An Assessment Model for Participatory Architecture: The Example of the Kuzguncuk Gardens


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Abstract: *It is crucial to evaluate the architectural production processes through the concept of participation because the thoughts and comments that emerge as a result of the evaluation will contribute to the current architectural environment. Since 1960s the integrity of theory, research, and practice that has been put forward combined with user-oriented architectural movements, has enabled new developments and potentials. For this reason, it is necessary to observe and evaluate user-oriented studies that aim to establish the integrity of theory, research and practice to unfold the results in all their complexity. The outputs of the research can serve as a reference for targeted polyphonic architectural production processes in the future. The proposed method makes these interaction networks visible, applying them to participatory architecture processes. In this way, today's design tools have the potential to involve participants in the process. The present study proposes the hypothesis that these potentialities can be demonstrated by observing, evaluating, re-discussing, and interpreting previous studies. The article seeks to evaluate the relationship between users' participation in architectural processes and the network of actors-stakeholders who take part in participatory approaches. The concept of participatory architecture is vital for future experiences of architecture in order to revive the development of architectural practice in Turkey. Therefore, to provide a guideline model for architects and researchers engaging in participatory architecture processes. The study's goals are: (1) clarifying the reasons of area defense with solidarity and evaluating the level of participation in architectural practice, (2) examining stakeholder typology assessments, and (3) observation participation techniques and tactics in processes. This research includes descriptive analysis of the Kuzguncuk Bostan Recovery and Protection Project as a case study and qualitative analysis examining participatory processes with the multi-dimensional model (EMParArc). Through this multi-dimensional model, this article emphasizes an alternative framework for the assessment of architectural participation methods in holistic processes that provide inclusive spaces in particular needers in Turkey and other non-develop and developing countries.*

Keywords: *Participation, Participatory Architecture, Participatory Design, Evaluation Model, Solidarity*

Katılımcı Mimarlık Üzerine Bir Değerlendirme Modeli: Kuzguncuk Bostanları Örneği

Özet: *Katılım kavramı üzerinden mimari üretim süreçlerini tartışmak ve değerlendirme yapmak oldukça önemlidir. Katılımcı mimarlık, aktörleri ve katılım yöntemleri ile çok boyutlu katmanları olan bir süreçtir. Bu süreç her katılımcı mimari üretim süreci için farklı ve eşsiz gerçekleşir. 1960'lı yıllardan itibaren kullanıcıyı odağına koymayı hedefleyen mimarlık hareketleri ile birlikte çeşitli ölçeklerde deneysel katılımcı mimarlık çalışmaları yürütülmüştür. Bu çalışmalar ile akademisyen ve mimarlık pratisyenleri tarafından çok paydaşlı üretimler ile ilgili kuram ve uygulama bütünlüğünü destekleyen söylemler geliştirilmiştir. Türkiye'de çok paydaşlı* yürütülen çeşitli çalışmalar mimari literatüre ve akademik ortama önemli katkılar

yapmıştır. *Dayanışma Mimarlığı Sergisi (2017) son dönemde yapılan çok paydaşlı mimarlık deneyimlerinin ortak bir söz söyleme adına bir araya geldiği bir kolektiftir. Çalışma, Dayanışma Mimarlığı Sergisi'nden yola çıkarak katılımcıların örgütlenmesi ve bir araya gelişlerine odaklanır. Katılımcılık ile ilgili söylemlerden geliştirilmiş bir kavramsal modeli ortaya koyar. Bu model, uygulanmış katılımcı mimarlık süreçlerinin değerlendirilmesinde bir araç olarak kullanılabilir.* Çünkü değerlendirme sonucunda çıkacak düşünce ve yorumların güncel mimarlık ortamına katkısı olacaktır. Çalışmanın amacı, (1) dayanışmanın ortaya çıkış sebeplerini ortaya çıkarmak, katılım düzeylerini değerlendirmek, (2) paydaş katılımını sorgulamak ve (3) süreçlerde izlenen yöntemleri gözlemlemektir. Çalışmada alan çalışması olarak Kuzguncuk Bostanı İyileştirme ve Koruma Projesi ele alınmıştır. *Metod olarak, tanımlayıcı ve niteliksel yöntemler ile katılımcılığı çok boyutlu olarak analiz eden, değerlendiren bir model ortaya konmuştur (EMParArc). Model, katılımcı mimarlığı değerlendirmede ve yeni üretilecek süreçlerde kullanılabilecek bir altlık olarak ortaya koyduğu alternatif çerçeveye vurgu yapmaktadır.*

Anahtar Kelimeler: *Katılım, Katılımcı Mimarlık, Katılımcı Tasarım, Değerlendirme Modeli, Dayanışma*

1. INTRODUCTION

The purpose of participatory architecture is to systematically combine the theories and practices of multidisciplinary design and to involve users in the planning and design processes of their physical environment. Thus, users become active individuals who are confident in shaping their environment. Planning action will turn into a learning process for both the designer and the user [1]. Other than users, there are many actors and stakeholders in participatory processes. This study researches the interaction of users and these actors and stakeholders within approaches to solidarity architecture, which is a participatory process.

Hacıalibeyoglu points out that participatory and its evaluation process is complex due to the nature of the concept of participation. Each participant has different values and backgrounds. Therefore, it is not possible for individuals to play a role in the same activity during the process. The inability to reach a definitive decision on the evaluation criteria makes this situation even more difficult [2]. The general lack of empirical evaluation for the quality of methods stems from confusion about the appropriate criteria for evaluation. There is no accepted assessment method and there are many different tools for measurement. Evaluation of participation practices is very significant for all participants [3]. Evaluation of participation studies is nothing more than the application of certain types of research methods used in evaluating social programs. Its purpose is to measure the effects of the program by contributing to the decisions to be made later regarding the program by reaching the target. Evaluation has an important place in terms of financial, practical, moral, and theoretical reasons. In addition, the evaluation of the projects serves as a reference point for future project processes in terms of strengths, weaknesses, potentials, and dangers.

Rosener emphasized that participation means sharing decision power for some citizens, while for others it means merely expressing an idea. He stated that if a definitive conclusion is to be reached regarding the assessment of the effectiveness of participation, the participation goals should be made clear to all participants [4]. The evaluation of project processes carried out in a transparent way will be just as accurate.

According to Habraken, the buildings represent a living-evolving environment that calls for a balance between the use of today's scientific potentials and the improvement of human relationships [5]. De Carlo focuses on the involvement of users as actor and relations between stakeholders such as workers on site in the design process in his articles and works [6]. He points out the significance of the social networks during the built environment construction process with actors, and its users [7].

Kroll became one of the key actors of participatory architecture who developed an application methodology through Habraken support theory. According to his approach, diversity of stakeholders bring creativity

and livability to built environments. The role of architects is to catalyze users' participation with the other stakeholders in the design process and to integrate the positive way of organization (Kroll & Jones, 1986). Participation was addressed in different scales such as architecture, and product design as well as city planning and interior design. For these theorists, the democratization of citizenship rights is an obligatory aspect of participatory activities [7]. Alejandro Aravena, uses participatory design principles to develop ideas and projects which consider the social, political, and economic advantages of users, also participated in such discourses [8]. Thus, Aravena is persuaded that it is time to discuss the relationship between architecture and other fields, such as environmental issues, and debate how these fields, rather than just architectural form, should inform projects [7].

Another valuable study on the active involvement of different actors in spatial production is the Spatial Agency book, project initiative and its website [9]. Spatial agency is defined as a network between lead actors of participation, independent researchers and designers. According to Till, the behavior of the architect, as one agent among others, should be to empower others for change [10]. The evaluation model for participation includes type, level, and actors of participation and is based on these theoretical approaches of goals, the power of society to shape the environment, the importance of social networks, the acceptance of diversity, interdisciplinarity in design, and the involvement of different actors.

The aim of this article is to find a proper way of evaluating participatory approaches in architecture and apply methodology in one case of the participatory approach. It is of great importance to evaluate participation through projects realized with a pluralist structure. It is also important to evaluate the collaboration techniques of the designer, user, and all other stakeholder actors in order to outline the lessons learned from carrying out the project through the process. Collaborations between actors and stakeholders should be observed and evaluated in terms of the participation ladder (1), typology assessment perspectives (2) and participation techniques (3). The process and the actors involved in the project need to be defined before the goal-oriented steps—that is, before the architectural result focuses on the product. The research questions about these parameters have been organized as the following: 1) Which step of the participation ladder is preferred for the participation method? 2) Which type of assessment perspective is used in the analysis of typology? 3) Which participation techniques are used for realizing the approach? The answers to these questions shaped the assessment approaches in this study. Kusumaningdyah & Purnamasari practiced that similar analysis methods on experimental participatory architectural project of "Kampung Layak Anak" process, Indonesia, in 2017 [11]. This research based process conducted with these steps of systematical method.

2. APPROACHES TO PARTICIPATION AND SOLIDARITY

When the literature was examined, we observed that there were papers, articles, and theses written on participatory architecture conducted by academicians, architects, and authors. Similarly, there are also studies that analyze and evaluate application studies made with the participatory architecture model and present a model based on it but do not have a specific framework. The present study, within certain limitations, defines the group by examining a specific area and proposes an evaluation model that discusses the participant relationships established and their causes and consequences. Limiting the exemplification of working with Solidarity Architecture Exhibition Groups is an important criterion for user focused design process assessment.

The comments of Sanoff about the different approaches to community participation centered on the fact that "resolving conflicts, and to supplement design and planning" [12]. According to Wulz, participation is a concept that covers different forms of decision-making by different individuals and groups [13]. Sanoff defines the main purposes of participation as involving people in decision-making processes' improving design, decisions and delivery by including the voices of prospective users; and promoting the sense of

community with common goals [12]. Burns & Taylor classify the experiences of participation in four categories; awareness, perception, decision-making and, implementation [14]. Just like these categories, Sanoff argues that there are four different stages of experience: goal-setting, programming, design, and implementation [12]. Some questions preparedfor participatory design process by Sanoff. 1) Why is this process needed? 2) How will the group work toward a solution? 3) How will decisions be made? 4) What is the schedule? 5) Who will receive and act on the final product? Godschalk et al. defined that the next section attempts to integrate all these ideas in the model for the assessment of participative solidarity groups [15].

3. METHOD -A MODEL FOR ASSESSMENT ON PARTICIPATIVE SOLIDARITY GROUPS

Evaluating participation and participatory architecture is possible with a multidimensional perspective. The participatory architecture models proposed by different theories, strategies, tactics and games, and the level of polyphony that emerges from them give us an idea as to the research on evaluation. This study's method can be categorized as an evaluation research aiming to analyze projects produced with a pluralistic understanding in terms of participation. Neuman defined evaluation research as applied research seeking to determine how well a program or policy is working or achieving its goals and objectives [16, 11]. In this way, a program or policy can be considered as the evaluation of the project process in the discipline of architecture. This study argues that projects done with the qualitative data collection method should be evaluated at every stage of the project through the resulting data and outputs. At the same time, this study evaluates quantitative data by using the observations and archived data of the executives/participants. Here, the descriptive method is used to analyze and evaluate the projects. This model proposes three levels for analysis: participation ladder analysis, stakeholder typology analysis, and participation techniques analysis. These levels were defined because of their interaction with the qualitative and quantitative characteristics of participation approaches. Each level of the study will be explained in the following paragraphs with their relevant details.

Participation Ladder Analysis: For participatory architecture, contextual events (the starting point of the process) and triggers (the factors that encourage participatory architecture and solidarity in the process) help determine the level of participation. The ladder level is affected by requests from within user groups, processes supported or blocked by administrations, and expert referrals. Arnstein classifies citizen participation by the level of power by examining the actual level of decision-making in many social upgrading programs, urban renewal, and empowerment against poverty in the United States [17, 18]. Arnstein's classification consists of eight degrees of participation: manipulation, therapy, informing, consultation, placation, partnership, delegated power, and citizen control. Tatlić explained these levels of participation in decision-making begin with the first two non-participatory degrees, manipulation and therapy, which are symbolic degrees for realizing imaginary interests through education and campaigns [18]. The next degrees, which can be defined as "degrees of tokenism," consists of one-way communication when it comes to informing the public, consultation without the need for implementation, and participation in the planning process without affecting the decision-making process. The final three degrees make up so-called citizen power: community partnerships in decision-making by financial participation, achieving influence in the decision-making process through community representatives, and civilian control of certain public institutions or settlements through the determination of their program.

Figure 1. Ladder of participation [17]

Stakeholder Typology Analysis: The second analysis is based on the study developed by Lee regarding Lefebvre's spatial philosophy [19, 20]. This analysis aimed to understand the relationship between the designer, the user group, and other stakeholders in the execution of the entire process, and the results at every stage of the process [2]. Interaction increases as the number of networks established by architects, users, and other actors involved in participatory processes increase. This will make interaction more meaningful.

	Typology Analysis
USER	Main user group Local supporting stakeholders Benefit / support progressive Supervision mentoring
STAKEHOLDER	Stakeholder group 1 Sub-stakeholders Stakeholder group 2 Sub-stakeholders Stakeholder group 3 Sub-stakeholders

Figure 2. Stakeholder typology analysis [19]

Participation Techniques Analysis: The types of relationships established by the participating stakeholders are important in terms of evaluation. Making inferences by observing the events organized, the content of the events, the language of communication with the user and the co-production process is valuable and unique for each process. The third analysis is based on the participation techniques theory developed by [12]. This analysis seeks is intended to understand the techniques/methods used at each stage of the process and how they result in different projects. Sanoff has defined the methods and techniques that can be used in participation processes in the chart shown below. The analysis of participation techniques should take place in three phases. The first is the quantitative data collection process. The second phase is the participatory

techniques in the design collaboration process. The third is the participation techniques in the technical collaboration process. In the first phase, quantitative data collection can be carried out according to the below list of questions. However, this list can be stretched, as each study has a different process. New questions can be added and existing ones can be removed [12].

Table 1. List of questions / sub-questions for the first phase of analysis of participation techniques [12]

Number	Quesitions	Sub-questions
1	Profile	Age Gender Adress
2	Frequency of use	-
3	Reason for the selection of area	-
4	Character of usage	Time spend Time preferences Type of user Type of activity Density of character
5	Perception of scale	Comfort Security Accesibility Cleanness Usage friendly
6	Aim	-

In the second and third phases, participant techniques are questioned with techniques developed using the methods and techniques developed by Sanoff.

Table 2. Methods and techniques of participation defined by Sanoff *[26]*

METHODS	Awareness Methods	Indirect Methods	Group Interaction Methods	Open Ended Methods	Brainstorming Methods
Techniques	·Exhibition ·Media tools ·Walks	·Survey ·Questioning ·Interview	·Workshop studies	·Public meetings ·Local media ·Planning voteing	·Classical brainstorming ·Brain products method ·Interactive brainstorming method

Dimensions of participation are used as part of the evaluation model for participatory architecture. In order to evaluate participatory architectural production, it is also necessary to consider the multiple dimensions of participation. It is possible to carry out an effective practice as a result of conceptualizing participation and associating it with architectural action. Sanoffand surveys that generated over 200 ideas for the riverfront. Idea-sharing sessions were also held with neighborhood focus groups to gauge the views of a cross-section of citizens about the future development of the riverfront. These activities culminated in a community workshop where 130 citizens began the planning process by revisiting the riverfront through a narrated photographic tour, and reviewing a video summary of the focus groups. Twenty-two groups then identified recreation objectives and located activities on a map of the riverfront. Workshop results formed the basis for a subsequent design proposal followed by implementation of the first phase.

[ABSTRACT FROM AUTHOR]; states that the dimensions of participation can be understood with simple questions asked to conceptualize it: who, what, where, how, and when [21].

- Who asks the question? Asking the users who will be involved in the participation (actors),
- What is the question: what will happen in the participation program (events)?
- How and when individuals will be involved? When will participation be requested in the planning process/es?
- Where; the accession process must affect the physical environment (location),
- Where should the participation path lead? Describe the goal and vision.

In this context, the dimensions of participation can be defined as event, place, actor/stakeholders, and process.

Event: The events that create the spatial need in the historical process trigger the individuals who constitute society and bring them together, thus constituting the first dimension of participation [22]. It is important to read the triggering events chronologically and to interpret them by associating them with the process in order to understand the development process of the project and to understand the underlying demand, need, and intention. Traveling to the past, not just reading the starting point of the process, helps build in-depth networks.

Location: It is possible for the individual to integrate with the social environment where s/he can share her/his past experiences and establish a relationship with her/his environment. The individual does not only have the knowledge of the city s/he lives in. In other words, "place," which is the environment in which the individual lives, is a complex phenomenon containing many memories, experiences, and emotions.

The concept of place: Place is defined as an outcome arising from the relationships of events, activities, concepts, and psychological-physical properties [23]. In the context of this definition, the definition of urban spaces cannot be made without determining subcomponents such as lifestyles, socio-cultural values, economic factors, educational status, psychological factors, and physical parameters of the individuals living in them.

From another perspective, the concept of place has a strong relationship with the act of building. The physical environmental conditions of the concept of place should be examined in terms of topographic and geographic data. In addition, the ethnic, cultural, and social values of the user of the place are important factors affecting the project process. The whole process is also affected by factors such as the architectural traditions of the place, structural styles and building traditions, materials to be used, and climatic conditions. In this sense, while examining the participatory project process, it is necessary to read and understand the place well to discover its potential. Only someone who understands the place well can reach the level of evaluating the existence, form, method, and function of the project there.

Actors: Actors represent a structural factor containing many ties during the participation process. According to van Randen, actors can be classified in ten categories. Especially these four different categories are crucial; designers, entrepreneurs, administrators, and users [24]. In addition, facilitator groups play a critical role in participation processes [22]. Designers take their own technical initiative. The necessary coordination between disciplines is required for the emergence of architectural products [25]. The organization within the design team also possesses a hierarchy and participation structure. This requires a strong planning process. The important task of the designer is to be able to set up the necessary work-sharing with the participant. Specialists from the disciplines related to architecture, such as design and engineering, like students and academics from architecture and design and can be included in this group.

Entrepreneurs create the necessary economic infrastructure for the realization of a project. They shape this infrastructure in line with the requests of financial experts and users. What an entrepreneur gains as a result of the process is important for understanding the starting point of the project. Entrenepeneurs prefer sustainable investments.

Local governments draw the necessary framework for the realization of the process and ensure the preparation of the necessary environment [26]. Central governments should encourage local governments by enacting the laws and laws necessary for the realization of such participatory models.

Users are urban participants to the extent that they are related to the environment in which they live. They have concerns aboutthe city, they live for the city, there is a reciprocal nourishment between them and the city. Residents intervene in the city so that their lives can continue. They get involved in the act of designing at the level of awareness. Participation provides great advantages in a democratic sense. Participatory design allows users to freely and objectively make decisions about their own lives.

Facilitators include foundations, associations, unions, chambers, non-governmental organizations, and independent local/national initiatives that can support gatherings. This group plays a key role in the organization, planning, and execution of processes. They can also be expected to raise awareness and encourage the public with solidarity movements.

Process: The act of architecture begins with an idea, need, or foresight. According to Hacıalibeyoglu, it can be conceptualized in four basic stages within a linear integrity consisting of decision, design, application, and usage stages [2]. It establishes a relationship before and after each stage in the process of linear progression. In other words, they can be described as complementary or as variants of each other. Reversals are always possible between processes. Experiences in the process create knowledge with feedback.

Described by Arditi & Gunaydin as the architectural production process cycle, the model refers to the building production activity; it describes it as a process divided up by phases of starting, design, construction, and usage [27]. This definition, which is called the structure production process and based on the idea that each phase is interactive and related to every other phase, has been conceptualized as a cyclical process consisting of nested phases [28]. The activities of people and acts on places have crucial impact on these architectural process.

4. EVALUATION MODEL FOR PARTICIPATORY ARCHITECTURE – "EMParArc"

The multidimensional structure in participatory architecture has a complex system. Each project has specific variables. The way every project is handled and interpreted by the specific approach of the architect is different, and therefore the organization of stakeholders is also different. This causes us to gain different experiences and results with changing conditions each time.

This study sets out from the proposition that participatory architectural work will be evaluated and their potentials, and positive and negative aspects, will be determined and guide the planned studies in the future. In this context, we made evaluations of different aspects of the process in line with the defined dimensions (event, place, actor, and process) and determined analyses. Figure 3 shows the conceptual framework of the participation ladder analysis, stakeholders typology analysis, participation techniques analysis and also indicates the interactions of the elements of these factors with the specific questions.

Figure 3. The framework of evaluation model for participatory architecture

Evaluating participatory architecture requires a cross-sectional study with a versatile perspective. Quantitative and qualitative data collection should be carried out meticulously and efforts should be made to obtain as clear, transparent, and accurate results regarding processes as possible. The researcher needs to analyze the categorization and objective perspective for each stage while evaluating the participatory processes. The evaluation should be performed with a skeptical approach, taking the situation of the stakeholders into consideration with a broad perspective. The results obtained by evaluating the projects carried out with the participatory architecture process should not be distorted. Incorrect results may lead to negative results by setting a wrong example for projects with large targeted participatory processes to be built in the future.

Relationship networks between dimensions of participation should be established and the cause-effect relationship should be evaluated. Contextual fiction will help to develop new participatory architecture models as well as obtain the correct outputs from the project. Therefore, it is necessary to examine all possible aspects of the process related to the project, actors, events, and relations of place.

It is critical to understand that the process is flexible and variable when evaluating participatory architectural work. In this context, processes may differ for different projects and groups. The user should be actively involved in the process as much as possible. The relationship established by the user and the designer is essential in participatory architecture. In addition, it is important for the designer and other experts to give

responsibility to the participating users in order to raise awareness and encourage society, which is one of the important goals of participatory architecture. However, the participation of other stakeholders may be extended or restricted in line with the scope and scale of the project. However, what is ideal is certain representatives from all stakeholder groups (user, designer, management, supporters, financiers, etc.) actively supporting the whole process to the extent possible.

A three-stage evaluation model for participatory architecture is defined in Figure 3 as a conceptual interaction framework model called "EMParArc." The three stages in the model have different parameters for the analysis of different factors, as listed in Table 3. The evaluation model for participatory architecture, the "EMParArc" case assessment form, was organized for assessment implementation in the case of participatory architectural approaches. The assessment covers three stages as defined in the conceptual framework of the model: participation ladder analysis, stakeholder typology analysis, and participation techniques analysis, as listed in the assessment template. Each stage has different components and each component can be evaluated as:

It is not existed: (no) - 0 point

It is partially existed: (partially) – 1 point

It is existed: (exist) – 2 points

The maximum points in each stage are defined in the assessment form. In the first stage, which is called participation ladder analysis, there are four different parameters in the total grade, in which one case of participatory architecture can have eight points. The second stage is stakeholder typology analysis, which has 26 parameters in different sub-categories, the maximum grade in this stage being 54 points. The last stage of the model, called participation techniques analysis, has a maximum grade of 22 points, as seen in Table 3.

Table 3. Evaluation model for participatory architecture (EMParArc) case assessment form template

	Evaluation Model for Participatory Architecture / Case assessment form					
Stage 1	**Participation ladder analysis**		TOTAL POINT of STAGE (8p)	**activities**	**Evaluation (0,1,2)**	**rung type**
	public inspection	public authority	0	decision mechanism	0	
	delegated authority			design cooperation	0	
	partnership			technic cooperation	0	
	convincing	symbolic participation		usage	0	
	advice					
	information					
	theraphy	no participation				
	manipulation					
Stage 2	**Stakeholder typology analysis**	**Evalaution 0,1,2**	TOTAL POINT of STAGE (54p)	Case information / case name		
	DESIGNER (16 point max)	0	0	DESIGNER		
	architect	0				
	designer	0				
	specialist	0				
	technique	0				
	advisor	0				
	support	0				
	academician	0				
	design student	0				

	ENTEPRENEUR (8 points max)	0		ENTEPRENEUR
	financer	0		
	investor	0		
	sponsor	0		
	supporter	0		
	LOCAL COMMUNTY-user (18 points mx)	0		LOCAL COMMUNITY-user
	user	0		
	practitioner	0		
	specialist	0		
	special groups	0		
	volunteer	0		
	ADMINISTRATION	0		
	International	0		
	national	0		
	local	0		
	FACILITATOR (12 points max)	0		FACILITATOR
	association	0		
	non-governmental organization	0		
	chamber	0		
	federation	0		
	individual initiation	0		
	volunteer	0		
Stage 3	**Participation techniques analysis**	**Evalaution 0,1,2**	TOTAL POINT of STAGE (22p)	Case information / case name
	QUESTIONS (8 points max)	0	0	QUESTIONS (8 points max)
	Who?-actors	0		
	What?-event	0		
	Where?-place	0		
	How? - process	0		
	PROCESS (4 points max)	0		PROCESS (8 points max)
	Decision	0		
	Design	0		
	Implamentation	0		
	Usage	0		
	DATA COLLECTION & ANALYSIS (6 points max)	0		DATA COLLECTION & ANAL-YSIS (6 points max)
	Qualitative data collection	0		
	Design collaboration analysis	0		
	technical collaboration analysis	0		
	TOTAL EVALUATION POINT	0		
	A	72-84		
	B	57-71		
	C	42-56		

The total point of the assessment can be 84 points if a case in every parameter of the three stages in the evaluation model is present. According to the total points of the evaluation after the assessment of the case, it can be awarded A class in the evaluation model for participatory architecture if it receives 72-84 total points. If the case receives 57-71 points, it is awarded B class and C class if it for 42-56 points. The minimum successful evaluation criteria is defined as 50% of the total points, which is based on the success criteria of the general approaches. Between 42-84 points divided three classes with regular and equal ratios. The rate of regular increase is 14 points. As a result, the evaluative scoring method is defined as 42-56 points for C class, 57-71 points for B class, and 72-84 points for A class. This evaluation method—which considers the participation ladder, stakeholders, and participation techniques as the evaluation parameter–shows an integrated approach to the problem of obtaining the participation levels in different types of projects.

5. TURKISH SOLIDARITY ARCHITECTURE EXHIBITION GROUPS AND THEIR PARTICIPATION APPROACHES

Especially the right to the city, the defense of space and the relationships it establishes are defined for the struggle of the most fundamental rights of the individual, life, housing, health and education. In addition to investor, designer, bureaucracy-oriented design practices, the organization of Another Workshop, Düzce Hope Workshop, Architecture for All, Kuzguncuk Garden, Assembly of Architects, Plankton Project and Yedikule Gardens Protection Initiative, which are groups that have participated in the Solidarity Architecture Exhibition in our country. Their schemes, purposes, tools, methods and environments are discussed. This discussion allows the positioning of the groups to define their relations with the users of the space they defend. In this context, a perspective and interpretation is made within a global and country conjecture by looking at questions such as “Why do they do not want to leave?” Or “Why should it be renewed?” Concepts such as rent-oriented urban developments, migration from the village to the metropolis, off-center architectural production, natural disaster are discussed in the context of groups. The relations of the participants and other actors are determined on the network system model established through the applied architectural practices of the groups. The applied participatory architectural practices made by the groups are first defined with a “project card” and then a “process analysis” and the relationships established by the participant.

The organization chart, status, actors, actor distribution, support and supporters, number of people, organic supporters within the Solidarity Architecture Exhibition Groups, Another Workshop, Düzce Hope Workshop, Architecture for All, Kuzguncuk Gardens, Assembly of Architects, Plankton Project and Yedikule Gardens Protection Initiative or inorganic bonds, working methods, working location differ and vary. It will be evaluated in terms of the relations established by the groups with each other as well as the relationships established within the group. An important evaluation criterion is the relationship that groups establish with the user. The relationship established with its user directly means the relationship it establishes with the space. Studies will be evaluated in different ways according to the type of defense mechanism by evaluating the areas where the studies are carried out. In this context, the applied participatory architectural works of Architecture for All, Plankton Project, Another Workshop for separate spaces in various locations. The applied participatory architecture of Düzce Hope Workshop, Assembly of Architects, Yedikule Gardens Protection Initiative and Kuzguncuk Gardens groups which work in one location.

The studies will be evaluated with their own classification. For the first group of works will be evaluated by each separate project and if one would like to see the average performance of the group in these separate projects and location they may look at the average of the different parameters. For the second group of works only one performance evaluation since each project established for one specific location. Only the case of Kuzguncuk Gardens which is in the second group will be explained in the following section by applying the general approach to this case.

Kuzguncuk Gardens

Kuzguncuk Ilya's Garden is on the Anatolian side of Istanbul in the district of Kuzguncuk on the coast of Bosphorous. It is a place where vegetable farming has been done in the city for years. Since the garden is a large green area in Kuzguncuk, it is considered important for urban transformation. After the Regional Directorate of Foundations leased the space to a foundation for 10 years in 1992, with the goal of building a hospital on the site, the residents of Kuzguncuk neighborhood began taking action to protect the garden. The hospital initiative was stopped by collecting signatures at street festivals and submitting the petitions to the relevant authorities [29]. The next attempt to build a private school was stopped thanks to the contributions of residents and professional chambers. With the activities of the chambers and the neighborhood, the municipality's zoning amendment was rejected and then a decision was made to stop the project. The garden remains a green space by virtue of having been allocated to a company as a plantation area between 2001-2011. In 2011, the Regional Directorate of Foundations attempted to reopen the garden to be used as a site for a private school.

At that point, the Kuzguncuklular (Citizens of Kuzguncuk) Association objected to the school project by organizing festivals. The association tried to share news of its struggle in various environments. With the effect of these studies, the private school allocation project was unable to get approval from the Board of Monuments. However, objections to the High Council of Monuments, who received approval and then the initiative to begin, continued. The self-initiative activities of the neighborhood continued to do urban agriculture in the area. The land was leased by the local municipality in 2014, causing some reactions against some projects of the municipality. Dündaralp stated that with the association's initiative, the municipality decided to go forward with the land development together with the neighborhood and, as a result of the evaluations and meetings, they decided the land would remain as a garden [29]. The areas not used for agriculture were set aside for sitting, playing, and walking activities.

Figure 4. Kuzguncuk Gardens in the Kuzguncuk Neighbourhood [URL-1] (re-illustration by authors)

"Driven by the community initiative, the Kuzguncuk Gardens exemplify how social, environmental, and heritage values can be successfully conserved through democratic processes, including collaboration, co-operation, and mediation of participatory planning and design processes. This piece of common land was able to be revitalized to sustain the collective spirit of the community [30].

Dündaralp gives the basic principles of planning and design were defined as follows from their experience. Dundaralp mentioned that nature should not be harmed when all kinds of add-ons are removed (1), natural materials should be used, not concrete (2), walls should be improved with drywall technique, though without using mortar (3), one should not interfere with any area that has the characteristics of a river (4), and according to the plant inventory, the green area should be protected and enriched (5) [29].

Figure 5. Site plan of the application project 1) garden(agriculture) 2) garden (agriculture) 3) entrance and service building 4) village square 5) pedestrian paths 6) playgrund 7) dog place 8) activity area / meadow 9) traditional water pump 10) sport field 11) library / kids' sand pool 12) kids' playground 13) recreation / excersize 14) disaster assembly area 15) natural pattern conservation region [29] [URL-2]

Dündaralp says of the Kuzguncuk Gardens project, *"If this study, which focuses on the right of use rather than the right of property, can force the parties to produce alternative models that can be kept alive without losing the values of the garden, it will be able to fulfill its task successfully by moving the parties to a new area of negotiation."* The project was made possible not only by the discourse of *"touching my greenery,"* but also by grasping the urban dynamics of the day and opening approaches to this field up for discussion, including how its own production, social, and economic models cannot be built on a single model without losing its current value [29].

The following evaluation was based on the evaluation of the architect of the project (Boğaçhan Dündaralp) using the general evaluation form prepared by the authors according to the framework of the study for the special case of Kuzguncuk Garden. As seen in Table 4, each stage of the evaluation has different total points and, according to this assessment, the project receives a total point score. The Kuzguncuk Gardens project, evaluated using "Evaluation Model for Participatory Architecture," received 47 points out of 84.

Table 4. Evaluation model for participatory architecture (EMParArc) case assessment form for Kuzguncuk Gardens Workshop

	Evaluation Model for Participatory Architecture / Case assessment form					
	Evaluation Model for Participatory Architecture / Case information **Case/Project Name: Kuzguncuk Bostan Recovery and Protection Project** **Year: 2014** **Location: Kuzguncuk-Üsküdar-İstanbul** **Area: 15.400 m2**					
Stage 1	**Participation ladder analysis**		TOTAL POINT of STAGE (8p)	**activities**	**Evaluation (0,1,2)**	**rung type**
under focus group control; execution of the project by the focus group with its own organizational network	8 public inspection	public authority	8	decision mechanism	2	*discussion and sharing of ideas, in place evaluation includes studies such as questioning the perception of the existing situation.*
delegated representation; on behalf of the production of the project by and under the control of the focus group; Execution of the process by transferring certain authority to skilled and expert stakeholders	7 delegated authority					
joint development; execution of the project with the stakeholder group as an active actor in the project processes	6 partnership			design cooperation	2	*user, local etc. groups; It is a sharing process that brings out their inspiration, ideas and creativity. It covers the studies of obtaining information about their dreams.*
persuasive production; Project production where the focus group benefits (the focus group passively monitors the process)	5 convincing	symbolic participation				
advice; Obtaining opinions from the focus group on the project to be carried out	4 advice			technical cooperation	2	*user, local etc. groups; It covers the process of sketching, freehand drawing, models and the transformation of ideas in his mind into a workable design.*

Information: to inform; only inform the focus group about the project	3 information					
improvement; imposing specific project ideas on the focus group	2 theraphy	no participation		usage	2	*in the process of use; observing life* *includes evaluation and archiving.*
Ensuring mandatory use of the project outcome product without involving a focus group with orientation	1 manipulation					
Stage 2	**Stakeholder typology analysis**	**Evalaution 0,1,2**	TOTAL POINT of STAGE (54p)	case name		
	DESIGNER (16 point max)	6	18	**DESIGNER**		
	architect	2		**Boğaçhan Dündaralp- Tülay Atabey-Berna Dündaralp-Lale Ceylan**		
	designer	1		design assistants		
	specialist	0		*designer/s and/or institution/s can be shared (optional)*		
	technique	0		*designer/s and/or institution/s can be shared (optional)*		
	advisor	0		*designer/s and/or institution/s can be shared (optional)*		
	support	2		design team suppoters		
	academician	1		academcians as a supporters		
	design student	0		*designer/s and/or institution/s can be shared (optional)*		
	ENTEPRENEUR (8 points max)	2		**ENTEPRENEUR**		
	financer	0		*individual/organization can be shared (optional)*		
	investor	1		Üsküdar Municipality		
	sponsor	0		*individual/organization can be shared (optional)*		
	supporter	1		Kuzguncuk Association		
	LOCAL COMMUNITY-user (18 points max)	5		**LOCAL COMMUNITY-user**		
	user	2		Kuzguncuk Local Community		

	practitioner	0		*information about the local community actor can be provided (optional)*	
	specialist	0		*information about the local community actor can be provided (optional)*	
	special groups	1		Kuzguncuk Association	
	volunteer	2		Kuzguncuk Local Community	
	ADMINISTRATION	0		*information about the local community actor can be provided (optional)*	
	International	0		*information about the local community actor can be provided (optional)*	
	national	0		*information about the local community actor can be provided (optional)*	
	local	0		*information about the local community actor can be provided (optional)*	
	FACILITATOR (12 points max)	5		**FACILITATOR**	
	association	0		*information/name about facilitators can be given (optional)*	
	non-governmental organization	2		Kuzguncuklular Association	
	chamber	1		Turkish Chamber of Urban Planners	
	federation	0		*information/name about facilitators can be given (optional)*	
	individual initiation	0		*information/name about facilitators can be given (optional)*	
	volunteer	2		Kuzguncuk Local Community	
Stage 3	**Participation techniques analysis**	**Evalaution 0,1,2**	TOTAL POINT of STAGE (22p)	case name	
	QUESTIONS (8 points max)	8	21	QUESTIONS (8 points max)	
	Who?-actors	2		*Were the actors defined and clear?*	YES
	What?-event	2		*Was the work to be done defined and clear?*	
	Where?-place	2		*Was the work area clear?*	YES
	How? - process	2		*Was there a schedule/schedule for the process?*	
	PROCESS (8 points max)	8		PROCESS (8 points max)	
	Decision	2		*Has the decision-making process been carried out?*	YES
	Design	2		*Has the design process been carried out?*	YES

	Implamentation	2		*Has the implementation process been carried out?*		YES
	Usage	2		*Has the usage process been observed/experienced?*		
	DATA COLLECTION & ANALYSIS (6 points max)	5		DATA COLLECTION & ANALYSIS (6 points max)		
	Qualitative data collection	1		*Was quantitative data collection study carried out?*		
	Design collaboration analysis	2		*Have design collaborations been evaluated during and/or at the end of the process?*		
	Technical collaboration analysis	2		*Have technical collaborations been evaluated during and/or at the end of the process?*		
	TOTAL EVALUATION POINT	47				
	A	72-84				
	B	57-71				
	C	42-56	**X**			

Participation ladder analysis ended with a total of 8 points out of 8. Kuzguncuk Garden had the following specialities at this stage: 1) Public inspection: Discussion and sharing of ideas, in-place evaluation including studies such as questioning the perception of the existing situation. 2) Partnership: User, local groups, etc.; it is a sharing process that brings out their inspiration, ideas, and creativity. It covers studies obtaining information about their desires. 3) Advice: User, local groups, etc.; it covers the process of sketching, freehand drawing, models, and the transformation of ideas from one's mind into a workable design. 4) Therapy: In the process of use, observing life includes evaluation and archiving. In the second stage, the "Stakeholder typology analysis," the project is evaluated according to the participation of different stakeholders. The project got 18 out of 54 points. Architects, designers, support people, academics, and design students participated in this part of the evaluation for designers. Usküdar Municipality, as the investor, and Kuzguncuklular Association, as the supporter, participated in the part of evaluation for entrepreneurs. Users, special groups, and volunteers made up the local community part of the evaluation. As for administration, there were two organizations: Uskudar Municipality and Kuzguncuklular Association. The Kuzguncuklular Association, Chamber of City Planners, and local citizens as volunteers were evaluated as the facilitators of the project. In the last stage, there were four questions about participation, four processes, and three data collection items. The Kuzguncuk Gardens project received 21 points out of 22 at this stage. The outputs of Kuzguncuk Gardens, which is the field study of the research, were visualized by creating a project card.

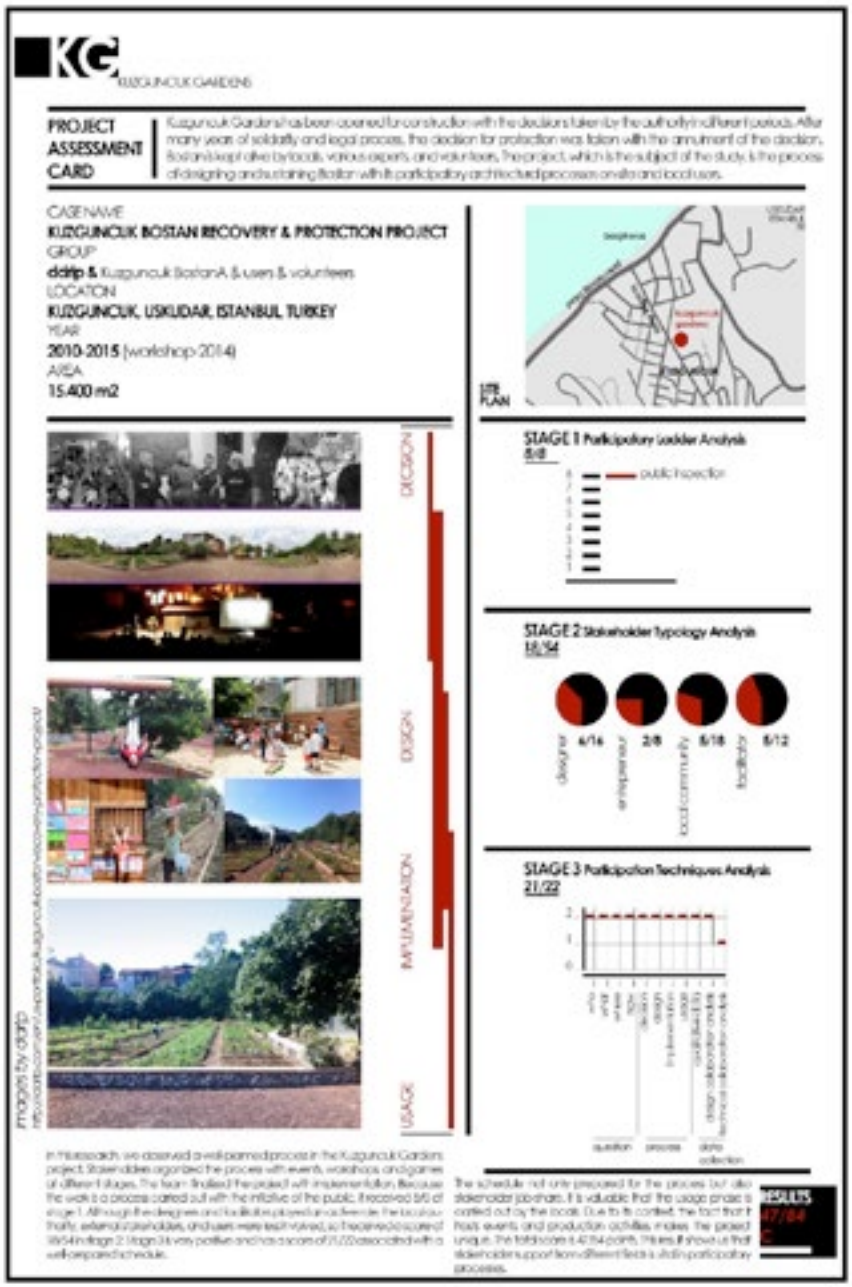

Figure 6. Evaluation model for participatory architecture (EMParArc) project card for Kuzguncuk Gardens Workshop

When the literature was examined, we observed that there were papers, articles, and theses written on participatory architectural studies made by academics, architects, and authors. Similarly, there are also studies that analyze and evaluate application studies made with the participatory architecture model but that do not have a specific framework that present a model based on these studies. To some extent, this present study defines the group by examining a specific area and proposes an evaluation model in which the participant relationships established, and their causes and consequences, are discussed. Limiting the exemplification of working with Solidarity Architecture Exhibition Groups is an important criterion for a sound assessment.

Because of this feature, the study differs from other studies. This article will hopefully serve as a model for future studies.

6. CONCLUSION - DISCUSSION

The article presents a model to examine the subject from different angles with a multidimensional perspective. The study encourages future groups that aim to produce within a polyphonic environment through participatory architecture in order to make good process management and planning decisions that extend throughout the whole process.

Some important points to be taken from the study have been clarified below:

• Kuzguncuk Gardens is a valuable public space for its local users. They harvest crops there regularly. Though the government has repeatedly tried to privatize the garden, the local community took a firm stand in solidarity for many years to preserve the site as a garden. With this effort, the legal processes came to an end with a favorable outcome. The users became conscious of the events transpiring. The local community and users take care of the gardens. Participatory architecture workshops helped to create a new environment that they can use based on their needs.

• Two key actors have a role in project processes. The first is stakeholders: architects and other designers, and experts, multi-sector collaborators (financiers, academics, associations, non-governmental organizations, associations, chambers, craftsmen and craftsmen), and governments (local, central, international). The second is local community actors: in other words, users. This group can be diversified in terms of places and events. There may be special groups such as women, children, students, the elderly and the disabled, as well as productions for the entirety of a specific local community. Facilitators represent the group that plays the main role in the project phase.

• Informal participatory local community can play a key role in the process. It encourages specialized groups with a solidarity style by providing support at the breaking points and difficult stages of the processes.

• It is necessary to use various participation techniques in design collaboration processes since not every individual involved in the process has the same educational and cultural background. Therefore, it is important to try to involve each individual as actively as possible in the process by choosing methods to communicate with different groups. In addition, developing new participatory techniques suitable for participant profiles beyond the current participation techniques in the literature will guide future studies and offer new opportunities for expansion.

• The necessary spatial productions can be realized for individuals and communities in need by developing a habit of organizing in extraordinary situations with collaborative, participatory architectural activities.

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