizen participation, and to improve the proactive possibilities of urban planning more generally. There is an exciting alternative story of citizen engagement in urban planning through a reimagining of participation that will be of interest to students, researchers, and professionals engaged with a digital future for people and planning (Wilson & Tewdwr-Jones, 2022).

Opportunities for democratic participation in matters to do with urban change can open up new ways of discussing places, capture people's urban living experiences, and set in train options and debate about future visions. Digital opportunities allow those that choose to participate at times convenient to them, in interesting and novel ways, with the possibility to better understand proposed development changes and how they might be influenced and reshaped. While there are examples of where digital participation has been provided successfully for meaningful engagement, the majority of digital engagement happens through poorly designed systems (Wilson & Tewdwr-Jones, 2022).

Table 2 shows the methods used for participating online and the implementations of methods that are available offline, for comparison. Many of these methods favour the one-way outward communication of information, rather than allowing citizens to voice their opinions inward to planners (Wilson & Tewdwr-Jones, 2022). The aim is to create a better understanding of how the participatory dilemma in online deliberative processes can be handled (Ekenberg, Hansson, Danielson, & Cars , 2017).

The aim is to create a better understanding of how the participatory dilemma in online deliberative processes can be handled

The use of innovative methods and techniques for community involvement in the planning process, rather than just collecting data, and an important element of contemporary studies in HCI is understanding how citizens can engage with the decisions,

rather than just providing data and information for decision-makers (a move from transactive to relational governance). Embracing technology to aid early, so-called up-stream involvement in planning. Research generally supports the use of technology for citizen engagement in civic matters and demonstrates how new methods of technology-enabled participation can create the means for a louder citizen voice (Wilson & Tewdwr-Jones, 2022).

However, common digital participation takes

Traditional vs digital alternative participation

Traditional Technology

- Send letters to affected individuals
- Unstaffed exhibitions to share information on proposals
- Publicise proposals in local newspaper and local authority's magazine
- Notices posted on lamp posts
- Making comments on physical map

Digital Alternative

- Send emails to affected individuals
- Upload proposals to council's website to view information
- Publicise proposals on social media
- Notices placed on website
- Making comments on an electronic map

Table 2: Traditional vs Digital alternative participation
Source: (Wilson & Tewdwr-Jones, 2022)

place in the virtual worlds of the Internet and has not yet been able to reach people spatially (Casper, 2019) on a large scale. Architects and planners, to create a built environment, should play an important role to create a connection between digital participation and society. All these methods and tools are being used to create a link between the values of the communities and the built environment, but if these social values are being neglected, then the tools are no longer important. In the next chapter, participation as a social act, and the social responsibility of architects and planners will be discussed.

"Embracing technology to aid early, so-called upstream involvement in planning. Research generally supports the use of technology for citizen engagement in civic matters and demonstrates how new methods of technology-enabled participation can create the means for a louder citizen voice"

2.6 Society and Decision-making

The connection between participation and society is undeniable. The people's behavior inside the society has been studied in different aspects, and in terms of defining the attitude of participation social participation of the crowd was a question. When the social aspect of participatory design is being investigated, first we have to take a look into the act of Design. Design is centrally concerned with making, preoccupied with form, and always accountable to particular social, economic, and ideological flows that lap against and surge beyond the designed objects themselves. In most instances, design is a locally contingent and culturally elaborated process of production, a background scheme organizing how things are made (Murphy, 2015). Architects and designers are involved in these processes and their actions and decisions, directly and indirectly, affect people in society. Their decisions have ethical, social, and environmental impacts and require processes of reasoning at multiple stages (Rhomborg, 2018). Participation, since it emerged as a concept in the late 20th century, has been widely debated about a wide variety of frameworks ranging from democratic theory to citizenship, from new media to game theory, and from communication to aesthetic practice. Just like 'participation', 'community' is one of the shining words in public and scientific debates hailing the Internet. This relationship can be traced back to its founding

Design is centrally concerned with making, preoccupied with form, and always accountable to particular social, economic, and ideological flows that lap against and surge beyond the designed objects themselves.

documents where community plays a vital role. (Denecke, Ganzert, Otto, & Stock, 2016). Against this background, participation is proving to be a total sense cultural fact of the contemporary condition: at least, it is perhaps the center of the coming governmentality and the heart of the new political economy (Denecke, Ganzert, Otto, & Stock, 2016). Designers, along with other makers creating artifacts, have used an intriguingly sim-

ple formula to connect what they do with democracy: '[D]emocracy means doing things together (Erlhoff & Rezai, 2022). In this chapter, the correlation between the social aspect of participation and how architects could play their social role in society will be discussed.

"[D]emocracy means doing things together"

2.6.1 Human as a Social Identity

The behavior of human crowds has always been compared to the behavior of animal collectives, most notably resulting in the popular denouncements of 'the mass' in the writings of mass psychology at the end of the 19th century. Participation in such collectives, turned well-behaved and conscious individuals into 'mobsters' who reacted irrationally, unconsciously, or purely instinctively and were devoid of everything that would characterize a self-determined subject. Adopting insights taken from contemporary natural history, the advocates of mass psychology laid the ground for at least half a century of a predominantly socio-psychological research practice in mass behavior (Denecke, Ganzert, Otto, & Stock, 2016). On the other hand, human social interaction could be considered through how much they participate in society. Participation in social science discusses this phenomenon through the lens of democracy and the motivation of the masses as part of a community. 'Community' has been described as one of the most vaguely defined concepts in all of sociology. A reasonable definition of the community would be a group of people with diverse characteristics who are linked by social ties, share common perspectives, and engage in joint action in geographical locations or settings.' Another definition of the community would be a specific group of people, often living in a defined geographical area, who share a common culture, values, and norms, and are arranged in a social structure according to relationships that the community has

developed over a period of time. Members of a community gain their personal and social identity by sharing common beliefs, values, and norms which have been developed by the community in the past and may be modified in the future. They exhibit some awareness of their identity as a group and share common needs and a commitment to meeting them. The community consists, in essence, of such connections between expressed thought and lived experience: a dynamic cyclical relationship between the stories people tell about themselves and the ways they relate to one another and their environment ... the material for building community is ever present, wherever people are and whatever they are doing (Allman, 2015).

2.6.2 Social Participation

Several authors consider social participation as an indicator of health and well-being (Dawson-Townsend, 2019), and positive social behaviors. Social participation is seen as an important condition for children's development, as children gather knowledge and develop social skills while interacting with other people. For the elderly, social participation is regarded as a key determinant of successful and healthy aging. Participation as 'involvement in a life situation' or as "the lived experience" of people in the actual context in which they live', while the activity is defined as 'the execution of a task or action by an individual'. Social participation could be considered as (the right for) 'meaningful involvement in decision-making about health, policy and planning, care and treatment, and the well-being of self and the community'. Social participation can also be defined as a person's involvement in activities that provide interaction with others in society or the community.' Involvement can be seen on a continuum from relatively passive to very active, and that social participation can be both an objective and a subjective outcome (Piskur, et al., 2014), but in fact, citizens are legally equal, they remain socially unequal (Landman, 2007).

Rights and responsibilities cease to be metaphysical attributes of the person and appear instead as socially conferred capacities and capabilities: governmental techniques produce the

individual as citizen. Men and women participate in democracy, one might say, but they do not participate under circumstances chosen by themselves nor in the terms defined by the formal rights of citizenship (Barnett, 2003). In contrast, the influence of trust and skepticism on the activation of citizens to participate and conclude that high project-related skepticism or low trust in institutions can lead to social participation and protest. The nature of social participation seems to be changing. Similar changes can also be seen in participation in issues of urban development (Casper, 2019). The question is how is it possible to define social participation in terms of their involvement in society? The proposed taxonomy of social activities has, along a continuum, six proximal to distal levels of involvement of the individual with others in social activities having different goals. The levels distinguish the individual proximity of involvement with others (level 1: alone; level 2: in parallel; levels 3 to 6: in interaction), and the goals of the activity (levels 1 and 2: basic needs oriented; level 3: socially oriented; level 4: task oriented; level 5: oriented toward helping others; and level 6: society oriented). In other words, the concept of participation encompasses all six levels, while social participation concerns levels 3 through 6 and social engagement includes levels 5 and 6 (Appendix 2) (Piskur, et al., 2014). The Example for clarification is based of parenthood, but it could be understood how involvement in society could work. In order to understand and relate to the concept of social participation of architects and urban planners, a revision for the table is proposed. The six levels of participation remain the same, only the examples are different, because the tools and media for this research are different (Table 3). According to the table, the citizens could also play an important social role in terms of participation in design and planning. They could be active in different frontiers. Participating is about fulfilling societal role and personal goals. Social participation is generally understood as the participation of citizens in managing the affairs of the community of which they are members (Zakrze-

"Human social interaction could be considered through how much they participate in society"

"The citizens could also play an important social role in terms of participation in design and planning. They could be active in different frontiers"

Levels	Description of levels of involvement	Examples using Design and planning of built environment in relation to involvement in Society
First level	Doing an activity in preparation for connecting with other people	Reading and get to know new projects that happening within the cities through different media
Second level	Being surrounded with others	Sitting in meetings, public gatherings, and exhibitions related to the built environment
Third level	Interacting with others without physical contact	Discussing inclusive concerns with others through Facebook, Twitter, LinkedIn, or any other digital tools for interaction
Fourth level	Doing an activity with others	Joining creative workshops with other citizens for new projects
Fifth level	Educating others and being an active member	Spread the information about the importance of expressing the opinions among the communities
Sixth level	Contributing to community	Being an active member of organizations or social institutions to bring more people to the process of decision-making for the built environment

Table 3: A taxonomy for social activities based on the levels of involvement in Design and planning
Source: (Author, 2022)

wska, 2017). It was shown that both social participation and social engagement fall under the umbrella of participation. Social engagement necessarily involves a desire for social change or to be heard to affect community choices (...) to contribute to making the community a better place to live. Participation then does not refer to performing single activities, but to performance of a socially and culturally defined role (Piskur, et al., 2014).

An effect of conceptualizing legitimate participation by a community of affected is the often unexpressed assumption in design that participation is not needed as a necessary democratic legitimation of certain designs and design decisions, but that participation, mediated by the designer-facilitator, helps the community of affected to solve the communities problems by themselves (Erlhoff & Rezai, 2022). Social participation is an integral part of a civil society which in turn is a derivative of a well-developed bridging social capital, which is high in well-functioning states. Governments can clearly build bridges to excluded groups, thereby increasing the likelihood that marginalized groups have access to resources and services.

by increasing the likelihood that marginalized groups have access to resources and services. In other words, the more individual connections that exist within communities, the better they will function socially, based on the idea of good governance. Social capital is a "special kind of resource that is embedded and developed in the structure of relationships" (Zakrzewska, 2017). However, the participation of people inside communities should be considered from another angle, which is the motivations behind the participation. In another word, before encouraging people to participate in decision-making and be an active players in social participation, it is necessary to see what triggers people to bring their opinions to the table.

2.6.3 Motives of Participation

According to Amna, 2010 Six individual motives could be distinguished in communities for participation:

- 1 Obligation: "One Ought to"
The respondents often defended their civic engagement as a way of maintaining their self-respect as a person and a citizen _ the idea that not participating and just letting things be would be shameful. But it appears to be more about obligation than a right to participate, accordingly, voting is the minimum requirement _ a small effort that maintains civic self-esteem, and a way in which everyone can contribute. Civic virtue involves civic engagement, particularly voting. All respondents appear to subscribe to this idea and appear to have done so from early childhood. Of course, this is a common response

finds oneself under observation by researchers. If someone ultimately chooses not to live by this norm, they do so in the awareness that it is something they are not profound of.

2 Importance: "I have to"
"I Ought to" was the theme of the previous motivation, related to external norms and social control. As a citizen, one should be engaged. This is powerful and widespread civic norm. but is the root of this norm primarily honor-based in nature, or something that one activates in a more elevated context, such as in the highly ritualized election process?

"I have to" is not a compulsion in the formal sense of the term. It stretches across many kinds of motivations — feelings that range from submitting to destiny to becoming terribly angry about a concrete event. For some, "I ought to" is very similar to "I have to", the rational being that what one ought to do one also has to do — like links in a chain of socio-ethical argument. But for many others, it is a matter of a political event that demands action. In contrast to "I ought to", "I have to" has a stronger internal orientation: I have to do it because it is important to me (now). In these situations, a more or less dormant civic engagement is awakened and leads to political engagement. But again, alongside these citizens there are still those who, faced with hypothetical situations that are generally perceived as either threatening or full of promise, nevertheless shrink back. Nothing in the situation makes them "have to" that there is no compelling moral duty or no direct interest at stake. Nothing can alter their passivity, which they duly recognize and can account for. Some offer various arguments, such as the time involved, priorities, and the degree of their concern for the issue, perhaps because they probably thought that they ought to be active — the burden of proof for remaining passive is perceived to be on them.

3 Ability: 'I Can'
For one to actually become involved and participate, a moral imperative or situation inviting action alone is insufficient. One also has to have confidence in one's own resources — that what one has to contribute can truly make a difference. We know that this dimension of motivation has strong socio-economic patterns, in that education and background are factors that promote self-confidence. In political behavioral science the concept of "political Efficacy" covers two dimensions: an internal aspect (having con-

in one's own resources and being able to make oneself heard), and an external aspect (being listened to). Additionally, one can talk about "collective efficacy" — having confidence in one's own ability to work in collaboration with others and successfully being heard, as part of group or a collective.

How one can see oneself being able to contribute? There are many ways: ingenuity, fresh ideas, intelligence, volunteer labor, ideology and valuable experience from previous participation are personal resources that are often mentioned. Despite this, not all of those who think they have the ability become participants; some remain dormant.

4 Demand: "I'm Needed"
Insight into what one ought to be doing in general and what must be done in particular is also insufficient for motivating action. Self-confidence about having something to contribute is not even always sufficient for engagement to develop into action. In study after study on political engagement, the significance of recruiting—particularly the effect of an invitation to action — is consistently emphasized. In other words, one must feel needed by someone else. One can wonder if this is the difference between active individuals and passive ones — that the former are already aware, while the latter must be told that their participation is needed. Moreover, those who are well-entrenched in a community of participants have their self-confidence confirmed.

5 Effectiveness: "It Works"
So far, the motivations that distinguish passive and active engagement are hardly a question of moral dictate, or something that everyone feels responsible for doing. Rather, it is a question of how urgent one thinks it is in the particular situation or how important a political issue is. It is also a matter of having a sufficient amount of self-confidence, readily manifested in an invitation to participate and a desire to contribute. But the respondents in the focus groups and individual interviews also spoke about effectiveness. They demonstrated that understanding the problem is not enough — one must be able to perceive an effective path of action that addresses the problem. One factor that the passive and the uninvolved appear to have in common is that they do not credit accessible forms of action with any effect.

6 Meaningfulness: "It Gives"
The theme of the futility of political participation varies as well, particularly in terms of

sentiments such as "it gives something back". This is important because political engagement quite likely involves sacrifices; at the very least it demands contributions in the form of time. The list of values that politically active people invoke when asked with participation gives them in return is long. On one level, it is a matter of social relationships, of having fun with friends and contact with interesting people ' one does not have to be alone and is appreciated by other individuals with common interests. One also benefits from being in a position of power. On another level, it has to do with feedback in terms of cognitive experiences such as training and knowledge. On an almost existential level, the dividend from participation revolves around joy, inspiration, and belonging. It promotes a civic identity: I do it because I belong. It is an act I do as a part of my lifestyle. It does one good to be engaged, as well as from a purely egotistical perspective, as in de Tocqueville's sense of community spirit or as "self-interest rightly understood" (Amna, 2010). The motivations for participation are different in many ways. The best way to summarize these motivations is to consider them in a way how much control participants have over the process of participation. The obligation for participation is the basic form of participation, that requires a small effort and the people has less freedom

in the process. In the other types of motivations, the eagerness and freedom for participation will grow because people have more confidence, they feel more needed, they feel more effective, and they also may find joy in this matter. In (Figure 15) it is tried to demonstrate this issue, but how architects and city planners could serve their social responsibility and make participation a meaningful process, which brings joy to the communities, and has a deeper impacts on the satisfaction level about built-environment?

"The motivations for participation are different in many ways. The best way to summarize these motivations is to consider them in a way how much control participants have over the process of participation"

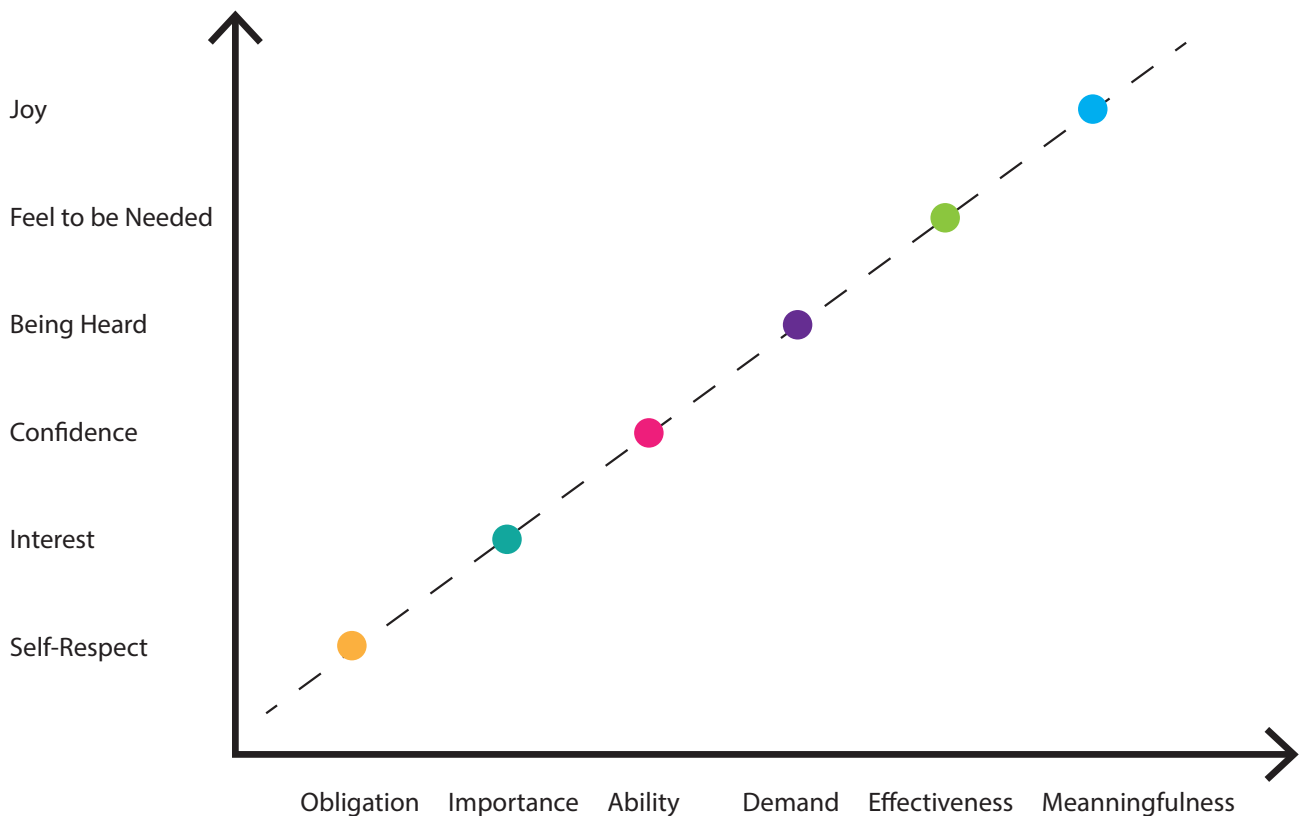


Figure 15: Motives of Participation
 Source: Interpretation from (Amna, 2010), Drawn by Author

2.6.4 Social responsibility of architects and planners

The Architects after the modern era had a large influence in planning the future of built environment. The image of designers and planners and their ability to convey the society by exerting many social and cultural values across the world had changed.

The godly picture of architects as the creators of future life on earth has started by Le Corbusier in a most impactful way in 20th century. The authorial voice of Le Corbusier echoed from architecture to furniture to theory, across the very functioning of society itself. He dreamed of implementing mass production in new ways, creating pure forms for every dimension of standardized - an idealized- life. He understood that "the sphere of architecture embraces every detail of household furnishing, the street as well as the house, and a wider world still beyond both. When it comes to creating context for human lives, Le Corbusier couldn't be bounded, couldn't rest on the seventh day. He sought to create "another city for another life,". During the first half of the 20th century, at the time Le Corbusier was working, there was a general sentiment that European culture had been destroyed by wars or had become so cluttered with nostalgic detritus as to be uninhabitable. It was on this soil that the Promethean architect alighted. He delivered the triumph of top-down, comprehensive design: Everything worked. Not only did it work, but it ticked along effortlessly with the smooth grace of pure rationality. Le Corbusier hovering hand announcing a pure, single-minded vision... and society could not help but follow. The great Promethean myth of the architect, one that has persisted from romantic times (Palladio, for example) through Ayn Rand's *The Fountainhead* and up to date. *The Fountainhead* promoted the idea that architects should (even have a responsibility to) educate the bourgeoisie. Rand's none-too-fictional protagonist firmly cemented the stubborn resolve of architects across the globe: "If Howard Roark could put his foot down and refuse the bad taste of boorish clients, so can I," (Ratti & Claudel, 2015). Architects (specifically Le Corbusier) could have a large impact on the cities. He could act as a city planner in parallel with occupying the role of an architect. This matter navigated this master thesis in a way that to not draw a distinctive line between architecture and planning.

The dreams of an entire era- global networks, architecture-as-media, speed, standardization, and efficiency - have at last come true, but architecture have become isolated. In accelerating bid to design society as well as everyone of its cultural products - and finally to enlighten the public as to what it all means - the lone genius has distanced himself from that public itself. The engine of architecture has become geared toward the privileged few: today, buildings designed by architects account for no more than two percent of global construction. Power is used and abused - from master- planned cities to corporations to single patrons - yet the common denominator is a grand, iconic building or masterplan that has little to do with the vast majority of its inhabitants. It could be argued that through books, film, the Internet, and finally sheer willpower, the cultural idea and self-conception of the architect has enjoyed wild success, while architecture itself has

Architects (specifically Le Corbusier) could have a large impact on the cities. He could act as a city planner in parallel with occupying the role of an architect. This matter navigated this master thesis in a way that to not draw a distinctive line between architecture and planning.

failed both as a business model and as a tool for beneficial social change. Architecture has drifted into the stratosphere, where it's not even as simple as designs being produced which have no relationship to actual buildings, but it's even that the buildings that are being produced have no relationship to actual needs (Ratti & Claudel, 2015). In contrast, much more than designing buildings or whole communities, architects have a greater task. They're uniquely positioned to improve life on numerous levels for professional

clients, cities and private individuals. Health, Safety, and Welfare are always at the forefront of the industry (PDH Academy, n.d.).

In past the city planners and architects were more part of society, and it was echoed through the history of architecture. The separation of architects from society caused the alienation of people from the new built environment. The architects in past were truly nameless, they reflected the whole spectrum of values of the communities because they con-

sider themselves also part of the community. The history of human habitation is an untold epic of anonymous architecture: the nameless vernacular is a cultural expression of man's need not only for shelter, but also for status, identity, and delight. In 1965 Bernard Rudofsky completed an epochal study of what he called "non-pedigreed architecture" presented as a book and exhibition for MoMA in New York titled "architecture without Architects" Rudofsky's project was at once an investigation, documentation, and celebration of vernacular architecture. The idea was uncommonly polemical for its era and location -during the heyday of modernism in New York, Rudofsky leveled a direct challenge toward the omnipotent authorial architect of his time. Rudofsky's work hinged upon a central thesis: building a compelling case for authorless architecture as

"Architecture without architects, we shall call it vernacular, anonymous, spontaneous, indigenous, or rural, as the case may be. "Slow trial-and-error process of adaptation offers to achieve locally and culturally optimized architecture, and that this process pre-dates humanity itself."

a viable means of a design that has existed for thousands of years in cultures across the globe. Architecture without architects attempts to break down our narrow concepts of the art of building by introducing the unfamiliar world of non-pedigreed architecture. It is so little-known that we don't even have a name for it. For want of a generic label, we shall call it vernacular, anonymous, spontaneous, indigenous, or rural, as the case may be. "Slow trial-and-error process of adaptation offers a rich potential to achieve locally and culturally optimized architecture, and that this process pre-dates humanity itself." (Ratti & Claudel, 2015). Vernacular architecture to this date is one of the successful examples of a socially responsible approach toward the built environment. "Socially active design", as Alastair Fuad-Luke has called it, focuses on society and its transformations toward a more sustainable way of living, working, and producing (Erlhoff & Rezai, 2022). Participation of communities is an integral part of this approach, but not why participation could be useful today. The main point seemed to be gaining community support; important to the architect who is delivering a smooth process of acquiring planning permission (Downs, 2017).

The architectural profession is, by nature, cross-disciplinary: architects are expected to negotiate between aesthetic, economic, environmental, and social issues. However, the profession has become self-referential, more concerned with presenting to other architects than communicating with the untrained (Downs, 2017). Architects have engaged with political, social, and environmental issues, and dealt with them in their writing, designs, plans, and utopias. This was specifically evident in their response to rapid urbanization, industrialization, standardization, and serial production (Rhomberg, 2018). In this understanding, the role of social responsibility of architects in today's built environment from a planning theory, governance and democracy, and participation is being investigated. The main goal is navigating the social responsibility of architects during the planning and design process. From the architect as an individual creator of buildings towards a more collaborative way of working - can already be observed as the product becomes more and more globalized and complex. More importantly, the architect is not the single creator of a building and thus needs to see him- or herself as a part of a wider network and as the conductor or facilitator of processes that span between varied realms, such as knowledge and action, design and processes.

However, the profession has become self-referential, more concerned with presenting to other architects than communicating with the untrained (Downs, 2017). Architects have engaged with political, social, and environmental issues, and dealt with them in their writing, designs, plans, and utopias. This was specifically evident in their response to rapid urbanization, industrialization, standardization, and serial production (Rhomberg, 2018). In this understanding, the role of social responsibility of architects in today's built environment from a planning theory, governance and democracy, and participation is being investigated. The main goal is navigating the social responsibility of architects during the planning and design process. From the architect as an individual creator of buildings towards a more collaborative way of working - can already be observed as the product becomes more and more globalized and complex. More importantly, the architect is not the single creator of a building and thus needs to see him- or herself as a part of a wider network and as the conductor or facilitator of processes that span between varied realms, such as knowledge and action, design and processes, and different interests and places. Since the advent of the 21st century and the impacts of the economic crisis, there have been an increasing interest and discussion in the planning community about socially responsible design. Socially responsible design, in general, it is characterized by "attitudes that value justice, equality, participation, sharing, sustainability, and practices that intentionally engage social issues and recognize the consequences of decisions and actions" (Rhomberg, 2018), in contrast, such an invested approach from an enthusiastic individual who is fundamentally convinced of his social responsibility is a rarity (Downs, 2017). The capacity to accommodate local needs, represent community identity, welcome those previously

excluded, create an atmosphere of dignity, inspire further improvements, and concretize advances in environmental justice. None of these occurs automatically; each requires the highest denominator of design acumen (la Pena, 2017). Throughout the history of architecture, as Habraken points out, building design has evolved on the timescale of generation. In the traditional evolution of vernacular architecture, a person may design her house to be similar to the neighbors', but with slight modifications and improvements. After a project is built, it is evaluated by the community, even unconsciously, and subsequent projects will modify and innovate. So architecture propagates and evolves, based on typologies, shared information, and subtle experimentation from Native American dwellings to Gothic cathedrals. He leaves the most intimate material element of the built environment (house, work, unit) to be the sole purview of users themselves. In this way, the living cells of architecture correspond directly to the individual in what Habraken calls a "natural relation." The architect has an

"The architect has an opportunity to participate in the evolution of the autonomous built environment by creating frameworks within which user designs"

opportunity to participate in the evolution of the autonomous built environment by creating frameworks within which user designs (Ratti & Claudel, 2015). It could be concluded that socially responsible architecture which is being labeled also as vernacular architecture provided

many solutions to the built environment. In this research, the interaction with communities and participation comes under scrutiny. In the next part, the role of an architect in this spectrum is discussed.

2.6.5 The Role of an Architect

Design is a political act. The politics of design determine who gets what, from parks and housing to landfills and freeway pollution. The politics of design determines if a bench prevents a homeless person from sleeping or if a park includes facilities for all in the neighborhood to enjoy. The politics of design determines whether land resources essential for a healthy ecosystem are enhanced or destroyed. Participatory design is one of the most effective means in a democra-

cy to create cities and landscapes that distribute resources and shape places to be sustainable, representative of diverse publics, well informed by local wisdom, and just. Transactive design processes empower participants and designers with information, skills, and self-confidence as well as the recognition that there is much to be gained by change (la Pena, 2017).

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As it was demonstrated that, the participation is one of the fundamentals of vernacular architecture, but participatory design without socially responsible attitude is not acceptable. It is a bit problematic to separate participation from a vernacular architecture. However, in this research, it is tried to address participation of communities, as a result, it is easier to call for participatory design in this research. There are many demands of the designer in this new broadened role of a self-critical practitioner of participatory design. In establishing the aims of using participation, practitioners need to consider the intricate context of each project. Also it is required an awareness of the ideology of freedom in this approach. In a commons-like situation, the designer can nurture a sense of working together for mutual benefit as a facilitator of effective collaboration and communication. A primary role of the designer is to negotiate between the different actors involved and their expectations. Done well, the designer can prioritize the information contributed by all participants and carefully curate this knowledge. The design is in the selection and hierarchy which is just as valid a work of design as the finished built form. Furthermore, the participation process itself should be considered a work of design subject to the same attention as the other processes and outcomes. The diagram in (Figure 16) shows a range of positions an architect may take in their practice. Critically evaluating the priorities of one's approach is vital to articulate to clients and users the emphasis that will be present in the design process (Downs, 2017).

This comes across as a heavy-handed approach, literally of trial and error on the ground as architect-participant, which is not easily replicable. Markus Miessen also treats the role of the designer as a primary concern in his work but takes a more removed stance. He describes the architect as a polymath, who is expendable in the current capitalist system of valuable expertise and consultancy, but suggests that this role should be more like a 'cross-bench practitioner'. The architect's role is to facilitate the upscaling of the existing energies. Where making and shaping a community is happening, all that is required is the identification and amplification of processes with potential. This process could be described as one-way informing, two-way consultation, and two-way collaboration, and that would provide scope for improving the design. Additionally, by democratizing the market and social practices, the control will be back in the hands of those directly impacted (Downs, 2017). It seems participatory design by architects can engage people in the process. The role of the architect in this matter is to facilitate participation and create collective authorship for the projects and accommodate a political role in the whole process. In the next chapter participatory design will be discussed in more detail.

The architect's role is to facilitate the upscaling of the existing energies. Where making and shaping a community is happening, all that is required is the identification and amplification of processes with potential.

2.6.6 Participatory Design

Participatory design is hands-on democracy in action. It is up close. It is personal. It is grounded in the everyday places and lives of people. For over half a century it has guided us in understanding communities, honoring difference, creating vibrant neighborhoods and ecosystems, challenging environmental injustice, and fostering citizenship. Yet, in spite of our creative potential as design of techniques that were developed 50 years ago, without adapting or innovating for the contexts we now encounter. This complacency has come at a cost. Familiar techniques are now rote and stagnant. Formalized and calcified into contemporary practice, they offer predictability for clients but hold little promise for grassroots community transformation (la Pena, 2017). As a result, designers tend to aim to encourage as large and diverse a group as pos-

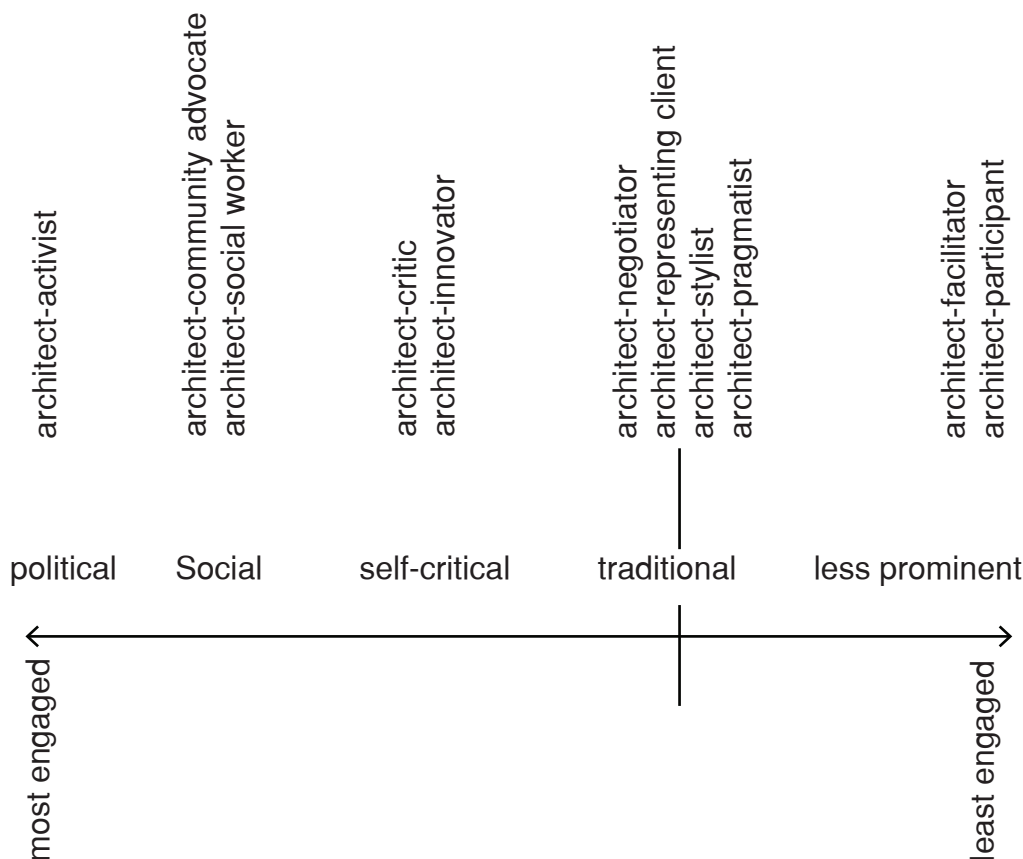


Figure 16: Diagram of different emphasises an architect may take in taking a position in their practice
Source: (Downs, 2017)

2.6.7 Dangers of Participation

sible to participate, assuming that secures the most democratic output. Miessen frames this as leading toward false consensus when in fact a representative mode of democracy can be more helpful (Downs, 2017). Participatory design is involving stakeholders, usually future users, at some point in the design process. The highest level of engagement is where participants directly influence the design, collaborating with the designer. Generally, the use of participatory design suggests a focus on the users' needs and desires, rather than prioritizing the client or designer's agenda. "For decades now, many architects have used community engagement and collaborative design techniques as a crucial part of the design process, essential to producing buildings and spaces that meet the needs and future potential of the end user", but it seems to utilize participation is appropriate sometimes, rather than "essential" always (Downs, 2017). The emphasis here is that to conduct beneficial participation in urban contexts, it is not about more participation but about more just, inclusive, and impactful participation that matters to people and their cities (Stiftung, 2019). The progressive quality of participatory design cannot be taken for granted as distinct from managerial governance but rather must be understood as part of the broader assemblage of late-capitalist governance (Elinoff, 2021). In this stage, it seems necessary to consider the downsides of participation, because misconceptions about the idea of participation can sometimes bring more harm than good.

"For decades now, many architects have used community engagement and collaborative design techniques as a crucial part of the design process, essential to producing buildings and spaces that meet the needs and future potential of the end user"

A 2005 study titled Architecture and Participation concluded that: 'the strong feeling is that participation, or rather pseudo-participation, is being used as a socially acceptable shield behind which the authors can develop their technically-determined ideologies,'. Yet, as the authors of Architecture and Participation suggest, nominally cooperative projects, in any basterdized form, nonetheless continue to be a useful tool for architects and administrators alike. The word 'participation' is clearly a powerful selling tool, regardless of its problematic feasibility, and adds the weight of democratic validation to any planning process.

The parallel conversation is the elevation of craft as a noble process. It is given political or intellectual weight though the outcome may not speak of the process at all. An article in the Architectural Review describes the current trend of a return to craft for the sake of itself. This is not just nostalgia for a pre-digital time, but a reaction to financial crises where the homemade is appreciated as a response to austerity and scarcity. In this way, the aesthetic skill of the architect is lost, as they adopt a participatory style which has specific rules of critique but also marginalises the practice in the eyes of the rest of the profession. Participation architecture is put in a box of ad-hoc, homemade, 'dirty architecture' not considered part of a quality design-led architecture. It should be posited that using participatory processes does not require the architect to leave their aesthetic skill and taste behind (Downs, 2017).

When participation is used to gain favour with

the local authority for example, rather than a sincere interest in involving the user in the process, it can be described as "pseudo-participation". Pseudo-participation is a concept taken from *The Nightmare of Participation* by Markus Miessen, architect, critic and writer. Miessen is critical of participation linking it to political theory and exposing a token participation practice that pursues false consensus rather than real engagement. It can be seen that, pseudo-participation becomes dangerous when the public is falsely appeased of having influence in the project (Downs, 2017). [A] vast amount of research shows that the costs and benefits of participation are generally skewed in favor of those with higher socio-economic status (SES) and education levels (Aichholzer & Rose, 2020). Those who decry insufficient participation, those who request more participation or those who want to illustrate felicitous inclusion depend on strategies of visualization. These strategies are often criticized as being superficial exhibitions or the exploitation of people who seem to be unable to decide for themselves. Yet it would be rash to dismiss these scenarios of participation as mere illusions or "false promises". This research perspective counters that idea that only through the different forms of staging participation can the "co-appearance" of community, in Nancy's terms its 'comparution' or 'compearance', be enabled and, above all, be visible and describable 'not only in promises and utopias, but also in denials and lapses (Bippus, Ochsner, & Otto, 2016).

The following is a number of downsides of participation:

- temporary change, but no lasting gain
- "managing expectations" in a restrictive or false manner
- monetizing "community spirit" as another added value to property in the area
- seeking false consensus, purposefully ignoring those with extreme or difficult views
- pacifying and appeasing to allow planning applications to go by unopposed by locals
- using labour of community volunteers - using participation to control and manipulate desires of participants
- masking exploitation
- suggesting permitted participation in processes affecting the built environment can replace more subversive actions of challenging the status quo
- suppressing citizen power
- pretending to affect larger systems of power

while furthering a destructive neoliberal agenda (Downs, 2017)

Participation under certain conditions can feel like tyranny. In the most oppressive forms of participation often involved paperwork. Such forms of bureaucracy not only generated feelings of disquiet among participants, but also enacted forms of direct power of personal and communal improvement found implementation in bureaucratic artifacts (Elinoff, 2021). Another outcome from describing participation as dangerous, in the sense of powerful and influential, is that there are risks to be taken. An unfortunate consequence of processes being written into legislation and mainstream guidelines, is that they become softened and flatter; appeasing rather than actively presenting something new. It is a worthy ambition to take risks in pursuing effective participation, outside of a flat mainstream acceptance (Downs, 2017).

Despite the democratic ambition expressed in goals such as collaborative government or open government, the obstacles to a more participatory and open way of organising government are many. Among other things there are still huge technical and institutional barriers, and a more collaborative government also brings some obvious problems regarding deliberative democracy. There is also a general lack of knowledge about who, in terms of gender, nationality, and social grouping, actually participates online and in what way. Not very surprisingly, new online platforms for participation have not solved many old problems regarding democracy. Equal rights and transparency are not enough; we need means to develop a more participatory deliberative conversation to develop a consensus on how to solve common problems (Ekenberg, Hansson, Danielson, & Cars, 2017).

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The Path to Shallow Design Despite the best intentions, participatory design often limits engagement at the most essential times. Input from participants is limited to written or verbal feedback while the professionals proceed to the drawing board or desktop to develop the actual design. The process follows a linear, unidirectional progression of design decision-making, with professionals maintaining their role as experts. With no meaningful interactions or exchanges, participants remain consumers rather than partners (la Pena, 2017). Designating participation as dangerous describes the fear that many implicitly hold. Is this fear of "doing it right", or fear of its potentially powerful outcomes? Seeking genuine participation can be seen as engaging with the complexity of the human urban condition - rather than dismissing it, or reducing it to simplified abstractions. Condensing the knowledge gained should happen after assessing the full extent of the situation, rather than avoiding such complexity and forcing consensus. The subsequent design of a hierarchy of needs and solutions should be seen as a legitimate and necessary part of the design process in which the designer retains responsibility (Downs, 2017). Participatory design is not a straightforward approach, it has many obstacles and complications. Architects should embrace these hindrances to praise the communities. It has many different rationalities which justify the participation.

2.6.8 Rationales of Participatory Design

Co-creating of sustainable urban futures can be considered as a design challenge. Future urban scenarios are envisioned as design challenges that require strategic thinking, creative problem-solving, and citizen-oriented ideation.

This brings us to the first rationale of participatory design: as a tool for democratic decision making and citizen-involvement. When human needs are put at the center of collaboratively developing city futures, questions about jus-

When human needs are put at the center of collaboratively developing city futures, questions about justice and equity come into play.

And equity come into play. Several urban professionals have explained this rationale as a criticism to neo-liberal planning and established practices in urban development.

Bringing back the human focus in digital cities is the second rationale for applying PDPC¹ in cities. Many critiques on the notion of the smart city evolve around the technological, efficiency and infrastructure focus in the smart city paradigm. In order to integrate the technological perspective with the social: urban technologies engage and empower people to become active in shaping their urban environment, forge relationships with their city and other people, and to collaboratively address shared urban issues. Thirdly, the inter- and transdisciplinary character of future approaches to all urban issues is another rationale for participatory design, cross-cutting all rationales presented above. Different knowledge and transdisciplinary approaches are needed to address the grand societal challenges in their urban contexts (Stiftung, 2019). Although there are many downsides to the participation process in design and planning, it seems these issues are more related to the flawed execution of this method. Democratizing the design is a political stand for participatory design. In this research, the idea of democracy is dominant and democratic design and planning has been observed as the focus of this research.

1- Participatory Design of People-centered Cities

Chapter 3:

Participation in Practice

3.1 Case studies

The digital technologies in planning use rarely go beyond the provision of information (one-way transfer of information from planner to citizen). Most of the web-based applications for supporting electronic participation (e-participation) "do not provide citizens with the opportunity to participate in decision making", a fact that has not changed substantially for at least a decade. For example, local authority websites will usually host scanned copies of letters, posters, or signs posted on lamp posts, rather than have content in a native digital format (i.e. using the abilities of digital technology to make information more easily understood and accessible) (Wilson & Tewdwr-Jones, 2022). This is the reason that why the tools and methods that are used to interact with people, are important. This part it is tried to consider different participatory projects to have a better understanding of the pros and cons of this matter. The selected projects consist of a variety of methods and tools in participation for better understanding about how digital/analog participation can be implemented more efficiently.

3.1.1 Cellphone Diaries

Cellphone Diaries was developed for community members so they could document their place-based stories independently, on their own time, and in their own voices. Through the use of smartphones, community residents can create self-authored digital videos leveraging sound and motion to add nuance and context to their stories. Additionally, videos are geo-located and can be linked to online maps adding relevant spatial characteristics, increasing accessibility for community review and discussion. The documentation of community stories can assist in the discursive process of community planning (la Pena, 2017). Cellphone Diaries was useful in the inventory and analysis to complement ongoing

community visioning and archival research processes for John Chavis Memorial Park in Raleigh. Chavis Park, a historically African American community, is in South Park East Raleigh and is a half mile southeast of Raleigh's downtown. Participants used digital videos to communicate the value of the park, which is the green heart of Raleigh's African American community, and to record stories of people, places, and events for which there is no longer any trace evidence. The process was facilitated by North Carolina State University College of Design's Downtown Studio and worked directly with members of the Raleigh Central Community Advisory Council as well the South Park East Raleigh Preservation and History Program. Although these groups included a range of people, the people who wanted to participate in the process and who had oral histories to share were all senior African American women.

The process produced 58 self-authored digital videos. The videos ranged from 30 seconds to seven minutes in length. The videos uncovered a range of previously undocumented park activities that gave the park meaning to local people. The most significant finding affecting park perception was the result of several residents identifying the historic main entry and programmatic heart of the park. A park that once allowed vehicular access and housed amusements, including an Olympic-sized pool and a miniature train ride, now has a pedestrian entry and plaza with no interpretive elements. This finding directly impacted the subsequent Chavis Community Conversation resulting in a master plan update for Chavis Park that aligned with community de-

The documentation of community stories can assist in the discursive process of community planning

sign values. The revitalization of the historic "heart of the park" is a key feature of the plan, and the park master plan was awarded a \$12.5 million budget for first phase of implementation. Additionally, excerpted videos from the process were featured in local gallery exhibitions and were the subject of public radio broadcasts and a city educational program focused on cultural landscapes. The technique was successful in engaging the specific people involved -local African American seniors with an abundance of previously undocumented memories and local heritage. However, the technique could have been used with other groups in the community. In particu-

lar, young people, who generally have a higher level of experience and interest in mobile technology, could have provided different perspectives on the places documented. New neighbors who may not have local historic knowledge represents another important group. In future efforts, attracting and encouraging dialogue between different neighborhood groups could enable critical dialogue about the collective awareness of important people, places, and events defining community heritage and meaning. Engaging a range of people with varying views and attitudes toward a place and using this technique to document and share different perceptions of the same place is a future direction for this work (la Pena, 2017). This case study used the google map and narrative system to tell and define the concerns of communities. People benefit from digital tools and create their agenda to interact with the context. hopefully, they could get their message through and participate in the master plan for the area (Figure 17).

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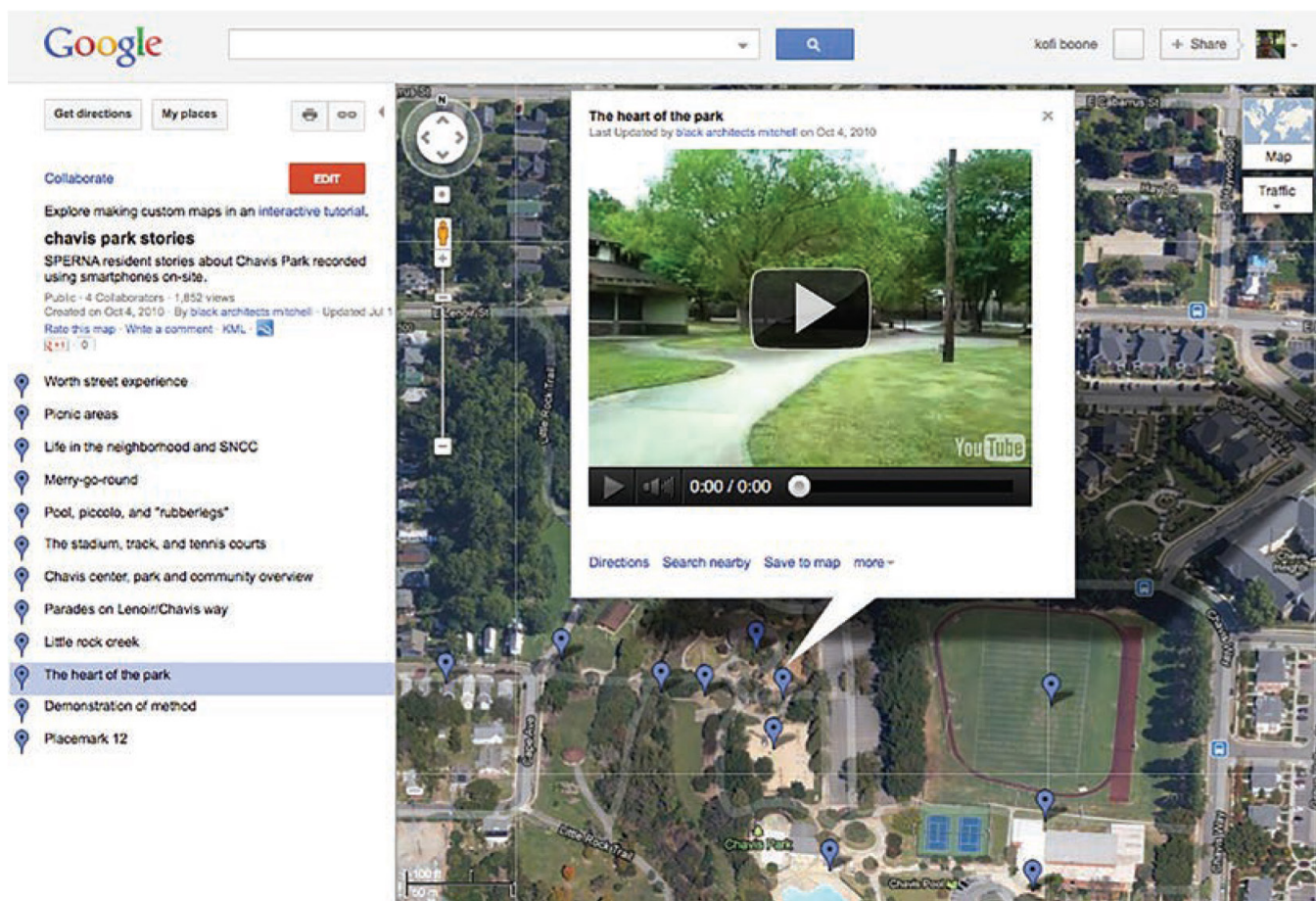


Figure 17: The Cellphone Diaries map and links to the videos. A free and online Google Map of the park was created by interns. Each video contained a GPS geotag showing the coordinates where the videos were recorded. Pins are placed in the Google Map to match the GPS locations of videos. The videos are uploaded to YouTube, producing a web link that has its respective pin, allowing anyone to go to the map, click on a pin, and view a cellphone diaries video. Source: (la Pena, 2017)

3.1.2 Machizukuri: Visualizing Sequential Futures

The Machizukuri Visualizing Sequential Futures is a simulation technique for presenting alternative design proposals at eye level. The technique uses building models with the pictures of actual facades on them and a small camera to create realistic, moving pictures. It is most effective in testing sequential spaces, such as streets, sidewalks, linear parks, and townscapes, where people move through and stop along the way. Models with realistic facades and furniture can be photographed to simulate motion to help people evaluate choices before construction. In this project, charge-coupled-device (CCD) camera is being used, but other cameras can be similarly effective. There are multiple advantages of a CCD camera: it is small enough to move about in a model, it allows participants to change the design, it is realistic enough that participants can test the feasibility of specific activities that they want to include in the place, and it provides eye-level and bird's-eye views simultaneously. But these devices are expensive. As technology changes there is a chance to find suitable, affordable equipment. Moving pictures of several models were made to demonstrate future visions of streets at different widths and layouts in a split-screen mode; in this case, the moving pictures were edited as a quadrisection with the current condition and three alternative ideas. It showed the different "after" views simultaneously. The first was an 8-meter-wide (26-foot-wide) street with a single lane, the second was a 12-meter-wide (39-foot-wide) street with a snakeshaped single lane, and the third was a 16-meter-wide (52-foot-wide) street with double lanes. They used the technique long before the official city planning decision, so the design idea was open at that time. After the discussion using the simulation, the government decided that it would choose a 14-meter-wide (46-foot-wide) street, taking into consideration the community's opinion, which preferred to have a 12-meter-wide (39-foot-wide) street. Even the 14-meter-wide street was unusually narrow for a road

that meets planning standards. The simultaneous simulations influenced not only the community's ideas but also the government's decision (Figure 18).

Scale models are useful for a community discussing ideas during the decision-making process because

The simultaneous simulations influenced not only the community's ideas but also the government's decision.

people can change the models more easily than with computer simulation models. They can move the streetscape with their hands, and the CCD camera immediately allows them to see that future at eye level. It is useful for planners as well to quickly adjust designs in the workshop, responding to the community's ideas. The split-screen mode, such as the quadrisection, makes comparison easier and pushes the discussion ahead. It looks real with the CCD camera, so the community can examine the ideas more seriously. This system is one of the most effective ways to discuss physical design coupled with lifestyle because it is detail oriented, and alternatives are easy to compare. The drawback is that preparation -including making models and filming and editing moving pictures- is time consuming. Using a 3-D printer for making models can help by saving labor and making the models more durable and more easily transportable to the workshops. (Styrofoam models are fragile and easily deteriorate.) Smartphones can also record moving pictures, although most are presently too big to record a go-through movie of a small model. However, those advancing technologies can reduce labor and equipment costs, making the use of this technique more widespread for professional practice. Because of the strong visual power of these moving simulations caution must be exercised about the timing of their use. They are good for comparison between alternative choices after the community has had wide-open conversations over a long time and has clear objectives. On the other hand, if a planner shows them too early in the community participation process, the movie simulations may rush people to judgment without considering deeper needs, bias decisions, and preclude more thoughtful and inventive designs. This method is best used in the middle of the process after several workshops, after participants have shared ideas and discussed future visions but before they



Figure 18: The base model needs to be big enough to move the camera around it. with photographs of actual facades pasted to the model, it appears realistic when photographed.

Source: (la Pena, 2017)

have made a final decision (la Pena, 2017). In this case study, the participants should be present in the workshop to see how they the alteration in design is different from one to another . The usage of technology was chosen in a very brilliant way because it provides the eye-level and bird's-eye views simultaneously. In their method they also tried to use these tools in the middle of the process to prevent any effect on the opinions of the participants (Figure 19&20).

This method is best used in the middle of the process after several workshops, after participants have shared ideas and discussed future visions but before they have made a final decision.



Figure 19: The existing street and three alternatives depicted in moving pictures are shown on a split screen so that residents can compare the differences between street width

Figure 20: Participants rearrange street furniture and trees to improve the designs or create new alternatives, which are filmed at eye level and immediately projected for all to evaluate

Source: (la Pena, 2017)

3.1.3 Preemptive Comparison

Yountville, California, is "the path less trodden" in Napa Valley. Residents expect to be actively engaged in testing alternatives, be they minor sidewalk repairs or multimillion-dollar capital improvements. This forced the firm to continually create more sophisticated methods for pretesting proposals with simple diagrams that clearly showed the choices and trade-offs. In designing the community center such diagrams facilitated testing alternatives, from an addition shoehorned within existing facilities to a greenfield relocation. The shoehorn tested best and was ultimately built. But the details of the architectural program required an iterative process of developing alternatives, testing them, and generating refined choices; this entailed dozens of workshops to narrow the choices to three. Floor plans at quarter-inch scale were provided to every participant at workshops targeting different groups from youth to residents of the veterans' home. A worksheet focused on "things that would work" and "things that would not work" for each of the three choices. Participants had to imagine themselves in each plan to make judgments about what would work. Then they were asked to select which of the three alternatives they preferred. The one most preferred by a significant majority of residents was refined.

The plan participants felt was the best was then evaluated in a community meeting, using a planning worksheet that asked participants to select specific activities they wanted to do and measure how well the plan performed for those activities. They were asked to draw ways to improve activity settings directly on the plan. The resulting community center evokes resident desires for multitasking use of the town center; a gym provides a basketball court but opens through oversized barn doors to increase the flexibility for indoor and outdoor events. A sheriff substation makes community policing an everyday reality. One mother redesigned the library so she could supervise children throughout the library. Getting residents to test plans from both a user and a spatial design perspective created a distinctive community center, serving local needs somewhat unorthodoxly (la Pena, 2017). Although this project was mostly on the side of analog, it has many great lessons. The people from community educated by the architects and after they gave their opinions they felt themselves involved (Figure 21,22,23 and 24).

The plan participants felt was the best was then evaluated in a community meeting, using a planning worksheet that asked participants to select specific activities they wanted to do and measure how well the plan performed for those activities.

They were asked to draw ways to improve activity settings directly on the plan.

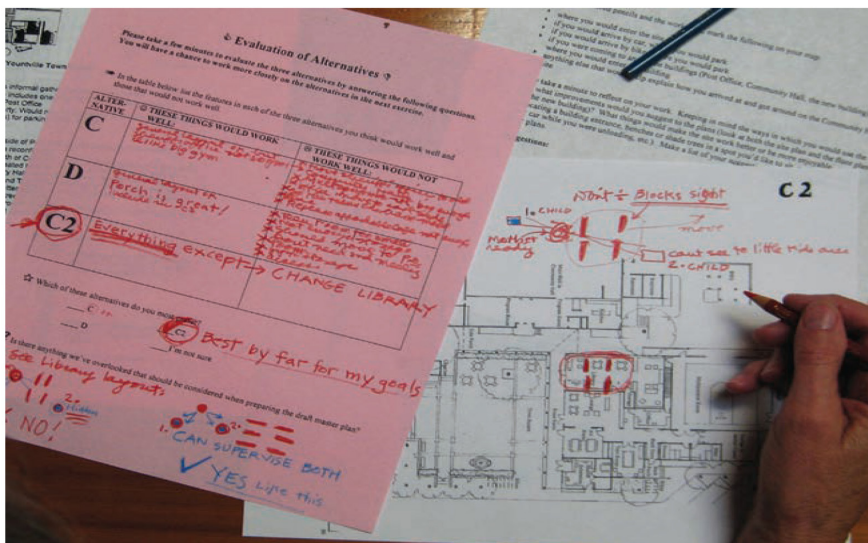
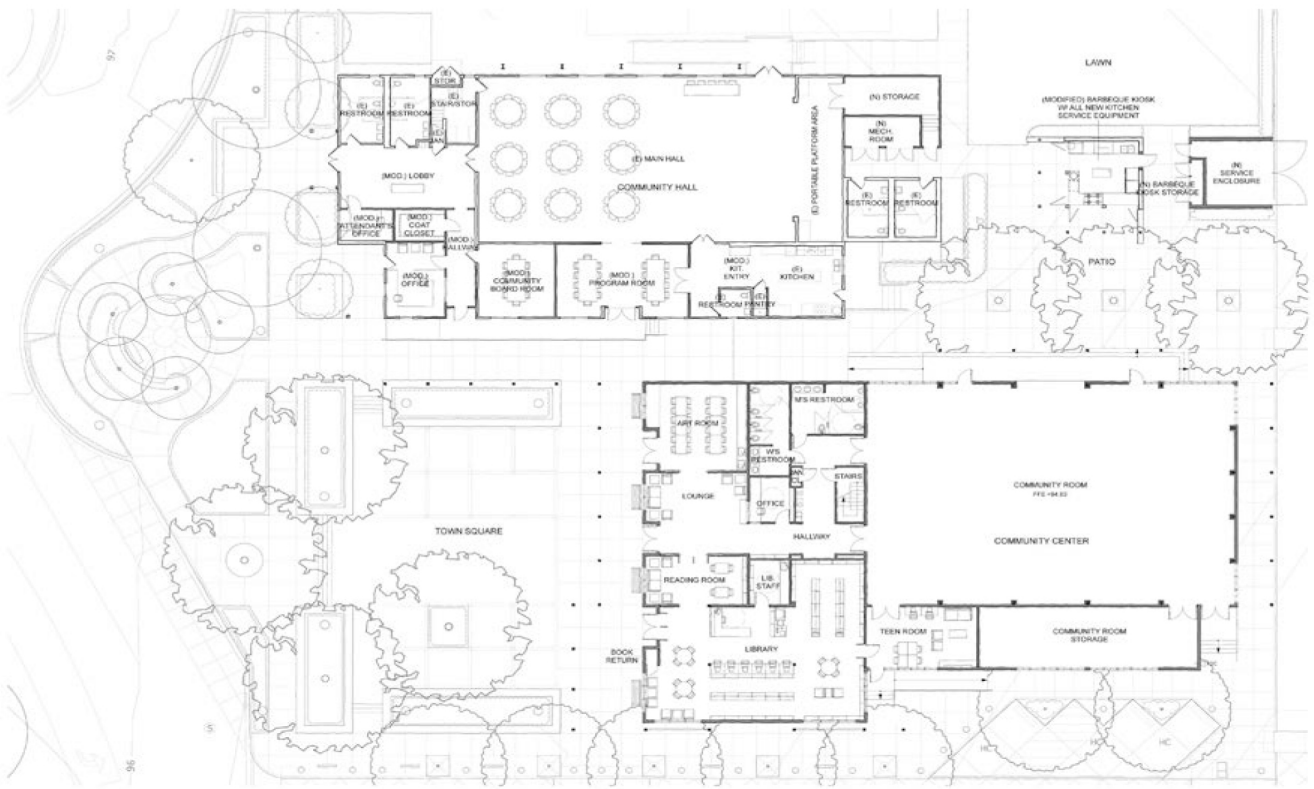


Figure 21: To evaluate three alternative one mother chose C2, noting that everything in that plan worked well except the library. The layout blocked her view of some areas of the room, making it impossible to supervise young readers in different locations. She diagramed on her worksheet exactly how to change the design.

Figure 22: Some residents drew a larger gym to accommodate basketball and dozens of other activities. The enlarged multiuse room is heavily used for classes and events.

Source: (la Pena, 2017)



1 OVERALL FIRST FLOOR PLAN - COMMUNITY HALL, COMMUNITY CENTER, TOWN SQUARE, BARBEQUE KIOSK, AND SERVICE ENCLOSURE
SCALE 1/8"=1'-0"



Figure 23: In the revised plan for the library Susi Marzuola, the architect, shifted the adult reading nook to a central spot, enlarged the gym, the created indoor-outdoor spaces under an arcade that connected the new and old buildings
Figure 24: An open layout provides a view from the art room and lounge through the reading room to the library, superseding requests for an open, inviting floor plan
Source: (la Pena, 2017)

From years of testing before construction it is clear that it is worth the time and money to generate distinguished design and avoid costly mistakes. But to some it seems to be unduly expensive and time consuming at the time. In reality, the iterative and detailed testing in the case of the Yountville Community Center cost only about \$20,000 in design fees for a much improved building and public space costing in excess of \$6 million. The real time expense is the hours residents volunteered to go far beyond just voting. Instead they carefully evaluated plans by projecting themselves into the spaces as users and designers. The challenge is balancing feedback from many participants with the extensive evaluation of a thoughtful few who listen to other opinions face to face and contribute nuanced design ideas through extended engagement. Both are important to democratic design. The redesigned ideas from the few produce designs that particularly fit the needs of the users (la Pena, 2017).

"The challenge is balancing feedback from many participants with the extensive evaluation of a thoughtful few who listen to other opinions face to face and contribute nuanced design ideas through extended engagement"

3.1.4 DIPAS

DIPAS, the Digital Participation System, is the result of an extensive series of local participation projects carried out throughout Hamburg. As a cooperation project between the BSW¹, LGV² and the CityScienceLab, the objective of DIPAS is to develop, test, and implement a digital workshop tool to be used for physical participation workshops, building on a prevailing online participation platform. It combines a workshop tool developed at HafenCity University. As an administrative institution, Stadtwerkstatt coordinates informal citizen participation in regards to topics of urban planning and environment in Hamburg. Both tools utilise web-based interfaces, and are accessible by a variety of devices, allowing citizens to participate either online, from a computer or smartphone or on-site, in participatory events via digital workshop tools (Thoneick, Degkwitz, & Lieven, 2022).

The existing technical basis of the online participation tool will be used for the interface of the digital data tables. The main difference is that the DIPAS is more flexible, less complex and more mobile than CityScopes. The DIPAS is intended to be a digital tool without media discontinuity, which can be used in a workshop-like manner at the participation events and which visually prepares the geodata of the city of Hamburg relevant for the planning. The digital multi-touch tables used for this purpose will display data that was previously held by administrative offices of the City of Hamburg (Casper, 2019). In the case of DIPAS, the platform facilitates public discussions by providing citizens with access to georeferenced planning information via the visual workshop tool. The tool is thus offering opportunities for levelling the knowledge gap between citizens and those managing planning procedures. DIPAS further invites citizens to voice their opinion via a contribution form (Thoneick, Degkwitz, & Lieven, 2022). The surface of the digital data table is approximately 1.50 by 0.90 meters and it is 0.90 meters height. Internet access is required to use the participation interface. Depending on the location, it can be decided how the map is displayed on the table. Thus, the south of the map can be displayed both on one of the short or as well as on one of the long sides of the table. The table is operated via the input bar in the south of the map. Elements that are called up can be dragged across the surface of the table using the touch function and their orientation can be changed. Only the input bar cannot be moved. The tables are managed by a table host, the so-called desk jockey. The participants were first familiarized with the tool. Sufficient time should be planned for working with the touch table. The participants need a certain amount of time to familiarize themselves with the functions and to be able to use the table to its full extent. If there is a lack of

In the case of DIPAS, the platform facilitates public discussions by providing citizens with access to georeferenced planning information via the visual workshop tool. The tool is thus offering opportunities for levelling the knowledge gap between citizens and those managing planning procedures.

1- Behörde für Stadtentwicklung und Wohnen

2- Landesbetrieb Geoinformation und Vermessung

time, it would be possible to leave the operation of the table in the hands of the DJ (Casper, 2019). The moderation of the table played an important role. Especially in comparison to previously common possibilities of digital participation, which often take place very singularly and from home, it was emphasized here that the touch table provides for a stronger interaction among the participants. This could be ensured both digitally by the program as well as by an expert accompanying the discussion. The higher degree of realism would give citizens the feeling that they have made a serious and well-founded contribution. The fact that participation would then not be a "wish concert" (Casper, 2019). For this work, the setting is described as the framework of an event. Under it includes factors such as time, day of the week, duration, space, room equipment, positioning of elements in the room, breaks, physical well-being, capacity of people, number of participants and degree of openness of the event. The setting is designed, depending on the goal of the event, by the corresponding offices or other and thus forms a basis that has an impact on the achievement of the desired goals and significantly influences the use and benefit of the digital touch tables. From the usage study prior to the actual research, it was already apparent

that the participants need a certain period of time to familiarize themselves with the table functions and to be able to use it in a way that promotes discussion. This was clearly contrasted by the two observed events (Casper, 2019).

As soon as the number of participants had regulated itself to eight, there was a topic-centered joint round of discussions among the remaining participants with active use of the table.

The number of participants working at the table at the same time should be about eight. The presence of more participants creates a second row, in which it is difficult to follow what is being displayed on the table surface and what is being said. Participants in the second row apparently sought to relate to the interaction, but were unable to become directly part of what was happening at the table itself due to lack of space. They diverged into individual and small group discussions with the experts also supervising the table. As soon as the number of participants had regulated itself to eight, there was a topic-centered joint round of discussions among the remaining participants with active use of the table. The discussion ball was also passed from participant to participant (Casper, 2019). DIPAS demonstrates many potentials regarding city planning projects, they use the platform and the geodata of Hamburg in many different tools, whether it is the pollution record for the neighborhood or it is story telling of people about their physical reality in the built environment (Figure 25).

DIPAS Workshop Installation

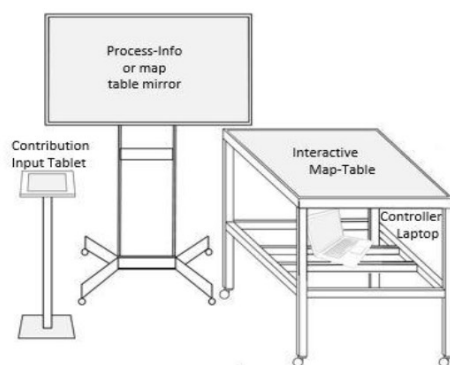


Figure 25: Functional Scheme and setting of DIPAS Workshop Installation
Source: (Thoneick, Degkwitz, & Lieven, 2022)



Figure 26: DIPAS Tool
Source: Author

3.1.5 ChangeExplorer

This technology experiments with the built environment, exploring whether an app could both encourage and enhance fresh perspectives in planning. To meet the design pilot requirements, a new app was created called ChangeExplorer, which ran on the Apple Watch, and also had a counterpart iPhone app for selected interactions. The app, when downloaded onto the device, would notify citizens of the potential of development change when they physically entered an area, and simultaneously allowed them to give quick responses to the prompt question, "what would you like to change here?" Citizens were prompted to reflect on where any would like to improve the area, who for, and what improvements they would like to see. Initially they answered two multiple-choice questions, focusing on who the changes might benefit (e.g. older adults, everyone) and what form the changes might take (e.g. improved footpaths, greenery). Following these choices, participants could expand on their comments by either dictating their comments into their watch or typing onto their phone.

All the comments were geotagged with the device's location (Wilson & Tewdwr-Jones, 2022). Change explorer (Figure 27) was designed to be used in two ways; first, by receiving a notification informing the user when had entered an area within which change was proposed, and second, for the app to be opened in a place someone wanted to comment on. Users were made aware of notifications through sound and/or haptic feedback (similar to a vibration) from the watch. **Users were made aware of notifications through sound and/or haptic feedback (similar to a vibration) from the watch.** When their wrist was raised, the user was informed that they had entered an area that to engage citizens, with the option to either respond to or dismiss the notification, or not receive future notifications. The notification contained an easily identifiable change explorer icon, allowing users to quickly understand that the app was seeking their comments (Wilson & Tewdwr-Jones, 2022). The authors' aim to make a technology that allowed potentially complex changes to the built environment to be explained to the partic-



Figure 27: Details of ChangeExplorer's client server architecture and screen shots of the watch's interface: screen shots of the notification being received, the app on home screen, and the process of leaving feedback and confirmation

Source: (Wilson, Tewdwr-Jones, & Comber, 2019)

pants quickly when in the area of the proposed change. Change explorer met the technological requirements in four ways. First, the notifications and interactions were simple and glanceable, allowing the selection of categories for speedier responses, with the option to add further comments if the user wished to. Second, there was no need for the user to understand the structure

Planners could add the location, the radius of notification (how close a user needed to be to the proposal) and what was being proposed. This website also allowed planners to view and analyse comments that were generated through the app as they occurred in real time.

or organization of their local council as comment destinations, or learn the use of a GIS system. Third, to avoid a problem with comments being too general ChangeExplorer used categories to guide the user to planning-related comments; this also allowed easier sorting of comments after they were made. Fourth, it allowed the user to reflect and comment on their built environment whilst they were physically within it. Apple Watch was chosen due to its ability to provide notifications to the user quickly, and its simple user interface. The watch also challenged the designers to design a technology that allowed for these quick interactions. The app aimed to seek views that could feed into earlier stages of policy development, so the questions were targeted towards aspirational visions for the area, rather than comments on individual elements of any proposed scheme. Phone app sat alongside the watch version. This had two functions' first, to allow more detailed comments to be submitted, and second to find places that were identified as changing. The phone app complemented the functionality of the watch app, rather than duplicating the functions. The apple watch remained the app's primary interface, but the phone's larger screen was suited for continuing comments with additional text. Planners could add the location, the radius of notification (how close a user needed to be to the proposal) and what was being proposed. This website also allowed planners to view and analyse comments that were generated through the app as they occurred in real time.

The ChangeExplorer app, running on the phone, would regularly check the ChangeExplorer server for any changes, and keep its database up to date. Apple Watch app required, at the time, a counterpart phone app. The photo app did most of the computing of a user's location. The benefit of this architecture allowed the watch's relatively small battery not to be overburdened and drain unduly quickly. When the phone indicated it was next to proposal, it would send a notification through the smart watch. The smart watch would then provide a notification and allow users to see the proposal. The user's comments were then sent back to the phone and uploaded to the ChangeExplorer servers to be viewed by planners. There is a strong case to explore how planning technologies might more closely align with how people experience places, and whether the opportunities provided by technologies provide the means for enhancing the citizen perspective in planning. Many of the engagement technologies noted in this chapter use cartographic representations, either allowing citizens to comment on a map with their own thoughts and experiences or allowing them to comment on the proposals created by planning professionals. And whilst it is broadly understood that online maps can provide a means for open discussion that is more accessible (in both terms of time and place), there is growing recognition that these online tools are reductionist in their approach (in how people communicate their experiences), and the extent to which they provide novel insights to professionals is limited (Wilson & Tewdwr-Jones, 2022). When prompted about this during interviews, participants stated that the notifications encouraged them to immediately reflect on the areas, and that it was usually a maintenance issue that was immediately obvious. However, without a notification being received, participants gave visions of what they would like to see, often drawing comparisons to other areas, for example "we should have a park like x does". Many participants saw the app as a way of evidence-gathering around issues, and requests for being able to submit photographs to document these problems. The quick interactions may have led to people feel-

Online maps can provide a means for open discussion that is more accessible (in both terms of time and place)

ing they could not sufficiently express their vision for the area and, instead, opt for improvements that were easier to communicate, with a simple "that's fixed" solution. The voting device was not able to capture the richer discussion that took place around the vote. The quick interactions may have encouraged and equally quick reflection, with participants submitting the first thing that was obvious. Participants stated that although a lot of the comments received through the app, the app seemed to influence how participants experienced the areas. The interviews suggested that they saw their environment increasingly critically, noticing both problems they had not seen before and opportunities for improvements (Wilson & Tewdwr-Jones, 2022). The planners considered that the citizens' comments would be useful for those trying to understand the difficulties and changes a community would make to their neighborhood at early stages of policy formation, and understand how people use space. This would be particularly true during the evidence-gathering stage (gathered to support planning policy during its writing) and when trying to understand how space is used: As planners, we probably have trouble picking up the value feelings that people attach to particular places, or buildings, or parks " we have all the empirical stuff, whether the site floods, we can pick up a lot of that off data, but it's how people feel about particular places. It was suggested the comments would be useful for regeneration, with the aim of improving an area as compared to city-wide planning policy formulation, and the value of the technology was seen as allowing earlier engagement with the plan-making process. The planners stated that the comments would be used to get a grasp of problems being faced by an area and, in time, they would be looked at with the intention of integrating the evidence into planning policy; We also need to be careful of the expectations " we want to get information out quickly; people will naturally assume that our way of dealing with it is as rapid " the whole business with technology, it's great, but you know, people will basically demand a response there and

The interviews suggested that they saw their environment increasingly critically, noticing both problems they had not seen before and opportunities for improvements.

then, and unfortunately .. it's not that easy - it's probably about an education role about how the process works and not unduly raising those expectation levels (Wilson & Tewdwr-Jones, 2022). This project is a great example of how architects and planners can think their way through a digital platform using digital tools and also following digital thinking. The commenting system requires an effort to translate and also interpret the data afterward to make it usable for the planners. This issue was also addressed during the interview with Rosa Thoneick, because in the end, the data should be comprehensible both for the people and the city planners.

Unfortunately .. it's not that easy - it's probably about an education role about how the process works and not unduly raising those expectation levels

3.1.6 JigsAudio

This device encourages people to express themselves through drawing and talking. Participants are required to draw on a large card or wooden jigsaw piece on the reverse of which is an electronic tag, and then place it on the JigsAudio device to make a simultaneous audio recording that is attached to the drawing. The two components- drawn jigsaw piece and audio representation- are then brought and displayed on a bespoke website. A later version of the device allowed participants to see other people's depictions and listen to their audio recordings through the device using headphones. The JigsAudio device reads a radio-frequency identification (RFID) tag (similar to those used in contactless bank cards) on the jigsaw piece. The participant then records an audio clip (by pressing the record button) that is associated with their jigsaw piece and the piece is then placed within the jigsaw. JigsAudio contains a Raspberry Pi (a bank card-sized computer), an RFID¹ scanner, and a microphone. The device was designed for relative ease of use and had one button. Following the deployment, the jigsaw pieces were digitized and displayed alongside audio content on the website. The jigsaws were displayed online in the same arrangement as they were laid out physically. A decision was taken to make the design and code for JigsAudio open source, with instructions for people to make

1- Radio Frequency Identification

their own JigsAudio device and generate their own webpages (Wilson & Tewdwr-Jones, 2022). As shown in the (Figure 28), the use of JigsAudio created a collection of images (e.g. the youth council created a jigsaw five meters long, and the Metro Futures deployment nine meters). The physicality of the technology generated interest in the activity, and encouraged participation. These images formed a makeshift exhibition that further encourage people to view, comment on, and create their own pieces. The artefact also caused an unexpected reaction: participants started

The physicality of the technology generated interest in the activity, and encouraged participation. These images formed a makeshift exhibition that further encourage people to view, comment on, and create their own pieces.

scanning other people's jigsaw pieces and commenting on term. Some people also stated they were "taking inspiration" from the other pieces, whilst others reported on trying not to duplicate visions or ideas that others had provided. In earlier uses of the technology (before the "playback" feature was enabled), requests were made for people to be able to scan someone else's jigsaw piece to listen to the audio or add comments. This demonstrated the understanding of being able to comprehend the activity and previous engagements demonstrated through people quickly commenting on others' drawings after joining the activity.

Being aware of previous participation encouraged them to complete their own and reduced anxiety in undertaking the activity. It is common practice

The research highlights how a non-digital method alongside digital technology can facilitate engagement with people who would not normally choose to use digital technology.

for situated engagement activities to take place on a screen; however, displaying the results of these engagements in an analogue format demonstrated previous engagement with the activity and encouraged others to participate. JigsAudio was non-digital at first, which allowed users to express their views in a familiar way, and they were introduced to the technology at a later stage. Through this, the research highlights how a non-digital method alongside digital technology can facilitate engagement with people who would not normally choose to use digital technology. The coupling of digital and analogue media meant that, conceptually, the audio was stored on the jigsaw piece, providing a simpler means for participants to visibly "add" their comment and see how their thoughts contributed to the group's vision. JigsAudio gave Opportunities to be agile and adaptable to suit the type of activity being undertaken. With many technologies, there are significant efforts to reconfigure the technologies for different uses. The design of JigsAudio was flexible, allowing Audio to be attached to any physical ob-

ject. The coupling of digital and analogue media meant that, conceptually, the audio was stored on the jigsaw piece, providing a simpler means for participants to visibly "add" their comment and see how their thoughts contributed to the group's vision. JigsAudio gave Opportunities to be agile and adaptable to suit the type of activity being undertaken. With many technologies, there are significant efforts to reconfigure the technologies for different uses. The design of JigsAudio was flexible, allowing Audio to be attached to any physical ob-

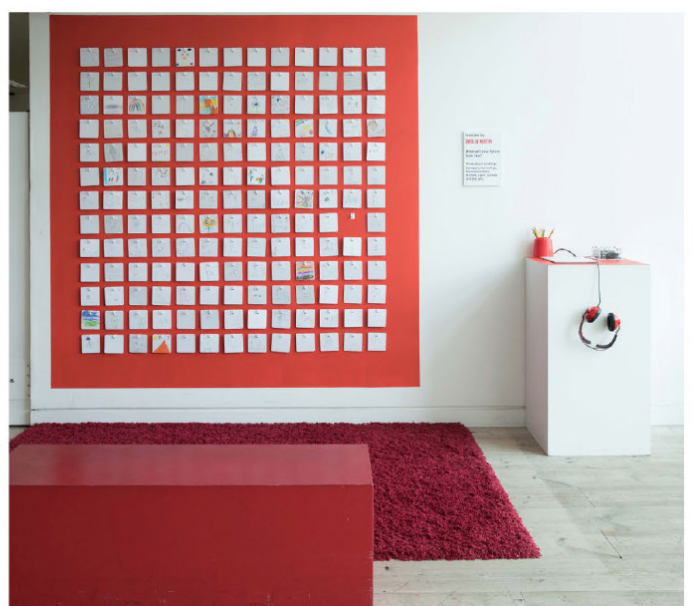
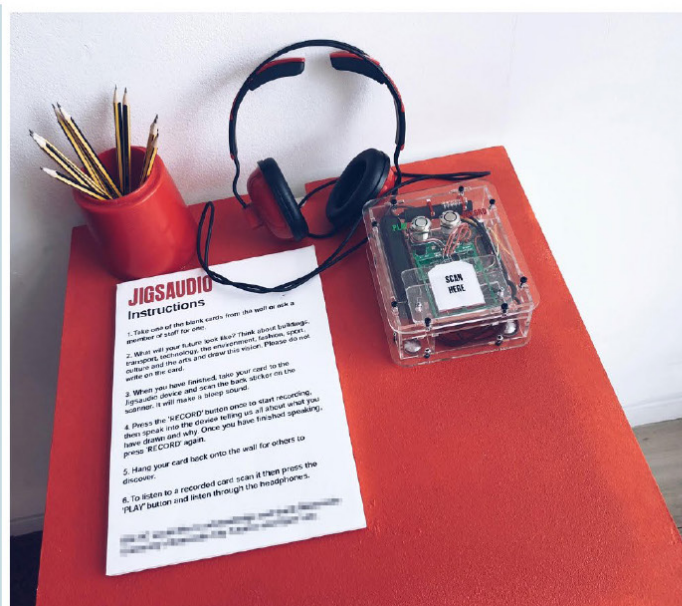


Figure 28: An example of one deployment at a modern art gallery in Gateshead, UK: JigsAudio device (left) and the visual artefact_ a tile mural of individual contributions (right). Source: (Weise, Wilson , & Vigar, 2020)

jects, and for the context of its use to be changed easily. This led to JigsAudio being used in many different contexts, which is particularly valuable during a period of funding constraints for local authorities that makes it difficult to both develop new technologies and support existing ones. Through JigsAudio, informal discussion around place allowed people to cover topics whether development oriented or not, and demonstrated how creative digital technologies could uncover perspectives that digitized "traditional" technologies struggle to capture. It further confirmed that in order to enhance citizen participation in planning, it is not only the language that needs to be inclusive, but also the type of comments that people can give. Different types of comments will be desirable: open comments are more likely to be useful during master planning exercises, whereas if consulting on a specific issue there might be less freedom in what can be undertaken. In the former case, the abstract pieces became a generic canvas for people to communicate their views. The more structured pieces, however, led to people commenting on issues that could be improved on, and led to suggestions that tended to fit into an existing framework. The development and evaluation of JigsAudio raised insights into combining drawing and talking as core, accessible features of a participatory platform. It demonstrated how creative digital tools can enhance citizen's sharing and expression of their visions for their local area, but also the importance of the attention that is given to the type of comment that will be received when various modes of participation are promoted. The majority of planning technologies fail to develop and deploy more innovative approaches. This may be the consequence of a variety of issues, some of which were captured by other researchers. Research on planners' general view of public engagement: "Basic" requests from local authorities and other planning agencies for digital versions for activities they already perform; perception that they should undertake the bare minimum of public consultation to meet legal requirements; unwillingness to enhance further public engagement through digital means due to perceived impact on workload; and a belief that opening up engagement on more innovative place-based issues rather than statutory planning matters would raise more expectations to respond to issues that are not strictly planning-related (Wilson & Tewdwr-Jones, 2022).

Although this tool is considered a digital tool for participation, the other features of this tool like drawing and voice recording add more depth to it. The designers of this tool added another feature to it which was commenting on the input of others, and it shows that the mixture of different interaction with the digital tools are not only possible but also it will create a unique experience and many unforeseen potentials.

The development and evaluation of JigsAudio raised insights into combining drawing and talking as core, accessible features of a participatory platform. It demonstrated how creative digital tools can enhance citizen's sharing and expression of their visions for their local area, but also the importance of the attention that is given to the type of comment that will be received when various modes of participation are promoted.

"The process of participation varies from many different types and there is no general approach toward the participation approach. It should be different because based on projects, context, and even participants"

3.2 Summary of Case studies

The case studies were considered and compared in different areas. One of the important matters that should be considered is the physicality and form that each project is being used. People can contribute to participation and interact with the projects in a vast variety of alternatives. It ranges from being in the actual built-environment to using different digital tools to comprehend urban issues and obstacles. These tools could also be used in different ways. In the next category, the tools are distinguished into two main categories. Inside the area and outside of the location. In this category, communities could experience completely different things. There were cases that they also use a mixture of both In-Situ and Ex-Situ to come up with the solution. The other important factor was how complicated or time-consuming the process of participation could be.

Based on the comparison, it could be concluded that the different approaches lead to a different levels of complication. The process of participation varies from many different types and there is no general approach toward the participation approach it should be different because projects, context, and even participants, are very different. The other issue that was discussed, was the improvement of awareness among the participants during the process. This issue is crucial because when the discussion gravitates toward democracy and the right of citizens in the city. Finally, the comparison ends with how to encourage people to be part of the participation process. It can be interacting with the built environment itself or even adding to the inputs of others in the form of comments, drawings and voice recording (Table 4).



Figure 29: Interactive table for planning the furnitures and vegetation in green areas
Source: Author

	Cellphone Diaries	Visualizing Sequential Futures	Preemptive Comparison	DIPAS	ChangeExplorer	JigsAudio
Summary	Quick, in-situ participation	Time consuming, in-situ participation	Time consuming, in-situ participation	Combination of digital and analog participation	Quick, in-situ participation	Creativity and expressiveness through drawing and talking
Physicality and Form	Physicality of built environment	Physicality of built models of the studied area	Different workshops and assessing different proposals	Digital multi-touch tables	Physicality of built environment	Physicality of device and drawing materials
In-Situ vs Ex-Situ	Using location and in-situ participation to support people discussing changes	In-situ and they use the charge-coupled-device camera to give the participants a close to reality experience	In-situ and they use workshops and presenting three different alternatives to the participants	In-situ and they use a digital multi-touch tables to interact with data	Using location and in-situ participation to support people discussing changes	Ex-situ, although should be used somewhere that relates to the place being discussed
Active vs Easy Participation	Active participation; however, minimal effort	Active participation; and not an easy process it requires time and money to execute the process	Active participation; and not an easy process it requires time and money to execute the workshops	Active participation, and very time consuming process	Active participation; however, minimal effort	Active participation requiring significant time and travel
Awareness of Abstracted Planning Policies	Aim to create awareness about the policies and consider their concerns about their neighborhood	Aim to create awareness about the policies and consider their concerns about their neighborhood	The awareness was there in the community because it was a public project the concern of them defended by the law	Participation in city planning project in Germany is common and municipalities raise awareness about this matter	Aims to make people aware of abstracted land allocations and planning policies	Technology for aiding citizen planner communication
Alternative Technologies	Digital platform using google map	3D printing for the Models and Smartphones can also record moving pictures	Multiple Workshops	Workshop at the participation events and use visually prepares the geodetic of city	Apps, however hopes to provide new means of interacting	Alternative means of interacting with computing
Prompts for Participation	Using built environment as prompt	Using the models of the neighborhood and digital eye-level experience	In presence workshops and the concern of architects to consider the community's opinion	Using the model of the neighborhood and digital eye-level experience	Using built environment as prompt	Prompted by questions or other's comments

Table 4: Summary of Case studies.
Source: (Wilson & Tewdwr-Jones, 2022), and Author

Chapter 4:

Conclusion

4.1 Constrains and Opportunities

In this research, it was tried to take a close look into the newly emerged form of participation through a lens of an architect. Based on the research, some of the advantages and disadvantages of digital participation are similar to analog format. As a result, it was tried to track these issues first in the roots of architecture before framing them in the digital age. Making every decision together with all citizens cannot work in such a large society, if only for reasons of time. That is why we elect representatives, parties and parliaments (Casper, 2019), and architects. Architects and planners studied for many years to address the best possible solutions for the built environment, however, the discontinuity from the flow of life in societies has created many social issues. Choosing architects or planners as representatives to build and not participating in the process of making, may not be the right answer to city planning. Although participation is the most practical solution for the current situation, it may be used and misused at the same time. The probability of using participation as a political tool for advertisement and not exercising the inclusion of people in this process may lead to the feeling of not being involved and disappointment. On the other hand, there are many successful experiences of participation that truly exert the values of inclusion. The role of an architect in this whole spectrum is crucial because the process of participation without a true belief in the effectiveness of participation is not possible. As

community that is willing to participate would lead to real participation in the design and planning of the built environment. Moreover, new tools and different methodologies seem to be effective from one project to another. The participatory design could be activated through different tools, which range from workshops to creating the interactive digital interface. The tools demonstrate a promising outcome if they are going to be used, properly. The constraint here is, the same tools can not be generalized and be used in a different context. For example, in the case of DIPAS, the geodata should be available to be used in the digital tools, in order to interpret the data. The other possible hindrance would be the abundance of data. This phenomenon affects both participants and planners. At both ends, it is complicated to understand and communicate with the data. This matter may make participation more complicated. The other aspect is, allowing the people to express their opinions about all types of iteration in all different levels of design. Although this matter will peruse the ideal form of democracy in design, it may threaten the qualities that architects and planners studied. For example, deciding on the length of the corridor that leads to the emergency exit with the help of the community may not be the case, and it should not. This issue can be tricky because the selection of these domains may not be an easy task. It is possible to conclude that having a better understanding of the participants before the beginning of the project would be the first step, and then architects

Making every decision together with all citizens cannot work in such a large society, if only for reasons of time. That is why we elect representatives, parties and parliaments (Casper, 2019), and architects.

An engaged architect and a community that is willing to participate would lead to real participation in the design and planning of the built environment.

could make their decisions more wisely. There is a paradox in the whole transition to digital participation. While apps can be effective at removing some barriers to participation, they can also create new ones. Technology should not be seen as a single method or media divorced from more traditional consultation arrangements, but rather it should be seen as an ecosystem of tools

that perform different functions, where different technologies facilitate and encourage different types of engagement. This is also to ensure, of course, that no one is potentially disenfranchised from participating if they find it difficult to access technology due to income, skills, or education reasons (Wilson & Tewdwr-Jones, 2022).

4.2 Results

The sophistication and type of engagement with digital technology led to different interpretations of what the technology was doing and how it worked. (Figure 30) shows the interpreted sophistication of the technology being used. Nevertheless, the sophistication of the technology did not seem to have the greatest bearing on how the technology was understood or used. Rather it seemed to follow the novelty of the technology and the interest there was in it. This is an interesting facet in itself, that participants responded to participatory experiences due to a perceived excitement with and novelty of utilizing new technologies (Wilson & Tewdwr-Jones, 2022).

The projects that were studied range from different contexts to different applications. The level of sophistication and the method they used for the participation of communities are also different. One of the main factors that could be considered is the degree of intensity in how much these tools could be considered digital or analog. It can not be stated by increasing the usage of digital tools and methods in the project the results would be better, because it is crucial to decide on the participation approach based on the resources and the chance of engaging more people in the project.

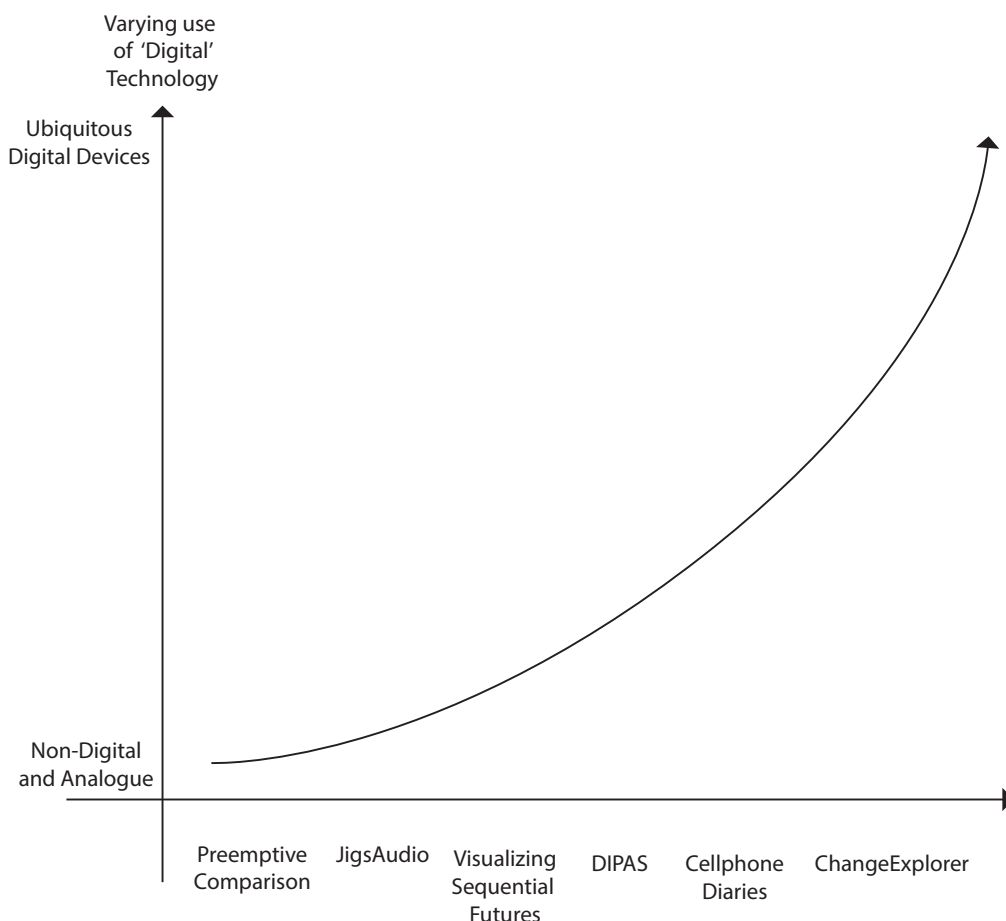


Figure 30: Varying levels of digital technology across the Pilots
Source: (Wilson & Tewdwr-Jones, 2022), and Author

4.2.1 Participation Model and Case Studies

Cube of participation was selected to be used for comparison of the model of participation for different case studies. This model provides 3 main axes (Participants, Authority & Power, and Communication & Decision Mode). In each axis, different degrees of that specific context are provided. This model was selected because, in comparison to the ladder of participation, it provides more chance to track down the form of participation.

4.2.1.1 CellphoneDiaries

In this project, everyone from the community could participate by recording videos and uploading them on the Internet. The storytelling capability of this approach let the people express their opinions without any effect from experts. In the end, the consultation with the community led to the alteration of the master plan (Figure 31).

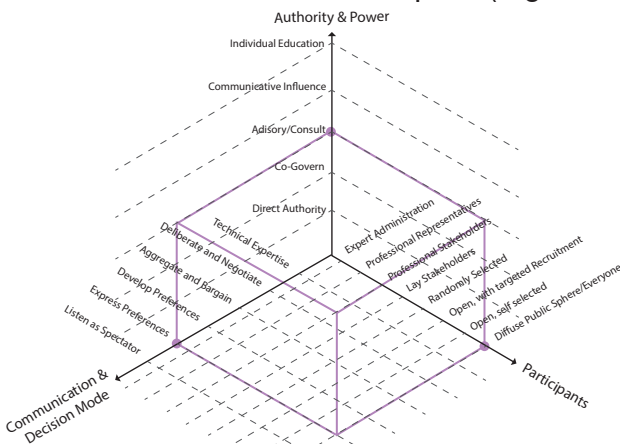


Figure 31: Participation Model for CellphoneDiaries
Source: Author

4.2.1.2 JigsAudio

In this case study, the author only listens and interacts with the drawing of the people. At the end of the process, authors should have translated the drawing and the recorded voices into an application form, for planning the built environment. The community had the maximum freedom to express themselves without any complications. The process was also communicative because people could interact with others' input. Participants were selected for participation (Figure 32).

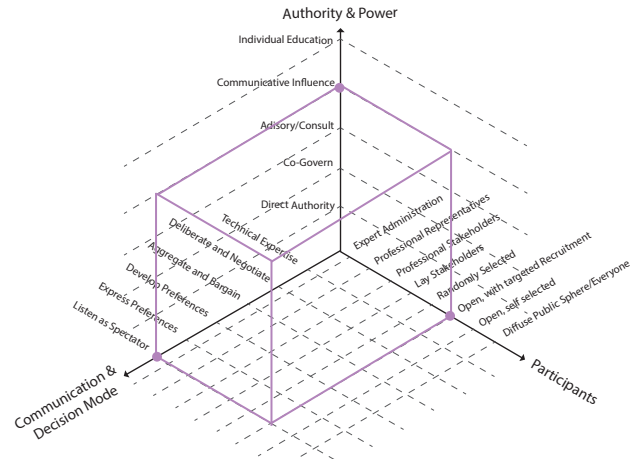


Figure 32: Participation Model for JigsAudio
Source: Author

4.2.1.3 Visualizing Sequential Futures

The interaction of people with this approach narrowed down to a target group that was present during the workshop. People could develop preferences by reviewing different design alternatives. The communication between designers and the selected community was always present (Figure 33).

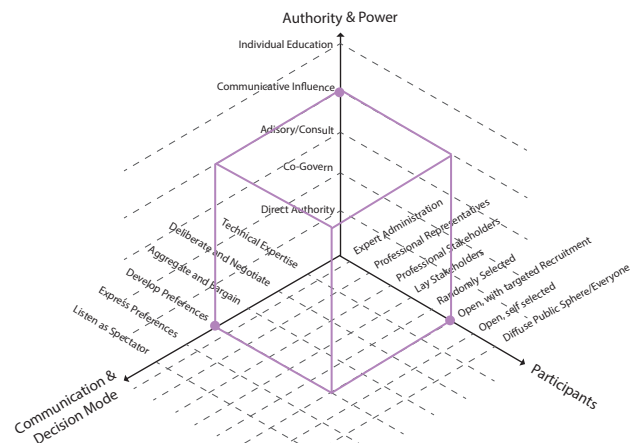


Figure 33: Participation Model for Visualizing the sequential Futures
Source: Author

4.2.1.4 Preemptive Comparison

This case study was based on inviting the community to different workshops both for learning purposes and decision-making on the proposed design alternatives. The communication of people with the design proposals were leading to even alteration of plans (Figure 34).

4.2.1.6 ChangeExplorer

In this project, the usage of digital gadgets like Apple watch activates the possibility of participation for all of the people. The process was communicative and people could express their direct feelings about the surrounding area (Figure 36).

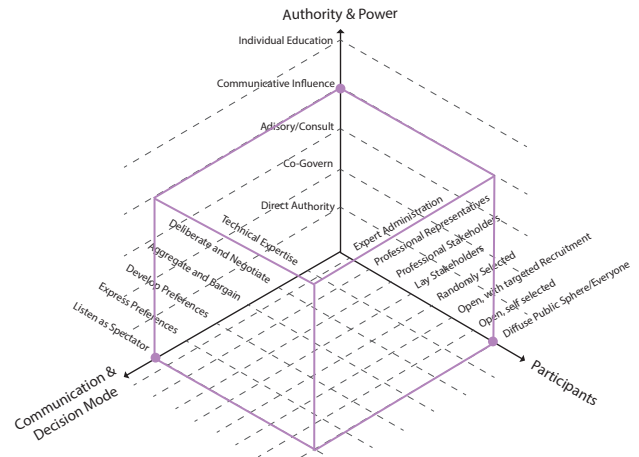


Figure 36: Participation Model for ChangeExplorer
Source: Author

According to the case studies, when the selected approach is digital participation, it becomes more open to the public and almost everyone can have their voice through. However, the value of integration of Online tools with on-site participation procedures was more engaging and collaborative. In all case studies, the facilitators were present to encourage interaction with the tools or the communicative process paved the way for better understanding. Moreover, the other issue would be the usage of existing proposals or proposing something new. In most of the case studies, they used these two strategies. In the case of JigsAudio, people had the utmost freedom of the expression of their opinions. Finally, it could be concluded that the reasons for the success of these projects, are the less authoritative process, and more open groups from the communities to participate.

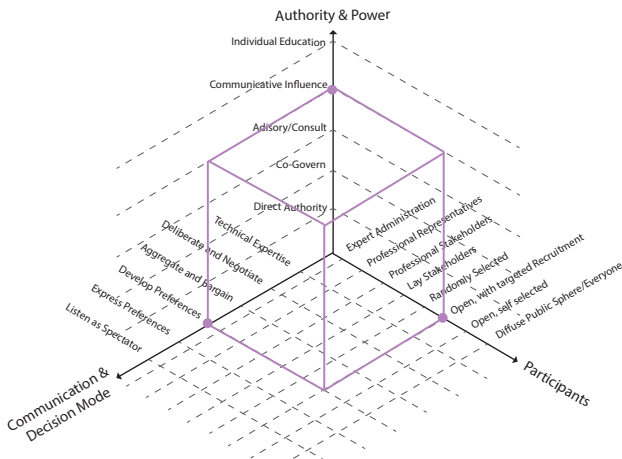


Figure 34: Participation Model for Preemptive Comparison
Source: Author

4.2.1.5 DIPAS

The comparison has shown that DIPAS as an integrated procedure combines the benefit of both approaches. It allows wider audiences to participate in the procedure by offering remote tools for participation typical of Online procedures, but it also invites participants to engage in discussions both on-site and Online, thus enabling citizens to exert advisory and consulting authority in the procedures (Figure 35). Because the extent and content of public opinion can be viewed by all, citizens can track which ideas have been incorporated into the planning decisions and can hold their authorities accountable for their decision-making (Thoneick, 2021).

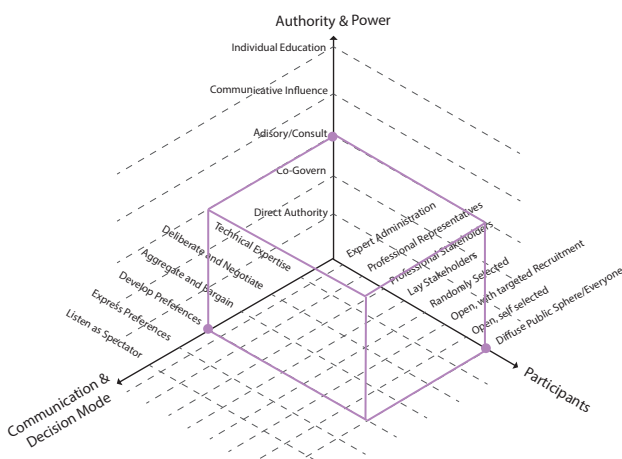


Figure 35: Participation Model for DIPAS
Source: Author

4.3 Discussing the Results

In the last step of comparison of different tools and methods of participation, it was tried to compare the case studies with the help of the cube of participation. The rationale was considering the size of the cube by seeing in which axes Participants, Authority & Power, and Communication & Decision Mode the project will be located. If the cube grows in size in the axis of Participants, it means there are more people affected, and the circle of the participants becomes larger and less selective. If the cube becomes larger, in the axis of Authority & Power, it means it becomes more democratic and more connected to the people from a more bottom-up approach. Finally, if it expands in Communication & Decision Mode, the connection with the people will become less hierarchical, and people could be

heard more expressive way.

After giving different rates to the projects based on the approach they took for participation, it was apparent that the ChangeExplorer was the best example in terms of being less authoritative and more open to the expression of the needs of the communities. As a result, the size of the cube is also larger in comparison to the other case studies. After comparing all the projects together, Cellphone Diaries, and JigsAudio became the second and third largest cube respectively, and the other three projects were in the same size, and smaller than the rest of the projects. This comparison helped to see which project could reach the ideal form of participation in comparison to the others.

The other comparison was, putting these proj-

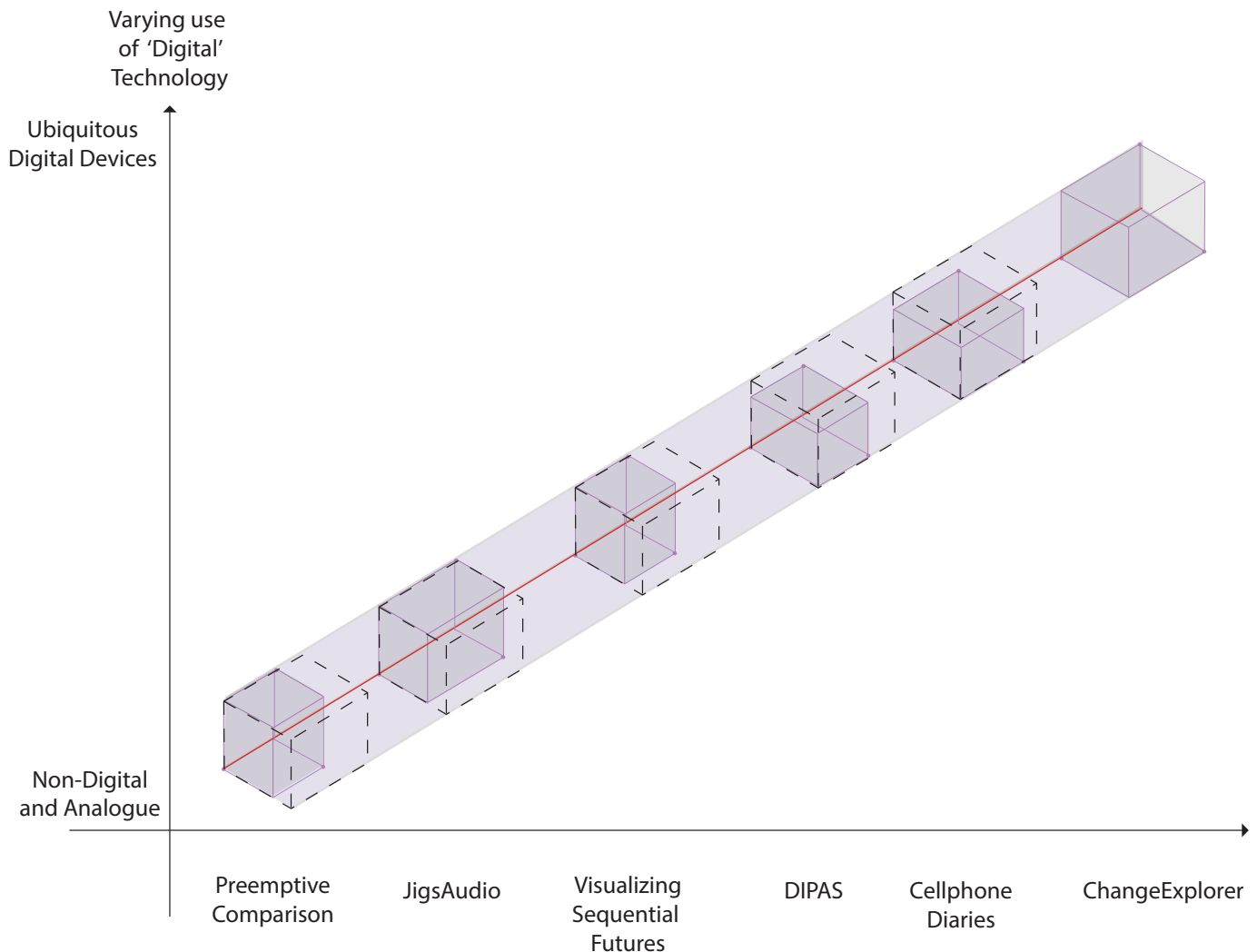


Figure 37: Analysis of Participation Model in Different Case Studies
Source: Author

ects in the line of the digital and analog axis. This comparison demonstrated that the two largest cubes of participation benefit more from the digital tools in their process. Digital tools in these two cases could make the process of decision-making more democratic, however, the project of JigsAudio, which is the third largest cube in comparison to the others, utilized less digital process. It means participation could also be successful, with fewer digital tools.

4.3.1 Democratic Design and Planning

In participatory processes, the extent to which the participant can assume a democratic role should be made clear. Such clarification of expectations is required for democratic design (Downs, 2017). Democracy and design form an interwoven relationship that is difficult to separate. Just as design, a democratic society without a public sphere is hardly conceivable. And both are all the more true if one considers democratically conditioned design aspects such as access to information, participation, codetermination, and the associated negotiation processes between the collective and individual. There is reason to believe that design takes (or can take) an important role in the social fabric by affecting, motivating, arguing, or even preventing social forms of behavior and role distributions through its artifacts - in the form of products, services, or interventions. Consequently, a central responsibility of designers lies in the fact that they inevitably create social contexts. In other words: Design influences the form(s) in which a society arranges its coexistence (Erlhoff & Rezai, 2022).

Firstly, there is the fight for a democratically produced built environment and a universal 'right to the city'. There is also the collectivity in collaborative participatory practices that opposes individualism and isolation in contemporary society. A desire for an open public architecture could be a reason for today's pursuit of participation (Downs, 2017).

Democratic designers do not consider "conflict" a dirty word, but rather a time-honored means

to honorable ends. Nonetheless, enabling and managing conflict requires courage, diplomacy, skill, and tenacity. Democratic design redistributes power, and as those closer to the grassroots gain an effective voice, others must necessarily yield some power. Those at the grassroots may also be skilled at design, challenging the very authority of the professional. Indeed, the power of design professionalism depends, in large part, on claiming to be elite experts with superior aesthetic judgment, but participatory design threatens to devalue that distinction. As a result, participatory projects struggle to overcome marginalization by the profession. Even worse, design professionals who cater to corporate or state interests serve those patrons by resisting the empowerment of the less powerful, the just allocation of land uses, the redistribution of economic resources, and the approval of grassroots improvement plans. Corporations, states, and design institutions must continually be reminded that participation makes cities and economies stronger, and that participation in design is not compromise but, rather, enrichment. This is the truth that democratic designers deliver, and we must constantly express it through our actions and through the proven quality of the designs that we arrive at together (la Pena, 2017).

To effectively practice democratic design is to embrace the many paradoxes we encounter and represent. Reconciling our values with those of others is but one of the paradoxes we must acknowledge. We are set apart by the strength and passion of our values, even as we seek to facilitate others' self-expression. We may be motivated to include the excluded, give space for cultural difference, preserve endangered species, advance resilience, or create deeper democracies. But these are not always mainstream motivations, and in fact often conflict in communities where we work (la Pena, 2017).

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motivations, and in fact often conflict in communities where we work (la Pena, 2017).

In democratic design we assume multiple roles that are ever shifting, conflictual, and sometimes contradictory. Some assert that facilitation in participatory design tends toward manipulation. We check our own motivations and positions of power but do not sacrifice the potential of instigation in the process. We avoid working against our values, not by ignoring or denying the paradoxes but by holding them in our awareness. There are many more paradoxical roles we balance. We listen between the lines and teach. We follow and lead. We connect to others' minds and hearts. We are insiders and outsiders.

We give life to conflict and mediate conflict. We are powerless and powerful. We are expert and ignorant. We draw what others say and what we think. We work in groups and in isolation. We recapture and create. We shape order and disorder. We work at small and extra-large scales. We set aside and confront. We obey and disobey. We reform and rebel. Do we do all of this at once? No, but we likely do each in due time. We are convinced that specialization can be dangerous. Utilizing the power of opposites is the essence of transactive, transformative, and tenacious design. To be effective, democratic designers must be able to sense when to employ all of the above oppositions with equal skill and enthusiasm. This does not require super-heroic powers; adventurous flexibility and daring persistence will suffice (la Pena, 2017). One may object that in our progressive notion of design, plans are not made for but with people. This simplistic notion of involvement. They thoroughly reflect the spectrum between complete separation and entire involvement of the observer, or between first and second order cybernetics, and thus contribute to make the designers' role explicit. They distinguish six relational states, which directly affect the quality of the conversational setting in transformative design:

Corporations, states, and design institutions must continually be reminded that participation makes cities and economies stronger, and that participation in design is not compromise but, rather, enrichment.

- to work on a community: observer, external planner
- to work for a community: employee
- to work on behalf of a community: delegate

- to work with a community: partnership
- to work within a community: sharing (their values and aims)
- to work as a community: belonging to the community (Erlhoff & Rezai, 2022).

Contemporary modern design is a symbol for a good future, freed from conventions and filled with ambitions for a better and brighter life. . . . With modern design one can show that democracy can be strengthened in practice by a better and more beautiful everyday (Murphy, 2015).

"Contemporary modern design is a symbol for a good future, freed from conventions and filled with ambitions for a better and brighter life. . . . With modern design one can show that democracy can be strengthened in practice by a better and more beautiful everyday"

4.3.2 Democratic Approach as a Social responsibility

Many architects around the world, articulating the communal, cultural, and transformative genesis of collective architecture. Lewis Mumford considered architecture for social value, rather than as a creative form or as a technological novelty. Architects of the 1960s were beginning to ask, 'why not have the courage, where practical, to let people shape their own environment? During 1960s a flood of ideas was brought to the table-varying degrees and means of participation, different boundaries of architect involvement, political or economic definition ' but central to all was user empowerment (Ratti & Claudel, 2015). As Ahmed & Othman, 2009 stated, there are two strategies, that a responsible architecture could

Architects of the 1960s were beginning to ask, 'why not have the courage, where practical, to let people shape their own environment?'

be implemented within societies: 1- Perceiving stakeholders' requirements and involving them in the design decision-making process to ensure that the developed facilities meet their needs, fulfil their expectations, and reduce the cost and implications of later modifications. 2- Seeking feedback from people who are affected by the built environment, providing support, and adding value to communities and the supply chain (Ahmed & Othman, 2009).

Design can in theory be shared and distributed in the same way as recipes communicate food. Under this umbrella, computer code is now acknowledged and appropriated. Copyright began as a response to the printing press, and it is now standard authorial protection for almost everything, from literature, music, images, and intellectual property to art, architecture, and consumer products. In the interim, each link in the design and production chain can nonetheless be infused with open sourcing - from funding to production to assembly. Although funding is traditionally the purview of philanthropists or wealthy corporations, it has now become democratized by crowd-funding platforms such as Kickstarter. With a modicum of video-making knowledge (which, thanks to YouTube and Creative Com-

mons, is nearly universal) anyone can launch a passionate message to the Internet-at-large and wait for funds to echo back. Estate Guru is a somewhat more mature platform with similar aims - aggregate funds to facilitate architectural production (Ratti & Claudel, 2015).

You are designer. **You are designer. Making is democratized.**

Productive, collaborative, shared design is happening around the world, but it is only accelerating. Yet as it becomes increasingly mainstream for software and consumer goods, the open-source mentality has been muscled out of architecture by traditional practice and remains in the murky periphery, away from the discipline's spotlight. A reductive categorization is that architecture still operates under the authorship model of copyright, when design, media, and culture are moving toward copyleft and Creative Commons. Almost all disciplines are rapidly expanding in scope while architecture progresses tentatively. Participatory architecture is far from the covers of Architectural Digest, Dwell, Abitare, or Wallpaper. The media is fixing its camera in the wrong direction. The implication is that democratization of production will revisit the "timeless way of building," the forms of production that yielded anonymous or vernacular architecture. Parvin speculates that in the future we may look back on the monolithic, top-down, financially capitalized, one-size-fits-all models of architectural production as an awkward, adolescent

The implication is that democratization of production will revisit the "timeless way of building," the forms of production that yielded anonymous or vernacular architecture.

blip in mankind's industrial development. Open-source architecture is presented as an innovation, but it is really just the vernacular with an Internet connection. Local design fueled by global community. The task, then, is to reflect on the potential implications that 'future vernacular' will have on economic development, social justice, resource scarcity, labor economies, planning systems, and the role of professionals. The discipline cannot remain hermetically sealed forever

' there is acritical mass of people, ready and willing to work in a bottom-up way (Ratti & Claudel,

2015).

Nicholas Negroponte predicted the evolution of the designer into a "middle man": a creator of open frameworks rather than deterministic forms. The enormous variety of emotional (intuitive) solutions which can be invented by a large number of future users might give an incredible richness to this new 'redesigned' design process." The architect will not be anonymous, but plural and compositional. Authorship will not be erased but contextualized as it is woven into a relational fabric. The new architect is situated between top-down and bottom-up, channeling the raw energy of the latter through the targeted framework of the former. The responsibility of the Choral Architect is less oriented toward object-building than orchestrating process. She is not a soloist, not a conductor, not an anonymous voice among any. The Choral Architect weaves together the creative and harmonic ensemble. In March 2017, Ezio Manzini and Victor Margolin (RIP), two design thinkers, in an open letter to the design community, asked them to take action and respond to the crisis that democracy is undergoing: 'We [designers] are in difficult and dangerous times. For many years, we lived in a world that, despite its problems, was nevertheless committed to principles of democracy in which human rights, fundamental freedoms, and opportunities for personal development, were increasing. Today, this picture has changed profoundly. There are attacks on democracy in several countries - including those where democracy had seemed to be unshakable'. They asked the design community to take action, because 'normal' ways of designing were not enough, and the role of designer in confronting the lack of democracy in the world needed to be changed. In truth, it was an invitation to designers for intervention in changing to improve democracy and its tools (Erlhoff & Rezai, 2022). Although considering social issues in design is not a new phenomenon - as footmark of waves

of social consciousness through design history can be found from the Arts and Crafts movement in the 19th century to Bauhaus and after the Ulm school, up to now - but intervention in big systems such as social networks and talk about design and democracy relation needs a new disposition in design. This new disposition is about awareness of existing power relationships, and at the same time, confidence regarding new skills and capabilities in design. From this point of view, today, design activism is the same new tendency for designers, I can say. An activist designer is a designer who observes, analyzes and then does an act by its design. Activist design is more sensitive to its surroundings, especially to social issues that affect society and thinks fundamentally and out of the box. In design activism what is most important is questioning and criticism, deep observation, and making change for people, not just being a cog in the capitalism machine. In design activism, there is no method that is recommended and all methods are just instruments to do any positive change, even a small one. Here, design and activism are two hands joined together; but there is a point. This river started from design and falls into activism, therefore just being 'activist' cannot be enough because, designers, can't be more 'active' than activists. Designers, should think deeply and design correct - this correctness is not only about form and function, but also is about

consideration of user needs and the moral consequences of our design - and then can use the help of people or activists to implement our ideas, or vice versa, our ability to implement people's ideas. In this regard, the social network is a great challenge for activist designers as a big project with different aspects of system design, strategy, behavioral design, customer experience, and so on. However, it's clear that running a new platform, as a new player in social networks contest,

The architect will not be anonymous, but plural and compositional. Authorship will not be erased but contextualized as it is woven into a relational fabric. The new architect is situated between top-down and bottom-up, channeling the raw energy of the latter through the targeted framework of the former.

Designers should not just being a cog in the capitalism machine. In design activism, there is no method that is recommended and all methods are just instruments to do any positive change, even a small one. Here, design and activism are two hands joined together; but there is a point. This river started from design and falls into activism.

is not so easy. It's a big production and now can't be an ordinary platform, especially when a platform in the presence of other players like Facebook and Twitter make claims about safety, high security, and being democratic, which looks like grand gambling. Also, we know social networks today are not only a website on the internet but also a political and security matter (Erlhoff & Rezai, 2022).

However, this research has demonstrated that once people are offered an opportunity to participate, and given the opportunity to share their perspective in open and accessible language, they are often "enthusiastic about participating and capable of engaging in a wide range of planning activities". Opportunities should exist for citizens to share their views without needing to understand the formal processes or language of local planning. Whilst these opportunities may encourage people to participate quickly, they might also change the quality of people's input into participation (Wilson & Tewdwr-Jones, 2022). Participation as a design method with the aim of democratizing the design and planning of the built environment, seems possible, especially when it is considered in the current digital age. Participation has the potential to bring many people together with a common interest in planning a project. Collective decision-making seems to be a solution to create a common ground and tackle complex urban issues. In the current era, many digital tools paved a way for architects and planners to facilitate the process of participation. A project with a common expected outcome could only correspond to the needs of the community for having a place to accommodate within the city, however, when this matter is considered a social issue it becomes more complex. In the city, people should have a right to access a high-quality built environment. One of the ways to respond to this matter is aligning the needs and expectations of the end-users with the constructed project, through participation. Participation could create a safe zone for the expression of ideas and demands for communities. Participation could be a very engaging process for people. This process could encourage people to express ideas and consider themselves involved. Architects and planners, here play a very important role, like a caretaker for the whole process. They should create an open discussion and blur the boundaries of authoritative decision-making, and instead create a collective

authorship for the project.

In the case study of "Preemptive Comparison", architects allocated a budget for the participation process, and this matter, not only saves a lot of money for the project but also contributes to the sense of belonging for the community. Now we are living in a world that the access to the internet and a mobile phone is ubiquitous. However, it is crucial to create and consider infrastructure as a fundamental criterion. This research made that apparent participation in design and planning without digital infrastructure could also be possible. The important issue here is the way architects and planners design the model of participation. This research was written through a lens of an architect who tries to find a meaningful transition between non-digital to digital participation in the design and planning of the built environment. There were some critics related to non-digital participation like cost, time, lack of transparency, and physical presence-oriented participation. In the digital form, the degree of informality is increased. Communities could interact in a more fluid way, and transparent procedure, however, the transition should not be very radical, which leads to the alteration of the fundamentals of participation. It could be assumed the mixture of digital and non-digital participation could provide more desirable results. During the research, it was found that participation could be engaging when it is easy to grasp for participants, and also people feel that their opinions are crucial to the process, and they are considered in decision-making. Lastly, architects should play as a mediator in the participation process. They should withhold the idea of democratic, collective design, and planning as a solution for the current complexity of the cities. Regardless of the scale of the project they are involved in, they should always try to not force any idea or measures on the decision-making. They should try to discuss different issues with communities and stakeholders along the way of the project. Architects have the potential to democratize design and planning, and I think the outcome would be fulfilling enough that they can not shrug off lightly about this matter.

4.4 Final Thoughts

The topic of democracy within our cities is very multifaceted. People urge for bringing democracy to the city and providing just and accessible welfare for the citizens. Democracy is considered the best tool for governing societies, and paving the road for citizens' inclusion in decision-making societies. When the cities are considered the laboratory of democracy (Aibéo, Keane, & Sassen, 2022), the role of architects and planners seems very crucial for shaping the cities. The democratic approach toward design is interwoven with participation, and it encourages architects to be more on the activist side. The participatory design did not have a political point of view about design and planning, but when the design itself is considered a political act, _ because it affects the lives of people within the society_ it makes sense to bring the political agenda to the discussion. The misuse of power in shaping societies in the digital age is another consideration. The democratic design seems to be more accessible with digital tools and the Internet, but it could be threatened at the same time. The open-access mentality to all information may lead to data manipulation. According to this research, there are many ways to tackle this issue, like 1- Not exposing the information about the participants 2- Creating both digital and non-digital platforms for participation 3- Increasing the security of a digital database The other matter worth mentioning is creating a transparent process for participation. In all of the successful case studies for participation. A clear expectation about the process could be helpful to frame the participation. In a clear step-by-step way, the architects and planners could track the outcomes easier. Moreover, the inclusion of people should lead to considering their opinions. If communities were invited to participate in the projects, but their opinions do not reflect on the outcomes, it will cause distrust in whole procedures. Design and planning sometimes become an opinionated realm, which leads to making decisions behind closed doors, and a democratic approach toward this matter seems to be effective.

In order to have a better understanding of the topic, it is tried to provide a set of guidelines that contributes to the better implementation of digi-

tal participation. The following are the guidelines:

1 Try to change the mindset of people that they have a right to have a say in urban change because the design is a political act in a democratic environment. Citizens should engage with decisions rather than just providing data and information for decision-makers. The most valuable motivation for people to participate is to find meaning in doing so. Under these circumstances, participation will become a joyful experience.

2 Architects and planners should not use participation as a political tool for advertisement.

They should design for collective freedom, promoting social cohesion and recognizing the value of maintaining community and its spirit.

3 We should not look at the architects and planners as the sole representatives of the communities. The values of communities and designers are different and they should try to create a common ground

4 for overlapping intentions and ideas. Like democracy, designing and planning is not a fixed framework, and it should be considered as a dynamic changing platform because there is

5 no fixed recipe for how to create that framework. Ambitions and expectations of projects should be clear for a democratic process. Architects and planners should first articulate the

6 problems to reach the necessary solution. Participatory design is a neutral process

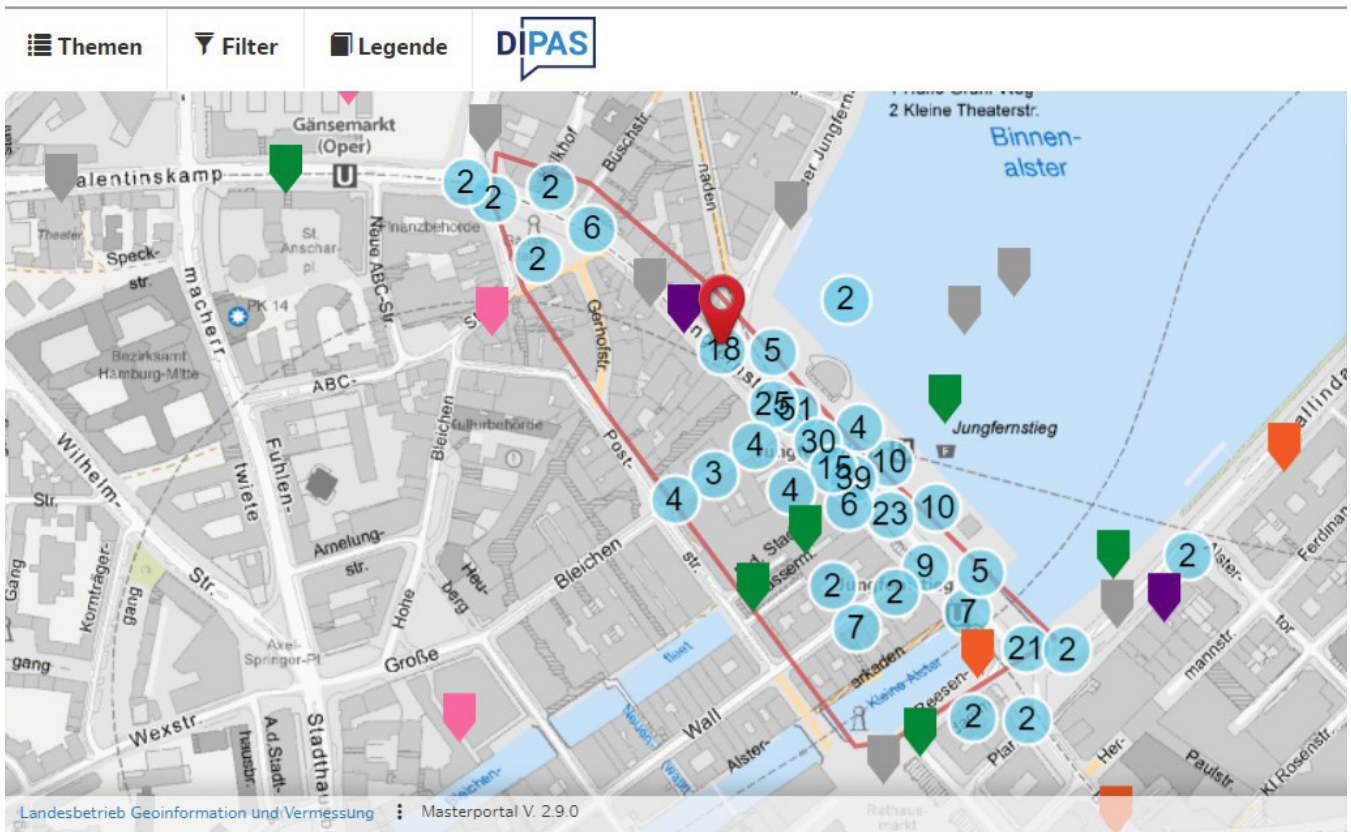
and architects and planners are the neutral facilitator. They should not avoid conflicts in the process, otherwise, it leads to

7 false consensus and pseudo-participation. Technology alone cannot be the solution for democracy. It can bring effectiveness by how we

design and use the technology. It should be used to bring the ability for better visualization of data, time and cost-effective solutions, more engagement, transparency, and a non-hierarchical process.

8 The closest architectural idea to participatory design is vernacular architecture. It made the

built environment a constant relation between the community and the designer through being a socially responsive designer. This approach toward the built-environment encourages nameless architecture and made the built environment an expression of social identity, status, and delight.



DIPAS Beiträge ✕

SONSTIGES

Autofrei- was ein Unsinn

Leider komplett an der "Politik für alle" vorbei philosophiert. Ich werde dort nicht mehr einkaufen, sofern der jungfernstieg weiterhin autofrei bleiben sollte. Das tut mir für die Einzelhändler vor Ort leid aber dann sollten Fahrradfahrer auch steuern zahlen.

MEHR

◀ ▶

car free - what a nonsense

"unfortunately completely gone philosophy of "policy for all". I will no longer shop there if Jungfernstieg is to remain car-free. I'm sorry for the local retailers, but then cyclists should also pay taxes"

Figure 38: Usage of DIPAS for development of Jungfernstieg with a comment
 Source: (Landesbetrieb Straßen, Brücken und Gewässer, 2020)

Abbreviations

ICT Information and Communication Technologies

PDPC Participatory Design of People-centered Cities

CCD Charge-Coupled-Device

BSW Behörde für Stadtentwicklung und Wohnen

LGV Landesbetrieb Geoinformation und Vermessung

RFID Radio Frequency Identification

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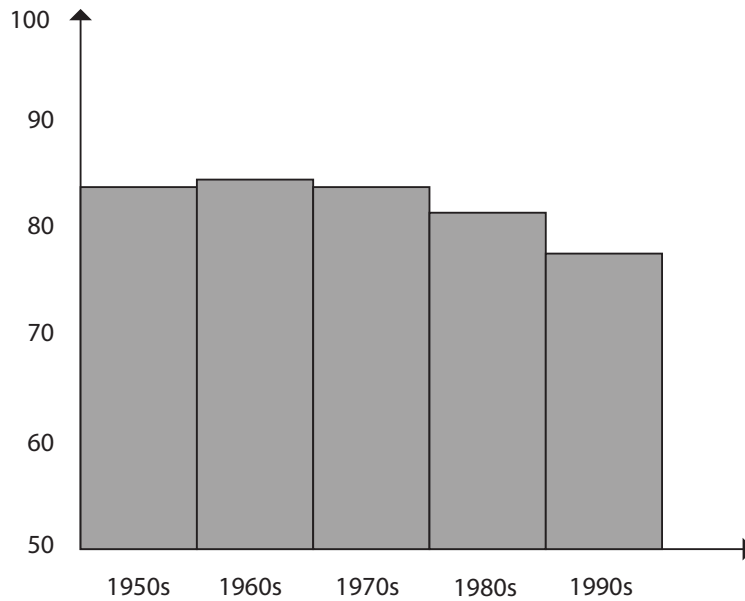
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Appendix



Appendix 1: Chart showing declining electorate turnout in Western Europe between 1950s to 1990s
Source: (Downs., 2017)

Levels	Description of levels of involvement	Examples using parental roles in relation to involvement in Society
First level	Doing an activity in preparation for connecting with other people	Reading a policy report to prepare for a meeting with a rehabilitation team and/or Child's teacher
Second level	Being surrounded with others	Sitting in a metro or train to get to a rehabilitation center
Third level	Interacting with others without physical contact	Discussing inclusive education with others through Facebook, Twitter or LinkedIn
Fourth level	Doing an activity with others	Joining a creative workshop for parents and Children
Fifth level	Helping others	Helping a child with physical education at primary school
Sixth level	Contributing to community	Being an active member of a parent organization or a political party

Appendix 2: A taxonomy for social activities based on the levels of involvement
Source: (Piskur, et al., 2014)

Expert Interview

Identification of the interviewee:

Name: Rosa Thoneick
Organisation: Hafencity University
Telephone/E-mail: rosa.thoneick@gmail.com

1. How far democratized design is possible without deeper expert knowledge extended information and discussion?

When we are talking about the experts it is mostly architects and urban planners, but we have to be sceptical about it, because we have many layers of knowledge, and each person could be counted as an expert. If we invite people, it makes the environment beneficial for everyone. The question is how to level up the knowledge, and one way is having the knowledge at the eye level and make it accessible for everyone.

2. Could we democratize the design process in all scales, or it is only possible in urban scale project?

The question is first how we can define democracy and how we use the space? The tools alone can not go further, because the process itself is more important. The other issue is the level of knowledge, because it is also crucial to see the availability of data and the process of collecting the data.

3. When you and your team working on the digital participation projects did you experience more the technological obstacles or social and intellectual hinderance along the way?

My studies mostly happened in the research part for the tools that are available for participation, so I have no experience about the practical use of the tools.

4. Do you think is it possible to implement projects that encourage digital participation in developing countries like African or south American countries?

Technically when you have access to mobile phone, internet, and electricity the digital participation is possible. At the same time issues as open urban data to use by public and transparency of open data policy will become important. It could be concluded that after

infrastructure the role of government is important.

5. How to avoid manipulation of data or misuse of information in digital participation and how did you deal with it?

The digital participation tools plan to be an open-source system, but the data that they are using is not accessible to public. This matter reduces the risk of manipulation of data. Another risk is the possibility of flooding the participation with fake accounts and identities. If you design a process that has no requirements for signing up, then you should think twice about the process that you designed. Very basic technical solution is reading the IP Address of the participants to prevent manipulation of data.

6. Did you convey your projects in a way that all the feedback and discussion will be a continuous process and follow the pace of the development of the projects till the end of the it or it will end at a point and be handed over to the professionals? Why?

First of all, the whole process should be clear phase by phase. As Planners, we learned feedback loop is very important. Also, it is important to set some rules that the whole conversation (questions and responses) could be followed. Another important factor is the trust and transparency because you must stay in a continuous conversation with city and politicians.

7. What do you think will lead to the lack of engagement in digital environment for participation? And how could we improve it?

We can create a communal online space and allow people to comment about their concerns. At the same time people should be accountable for their participation. The culture of co-creation should also be encouraged, because internet is a large space and we have to ask where the point of entry is? and how can we use information, or in metaverse and digital space, how to find our new identity.

8. Do you think digital participation will contribute to democratization of design?

It depends on participation, or what subset of people is there to participate or when it is not diverse then the participation is also questionable. It is always great if we create an open a channel for conversation.

9. To what extent your projects are affected by political agendas, both financially and socially?

In terms of social aspect, it is supposed to be a bottom-up approach and when you look at it in terms of political view, the cities seem to be motivated more, but if we use it only as a political tool without believing in it then it will not lead to a good result. The important thing is the honesty in the whole process. Although our projects are being funded by the EU, it is not the whole intention. Some researchers really have interest in this topic.

10. Have you ever experienced in your projects that the delivery of information and feelings from the people is not completely successful? what were the reasons?

DIPAS is a map-based tool, and at the beginning it used only 2d maps of the city. It was somehow a reductionist point of view because you could not see any shadow or volume of the buildings. Then it means you did not have a good understanding about the city. Now with the help of VR and AR people can be in the virtual space and have real experience. The other issue is delivery of information. It will become important because the way we analyse and use the data is important because it has to be understandable both for experts and the participants.

Thank you for your time and cooperation

Report

The report was made through a visit to one of the workshops of the CityScienceLab (CSL) on the 19th of September 2022 and the 26th of July. The report was held in English with Kayla Bargina for the former and with Johanna Fischer for the latter in the CSL workshop. They tried to first give an introduction about the projects and the laboratory and then they described different projects in detail and answered the proposed questions.

The tools are mostly using the same database but the purpose of each tool that is created in CSL is different. The projects correspond to a wide range of different usages from city planning to mobility and even air quality monitoring. In this report, it was tried to not focus on the function of each tool in detail, but instead on the process of digital participation and the highlights or experience of working with these tools.

1 The first observation was that, not only is the team of CSL interdisciplinary but also the people and stakeholders that they are working with are very diverse both local and international.

2 The second observation was that the focus of the projects of the CSL is more on sustainable city planning, which could cover mobility, climate, and also buildings. However, because most of the projects are funded through an external resource rather than Hafencity university, the theme and topic of the projects are mostly decided by the clients.

3 The third observation was the urge for education for the participants. The people who participate in the process always receive information, in terms of how to deal with the information and the tools.

4 The fourth observation was the importance of the hardware and software capabilities of the digital tools for participation. During the explanation of the project's technical problem, the connection to the server prevents the proper function of the tools. The database is most of the time huge so it takes a lot of time to process all the data.

5 The fifth observation is the great ability of digital tools in overlapping different data in real-time with the least effort and time consumption. This matter could even become more effective when the visualizations are also clear and understandable.

6 The next observation was that one of the tools is only available to the professionals in city planning because the complexity and amount of data are not easy to handle for everyone, so the presence of an expert seems necessary for the whole process. Although most of the tools are being used only for the city of Hamburg, they have ability to be used also by private companies.

7 The other observation is the diversity of the ways that participants can interact with digital tools. These interactions could range from storytelling with the help of voice recording to even playing a game and providing feedback for the process.

8 The success of the participation in the projects depends on the engagement of participants. It takes a lot of time and effort to bring the people to the workshop explain to them the process and encourage them to be fully engaged. Moreover, the interpretation of data with the help of city planners is also may become hard and time-consuming.

9 Finally, the feedback from the participants of the projects is positive. People are eager to participate and play a role in the process. In addition, the CSL team also hold different sessions with stakeholders to elaborate on the results and the progress of the projects.

