



Transilvania University of Brasov,  
Romania

13<sup>th</sup> INTERNATIONAL CONFERENCE  
"STANDARDIZATION, PROTOTYPES AND QUALITY:  
A MEANS OF BALKAN COUNTRIES' COLLABORATION"

Brasov, Romania, November 3 - 4, 2016

## Designing "Livable Children Spaces" in Urban Space: Child-Friendly Streets and Turkey Example

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### Abstract

Streets as one of the urban spaces are defined on one hand as roads between buildings and surfaces limited by neighbouring buildings and on the other hand as elements of urban existence, communication areas and face to face communication spaces, socializing areas allowing creation of collective memory and a bridge between individual and community. However streets which have such important properties in cities have been changed and are changing radically due to technological developments, land speculation, traffic problems, transportation-related urban transformation and the modernist planning. The streets, which were once the "places of socialization", are now left to the hegemony of motor vehicles. As a result, the vehicle density and noise forced people to live in indoor spaces. With the safety problems (traffic, crime rates etc.) included, the "street life" has gradually disappeared. Disappearing of street life maybe mostly affected children. Today's children can no longer use the streets which are the "most accessible urban spaces; the changes prevent the physical activities of children and have negative impact on their health. Today, children cannot go outside on their own and are always supervised by someone, and they spend most of their time at school, doing homework or attending language courses and sports activities. UNICEF reported that most of the children around the world are living in cities and towns. The report declares that 7 out of 10 people will live in cities by 2050, which shows how bad the situation is for children. United Nations and UNICEF are working on important projects to make the cities more livable for children. "Child Friendly Cities Initiative" is one of the most important projects in this field. Among the other initiatives are "Growing- Up Cities" and the initiatives aiming for "livable streets for children" which are implemented in Northern Europe countries, Australia, the States and Japan. In Turkey due to immigration from villages to cities last 30 years, 65% of the population live in cities. As the children population living in cities increase, taking children requirements and priorities into consideration started to become an important problem. In this sense, initiatives were taken by UNICEF Turkey in order to develop child friendly policies and creating child friendly spaces. One of these initiatives is the "Child Friendly Cities" project. The project was implemented between 2014 and 2015. The other one of the studies performed is "child-friendly street". This study aims to comparatively analyze the process of developing "child friendly streets" in Turkey designed within the scope of the child friendly cities project as well as the principles adopted and problems encountered during the process. In this sense, the activities carried out by the municipalities of Ankara- Mamak and Kırklareli- Lüleburgaz with regard to the "child friendly streets" project were examined.

### Keywords

child-friendly cities, liveable streets, child-friendly streets, Turkey

### 1. Introduction

Being one of the important urban spaces, streets are generally defined as the roads between the buildings [1] and surfaces surrounded and bordered by the adjacent buildings [2]. However, such definitions only indicate the physical dimension of the streets, falling short of defining the other dimensions. In this sense, the streets also constitute the major elements of urban existence [3], a three dimensional urban component and felt volume [4]. Streets also have a conceptual dimension that describes any kind of urban space activity and they are artifacts of communication in various aspects and spaces for face to face interactions [2]. Benjamin [5], argues that streets are the houses for the society. Lefebvre [6], indicates that a street is a place for meeting and elimination of the street causes extinction of all life and reduction of the city to a dormitory. According to him, a street has an informative, symbolic and ludic function. It at the same time constitutes a place that informs and

surprises and where disorder lives. Jacops[7], mentions the safety asset of the streets. The streets of a city are places equipped to handle strangers (they defend against predatory strangers and protect peaceable and well-meaning ones). To Appleyard [8], streets are the social centers of towns and cities where children first learned about the world and where neighbors met. The street is also a scene of conflict between living and access and between resident and traveller. Yazıcıoğlu Halu[9], indicates that avenues and streets are socializing centers and lists the criteria for streets to turn into such centers as follows: 1. Relationship they build with the city 2. Historical continuity 3. Perceptual features (simple-net expression, identifiability, sense of place, identity, status and sample value 4. Social features (public-private space, different level-floor use, pavement use, presence of different activities, accessibility, safety) 5. Physical and formal features (linear, curvilinear, pattern, pattern of neighborhood, density, land use, diversity of buildings, functional diversity, pattern of city blocks, occupancies, voids, adjoining buildings). However, despite having such important features, city streets are now radically changing and transforming.

### **1.1. Development and transformation of streets**

While streets were an additional part of privileged areas (temples, agora, yard) in the ancient times, they functioned as a "gateway" filled with craftsmen during the middle age. In today's world, they have turned into a network organized for and by consumption and the time spent on the streets has become "time bought and sold". Now, the streets have been reduced to nothing more than a necessary transition between forced labor, programmed leisure, home and workplace [6]. Technological developments, land speculation, traffic problems, transportation-related urban transformation and the modernist planning are the most important factors that lead to transformation of streets [2]. The streets, which were once the "places of socialization", are now left to the hegemony of motor vehicles. As a result, the vehicle density and noise forced people to live in indoor spaces. With the safety problems (traffic, crime rates etc.) included, the "street life" has gradually disappeared [10]. Children might have been the ones mostly affected by the disappearance of street life. Today's children can no longer use the streets that are the "most accessible urban spaces", due to the above mentioned reasons.

### **1.2. Street and child**

Children are now away from the streets, which means that they cannot experience the "daily adventures" (risk taking, making decision, making friends etc.) where they gain important experiences, learn the world, develop their physical coordination and control and feel free [11]. According to the experts, children lost 12 hours a week of free time including unstructured play in the last 20 years, while doubling the time they spent in organized sports activities. With the disappearance of play in the children's world, it has been observed that increasing number of children feel sorrow since their "emotional, behavioral and developmental needs" are not met. Besides, children now have very little time to develop their "imagination and creativity", since they spend too much time in front of television and other screens [12]. Academic and political studies investigating the relationship between children's health and urban environment warn that "child rescue" is of high priority in both planning and practice. They believe that changes in the structured and social environment kill the physical activities of children, affecting their health negatively [13, 14]. Today, children cannot go outside on their own and are always supervised by someone, and they spend most of their time at school, doing homework or attending language courses and sports activities [15]. UNICEF reported that most of the children around the world are living in cities and towns. The report declares that 7 out of 10 people will live in cities by 2050, which shows how bad the situation is for children [16]. United Nations (Declaration Of The Rights Of The Child ,1959; The Convention of the Rights of the Child, 1989; A World Fit for Children report, 2002) and UNICEF (Child Friendly Cities Secretariat at Innocenti Research Centre in Florence, Italy, 2000) are working on important projects to make the cities more livable for children. "Child Friendly Cities Initiative" is one of the most important projects in this field and it has been further strengthened by its partnership with the International Union of Local Authorities (now known as United Cities and Local Governments or UCLG). Among the other initiatives are "Growing- Up Cities" and the initiatives aiming for "livable streets for children" which are implemented in Northern Europe countries, Australia, the States and Japan.

## **2. Initiatives for making cities more livable for children**

### **2.1. Child friendly cities initiative**

On 20 November 1959, the Declaration of the Rights of the Child was signed by the member states of United Nations. In 1989, the Convention on the Rights of the Child was adopted. The former constitutes a declaration about child protection and care, while the one adopted in 1989 is the first convention acknowledging the civil, economic, political and social rights of children [15, 16]. This convention was based on the Geneva Declaration of the Rights of the Child of 1924, Universal Declaration of Human Rights of 1948 and the Declaration of the Rights of the Child of 1959. In the convention, a "child" is defined as every person younger than 18 [16]. In 1996, UN-Habitat and UNICEF organized a workshop which constituted the basis for the Child Friendly Cities Initiative [17, 18]. In 2000, UNICEF established the "Innocenti Research Centre", the secretariat for child friendly cities, in Florence, Italy. In 2002, the report called "A World Fit for Children" was published after the United Nations General Assembly's special session on children. Since 2000, the "Child Friendly Cities Initiative" continues, going from strength to strength in cooperation with the International Union of Local Authorities [19]. The project was implemented and participation of about 200 cities in Italy, Spain, Argentina, Mexico, Colombia, Uruguay, Chile and Lebanon was ensured [15]. UNICEF [20] defines the "child friendly cities" as "a city, or more generally, a local system of governance committed to fulfilling children's rights". These rights are as follows: 1. Influence decisions about their city; 2. Express their opinion on the city they want; 3. Participate in family, community and social life; 4. Receive basic services such as health care and education; 5. Drink safe water and have access to proper sanitation; 6. Be protected from exploitation, violence and abuse; 7. Walk safely on the streets on their own; 8. Meet friends and play; 9. Have green spaces for plants and animals; 10. Live in an unpolluted environment; 11. Participate in cultural and social events; 12. Be an equal citizen of their city with access to every service, regardless of ethnic origin, religion, income, gender or disability.

### **2.2. Growing-up cities**

UNESCO- MOST Growing-up cities (GUIC) is a research project initiated under the direction of Kevin Lynch in 1970s. The project aimed to explore how children perceive, value and use their local environment, in order to suggest planning policy recommendations to develop the urban environment for children. The project was revived in 1996. Today, in addition to Lynch's primary objectives, the project aims to provide practitioners with a toolkit of principles, research methods and strategies for engaging with children. The most significant outcome of Growing-up cities (GUIC) was the development of a set of "social and physical Indicators of Environment Quality" [19].

### **2.3. Livable streets**

To be livable is one of the most important issues of a 21<sup>st</sup>-century city. In order to improve this idea, "most livable cities" are chosen every year. The term livable is defined as "pleasant, safe, affordable, and supportive of human community". The key elements of community livability include an "attractive, pedestrian-oriented public realm; low traffic speed, volume, and congestion; decent, affordable, and well-located housing; convenient schools, shops, and services; accessible parks and open space; a clean natural environment; places that feel safe and accepting to a diverse range of users; the presence of meaningful cultural, historical, and ecological features; and friendly, community-oriented social environments" [21]. The concept of "woonerf" (residential yard, shared street), which was developed and implemented in the late 1960s in Delft, the Netherlands, constitutes one of the living street initiatives. This concept of "streets for living" or "living street" is known as "Home zone" in Britain. The concept of woonerf was adopted by the Dutch government in 1976. Today, this concept is implemented in Germany, Switzerland, Denmark, the UK, Japan and Israel. There are approximately 6,500 woonerfs in the Netherlands [22, 23]. The main goal of a woonerf is to change the way streets are used and to improve the quality of life in residential streets by designing them for people, not just for traffic. In a woonerf, the street is shared among pedestrians, bicyclists, and motor vehicles. However, pedestrians have priority over vehicles. The street is designed without a clear division between pedestrian and auto space. Therefore, the drivers are forced to travel slowly and with caution. The concept of homezone was

developed from the concept of "woonerf" in Britain in the late 1990s. Another concept is the "shared space" used in the USA. This concept was applied to residential streets as well as commercial ones [23]. The studies on "living streets", "child friendly environments" and "child friendly cities" revealed how the quality of the streets can be increased [24, 25, 26, 27, 28, 29, 30, 31, 32, 33].

In Turkey, 65% of the whole population is living in cities as a result of the intensive rural-urban migration in the last 30 years. Due to the increasing number of children living in cities, it became important to take account of the needs and priorities of children [34]. In this sense, with the financial assistance of IKEA and the Turkey National Committee for UNICEF, initiatives were taken by UNICEF Turkey in order to develop child friendly policies and creating child friendly spaces. One of these initiatives is the "Child Friendly Cities" project. The project was implemented between 2014 and 2015 [35].

### **3. "Child Friendly Cities and Streets" Initiatives in Turkey**

The main goals of the "Child Friendly Cities" initiative in Turkey are to reduce geographical and social gender differences among children, to provide fair access to services, to reduce child poverty and to increase children's participation in order to promote well-being of children at the national and international level. Within this scope, two main objectives were determined for the project: 1. Designing policies and programs based on children's needs and addressing the needs of the children from different urban settings in order to monitor this process; 2. Creating child friendly spaces in urban settings in order to fulfil children's right to play and development. In this sense, following provinces and districts were chosen to take part in the project: Adana- Yüreğir, Ankara- Mamak, Bitlis, Erzurum- İspir, Giresun, İzmir- Bornova, Kırklareli- Lüleburgaz, Manisa, Mersin, Şanlıurfa- Eyyübiye (Fig. 1) [35].



Fig. 1. Child Friendly Cities and Municipalities in Turkey

This study aims to comparatively analyze the process of developing "child friendly streets" in Turkey designed within the scope of the child friendly cities project as well as the principles adopted and problems encountered during the process. In this sense, the activities carried out by the municipalities of Ankara- Mamak and Kırklareli- Lüleburgaz with regard to the "child friendly streets" project were examined.

#### **3.1. Ankara Child Friendly City and Mamak Child Friendly Street initiative**

In Ankara, the "child friendly cities" project was initiated by the Ankara governorate in 2011. In 2012, the "Directive on Implementation, Duties and Operation of the Ankara Child Friendly Cities Project" was prepared and the Ankara Child Friendly City Council was formed in line with the "Ankara Child Friendly City Council Operation Directive" in the same year [37, 38]. Apart from these, "1<sup>st</sup> Symposium of the Child Friendly City" was organized between May 6<sup>th</sup> and 7<sup>th</sup>, 2014. Other activities included the following: "Ankara through the Eyes of Children Poster Contest" (21.04.2014); peer education activity (2016); "Child Friendly Museum Project" in cooperation with the Ankara Provincial Directorate of Culture and Tourism and the Ministry of Family and Social Policies and (2014-2015 academic year); Ankara through the Eyes of Children State Scale (2013-2014); Ankara child friendly city short movie contest (February-December 2016) [39]. The "child friendly street project" initiated by the Ankara University Children's Science Center was implemented with the participation of the Mamak Municipality, Women's

Association for Education and Employment and Ankara University Department of Landscape Architecture (Fig. 2). The project was supported by the Ankara development agency between the years of 2013 and 2014 [40, 41].



Fig. 2. Location of the Municipalities of Ankara and Mamak on the Turkey map [36]

Within the scope of the project, 605 pre-school and primary school teachers in Mamak were provided with training. In the teacher training, a "general information form", an "information test" and an "assessment questionnaire for child friendly street training program" were used. Besides, interviews were held with nine low-age children and five high-age children living in the districts. During the interviews, the children were asked to draw pictures and asked questions about the subject matter [42]. Within the scope of the project, two workshops were held between August 14<sup>th</sup> and 15<sup>th</sup>, 2013 and between February 2<sup>nd</sup> and 3<sup>rd</sup>, 2014. The first workshop included the presentation about child friendly spaces, group members' drawings of their dream streets, identification of the areas of high priority in the streets and organization of idea sessions where the issues regarding distribution of the street tasks taken on by the team (landscape, field, training). In the second workshop, sustainability of the project, the roles and participation levels of children during the stages of participation model and the structured and unstructured (guided and unguided) activities in the street were determined (Table 1) [43, 44].

However, during the implementing phase, the street residents did not want the street to be closed to traffic. Therefore, only the "child park part" of the project was implemented on the southern part of the street [41]. The first version of the "Child friendly street" project was not reached.

### 3.2. Kırklareli- Lüleburgaz Child Friendly City and Street Initiative

Lüleburgaz Municipality is one of the 10 municipalities that took part in the "child friendly city" project which was initiated in 2014 with the financial assistance IKEA and Turkey National Committee for UNICEF. Within the scope of this project, city analysis surveys based on the "rights of children" have been held since 2014 with over 400 people from different ages in the Lüleburgaz district in order to develop a "child action plan": 1) children aged 12; 2) adolescents aged 13 to 18 years; 3) parents of pre-schoolers; 4) parents of elementary schoolers; 5) parents of middle-schoolers; 6) Service providers and defenders of children. Following the project, an "action plan for children" workshop was organized (February 10<sup>th</sup>, 2015). "Child street project" is a project implemented following the meeting (October 2<sup>nd</sup>, 2015) held in line with these analyses in Lüleburgaz with the representatives from UNICEF and IKEA (Fig. 3). The project was implemented by a team formed by the Lüleburgaz Municipality with the assistance of UNICEF and IKEA between 2014 and 2015. The street formed within the scope of the project was closed to traffic. Playgrounds, exhibition and performance areas were organized on the area (Table 2) [46, 47].

Table 1. Mamak Child Friendly Street Project [41]

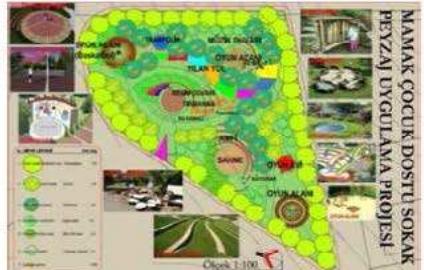
<b>Project</b>	 
Ankara Province, Mamak District, Yeşilbayır region, 1912 street, an area of 3500 sqm on the street	
<b>Project Team</b>	Ankara University Faculty of Agriculture Department of Landscape Architecture
<b>Start Date</b>	08/07/2013
<b>End Date</b>	08/04/2014
<b>Land Features</b>	A piece of land inclined (about 10% slope) on the north-south direction, lying between the residential blocks zoned for construction. Surrounded by adjoining apartment buildings on the south and by 10-meter roadways on the western and eastern frontiers.
<b>Design Criteria</b>	Creating an area identity; creating a common language; sustainability; topography; structural uses: ramps, use of interlocking paving stones, red curbs; allowed structural uses: playground and sandpit (2 of each), painting wall, music wall, slides, snake path, open canal, well, water pump, play wall, rope play elements, metal play elements, swing, tire climber, log path, wooden play house and body conditioning area.



Fig. 3. Location of the Lüleburgaz on the Turkey Map [45]

### 3.3. Assessment of the Child Friendly Streets in Turkey

In this study, the streets were assessed based on the 10 normative dimensions developed by Horelli and Haikkola to assess a "child-friendly environment" [25, 26, 27] in their study mentioned in the section "living streets" which we believe to cover the other studies (Table 3):

1. Housing and dwelling: Flexible and secure housing alternatives, Processes that transform the dwelling into a home
2. Basic services (health, education and transport)
3. Participation: Opportunities to participate in planning and development

Table 2. Lüleburgaz Child Friendly Street Project [46].

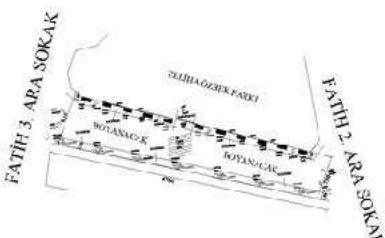
<b>Project</b>	  
Kırklareli Province, Lüleburgaz District, Yeni Mahalle Özbek 1 <sup>st</sup> Side road	
<b>Project Team</b>	Lüleburgaz Municipality Project Team
<b>Start Date</b>	2014
<b>End Date</b>	2015
<b>Land Features</b>	Playground on the North, adjoining apartment buildings on the south
<b>Design Criteria</b>	<p>Promoting participation of children; having a child friendly legal framework; developing a strategy for children's rights around the city; establishing a department of children's rights or having a coordination mechanism; ensuring the assessment and measurement of impact on children; setting a budget for children; reporting the status of children around the city; ensuring that children's rights are known by the adults and children; promoting independent advocacy for children.</p> <ul style="list-style-type: none"> <li>-Non-fixed elements in the area: Sound-lighting-stage system, thrash bin, benches, children tents, garden sets, table, chair, easel.</li> <li>-Activity areas: Playgrounds, exhibition and performance areas</li> </ul>

Table 3. Assessment of the Child Friendly Streets in Mamak and Lüleburgaz Based on the "Child-Friendly Environment" Criteria

Normative dimensions	Mamak Child Friendly Street (Yeşilbayır region, 1912 street)	Lüleburgaz Child Friendly Street (Yeni Mahalle Özbek 1st Side road)
Housing and dwelling	---	---
Basic services (health, education and transport)	---	---
Participation	<ul style="list-style-type: none"> <li>-Survey with preschool and primary school teachers</li> <li>-Interviews and surveys with nine low-age children and five high-age children</li> <li>-Workshops with the working groups (landscape, field, training and the municipality team)</li> </ul>	<ul style="list-style-type: none"> <li>-Surveys with children of different ages in the district (children aged 8 to 18, parents, service providers and defenders of children)</li> </ul>
Safety and security	<ul style="list-style-type: none"> <li>-Safe use of the equipment (Playground and sandpit (2 of each), painting wall, music wall, slides, snake path, open canal, well, water pump, play wall, rope play elements, metal play elements, swing, tire climber, log path, wooden play house and body conditioning area</li> <li>-Roadside flowery plants and ground-covering plants</li> <li>-Stepless solutions in the area</li> </ul>	<ul style="list-style-type: none"> <li>-Area closed to traffic</li> <li>-Lighting elements</li> </ul>
Family, kin, peers and community	<ul style="list-style-type: none"> <li>-Structured and unstructured playgrounds designed based on a participatory approach and a "friendly, community-oriented social environment"</li> </ul>	<ul style="list-style-type: none"> <li>-An area where children can play safely and freely</li> <li>-An area for activities in addition to exhibition and performance areas</li> </ul>

**Table 3. Assessment of the Child Friendly Streets in Mamak and Lüleburgaz Based on the "Child-Friendly Environment" Criteria (Continue)**

Normative dimensions	<b>Mamak Child Friendly Street (Yeşilbayır region, 1912 street)</b>	<b>Lüleburgaz Child Friendly Street (Yeni Mahalle Özbek 1st Side road)</b>
Urban and environmental qualities	<ul style="list-style-type: none"> <li>-Accessibility for all (stepless area)</li> <li>- Safe equipment and ground</li> <li>-Playing in touch with nature</li> <li>-A playground integrated with the environment</li> <li>-Structured and unstructured activities</li> </ul>	<ul style="list-style-type: none"> <li>-Accessibility for all</li> <li>-A child street controllably integrated with the surrounding playground</li> <li>- Use of non-fixed elements in the area</li> </ul>
Provision and distribution of resources; poverty reduction	-	-
Ecology	<ul style="list-style-type: none"> <li>-An accessible playground designed for children</li> </ul>	<ul style="list-style-type: none"> <li>- A child street controllably integrated with the surrounding playground (Zeliha Özbek Playground)</li> <li>-Lack of green areas</li> </ul>
Sense of belonging and continuity	<ul style="list-style-type: none"> <li>-An area of transition, activity and meeting integrated with the surrounding structures and usages</li> <li>- Objection by the local residents, although the area was designed with a participatory approach; playground was achieved to be built</li> </ul>	<ul style="list-style-type: none"> <li>-The area houses the activities for children (April 23 National Sovereignty and Children's Day, exhibitions, etc.)</li> <li>-Local residents welcomed the area as it was designed with a participatory approach</li> </ul>
Good governance	<ul style="list-style-type: none"> <li>-A design approach developed with the participation of people from different parts of the society (university, teachers, children, municipality)</li> <li>-Active role of the municipality and its adoption</li> </ul>	<ul style="list-style-type: none"> <li>- A design approach developed with the participation of people from different parts of the society</li> <li>- Active role of the municipality and the chance of sustainability</li> </ul>

4. Safety and security: The guaranteeing of physical and psychological safety by the state and the municipalities: child welfare and the prevention of violence, An environment which is tolerant and pluralistic, Safe transport systems and public places in general [Safety:24; Safety and Security: 30; well lit and safe: 31; traffic calming: 28; slow moving traffic and street parking: 32; Confort and safety: 33; places that will safe, Low traffic speed: 21].
5. Family, kin, peers and community: Opportunities for close social relationships with family, kin and friends (Opportunities interaction with other children: 24; Friendly, community- oriented social environment: 21; Inclusivity- how welcoming they are to different sections of society: 30; human, attractive and distinctive: 31).
6. Urban and environmental qualities: High standards in the physical elements of the local environment; provision of a variety of interesting opportunities and arenas for activities (Flexibility: 24; functionality: 30; good attractions and associated activity: 31; activity and interest at the street level: 32).
7. Provision and distribution of resources; poverty reduction: The provision of financial resources and work opportunities to young people who have a role to play in the local economies.
8. Ecology: The protection of nature and the application of the principles of sustainable development in the construction of the built environment [Accessible parks and open spaces, the presence of meaningful cultural, historical and ecological features: 21].
9. Sense of belonging and continuity: A sense of cultural continuity and a sense of belonging to a certain place at a certain time (the presence of meaningful cultural, historical and ecological features: 21).

10. Good governance: Flexible local governance that takes into account young people's opinions in the decision-making; the provision of participatory structures, such as youth councils and various participatory projects.

#### **4. Conclusions and Suggestions**

Since both cities are among the "Child Friendly Cities", the activities related to the dimensions of "1.Housing and dwelling, 2.Basic services, 7.Provision and distribution of resources; poverty reduction" were initiated by the Ankara Governorate and the Lüleburgaz Municipality. The findings about the other dimensions are as follows:

3. Participation: Both streets were designed with a participatory approach by receiving the opinions of the users. However, the failure in constructing the "street" part of the Mamak Child Friendly Street due to the objection by the local residents indicates the necessity of receiving the opinions of the street residents beforehand.

4. Safety and security: Safety of children was ensured by using roadside flowery plants in the Mamak Child Friendly Street. In the Lüleburgaz Child Friendly Street, safety of children was ensured by closing the street to traffic and using lighting elements. However, as can be seen in the images, children can only play on the street under the supervision of their parents.

5. Family, kin, peers and community: The Mamak Child Friendly Street project was a scientifically conducted study as a result of the workshops held by the university team based on the evaluation of the trainers and children. Although the street project was not achieved, a "friendly, community- oriented social environment" was created in the playgrounds. The Lüleburgaz Child Friendly Street was a child street constructed with temporary elements. When these elements are removed, the feature of being a "child friendly street" is also eliminated.

6. Urban and environmental qualities: Both streets are "accessible for all" (elder people, people with disabilities etc.). Mamak Child Friendly Street is a playground area designed with safe and quality elements, which includes all structured and unstructured activities. In the Lüleburgaz Child Friendly Street, what was done was only to close the area to traffic and ensure the controlled entrance. All other equipment is temporary.

8. Ecology: Mamak Child Friendly Street has green fields reconstructed for children. There is no green field in the Lüleburgaz Child Friendly Street.

9. Sense of belonging and continuity: Although the Mamak Child Friendly Street was created with a participatory approach, the objection by the local residents indicates that the street was not welcomed and the project was not explained well to the people. Lüleburgaz Child Friendly Street was welcomed by the local residents. The activities related to the April 23 National Sovereignty and Children's Day and other exhibitions are held on this street and children actively use it [47].

10. Good governance: Both streets were designed with the participation of people from different parts of the society. Active role of the municipalities and their adoption is important for ensuring the sustainability of the streets.

In the light of the above-mentioned findings, following suggestions can be made for the "child friendly streets" in Turkey:

- Participation of the local residents is important in creating child friendly streets, since the aim is "to place the streets to the center of the society again" [28]. It is especially important for increasing the number of child friendly streets in Turkey to complete the Mamak Child Friendly Street project by receiving the opinions of the local residents again. Besides, "the problem of closing the street to traffic" which was the main reason of objection may be solved by modeling the street designs of "woonerf, homezone, shared zone" whose success was proven around the world.
- One of the major problems of the street projects is the lack of "architects and urban and regional planners" in the project.
- Although there are 10 child friendly cities in Turkey, there is a "child friendly street" only in two of them, which is an important point to take into account. If both streets are re-evaluated and designed based on the successful applications around the world [24, 25, 26, 27, 28, 29, 30, 31, 32, 33], Turkey can take its place in the world literature with these two streets.

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