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Evaluating the Role of Participation in Different Design Phases for More Inclusive Housing

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Abstract

Urban growth and population increase have been major driving forces for cities, combined with an expanding heterogeneous sociocultural structure. The growing trends in urbanization pose massive challenges of inequalities and exclusions, primarily observed in housing. While housing was initially a sociocultural product involving users, it has transformed into a more standardized and financialized entity in the twentieth century, resulting in the abstraction of users from the production process. Against these exclusionary housing trends, it is the role of designers to redefine the place of users in housing for more inclusive results. So, this paper aims to investigate the potential of participatory approaches in housing to achieve more inclusive outcomes. Accordingly, accumulated knowledge on participation in housing starting in the 1960s is chronologically and interrelatedly discussed and mapped through prominent publications. Then, the benefits of specific participatory approaches in the inclusivity of housing are evaluated regarding three design phases to form a framework for future practices: i) design/predesign, ii) implementation, and iii) (post) occupancy. The study showed that participatory approaches at various phases and levels contribute to creating inclusive housing by increasing users' representation in decision-making, demystifying professional tools, and allowing alternative and dynamic appropriation of living.

Keywords: *inclusivity, inclusive housing, participation, participatory design.*

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Daha Kapsayıcı Konutlar için Katılımın Farklı Tasarım Aşamalarındaki Rolü Üzerine Bir Değerlendirme

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Öz

Kentsel büyüme ve nüfus artışı, genişleyen ve heterojen sosyo-kültürel yapıyla birlikte şehirler için temel itici güçler olmuştur. Kentleşmedeki artan eğilimler, özellikle konut alanında gözlemlenen büyük eşitsizlik ve dışlanmayı da ortaya çıkarmaktadır. Konut, eskiden kullanıcılar tarafından oluşan sosyokültürel bir ürünken, yirminci yüzyılda daha standartlaştırılmış ve finansallaşmış bir varlığa dönüşmüş ve kullanıcılar üretim sürecinden soyutlanmıştır. Bu dışlayıcı konut eğilimlerine karşı, daha kapsayıcı sonuçlar için kullanıcıların konut üretimindeki yerini yeniden tanımlamak tasarımcıların görevidir. Dolayısıyla bu makale, daha kapsayıcı sonuçlar elde etmek için konutta katılımcı yaklaşımların potansiyelini araştırmayı amaçlamaktadır. Buna göre, 1960'lardan başlayarak konut katılımına ilişkin biriken bilgi, önde gelen yayınlar aracılığıyla kronolojik ve birbiriyle ilişkili olarak tartışılmakta ve haritalanmaktadır. Sonrasında, konutun kapsayıcılığına yönelik belirli katılımcı yaklaşımların faydaları, gelecekteki uygulamalar için bir çerçeve oluşturmak üzere üç tasarım aşamasına göre değerlendirilir: i) tasarım/tasarım öncesi, ii) uygulama ve iii) kullanım(sonrası). Çalışma, çeşitli aşamalarda ve seviyelerde katılımcı yaklaşımların, kullanıcıların karar verme süreçlerinde temsilini artırarak, katılımı kolaylaştırma yolunda profesyonel araçları anlaşılır kılarak ve inşaat ve kullanım sırasında çevrelerin dönüştürülmesine izin vererek kapsayıcı konut yaratılmasına katkıda bulunduğunu göstermiştir.

Anahtar Kelimeler: *kapsayıcılık, kapsayıcı konutlar, katılımcılık, katılımcı tasarım.*

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Introduction

The world has been predominantly urban, and the urban population is expected to double by 2050. (United Nations-Habitat, 2017a) While the internal dynamics of cities significantly affect urban growth, international migration, refugee movements, and displacement also account for a significant portion of this growth, transforming urban areas into heterogeneous, multicultural, and diverse spaces (UN-Habitat, 2020). Despite the values brought by rich societal structures, existing urbanization trends demonstrate that growing inequalities, economic exclusion, and socio-spatial segregation persist. So, to enhance the social values of diverse societies, it is necessary to protect the rights of vulnerable groups and overcome the issues leading to inequalities. This fueled the recent global studies that adopt more inclusive and participatory approaches.

Spatial consequences of inequalities and exclusions are essentially observed in housing environments. Although housing had been primarily a sociocultural product of residents until the twentieth century, the increasing housing shortage for the rising population and the financialization of the process has transformed housing into an economic entity under the influence of deterministic approaches. Elimination of users from the production process of their settlements has fueled the exclusions faced in housing at both individual and societal levels. While the specific needs of vulnerable groups like the disabled, elderly, and children are mostly ignored, other disadvantaged groups like the unemployed, low-income, immigrants, or ethnically discriminated ones become more segregated in inadequate living environments (UN-Habitat, 2003, p.22). Considering the significance of such problems today, designers need to question how to involve users back in the production process of their homes. In light of this, the study aims to investigate the potential of participatory approaches to involve users in the housing process to reach more inclusive and adequate results. Accordingly, the paper first discusses how exclusions have become a major problem in housing and how this has directed the studies on inclusive and adequate housing, particularly the growing interest in participatory approaches. Explaining the conceptual and philosophical underpinnings of participation in a sociopolitical context, the study maps the participatory approaches in spatial practices chronologically and identifies changing perspectives and methods. Based on these, findings

from a holistic evaluation of selected participatory practices from the chronological mapping are presented in terms of their impact in different design phases.

Methodology of the Study

To evaluate the potential of participatory approaches in creating more inclusive housing, fragmented cumulative studies of such approaches are holistically and chronologically studied and mapped. Firstly, the study identifies correlations between the emerging housing trends and issues in the twentieth century and the influence of global discussions on inclusive design philosophy, particularly on housing. Then, based on the designated role of participation within the inclusivity discourse, a widened definition of the notion is presented by focusing on its changing and recurring aspects within the sociopolitical context. Following this, within the scope of the research, participatory approaches in housing that emerged since the 1960s are mapped chronologically through related pioneering publications. Following the review of the literature, the essential aspects of participatory practices are identified as:

i)the organizational structure of participation (government-led, professionals-led, community collaboration, or grassroots)

ii) the level of participation (representative-passive participation, or direct engagement)

iii) the form of participation (in decision-making, planning, design, construction)

Based on these aspects, 22 diverse participatory approaches consisting of both conceptual studies and practices are selected and categorized into five groups according to their formation, level, and form of participation. To form a framework for evaluating their potential in enhancing the inclusivity of housing, these participatory approaches are discussed in terms of three different design phases – i) planning and predesign phase, ii) implementation phase and iii) (post) occupancy phase. Primarily, participatory practices are evaluated regarding their potential to enhance the inclusivity of housing environments in the specified design phases in social, spatial, political, and economic dimensions.

Inclusivity and Housing

The dominant ethnic and social discrimination and segregation prevailing in the societies became apparent, especially at the beginning of the twentieth century. During the interwar period and afterward, the modernist perspective on homogeneous and 'normalized' social structure further influenced this exclusion. In search of social and political equality, civil rights movements occurred in the 50s and 60s (Coleman, Lebbon, Clarkson, & Keates, 2003). The success of these movements fueled the disability rights movements in the 70s, and the notion of 'inclusivity' has become more mainstream (Keates & Clarkson, 2004). Following the early conceptualizations of inclusivity, discussions of inclusion in the sociopolitical sphere spread into spatial studies with slightly different understandings in different contexts like accessible design, universal design, inclusive design, and design for all (Persson, Ahman, Yngling & Gulliksen, 2014). However, the similarities of these approaches helped to form a powerful discourse on a way of designing which focuses on how to address themes like *diversity*, *equity*, and *social inclusion* through design that can be used by *all* people (Heylighen, Van der Linden, & Van Steenwinkel, 2017). Due to the human rights-based nature of this philosophy, equity emerges as one of the fundamental concepts in recognizing the use of redistributive mechanisms for a fairer environment. Considering that societies consist of people from diverse backgrounds and cultures, different social groups should be treated according to their diversity to have equal opportunities and access to resources. Based on such fundamental concepts of equity, diversity, and human rights, *inclusive design philosophy* can be defined by providing equal opportunities and pluralistic environments for diverse individuals of society to participate in everyday life to the greatest extent possible without discrimination and exclusion (DESA, 2009; Erkılıç, 2012; Heylighen et al., 2017).

Housing development is an essentially discussed field within the spatial dimension of inclusivity. Due to its contested and oscillating character between being a highly socioculturally-led production and a key element in economic development and legal actions, studies on inclusive housing dwell on many dimensions. Especially twentieth-century housing trends and issues are reflected parallelly (Figure 1). In the postwar period, housing emerged as a fundamental spatial problem to address due to the mass destruction of cities

and rapidly increasing populations. Therefore, the West, considering European countries and the US, focused on government-led mass housing projects to cope with housing shortages between the 50s and 70s (Forrest & William, 2001; Jenkins, Smith, & Ping Wang, 2007, pp.153-178; Czischke & Ayala, 2021). The prevailing modernist approach to a standardized living environment for 'normal' citizens was criticized parallel to civil and disability rights movements occurred in the same period. Moreover, this approach failed to solve the exclusion of marginalized and low-income groups as mass-housing projects have led to repositioning and segregating the poor, unemployed, and immigrant communities in the urban periphery, deprived of fundamental needs (Calavita & Mallach, 2010). Thus, in the following period of the 80s-90s and afterward, the discussions mainly identified a more affordable and inclusive housing concept in two dimensions. Parallel to early approaches in inclusive design philosophy, providing equitable and accessible housing environments for disadvantaged population groups like the disabled and aged has been one of these main dimensions. Following the increase in home ownership, many studies focused on design principles and living standards that would be accessible and non-stigmatizing for all (Milner & Madigan, 2004; Peace & Holland, 2001; Steinfeld & Maisel, 2012). These studies mainly highlighted the importance of considering diversities in the design phase and developing housing accordingly. Moreover, how can housing environments respond to changing needs and experiences of users in post-occupancy has been questioned.

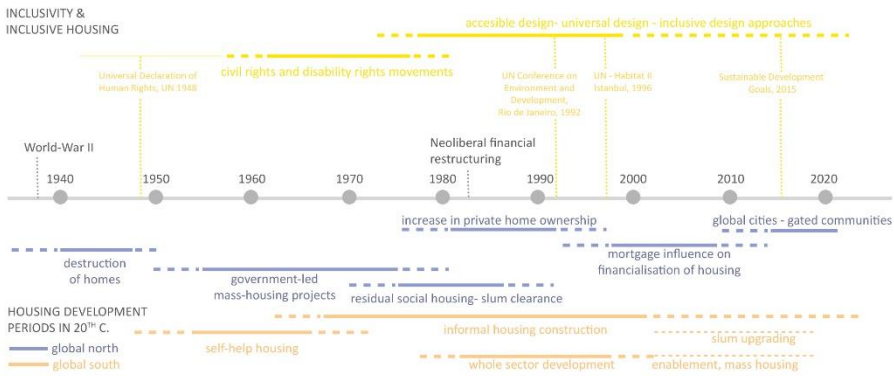


Figure 1. Timeline of housing trends in the twentieth century concerning inclusivity discussions, drawn by the Authors based on explanations in Forrest and William, 2001; Jenkins et al., 2007; Czischke and Ayala, 2021

Another significant perspective in housing studies has been the legal aspects of making policies and the planning process more inclusive and affordable. While user-driven discussions focused more on generating design solutions that could be universal and equitable for all, these studies have been primarily context-based and varied in two parts of the world. In the Global North, the main question was how to direct highly financialized housing development toward more affordable and inclusive practices. Privatization trends in housing have significantly reconsidered the public sector and NGOs' role in affordable housing, especially in many European countries (Calavita & Mallach, 2010). Accordingly, bottom-up and participatory solutions for housing have also (re)emerged, such as resident-led cooperatives and collaborative housing (Czischke & Ayala, 2021; Lang, Carriou & Czischke, 2020). Whereas, for the Global South, housing issues have been relatively new due to rapid urbanization that started after the 60s. The growing population's lack of affordable and adequate housing has increased informal settlements. This resulted in marginalized and unemployed groups of society being deprived of fundamental housing rights (Czischke & Ayala, 2021). Thus, inclusionary housing studies in the Global South mainly focused on enabling policy development for the informal housing sector through collaborative approaches between state and private sectors and, most recently, participatory improvement initiatives (UN-Habitat, 2003).

The right-based understanding and recognition by national and international organizations like the UN and OECD have significantly influenced inclusivity discussions in housing. Especially the development of new global agendas like UN-Habitat to cope with increasing problems of urban environments fostered the movement of the housing paradigm in the twentieth century toward the recognition and operationalization of the right to adequate housing (Czischke & Ayala, 2021). According to the human rights-based approach identified by UN-Habitat (shown in Figure 2), minimum criteria for fair housing prioritize inclusion in many dimensions within a holistic framework for housing development (2017b). Such understanding of inclusive housing is formed around the urban planning process, design development, and protection of fundamental rights in the occupancy.

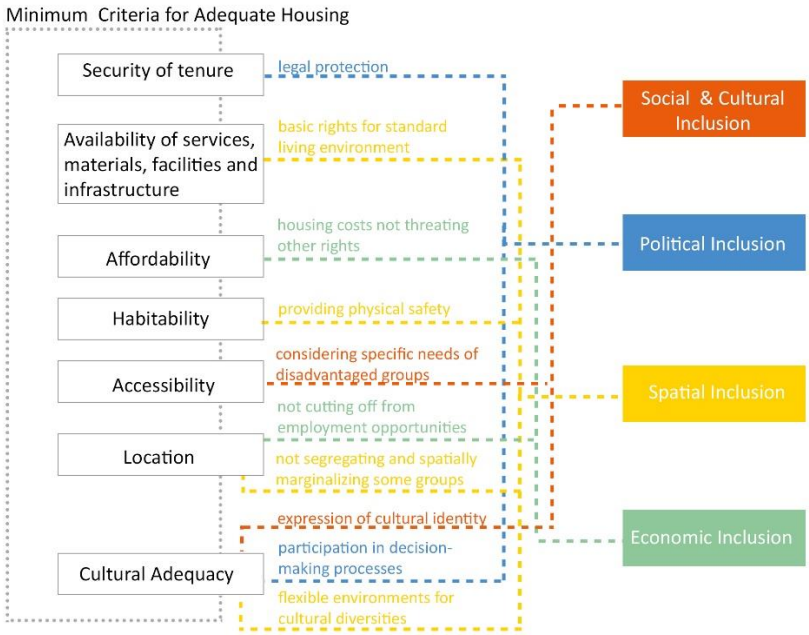


Figure 2. Minimum Criteria for Adequate Housing, Adapted from UN-Habitat, (2017b, pp. 11)

A key factor in realizing rights-based approach is participation. As Bianchin and Heylighen (2018) identify, the universal quality of human rights and aspiration to address social, cultural, economic, and political diversities remarkable to varying contexts creates a paradoxical situation in the epistemological understanding of inclusive design philosophy. They clarify this by highlighting that what is aimed through inclusive design is not to grant equal use of artifact(s) but to grant equal rights to participate in deliberating how design principles will be applied to specific contexts. Therefore, it can be deduced that participation is associated with the pluralistic representation of social and political identities necessary for inclusive development. From this perspective, starting with social housing, several housing models and approaches are studied to enhance participation for more inclusive solutions. Participatory approaches identify a dynamic design methodology to redefine housing by involving a significant heterogenic structure of citizens, experts, partners, designers, employees, and other interested parties to produce more inclusive results. Although being a substantial part of inclusivity discussions in housing, theoretical and methodological studies on participatory design remained incremental by focusing on specific approaches. Thus, discussing

participation in housing, starting with its right-based epistemological understanding and reflections on methodologies focusing on different design phases can be helpful to (re)define the potential of participatory design for more inclusive housing.

The Notion of Participation

The notion of participation is as old as the existence of human societies. The early conception of participation can be traced back to the Greek community, where participation is associated with sociopolitical concepts of freedom of speech (Lexis) and equal legislative action of decision-making (Praxis) (Arendt, 1998, pp.25; Sanoff, 2011). The Greek notion of participation is defined as a shared intellectual sense of individuals that presents their pluralistic social identity through collective actions. It is the autonomous collaborative practice of different social identities to politically obtain everyday needs and desires after the contentment of their private economic necessities (Dacombe, 2018, pp. 28). The Greek notion of participation is emphasized through the construction of the civic participatory model, known as *Agora*. It has encouraged the development of the individual's diverse political capacities to formulate a collective political decision justified by involving different social entities through confrontation (Hoskyns, 2014, pp. 6-8).

Similar to Arendt's understanding of the political pluralism of participation, Claude Lefort (1986, pp. 279-280) argues that the essence of participation in democratic spatial practices relies on the possibility of different political subjectivities to share an equal influence over the decision-making process in an empty place, without conflictual attrition. Participation takes an intermediary place in the controversial socio-political structure of the Greek Polis, between individuals' accessibility to decision-making processes and their social involvement in collective practices. Although the possibility of participation for a broad citizen population enabled forming a pluralistic collective identity, the strict definition of citizenship led to exclusions (Mitchell, 2015, pp.256-60). Political participation was inaccessible for women, enslaved people, metics, and foreigners. Women were especially considered part of the '*Oikos*' and excluded from the political ground of agora (Lape, 2010, p.43). Therefore, the modern concept of participation and understanding of citizenship has been built around the idea of inclusivity; however, this has also led to a passive form of participation through the model of representative democracy.

Moving to modern times, participation has been highly linked to the contemporary response to the failure of the traditional political forms of fixed social orders and the domination of the hierarchical and representative political structures that eliminated individuals' collective actions. Social movements in the 60s and 70s advocated alternative participatory concepts and practices on citizen engagement due to compelling circumstances of globalization, inclusive modes of communication, political discourses, and socio-political activism (Hoskyns, 2014). As such, participation has been accepted as a practical understanding based on sociopolitical equality and diversity in social identities and political representations opposing the traditional systems that have favored the notion of political consensus, universally accepted rational social norms and political instruments (Borș & Dascălu, 2013). Chantal Mouffe stresses the importance of redefining participation as a counter-manifestation and socio-political struggle to reclaim the role of individuals in the socio-political spatial practices beyond the limitations of liberal and representative forms of political domination (Laclau & Mouffe,1985).

Architecturally, participation has evolved after the failure of modern architecture to dissolve the methodological and epistemological dominant design structures in the socio-political context. Giancarlo De Carlo (1980) states that modern architects have been criticized for their subjugation to power in the form of professionalism which serves for inevitable economic domination. Under the influence of traditional liberal political systems, architectural practice has been defined by rational thinking and implementation processes based on universal rules of accepted geometrical and functional norms. Such architectural practices have depended on consensual political homogeneity and the avoidance of any multilateral engagement of social heterogeneity (Borș & Dascălu, 2013). Therefore, the modern notion of participation in architecture has parallelly emerged with the philosophical interpretation of *postmodernism* that had a fundamental role in providing a discursive evaluation of concepts like architecture, city, and urban environments through recognizing their political, social, and cultural perspectives and spatial capacities to reflect social diversity. Post-modernistic arguments have promoted the deconstruction of the urban environment into multiple co-existential and discursive fragmentations to highlight a sophisticated and tolerable understanding of the urban environment concerning its different conflicting and contradicting sociocultural representations (Harvey, 1992). Subsequently, the modern notion of participation can be considered as the evolution of social conciseness to the engagement of individuals in the political decision-making

process in the forms of social responsibilities (Sanoff, 2011). This concept is rooted in 'The Right to the City' by Henri Lefebvre. He forms this concept based on the idea of reclaiming the role of citizens in creating urban environments by ensuring their right to participate in decisions related to the spatial practices defining the city (Lefebvre, 1976). Thus, participatory design and planning practices in the field of architecture have started as a response to solve issues related to the city, such as urban decay, expansion of scattered and poor environments, unemployment, social exclusion, and political misrepresentations in the spatial dimension of the public realm under the influence of post-modernistic socio-political interpretations of architectural practices (Hoskyns, 2014).

Participatory Approaches in Housing Practices

Modern housing practices have been harshly criticized because their flawed design methodologies hinder the chance for different socio-political identities to participate in their environments' planning and designing process. John Turner (1976) argues that modern housing practices have misrepresented the rich socio-political nature of the housing environment by excluding the inhabitants, their complex political subjectivities, and their desires for inclusive sociocultural fulfillment. Accordingly, he emphasizes that housing is best provided when produced and managed by those who dwell in it and supports the idea of involving residents in decisions regarding their environment. Fundamentally, he identifies the strength of self-help houses in the Global South and proposed enabling these practices in a participatory way. Similar approaches based on mutual contribution have been developed in housing practices to guarantee inhabitants' social development and cultural representations in the early 70s and 80s. Under the influence of the socio-political struggles in the 60s, Community Design Centers were developed in the US to represent the interests of disadvantaged community groups (Sanoff, 2000). In the following decades, across the UK and other European countries, CDCs have been the institutions supporting the housing needs of communities through participation in planning, architectural design, and service provisions. Another example of such a paradigm shift in public involvement in housing has been cooperative housing, which is defined as the practice of a group coproducing their own accommodation fully or partially in collaboration with established providers (Czischke, 2017). A shared characteristic in

such participatory approaches has been acknowledging the sociocultural values against prevailing housing theories tied to fixed notions and allowing alternative spatial practices outside the dominant institutional framework of authorities (Sanoff, 2000).

On one side, participatory practices in housing have provided an alternative design methodology based on the innovation in quantitative measurements and the exploration of qualitative approaches out of inclusive sociopolitical practices of users (Curato et al., 2017). On the other side, housing-related theoretical and practical architectural frameworks have transformed upon the idea of considering the house as a conclusion of continuous transformative processes instead of an ultimate goal of perfectly designing. As Habraken (1986) points out, housing has been a practice that involved users for centuries until the need for mass housing in the early modern period. So, it is reversely designers' responsibility to participate and contribute to the users' socio-political production process of settlements and recognize this as a professional role. Similarly, Nabeel Hamdi (1995) identifies complementary enabling roles of professionals to enhance community participation: working directly with future users, working with provider authorities for incremental and self-developed initiatives, and acting as negotiators between local and central organizations. So, the application of participatory design as a methodology for housing essentially relies on the embodiment of participatory principles and practices in the culture of including communities.

However, participatory architectural practices have been heavily criticized, especially in their early appearance. The early notion of participatory design between the 1960s and the 1980s has been limited to the radical and experimental definitions delivered only by a few numbers of architectural pioneers and researchers as a direct response to the discussions related to civil rights and urban social justice issues in a sequence of social and political decline at that time (Luck, 2018). Correspondingly, Tim Richardson and Stephen Connelly (2013) refer to such a developed conception of participation as instrumental participation that is associated with the public's direct involvement against the hegemonic political consensus and decision-making policies influenced by the dominating objectivity and economic rationality.

Social participation has also been discussed in planning since the 60s through theories like Davidoff's (1995) advocacy planning, Arnstein's (1969) ladder of participation, Friedmann's (1973) transactive planning, Healey's (1997) collaborative planning, Davidson's (1998) wheel of participation and

others. The initial homogeneous and passive forms of participation in planning have gradually evolved into participatory planning in a more communicative spatial practice involving experts and users (Jenkins et al., 2009a, pp.69-72). Jones, Petrescu and Till (2005), supportively to the critique of traditional protective participation, show that early forms of participation were conducted to generate homogenized public consensus and protect its homogeneous nature. Individuals' participation is only valid and accepted if it can be collectively mediated for establishing a non-conflictual and stable political structure in decision-making. Based on these critiques of the traditional notion of participation, it is also crucial to identify challenges and issues regarding participatory practices to reach its new, widened definition. Accordingly, Henry Sanoff (2000) explains these issues: Firstly, participation might take too much time and effort. So, there is a risk in controlling this process by excluding necessary groups to achieve consensual progress more efficiently. Secondly, if participants are not presented with fundamental socio-political and technical knowledge, they might not actively engage in the process, leading to homogeneous passivity. Therefore, as Jones et al. (2005) advocate, a new understanding of transformative participation is an alternative communicative process of sense-making in which everyone is given equal power and opportunities rather than problem-solving.

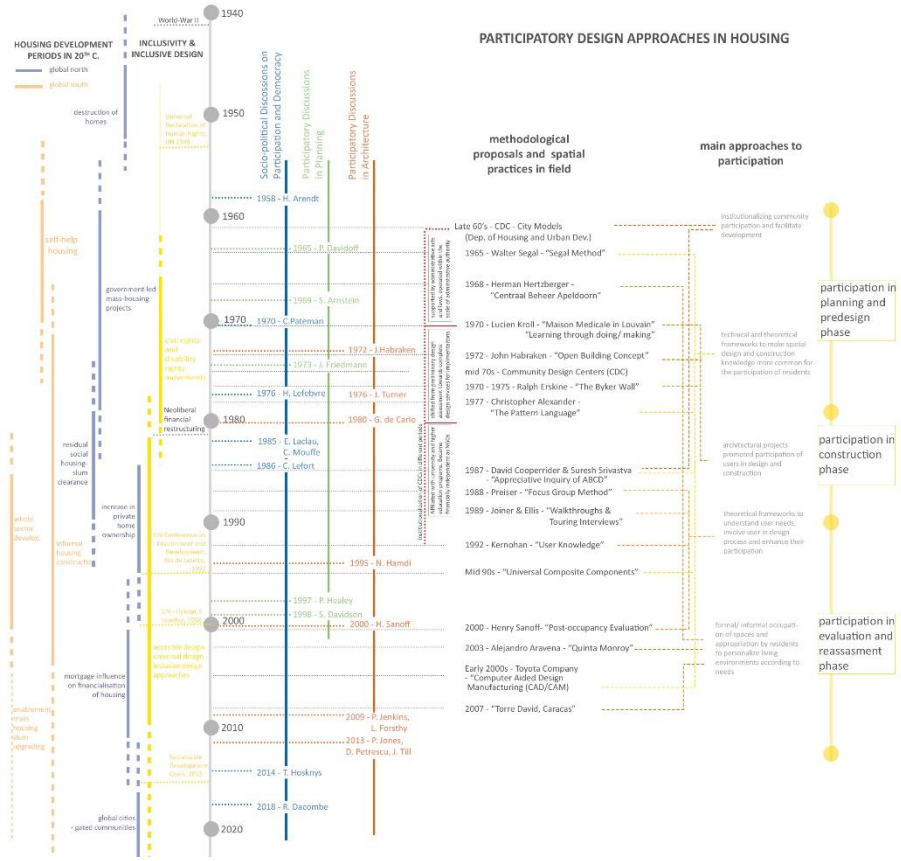


Figure 3. Mapping of intellectual works of participatory approaches in housing and their relations, (Authors,2022).

Participatory approaches in housing practices have emerged, especially after the 60s, parallel to rising issues of segregation and exclusion arising in cities due to increasing housing shortages. As seen in Figure 3, these approaches have evolved significantly through theoretical inquiries, methodological proposals, and practices in the field. Holistic study of these efforts shows that the initial focus on the planning and predesign phases have gradually evolved to the design and post-occupancy phases. However, each phase has been an object of inquiry within the accumulative knowledge in participatory design. Regarding this, Giancarlo de Carlo (1980) states that an architectural operation consists of these three naturally separate phases; however, users' participation during the whole operational process leads to a transformative result in which every phase becomes an interrelated design phase,

a self-sufficient process in itself. So, the following part of the study presents a detailed research on these three design phases concerning housing practices by mainly focusing on the potential of participatory approaches to achieve more inclusive processes.

Research Findings

In the following section of the study, research findings and critical reflections on academic publications are presented within the continuity of chronological developments and sociopolitical turning points in housing. Mapped and selected 22 participatory practices - are categorized into five groups: Top-down government-funded practices, bottom-up supported community practices, individual intellectuals' methodological frameworks or practical models, and entrepreneurial strategies. As shown in Figure 4, approaches in these groups are further differentiated according to the forms of participation and their level of engagement. Within the scope of the research, how these different groups of participatory approaches particularly influence the inclusivity of housing is critically evaluated with benefits and challenges regarding the three operational phases of architectural practice, which are: i) planning and pre-design phase, ii) implementation phase and iii) (post) occupancy phase.

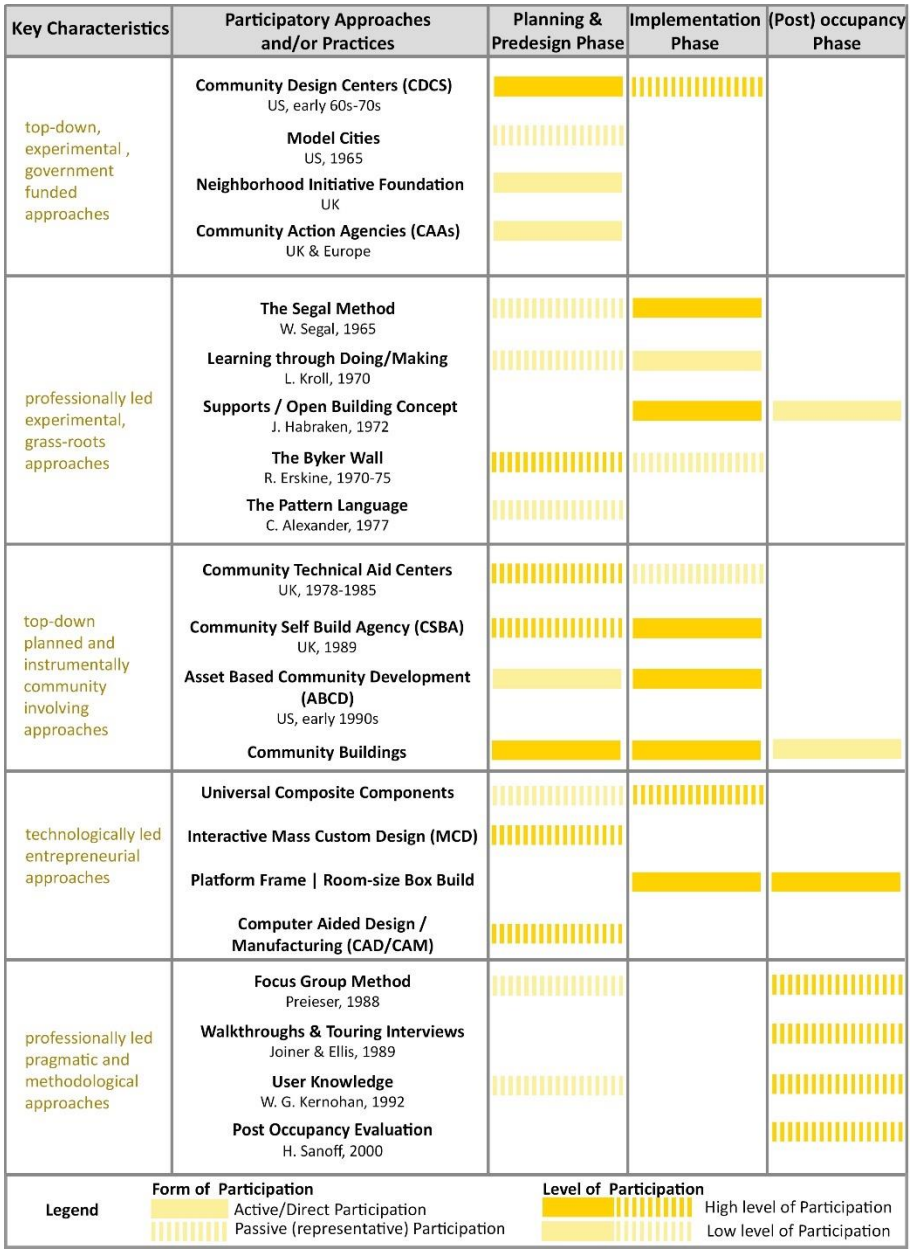


Figure 4. Different participatory approaches in housing, their form and level of participation, and related design phases (Authors, 2022)

Planning and Pre-design Phase

Participatory practices in predesign phase of housing projects are based on the active participatory involvement of different inhabitants and users during the design decision-making process and prioritizing their needs and demands to be fairly illustrated and treated through design. In addition, participatory spatial practices in housing projects conduct a collaborative two-way communication between ordinary users and technical experts, which moderates the objective technicality of design and the subjective practiced needs desired by users. Cooperative, participatory organizations like community buildings, Community Design Centers (CDCs) (Figure 5), and Neighborhood Initiative Foundations, in the western context, can be a clear and early example in which citizens were offered to be part of the processes of creating, managing, and evaluating their urban inhabiting environments in forms of public social responsibilities with empowering objectives like technical and financial assistance (Sanoff, 2006). These participatory organizations have promoted a collaboration between experts, university students, civil society, and local inhabitants to provide architectural design services for less fortunate communities to revitalize their socio-political identity and active participation in their inhabitant urban environments (Luck, 2018).



Figure 5. Example of CDC (New Worthley Community Centre Project conducted by the Collaborations of Project Office consisting of academicians, students, and locals), ("New Wortley Community Centre | Project office," n.d.)

A fundamental issue of such top-down generated participatory practices is the redistribution of power, as Sherry Arnstein (1969) identifies. Through the analogy ladder of participation, she states that citizen participation in design is a process of power redistribution beyond the limits of fundamental

consensus to include powerless outright racial, ethnic, ideological, and political oppositions and enable them deliberatively in the social, economic, and political processes. In light of this, the benefits of top-down and institutionalized approaches in the inclusivity of housing where power is redistributed equally can be described as follows: Firstly, the cultural and political representation of disadvantaged groups in the process leads to more accessible solutions. In examples like CDCs, when individuals directly participate in the decision-making processes, they can designate their neighborhoods' economic and spatial deficiencies, and housing programs are developed accordingly. Thus, parallel to the human-rights-based understanding of housing, habitability, and availability of services enhances to fulfill essential needs. Moreover, participatory practices have led to the creation of more accessible design tools and design environments that users can understand, utilize, and use to reflect their necessities directly upon the design offered to them. Jon Broome (2005) argues that participatory practices in the housing sector are valued by their ability to generate practical methods and techniques that centralize the users in designing with familiar design tools and equipment. An example of such, The Pattern Language, which was developed by Christopher Alexander, Ishikawa and Silverstein (1977), consists of 273 patterns of design vocabulary of spatial characteristics in cities, neighborhoods, and buildings and allows users and dwellers to engage with the architectural practice through alternative and common language parallel to the technical one used by experts in their professional practices. Also, in community architecture practices in the 70s and 80s following early grass-root CDCs, a similar approach to shared architectural knowledge for enhancing participation has been observed. Community Technical Aid Services in the UK, different from than grass-root involvement of architects as advocators of disadvantaged groups, has offered a greater variety of assistance with the support of local authorities. Professionals involved in this collaborative environment have emphasized the demystification of technical jargon to enhance users' participation from the initial conceptual phase to the implementation phase (Jenkins, Milner, & Sharpe, 2009b, pp.30-36).

Another crucial example in the participatory practice of housing is mass customizations supported by computer-aided design/manufacturing (CAD/CAM) of production systems and interactive mass custom design (MCD) processes that provide assessments to select and apply standardized design components according to the preferences of clients for more affordable, customizable, and sustainable design alternatives with the adaptation of

time, capital, material and production waste, and production system to the market and users changing demands (Jenkins et al., 2009a, pp75-77). To conclude, participatory architectural practices in housing have formulated a new discursive understanding of the design phase related to the issues of the right to obtain power. New forms of participation are strongly associated with enabling the legitimacy of users to influence both designers' ideologies and design phases depending on their needs and requests. Attempts to transform architectural tools and techniques to make them more suitable to comprehend and use in operational processes provide a more inclusive and equitable environment for all residents and foster active forms of participation rather than representational ones.

Implementation Phase

Participatory practices in housing projects have developed easily understandable, flexible, and accessible implementation systems and techniques that allow inhabitants to be further involved in creating their urban habitations. As a result, the construction phase, by the discursive influence of participation, is now neither monopolized by the professional practice of architecture as a complex building technology nor suffering from the economic burdens of costly specialized consultations and complicated implementations. Moreover, the implementation phase, reached by participatory practices, can be represented as an open source of architectural patterns that leave participants with higher levels of contentment by providing alternative social capital of financial support and more psychological attachment to the outcome of direct engagement in constructing living environments. Lucien Kroll is considered one of the proactive architectural pioneers to include participatory architectural practices in the phase of construction to involve the users in the process of creating and constructing their environments through initiatives like Learning Through Doing/Making, where potential inhabitants like university students are actively engaged in the construction of their dormitories according to their social preferences and financial limitations. Such participatory actions advocate for users to understand better how their environments are constructed and built to effectively interfere directly according to their spatial, social, and economic requirements with no technical moderator that may compromise at the expense of construction's objectivities (Luck, 2018).

Institutionalized top-down participatory formations in the early 60s and 70s, like the neighbor initiative foundation and community action agency, have remained relatively unsuccessful, especially in the implementation phases of some cases where the local communities are highly disadvantaged regarding resources. So, in the following decades, new formations have emerged to enable locals and involve them directly in the implementation phase, as seen in community self-build agencies. In such participatory practices, communities are provided with the opportunity and tools to build their own homes after collaboratively deciding on their planning. A fundamental impact of the self-building model as a participatory act for inclusive housing is observed in situations where unemployed, low-income groups actively construct their living environments. Parallel to human rights-based understanding, involving future residents in the construction process using local materials and tools directly enhances the affordability and sustainability of houses. If residents apply to build their own homes, they also build a sense of connection. They become more responsible and knowledgeable regarding the maintenance and appropriation of their living environment, which stimulates individual and social well-being (Fichter, Turner & Grener, 1972, p.241). Moreover, housing practices can act as a catalyst for improving well-being in a broader sense as self-build initiatives also generate new employment opportunities and technical skills for disadvantaged groups

Participatory housing practices have also been reflected in alternative construction methods, systems, and frameworks that positioned inhabitants at the core of the construction process of their living spaces and made the process more accessible and inclusive. A pioneering example in this respect is the Segal Method (Figure 6), developed by Walter Segal in the mid-1960s, which is a structural non-loadbearing frame with dry jointing techniques of modular partitions and architectural components. Thanks to easily understandable techniques, residents can take an active role in the planning and constructing their homes. Similarly, John Habraken (1972) proposed the Support Structure Idea, an alternative method to build houses by creating a flexible structure that corresponds to dynamic changes and alternations in its lifespan and is applicable with minimum technical intrusions. This idea of separating buildings into components for participatory alterations has been further elaborated by Stuart Brand (1994) in Six Elements of Building Analysis. He differentiates six different elements of the building with varying timescales of changes in a sustainable scheme, including "The Site, The Structure,

The Skin, The service, The Space Plan, The Stuff" to give more power to inhabitants for physical alternation by understanding their living environments through simple and easy-to-interfere construction framework (Broome, 2005). Another example is the Universal Composite Components, which defines the construction phase by prefabricated and standardized building components with high ergonomic features of lightweight, high thermal insulation, and easy installation to fit in a wide range of built environments according to installation methods corresponding to desires and needs of users (Jenkins et al., 2009a). Briefly, participation in housing architecture has implied a new digressive meaning of the construction phase in which values like equal accessibility to adequate construction techniques and methods, social and economic solidarity of vulnerable local communities against capitalist market orientations, and self-management of both urban environment and urban resources are taking place in the foreground.

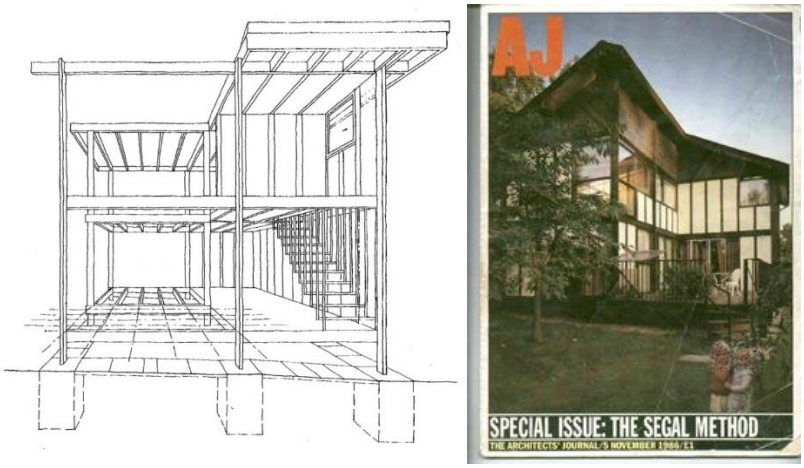


Figure 6. Principles of Segal Method (left) and its application (right) ("Special Issue: The Segal Method," 1986)

(Post) Occupancy Stage

Participatory practices in housing have allowed different post-occupational appropriations and flexible adaptation for various use patterns. The traditional standardized perspectives of objective design have shifted towards a more flexible and transformable conception that embodies different use patterns depending on users' diverse socio-political and cultural representations. Such a claim is rooted in Lefebvre's (1991) idea of distinguishing between the

three modes of conceived, perceived, and lived spaces. Conceived space is the abstract representation of space produced by designers whereas lived space denotes the experienced nature of space constructed through users and their interactions. As Jonathan Hill (2003, p.86) states, an architect has a role in conceived space but has no authority over lived space. So, architects can only understand different types of users but cannot determine the specific use of space. This also resonates with expanding discussions on inclusivity as the diversity of users, and their experiences have been emphasized more than the possibility of universally designing environments. As such, participatory approaches in the occupancy stage focus on two main aspects: the alternative practices to allow user appropriations and alterations. The other is translated to a methodological framework to evaluate and understand how users respond to designed living environments. Being fundamentally a socio-cultural product, the significant impact of housing environments is observed during its long-lasting occupancy phase. So, the user's spatial appropriation and adaptability of houses have been an issue of discussion in participatory housing, starting with Habraken's (1972) idea of Supports as discussed in the implementation phase, where the idea of separation physical structure from the infill. In current practices, a similar approach is seen in the works of Alejandro Aravena with Elemental (Quinta Monroy, 2003; Villa Verde, 2010), based on Turner's premise of conceiving housing as an ongoing project. In these projects, he designed half-houses, and the other half was completed by residents themselves in a participatory manner, according to the unique needs of each family. This idea of incompleteness in housing supports various principles of human rights-based inclusive and adequate housing. Firstly, Half-houses in nature become more affordable than 'completed' ones, thus becoming more accessible for disadvantaged groups like unemployed and low-income ones. Also, the personalization of living environments and their adaptability to future uses allow more socially and individually diverse groups to satisfy their needs and lead to more inclusive results.

Moreover, an accumulative body of knowledge on methodological frameworks has appeared regarding the post-occupancy phase to redefine and change housing practices by getting comprehensive and descriptive feedback from the users over the architectural processes. For instance, Henry Sanoff has offered the Post-Occupancy Evaluation (POE) approach focusing on the user's evaluation of the built environment from a descriptive and behavioral perspective to highlight the positive and negative sides of the built environment to be reflected in patterns of design and use in architecture

(Sanoff, 2000). Besides, plenty of other participatory initiatives promote an extensive assessment of living urban environment during the post-occupancy phase in housing architecture. User Knowledge Approach, explained by Kernohan et al. (1982), supports design based on the knowledge developed by inhabitants as a natural process of their interactions with the building according to their activities, needs, orientation, navigations, and experiences inside a familiar inhabited environment. Walkthroughs & Touring Interviews (Joiner & Ellis, 1989) are methods of a similar understanding based on analyzing, commenting, and evaluating the built environment through physical interaction rather than focusing on the patterns of use and functions. To conclude, participatory practices in housing have reshaped the post-occupancy stage discursively by constructing a pragmatic body of knowledge depending on meaningful interactions of users with their urban environment to redefine their spatial experience correspondingly. Carole Pateman (1970, pp.22-25) emphasizes this argument by asserting that the primary function of participation is an educative one by explaining participation as a form of "socialization" or "social training" in which individuals provide "externalities" or normative factors that are free from the dominance of the objective architectural influence to assure a comprehensive assessment with meaningful feedback to alter architectural perceptions, characteristics, and practices.

Discussion and Conclusion

In the twentieth century, the mass destruction of cities, followed by the rapidly increasing populations, resulted in the need for housing in many parts of the world. While settlements were products of a sociocultural process involving users, they have transformed into economic entities due to the mass construction of houses and the financialization process during the neoliberal period. Housing formation occurring beyond the users resulted in exclusions of especially vulnerable groups like the disabled and aged as they were not conforming to the standardized profile of mass-produced houses and segregation of low-income, unemployed, or ethnically discriminated groups in inadequate housing conditions. These growing exclusions fueled the discussions on the inclusivity of housing. In this study, the potential of participatory approaches in housing that emerged after the 60s is scrutinized in such inclusivity studies. Examining the studies chronologically and interrelatedly shows that early participatory approaches consisting of grassroots organizational attempts and professional practices were mainly in the planning and predesign

phase. The increasing institutional approaches have improved the collaborative environment. In addition, new methods and techniques have enhanced user participation, especially in the design and implementation phases, by demystifying professional vocabulary and tools. Moreover, emerging participatory approaches have emphasized user experience and how it supports future practices. Based on these sequential trends in participatory housing practices, the study presented the research results on the potential of participatory approaches in increasing inclusivity by evaluating their implementations holistically regarding three operational design phases – planning and predesign, implementation, and (post) occupancy.

Different groups of participatory approaches in terms of form and degree provide various benefits for inclusivity in the three phases. Approaches in the planning phase enhance the representation of vulnerable groups like the disabled, aged, and children, and disadvantaged groups like low-income, unemployed, and marginalized in decision-making. Their diversities and needs become more visible, and design solutions are formed to improve their social, spatial, and economic well-being. Participatory approaches that allow users to easily understand professional and technical knowledge enhance their involvement, especially in the implementation phase. Thus, they can lead the design process according to their needs directly and form a stronger sense of connection with their living environment, which improves their role in its maintenance. Also, engaging in the construction of houses provides new employment opportunities for especially low-income groups, which is vital for their economic inclusion besides its social and spatial dimensions. Finally, practices and methods in the (post) occupancy phase show the importance of user experience in inclusivity as the most lasting period in the housing design process. Enabling user appropriation according to their individual and social diversities and learning better design solutions from their experiences supports the provision of more inclusive and equitable houses.

To conclude, this study aimed to show the potential of participatory approaches in enhancing the inclusivity of housing while presenting a holistic and chronological perspective on its over 60 years of accumulated knowledge. Due to its process-oriented nature, adopting participatory design remains limited; however, the essential point is educating designers regarding the potential of participation. Considering that users are increasingly abstracted from the housing production process, designers need to emphasize users' place in the process through a right-based understanding of inclusive and adequate housing. Providing comprehensive conceptual and practical

knowledge on participatory design potentially enhances future practices, and reflexively, these practices will direct conceptual and theoretical discussions and our educational vocabulary, tools, and methods in implementing participatory design.

References

Alexander, C., Ishikawa, S., & Silverstein, M. (1977). *A pattern language: Towns, buildings, construction*. New York: Oxford University Press.

Arendt, H. (1998). *The human condition*. Chicago: University of Chicago Press.

Arnstein, S.R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, *35*(4), pp. 216-224. https://doi.org/10.1080/01944366908977225

Bianchin, M., & Heylighen, A. (2018). Just design. *Design Studies, 54*, pp. 1-22. https://doi.org/10.1016/j.destud.2017.10.001

Brand, S. (1994). *How buildings learn: What happens after they're built*. New York: Viking, p.13.

Broome, J. (2005). Mass housing cannot be sustained. In P.B. Jones, D. Petrescu, & J. Till (Eds.) *Architecture and participation*, (pp.72-86). New York: Spon Press.

Borș, S., & Dascălu, D. (2013). Notes towards a theory of contestational architecture. Retrieved June 25, 2022 from https://www.researchgate.net/publication/259560896_Notes_towards_a_Theory_of_Contestational_Architecture

Calavita, N., Mallach, A. (2010). An international perspective on inclusionary housing. In N. Calavita, A. Mallach (Eds.) *Inclusionary housing in international perspective: Affordable housing, social inclusion and land value recapture*. (pp. 1-14.) Massachuttes: Lincoln Institute of Land Policy.

Coleman, R., Lebbon, P.J., Clarkson, J. & Keates, S. (2003). Introduction: From margins to the mainstream. In J. Clarkson, R. Coleman, S. Keates & C. Lebbon (Eds.), *Inclusive design: Design for the whole population.* (pp. 1-25). London: Springer.

Curato, N., Dryzek, J. S., Ercan, S. A., Hendriks, C. M., & Niemeyer, S. (2017). Twelve key findings in deliberative democracy research. *Daedalus, 146*(3), pp. 28–38. https://doi.org/10.1162/daed_a_00444

Czischke, D. (2017). Collaborative housing and housing providers: Towards an analytical framework of multistakeholder collaboration in housing co-production. *International Journal of Housing Policy, 18*, pp. 55-81. https://doi.org/10.1080/19491247.2017.1331593

Czischke, D., Ayala, A. (2021). Housing in the global north and global south. In A. M. Orum, J. Ruiz-Tagle, & S. V. Haddock (Eds.) *Companion to urban and regional studies*. (pp. 579-604). https://doi.org/10.1002/9781119316916.ch27

Dacombe, R. (2018). *Rethinking civic participation in democratic theory and practice*. London: Palgrave Macmillan.

Davidoff, P. (1995). Advocacy and pluralism in planning. *Journal of the American Institute of Planners, 31*, pp.331-338. https://doi.org/10.1080/01944366508978187

Davidson, S. (1998). Spinning the wheel of empowerment. *Planning*, *1262*, pp. 14–15.

De Carlo, G. (1980). An architecture of participation. *Perspecta, 17,* pp.74-79. https://www.jstor.org/stable/1567006

DESA (2009). United Nations Department of Economic and Social Affairs, Report *Creating an inclusive society: Practical strategies to promote social Integration*, Retrieved May 28, 2022 from https://www.un.org/esa/socdev/egms/docs/2009/Ghana/inclusive- society.pdf

Erkılıc, M. (2012). Inclusive schools and urban space diversity: Universal design strategies in use. *METU JFA, 29*(1), pp. 193-206. https://doi.org/10.4305/metu.jfa.2012.1.11

Fichter, R., Turner, J., & Grenell, P. (1972). The meaning of autonomy. In J.F.C. Turner & R. Fichter (Eds.) *Freedom to build: Dweller control of the housing process*, (pp. 241-254). New York: Macmillan.

Forrest, R., Williams, P. (2001). Housing in the thwentieth century. In R. Paddison (Ed.) *Handbook of urban studies*. (pp. 88-101). Sage Publications.

Friedmann, J. (1973). *Retracking America: A theory of transactive planning*. New York: Anchor Press.

Habraken, N. J. (1972) *Supports: An alternative to mass housing*. London: Architectural Press.

Habraken, J. (1986). Towards a new professional role. *Design Studies, 7*(3), pp.139-143. https://doi.org/10.1016/0142-694X(86)90050-5

Hamdi, N. (1995). *Housing without houses: Participation, flexibility, enablement*. New York: Van Nostrand Reinhold.

Harvey, D. (1992). Social justice, postmodernism, and the city. *International Journal of Urban and Regional Research, 16*(4), pp. 588–601. https://doi.org/10.1111/j.1468-2427.1992.tb00198.x

Healey, P. (1997) *Collaborative planning: Shaping places in fragmented Societies*. Vancouver: UBC Press

Heylighen, A., Van der Linden, V., & Van Steenwinkel, I. (2017). Ten questions concerning inclusive design of the built environment. *Building and Environment, 114*, pp. 507-517. https://doi.org/10.1016/j.buildenv.2016.12.008

Hill, J. (2003). *Actions of architecture: Architects and creative users*. London: Routledge.

Hoskyns, T. (2014). *Empty place: Democracy and public space*. London: Routledge.

Jenkins, P., Smith, H., & Ping Wang, Y. (2007). *Planning and housing in the rapidly urbanising world*. Routledge.

Jenkins, P., Pereira, M., & Townsend, L. (2009a). Wider scoping of relevant literature. In P. Jenkins, L. Forsyth (Eds.) *Architecture, participation and society*, (pp.60-80). London: Routledge.

Jenkins, P., Milner, J., & Sharpe, T. (2009b). A brief historical review of community technical aid and community architecture. In P. Jenkins, L. Forsyth (Eds.) *Architecture, participation and society*, (pp.23-38). London: Routledge.

Joiner, D. and Ellis, P. (1989) 'Making POE Work in an Organization', in W. F. E. Preiser (ed.) *Building Evaluation*, New York: Van Nostrand Reinhold.

Jones, P. B., Petrescu, D., & Till, J. (Eds.). (2005). *Architecture and participation*. New York: Spon Press.

Keates, S., & Clarkson, J. (2004). *Countering design exclusion: An introduction to inclusive design*. London: Springer-Verlag. https://doi.org/10.1007/978-1-4471-0013-3

Kernohan, D., Gray, J., Daish, J. and Joiner, D. (1992). *User participation in building design and management: A generic approach to building managemen*t, Oxford: Butterworth-Heinemann.

Laclau, E., & Mouffe, C. (1985). *Hegemony and socialist strategy: Towards a radical democratic politics*. London: Verso Books.

Lape, S. (2010). *Race and citizen identity in the classical Athenian democracy*. Cambridge university press.

Lang, R., Carriou, C., & Czischke, D. (2020). Collaborative housing research (1990–2017): A systematic review and thematic analysis of the field. *Housing, Theory and Society*, 37(1): 10–39. doi: 10.1080/14036096.2018.1536077

Lefebvre, H. (1976). *Survival of capitalism*. Allison & Busby.

Lefebvre, H. (1991). *The production of space*. Oxford, UK: Blackwell

Lefort, C. (1986). *The political forms of modern society: Bureaucracy, democracy, totalitarianism*. The MIT Press.

Luck, R. (2018). Participatory design in architectural practice: Changing practices in future making in uncertain times. *Design Studies, 59*, pp. 139–157. https://doi.org/10.1016/j.destud.2018.10.003

Milner, J., Madigan, R. (2004). Regulation and innovation: Rethinking 'inclusive' housing design. *Housing Studies*, *19*(5), pp.727-744. https://doi.org/10.1080/0267303042000249170

Mitchell, T. (2015). *Democracy's beginning: The Athenian story*. Yale University Press.

New Wortley Community Centre | projectoffice. (n.d.). Retrieved June 28, 2022, from projectoffice website: https://leedsbeckett.wixsite.com/projectoffice/new-wortley-community-centre

Pateman, C. (1970). *Participation and democratic theory*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511720444

Peace, S. M., Holland, C. (2001). *Inclusive housing in an ageing society: Innovative approaches*. Bristol: The Policy Press.

Persson, H., Ahman, H., Yngling, A.A., & Gulliksen, J. (2015). Universal design, inclusive design, accessible design, design for all: Different concepts-one goal? On the concept of accessibility-historical, methodological and philosophical aspects. *Univ Access Inf Soc, 14*, pp. 505-526. https://doi.org/10.1007/s10209-014-0358-z

Richardson, T., Connelly, S. (2005). Reinventing public participation: Planning in the age of consensus. In P.B. Jones, D. Petrescu, & J. Till (Eds.) *Architecture and participation*, pp.87-110. London: Spon Press.

Sanoff, H. (2000). *Community participation methods in design and planning*. New York: John Wiley & Sons.

Sanoff, H. (2006). *Democratic design participation: Case studies*. VDM Verlag Dr. Müller

Sanoff, H. (2011). Multiple views of participatory design. *Focus The Journal of Planning Practice and Education, 8(*1). https://doi.org/10.15368/focus.2011v8n1.1Special issue: The Segal method. (1986). *Architects' Journal*.

Steinfeld, E., Maisel, J. (2012). *Universal design: Creating inclusive environments*. New Jersey: John Wiley & Sons, Inc.

Turner, J.F.C. (1976). *Housing by people: Towards autonomy in building environments*. New York: Pantheon Books.

United Nations Habitat. (2003). *The challenge of slums: Global report on human settlements 2003*. Retrieved on 03.10.2022 from https://unhabitat.org/the-challenge-of-slums-global-report-on-human- settlements-2003

United Nations Habitat. (2017a). *New urban agenda*. Ecuador. Retrieved May 25, 2022 from https://habitat3.org/the-new-urban- agenda/

United Nations Habitat. (2017b). *Human rights in cities handbook series: The human rights-based approach to housing and slum upgrading*. Nairobi. Retrieved May 27,2022 from https://unhabitat.org/the-human-rights-in-cities-handbook-series-volume-i-the-human-rights-based-approach-to-housing-and-slum-upgrading

United Nations Habitat. (2020). *World cities report 2020: The value of sustainable urbanization*. Retrieved May 21, 2022 from https://unhabitat.org/World%20Cities%20Report%202020