An Evaluation on Participatory Design Model
20 Neighborhood 1 Kartal: Neighborhood Action Plan

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Abstract

The inclusive design considers whole human diversity (although it is mostly mentioned about human life, inclusive design approach considers also about all living creatures) with their whole characteristics (capability, language, culture, way of life, age, gender, etc.) This consideration can be included in all areas of life such as products, services, spaces, environments, etc. Within these, space is one of the most fundamental areas, because people spend all their time and carry out all their activities in spaces; in the meantime, spaces are the most difficult ones to replace due to their long lifecycle and relatively high cost. Hence, the quality of space plays a vital role in an individual's life for a long period of time. To sustain well-being in this long period of time the user's opinions of design should be considered. This can be achieved by practicing a commonly known design model: participatory design. "Participatory design (PD) is an approach where all stakeholders are involved in the design process" (P!D 2017). In this paper, as a local participatory design project we researched TAK Kartal NAP (Neighborhood Action Plan). Interviews has been conducted with the architects and organizers of this project. The aim of this study is to examine the NAP process in Turkey and to find out some data that set up a substructure for future work.

Keywords: participatory design, neighborhood action plan, 'Kartal', 'TAK Kartal', 'Kentsel Strateji'

Introduction

Inclusive Design is a design philosophy with the aim of considering the needs and capabilities of the full range of human diversity with respect to ability, language, culture, gender, age, and other forms of human difference (Inclusive Design Toolkit 2017). A central tenet of the philosophy is that through considering the full diversity of users a better product will result (Johnson, Clarkson, and Huppert 2010, 275-288). Products, services, places, environments, etc. which are created by this philosophy that give people the best possible chance of thriving, now and in the future. Inclusive Design provides urban and landscape design services to community groups, government agencies, housing providers, councils, development agencies and developers who share this goal and recognize the importance of good design in creating great places (Inclusive Design 2017). Towards this goal, identifying and understanding user needs is the one of the main approach in inclusive design. This approach while extending quality of life by concerning for physical capabilities and also should reflect local cultural, political and historical situations (Keates, Clarkson, Harrison and Robinson 2000, 42-52). There are different methods to identify, understand user needs, find solution, and make change towards the goal. Participatory design (cooperative design) is a specific method for this specific approach.

Figure 1. Neighborhood Identity Cards. Kartal Municipality, TAK Kartal and. Kentsel Strateji 2016.

The beginnings of Participatory Design lie among the various social, political and civil rights movements of the 1960s and 70s, when people in many Western societies demanded an increased say in decision-making about different aspects of their lives and were prepared to participate in collective action around shared interests and values. Some designers and design researchers responded to these events by investigating how they might relate to their own practices (Robertson and Simenson 2013, 1-20). In the 80's, the designers and academicians have showed their interest in participatory design in Turkey.

The practice of participatory design makes conscious use of the analysis of human needs and desires the involvement of users at every stage in the design process. Participatory design makes explicit the critical, and inevitable, presence of values in the system development process (Suchman 1993, vii-ix). As a democratic practice, participatory design can justify that people have a right to control over their environment. Participatory design process is not just active involvement of users in the process but also full cooperation of users, designers, development team and stakeholders with sharing their knowledge and experiences by designing together. In this context, it is concerted in this paper to analyze a local participatory design example, 'Neighborhood

Action Plan' which is the first practice in Turkey in participatory design.

A Local Participatory Design Example: 20 Neighborhood 1 Kartal; "Neighborhood Action Plan"

Kartal *(eagle)* is a district of Istanbul located in Anatolia site. The district's history extends to the Byzantine Empire. At that time, this area carries the importance of being a port. The first ferry quay at Kartal was built in 1857. In 1947, as the Kartal and its surrounding were designated as an industrial zone, the population and their production of the district increased. It is still one of the most important trade and industrial zones in Istanbul (Kartal Belediyesi).

Kartal Municipality's 4-year strategic plan was published in 2015. The mission and the vision in the strategic plan were explained as follows: 'Our mission is to sustain local services in an effective, productive, transparent and participatory manner and to continuously improve the quality of life of the people with a sense of equality. Our vision is to be a pioneer municipality based on contemporary and democratic management principles, which is based on human being, renewed by on-site transformation, having urbanism consciousness, protecting cultural and historical values,

innovative and environmentally friendly' (Kartal Municipality 2015).

Kartal district consists of 20 neighborhoods and according to the information from the interview with TAK (design-research-participation) Kartal on 22nd May 2017, 20 neighborhoods of Kartal are in the process of urban transformation-renewal. We realized that the Kartal Municipality, which has the mission and vision, has a distinctive perspective on urban transformation-renewal. Kartal Municipality collaborates with TAK Kartal and Kentsel Strateji on urban transformation-renewal project. They are together published a manual; '20 Neighborhood 1 Kartal: Neighborhood Action Plan (NAP)' on June 2016. The scope of the 20 Neighborhoods 1 Kartal: Neighborhood Action Plan (NAP) is 20 neighborhoods of Kartal district.

NAP is a method proposal for getting aroused neighborhood (Kartal Municipality, TAK Kartal and Kentsel Strateji 2016). The goal of the NAP is to encourage active participation of the people in the decision-making process through the planning approach bottom-up. Thus, it is a strategic bridge between local government and the people. The NAP creates a collaborative environment and culture in the design of the future in the framework of a common vision and priority strategies of the neighborhood and municipality. Therefore, Kartal NAP has been prepared with the efforts of everyone in the participatory environment. The NAP ensures that process is planned, that neighborhoods have possession of programs and projects relevant environment they live in, and that they take responsibility in decision-making processes (Öz 2016).

Within the NAP process, The Social Impact Assessment (SIA) Report of the East Central Transformation Project was prepared for the first time in Turkey. This report is given a different dimension to the development of solution proposals for reducing impacts, by determining possible adverse impacts of the project (Göksu 2016).

Research Phase
Researching of existing practice in the field of NAP to determine habitable neighborhood criteria, to benefit from various approach and project samples. From these studies, results that
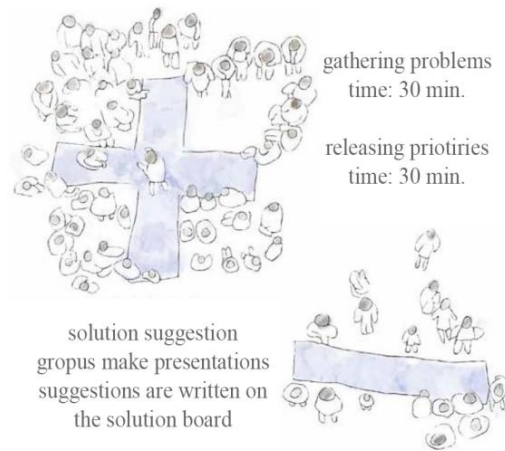

Figure 2. Addition (+) Subtraction (-) Method. Kartal Municipality, TAK Kartal and Kentsel Strateji 2016.

can be implemented in 20 Neighborhood 1 Kartal: NAP were reported.

Capacity analysis was carried out with *Kartal in 20 Maps*. It is aimed to display explicitly the gathering of existing natural and human data belonging to overall Kartal district. The gathered data were processed in the GIS (Geographic Information System) database to create a digital database, codified in 20 maps to constitute a workspace for NAP and future projects. The areas researched in capacity analysis were location, habitat, population, trade, manufacturing and factory, dwelling, parks, education, health, public enterprises, earthquake gathering point, outdoor parking areas, open spaces, cultural and historical units, markets-bazaars, traffic way, public transportation, ruin constructions, worship areas and sports fields.

Neighborhood and neighborhood resident profiles were constituted with *Identity Cards* for all 20 neighborhoods. Neighborhood Identity Cards were designed to analyze the social and physical capacities of neighborhoods, to determine their performances and to establish data comparatively. In this study, neighborhood's borders, land use, vacant land, structure, field size, population and density, occupancy rates, green areas, number and distribution of buildings, health and education units were analyzed.

Participation Phase
Participation methods were enhanced. The adoption of the NAP and strategies by all sides
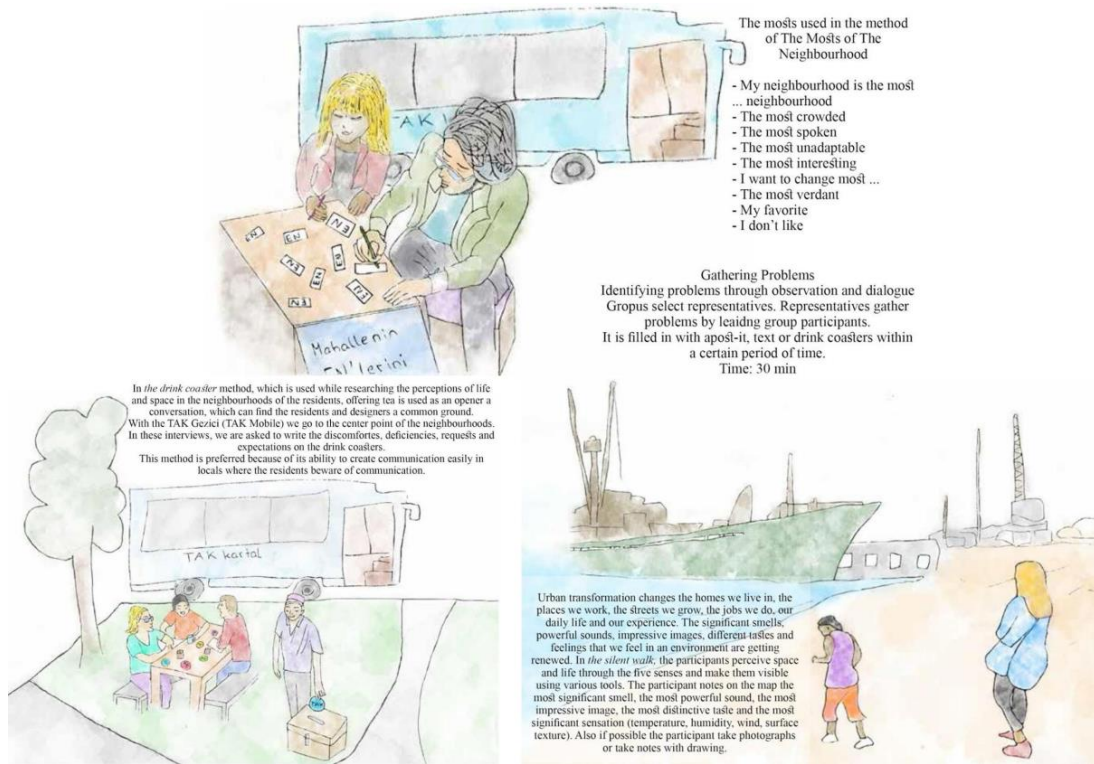
Figure 3. top – The Mosts of The Neighborhood Method, bottom left – Drink Coaster Method, bottom right – Silent Walk Method. Kartal Municipality, TAK Kartal and Kentsel Strateji 2016.

Figure 4. top – I Like My Neighborhood Because… Method, bottom left – Interview Method, bottom right – Focus Group Method. Kartal Municipality, TAK Kartal and Kentsel Strateji 2016.

can be possible through participatory process management. It was aimed to determine the dynamics of the neighborhoods and the uncertainties and priorities perceived by the inhabitants of a district in the participatory process.

Meeting with the residents of Kartal -20 neighborhoods- was realized. The method of meeting with residents was formed by participatory process models selected from the SID method cards which were generated by *Kentsel Strateji*3 (Urban Strategy) team. Selected methods were *addition-subtraction, the most of the neighborhood, drink coaster, silent walk, I like my neighborhood because..., interview and focus group meetings.*

The methods used in the participatory phase provide an opportunity for the deep and accurate understanding of the characteristics and needs of the neighborhood and their residents, revealing the expectation and uncertainties in the constituted interactive environments and the transformation of the plan into design strategies and solutions at the design phase. Neighborhood meetings were held with 800 neighborhoods, 50 shopkeepers, 20 mukhtars and 20 non-governmental organizations (ngo). In addition, meetings were held with the administrators of Kartal Municipality and TAK Kamp (camping) was realized with the residents of neighborhoods.

The Inventory of Issue - Opportunity - Expectation was taken. TAK designers conducted participatory processes by discovering and empathizing the issues, *opportunities, and expectations of neighborhoods. It* is important to understand the needs of the neighborhood and the dynamics of life, to discover the values of the neighborhoods and gather solution-oriented data.

Preliminary research, observation and street workshops were held in the neighborhoods of Kartal district's 20 neighborhoods by TAK Gezici (TAK Mobile) and TAK Kamp (camping) workshop. At the end of these studies the TAK Kartal recognized the neighborhoods of Kartal. TAK team gathered the problems from the participators (women, men, children, young, old persons, shopkeepers, mukhtars and non-governmental organizations) perceived in their neighborhoods, the opportunities to be evaluated and the expectations from their neighborhoods by using various methods. Also,

the NAP was shared with relevant deputy chairmen and directorates of the municipality, and opinions were collected.

Issue - Opportunity - Expectation inventory was communized. The issues (problems) of the Kartal district are unqualified and inadequate parks, street dogs, security, lighting, public space, infrastructure, parking area, railway construction, lack of information on municipal activities. The opportunity of the Kartal district are Kartal Municipality, Earthquake Transformation Directorate, TAK Kartal, Kartal East Centre Project, courthouse / hospital, Aydos Forest, Dragos Hill, coastline, stone pit, areas that can be evaluated. The expectation from the Kartal district are green area, sport field, social facility, infrastructure improvements, cultural activities, public transformation improvements, kindergarten, construction supervision.

Design Phase
The neighborhood life index was constituted with *Easy - Appealing - Transforming - Sensitive themes*. These 4 themes are qualified as far as involves people's daily life, economic status, lifestyle, relationship between society and also come concepts such as moral, faith and rules.

NAP strategies were enhanced. NAP strategies aimed to develop, renewal and preserve the neighborhoods. In this regard, information about the current situation of Kartal neighborhoods and action examples were matched. *Easy - Appealing - Transforming - Sensitive themes* became the NAP strategies. There are 4 enhanced action for each strategy. In order to make neighborhood life *easier*, it is suggested to prepare the public space inventory, to develop easy life scenarios, to prepare easy access guide and to be programmed to construction of missing urban equipment. To create *appealing* neighborhoods, we should design social life inventory, develop interaction scenarios, create appealing neighborhood design guide and design appealing neighborhood sense. In order to design a neighborhood that is *transformed* together and in place, neighborhood values should be defined, conceiver and imager neighborhood transformation scenarios should be developed, neighborhood social interaction network should be designed, and neighborhood councils should be established. In order to expand the awareness

Easy Neighbourhood Criteria
A healthy person can easily walk **1 km** in **15 minutes**.
Usage areas that can be reached by walking in 15 minutes **show the level of convenience of the neighbourhoods.**
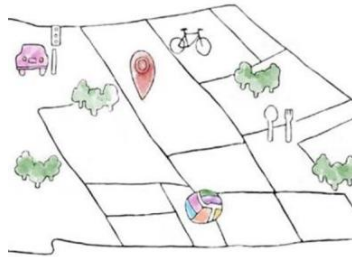Easy Neighbourhoods are **Accessible, Continuous, Integrated and Intelligible.**
Accessible (facilities, shops, shopping malls, social and cultural facilities, public institutions, places of worship, education, health facilitie, etc.)
Continuous (pedestrian roads, green areas, bicycle paths and traffic way)
Integrated (house-workplace parking area and house-public transportation-workplace)
Intelligible (car traffic, pedestrian traffic, signage and signalization)

Appealing Neighbourhood Criteria
Usage variety and neighbourhood character are important criteria for to be appealing.
Usage of the neighbourhood by other districts contribute to revitalise the neighbourhood and the local economy.
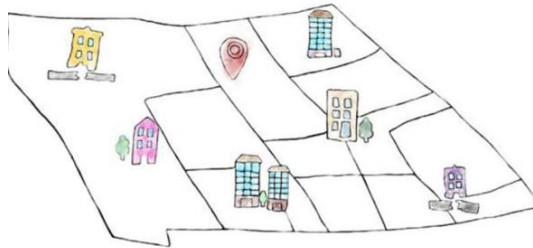Appealing neighbourhoods are **attractive, lively, safe and clean**.
Attractive (spatial reference points, natural and cultral opportunities, cultural constructions and symbols, squares, coastline, forests, green spaces, etc.)
Lively (social and cultural activities, coastline-street usage, inhabitable areas)
Safe (robbery, evening usage, measures against substance abuse, natural disaster, house and workspace safety, living together with street animals, adherence to traffic rules)
Clean (cleaning services are neat and well-controlled, cleanliness-conscious in the neighbourhood)

Transforming Neighbourhood Criteria
While neighbourhoods are transforming, they must be able to convey their past experience to the future.
Transforming neighbourhoods take an active role in the transformation process and pay special attention to coherence.
Transforming neighbourhoods are **participating, valuable, harmonic and capacitive**.
Participation (awareness)
Value (land value and risk)
Harmony (architecture, design, social structure and character)
Capacity (infrastructure, services and construction period)

Sensitive Neighbourhood Criteria
Neighbourhoods can reduce their consumption and increase their production to the extent they are sensitive.
Individuals volunteer to take responsibility for raising their quality of life.
Sensitive neighbourhoods are **collective, active, concious and learner**.
Collective (neighbourliness, helping each other, colective concious)
Active (participating, responsible, wise, sharing, open-minded)
Concious (care for recycling, awareness of cleanliness, sensitive to street animals, awareness of ecology)
Learner (open to learning, communication network)

Figure 5. from top to bottom – Easy Neighborhood Criteria, Appealing Neighborhood Criteria, Transforming Neighborhood Criteria, Sensitive Neighborhood Criteria. Kartal Municipality, TAK Kartal and Kentsel Strateji 2016.

of sensitive residents, neighborhood character analysis should be prepared, sensitiveness criteria should be determined, sensitive neighborhood perception management should be designed, and local awareness activities should be organized.

Göksu5 argues that the implementation of the programs and projects presented in the NAP should be actualized an effective management structure. Additionally, the basic approach of management should be with executive notions such as creating resources, increasing capacity, delegating authority, and using authority. In order to achieve this, the NAP manual; should be discussed in large media, should be adopted by the municipality and the neighborhood, must be approved by the municipal council (Göksu 2016). Therefore, the studies are released to the public by using the Internet and outdoor billboards. The people are informed about the studies and their feedbacks are being received.

TAK is an organization of innovation and creativity in which urbanists, designers, volunteers, students, and supporters establish national and international collaborations to produce ideas and share their products with the public-people in the solution of urban issues-problems. It is an independent organization that produces programs and projects based on volunteerism and cooperation with designers from all disciplines. TAK tackles the urban issues through Design, Research, Participation and builds social change-sensitive design processes. Basic principles of TAK are design power, strategic design, idea sharing, experience sharing, participatory design, participatory ideas, meeting, entrepreneur designers, expand the capacity, creative collaborations, and social capital (Inclusive Design 2017). TAK Kartal was founded by the approach of cooperation between public and private sectors in 2013. Kartal Municipality and Kentsel Strateji (Urban Strategy) are voluntary partnership. TAK Kartal brings designers together with inhabitants of the neighborhood for the solution of Kartal's issues-problems; Design, Research and Participation programs and projects aim to enhance the quality of life in Kartal. TAK Kamp (camping), TAK Kondu (land on), TAK Gezici (mobile) are the main formations that enable them to meet people (Inclusive Design Toolkit 2017).

Conclusion

The fact that the NAP report has not yet passed through the Municipal Council makes it difficult to read the process of feedbacks from inhabitant of the neighborhood. However, when we analyze the other process of the NAP project, we also get a lot of information on their participatory design approaches. According to the experience of TAK Kartal and the team behind them (Faruk Göksu, Kentsel Strateji, etc.), we can see that the processes already seen abroad are also brought to Turkey. In academic discourses, we see that the urban design transformation is not only physical but also the necessity of researching the social, cultural, and everyday life of the local people is on the way to practice. The examination of the international examples7 at the beginning of the project period are evaluated with the results of the good or bad processes encountered in the projects and the evaluation of Turkey-Kartal cases are based on the ideal research methods taught at the universities. The creation of a manual that contains many of the methods of international communication with the conclusions drawn by researching the literature and practices, emphasizes the importance of the relationship with the participant.

Today, the use of participatory design method in projects in Turkey is increasing. The SIA8 and NAP reports were compiled for the first time in a comprehensive way that could be the handbook of such studies. As, TAK Kartal learned so much from the residents that the participants learned so much from TAK Kartal, people were aware of their rights, desires and become conscious. However, the process of informing is a never-ending process. Issues and solutions revealed by participatory methods are waiting to be realized. All these issues and solutions, the people who will be the solution that clearly address in the report will help to realize the project. The transparency of all these processes is one of the criteria of participatory design. It is TAK endeavor to use this openness efficiently for informing and receiving feedback from the people of Kartal and the whole of Turkey. It can be said that the reason of the process has been carried out continuously and even in a fun way that it is based on the experiences of the people involved in the project and the preliminary work. As projects come into effect, we will be able to observe that what the people's feeling about the realized projects which they discussed them, decided about them, produced solutions for them and designed them.

Due to the process never ends, it requires continuous and good communication with the participants. These reports and the process may provide evidence that here may be different approaches in the construction sector, which is increasing in Turkey today. Increased knowledge of what people's rights and desires are will lead to quality lives and quality environments. This project can create awareness of urban life. The realization and feedbacks of the projects constitutes a comprehensive part of the NAP project. Perhaps it is necessary to address the regional studies in a higher-holistic project to get better results than the projects.

Endnotes

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