



Study on the Investigation of Urban Furniture in Detached Housing Gardens in Isparta City Center

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Abstract

The aim of this study was investigating the urban furniture, structural and landscape elements in selected detached family house gardens located 33 neighborhoods in Isparta city center. However, these elements were determined in detail on site, and some evaluations were made in terms of their intended use and intensity. It was found that 92 of 278 detached family house gardens have at least one type urban furniture. In these gardens 24.5% of had a sitting element, 7.2% of had plant boxes, 4.3% had water object and only 2.2% of had playground. It has also realized that with only limited number of exceptions, most of these elements were unable to create aesthetic appearance and could not serve as a focal point in the landscape design practices. Moreover 174 detached family home gardens have at least one structural element. The storage shed were found to be dominantly present (26.6%), followed by sitting areas (24.1%), animal shelter (14.1%), garage (14.1%), stove/oven (3.2%) and greenhouse (0.7%), respectively. Some photographs were taken to reflect the visited residential gardens and the state of structural elements used. Based on observations and participants responds, most of the detached family house gardens has not design properties with realistic sense and not follow landscape design rules.

Keywords: House gardens, Structural elements, Urban furniture, Landscape design

Isparta Kent Merkezindeki Müstakil Konut Bahçelerinde Yer Alan Kentsel Donatı Elemanlarının İrdelenmesi Üzerine Bir Çalışma

Öz

Bu çalışmanın amacı, Isparta il merkezinde 33 mahallede bulunan müstakil konut bahçelerindeki kentsel mobilya, yapı ve peyzaj unsurlarını araştırmaktır. Bu yapısal elemanlar yerinde ayrıntılı olarak incelenmiş ve kullanım amacı ile bulunma oranları araştırılmıştır. 278 müstakil ev bahçesinden 92'sinin en az bir tip kentsel mobilyaya sahip olduğu bulunmuştur. Bu bahçelerin %24,5'inin oturma elemanı, %7,2'sinin bitki kutusu, %4,3'ünün su nesnesi ve sadece %2,2'sinin oyun alanı bulunduğu belirlenmiştir. Ayrıca, bazı küçük istisnalar dışında, bu unsurların çoğunun estetik görünüm yaratamayacağı ve peyzaj tasarımı uygulamalarında odak noktası olamayacağı anlaşılmıştır. 174 müstakil konut bahçesinin en az bir yapısal elemanı bulunduğu anlaşılmıştır. Bu yapısal elemanlar içinde, depolama ünitesinin yoğunlukla bulunduğu (%26,6), ardından ise yoğunluk sırasına göre; oturma alanlarının (%24,1), hayvan barınaklarının (%14,1), garaj (%14,1), soba/fırın (%3,2) ve sera (%0,7) bulunduğu gözlemlenmiştir. Ziyaret edilen alanın gerçek durumunu ve kullanılan yapısal elemanların durumunu yansıtan bazı fotoğraflar çekilmiştir. Alanda yapılan incelemeler sonucunda, müstakil konut bahçelerinin çoğunda yapısal elemanların peyzaj uygulamalarına uygun tasarımın yapılmadığı anlaşılmıştır.

Anahtar Kelimeler: Konut bahçeleri, Yapısal elemanlar, Kentsel mobilya, Peyzaj tasarımı

1. Introduction

Throughout the centuries, the home and its connected units (i.e. gardens) have become an important issue for people lifestyle to provide comfort, safety and recreations. Over time, expanding cities and creating big industrial zones (metropolitan areas) have usually faced with various negative feelings and discomfort to people. This is because of lack of comfortable housing and city life in over crowded urbanized places (Bell, 2019; Kimber, 2004; Yalçınalp et al., 2017; Zanette et al., 2005). However, cities become to reveal the cultural and identity component and reflects the settlements habits. Hence, a city could be seen as the urban space that is composed of the residential units, material elements, social environments and urban practices (Arruda, et al., 2016).

Residential houses are places where privacy needs are felt at the highest level in all cultures as comfort spaces. In this context, as in all societies, the phenomenon of privacy is one of the most important factors in shaping the houses. However, a well-designed and implemented houses and its integrated parts (i.e. gardens) increase the quality of life with improving the satisfaction of the environment (Arruda, et al., 2016; Sahin, 2015). In this context, people want to live in a comfortable environment to reflect traditional life style. Hence the urban residential house gardens have become important places for people who spent their leisure time longing to green in cities. Residential house and its surroundings should be carefully designed to provide quality and comfort conditions for users (Gedikli, 1993; Kendle and Forbes, 1997; Nassauer et al., 2009; Yalçınalp et al., 2017).

Numerous factors affecting the design or construction of residential structures. These are basically depending on traditional housing culture, climate, religion, personal demand and land structure. All these impact on shaping of these houses and their near environments (Chokor, 1990; Goodchild, 1994; Darke and Tallamy, 2014; Kendle and Forbes, 1997; Kennedy et al., 2005). However, the detached house gardens are usually considered to be an integrated parts of city images and have significant aesthetic and functional property to reflect traditional life style. Therefore, houses are different shapes, sizes and character because of the user expectations. Some may choose to have a certain architectural style, historic or modern or just flat design. But the structural landscape elements impact on people have put forward higher requirements about comforting garden activities. It has already reported by Sahin and Erol (2009) that sense of garden emerged in Turkish houses due to socio-cultural factors that directly impact on the shaping of houses. Xiaomeng (2014) proposed that the house gardens are diversified and usually supply comfortable life style form with certain traditional practices. Moreover, garden furnitures are also the spiritual and cultural manifestation and image of neighborhoods.

A typical detachable family house gardens usually consist of three sections. The front garden overlooking the main road, the back garden (courtyard), which is more specific to users, and side gardens, which are often considered as open areas or part of the garden, and a transition zone. These sections should be created a recreational and outdoor living space with providing space for some functional activities such as; sports, playgrounds, gardening, storage, etc.

The accessibility to urban communal use, social facilities, and security are very important in urban life. But it is important to

know the built environment features in evaluating the satisfaction of housing-residential environment (Xiaomeng, 2014). In this regard, it should be required to well understanding of garden properties with the effect of socio-cultural factors on residents. Therefore, the landscape architect should be considering all these situations. A well-designed home garden should be impact on users as; (Gedikli, 1993; Kendle and Forbes, 1997; Sahin and Askin, 2015).

- Make inviting spots to sit,
- Increase comfort by landscape elements,
- Improve usable yard space,
- Create aesthetics appearance,
- Establishment for privacy,
- Increase psychological and socio-cultural satisfaction

However, urban furnitures and structural elements in gardens should be created the most suitable landscape in terms of recreation with family life, individual work and resting. The detached house gardens and their landscape elements could be provided many benefits as aesthetic appearance and comfort for users.

In this study, a comparative study of family detached house gardens, located in Isparta city center's neighborhoods, in terms of structural and landscape elements were investigated under landscape architecture discipline. Besides, it has also be provided some suggestions and recommendations for improving the qualities of these structures.

2. Material and Method

2.1. Material

The study was conducted on detached family house gardens located in Isparta city center. However, Isparta is a low to medium size city category and population is approximately 250.000. It is located in the north of the Mediterranean region where usually called lakes region. Its location in the transition zone between hot and mild Mediterranean to cold and dry central Anatolian region. Therefore, both climate characteristics can be seen in Isparta and its near vicinity (URL 1 and 2, 2020).

Administratively, Isparta city center subdivided into 43 district/neighborhoods. But, 10 neighborhoods were excluded from the survey because there were few or no detached family houses and/or some houses were not suitable for this study. Therefore, it gathered information with sampling method about randomly selected 278 detached family houses in 33 neighborhoods. In this context, it was believed that those sampling procedures were enough and capable of represent the target population.

2.2. Method

In order to determine the detached house garden's landscape and structural elements, a questionnaire prepared in advance and applied to household with face-to-face survey technique. Initially, the questionnaires planned to be carried out in 10 randomly selected detached houses from each neighborhood. But due to some difficulties, such as; not enough sampling detached house gardens in some neighborhoods, individuals who did not interest to participate the survey etc, less than 10 survey conducted in

some neighborhoods. A total of 10 questions were directed to participants, with a standard questionnaire procedure.

An analysis of garden's properties such as; availability of urban furnitures, water features occurrence (rather than basic irrigation foundations), playground and sport field existence, and presence of structural elements (storage shed, reservation area for sitting, animal shelter, etc.) were examined in detail in view of landscape architecture discipline. After application of questions, detached house garden status had carefully checked and some important elements/structures photographed if owner of house was permitted. Then the advance prepared evaluation paper checklist filled in order to note deficiencies and suitability of the landscape designs practices. At the end of survey, an open-ended question directed to participants to determine their tendencies in garden design, important things for them and their demands on garden subject.

3. Results and Discussion

It is a common idea that colorful leafy or blooming plants make garden beautiful. However, this may negative impact if disorganized and lacks units in gardens. Therefore, by adding some structural elements and even arrangement of most ordinary plants within a well-structured landscape could be make an aesthetic appearance in all seasons, and creates sense of privacy with satisfactions. Even simply constructed elements such as walls, fences, boxes, dog houses and trellises could be created a visual focal point.

During neighborhood visits, careful observations and interviews conducted with responders, a detailed comparative list of structural elements has been prepared. However, it was identified that 92 of 278 studied detached family house gardens (33%) have at least one type urban furniture. It has been found that these elements are placed alone in garden and/or used with others to improve functionality and aesthetic appearance. In this sense, it has been observed that 73 of house gardens has only one, 11 of has two, 5 of has three, 3 has four and more urban furniture present in gardens.

An ordinary garden contains some constructed elements that consist of plants, fences and some other built elements. However, to increase the aesthetic appearance and function of the gardens; structural landscape elements such as water objects, playgrounds, sports fields, lightning elements should be added. Table 1 and Figure 1 shows summary for the urban furniture elements placed in detached family house gardens. In the study 68 sitting elements (24.5%), 20 plant boxes (7.2%), 12 water objects (4.3%), 6 playgrounds (2.2%), 3 plastic elements (1.1%), 2 lightning elements (0.7%), and 2 garbage boxes (0.7%) are observed in study area.

Table 1. Landscape elements found in detached family house gardens.

Water objects		Urban furniture					Play ground	
Pool	Waterfall	Sitting elements	Plant boxes	Lightning	Plastic elements	Garbage box	Swing	Sand pool
10	2	68	20	2	3	2	5	1

However, it is important to have knowledge on these structural elements to place on garden. It has clearly realized that, these elements are usually randomly placed without considering sharing a common sense such as style, or material so they are usually not creating a unified look in the space. The water features could be created sanctuary, sooth street noise and make a focal point. But in this study, water supply (fountain) was observed almost in all gardens. But, only 12 of 278 family house gardens had water object (10 small pool and 2 waterfall) (Table 1). The playgrounds and sport fields (equipment) had also useful elements to set the mood of the garden such as; fun, serene or focal points. But it was found that only 6 of 278 family house gardens contain a playground that 5 swing and 1 sand pool (Table 1) while none of a sport field and/or sporting goods observed in study context.

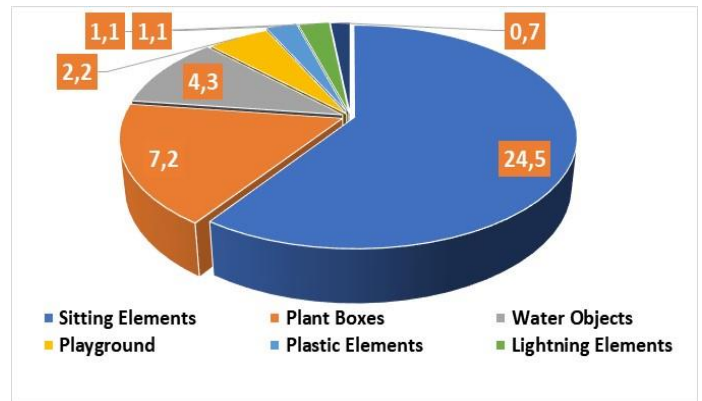


Figure 1. Urban furniture elements placed in detached family house gardens.

Interestingly, only three plastic aesthetic structures (small sculptures), two lighting elements and two garbage boxes were found. But a few exceptions, these insufficient structures are unable to create aesthetic appearance and could not matched to the urban garden filled and not serve as a focal point in the landscape design practices. However, a well-designed garden is the framework that creates the basis to its seasonal elements throughout the year. But insufficient level of presence of these urban furniture elements clearly show that the home owners have not enough attention on their gardens for ensuring year-round shape and interest.

It is important to establish garden's frameworks (structural elements) that involves deciding, for instance, what the main elements need to be and where a good place to sit to enjoy the morning or evening sun, or to create a shady terrace for eating. In this regards these secondary structural elements enhances the design and provides visual interest when plants are even not in bloom.

It was found that 174 of 278 studied detached family home gardens have at least one structural element in their garden. However, it had also been observed that 121 gardens had only one structural element, 44 of had two, 8 of had three and 1 of had four and more structural elements placed in gardens. Figure 2 and Table 2 shows summary for the structural elements present in family house gardens. It had found that storage sheds were dominantly present (74 count; 26.6%), followed by Sitting areas (67 count; 24.1%), Animal shelter (39 count; 14.1%), Car garage (39 count; 14.1%), Stove/Owen (9 count; 3.2%) and Greenhouse (2 count: 0.7%), respectively.

Table 2. Structural elements found in detached family house gardens.

Storage shed		Sitting Area		Animal Shelter			Other structures		
Storage room	Woodshed	Terrace	Pergola	Chicken coop	Barn	Dog house	Stove/owen	Garage	Greenhouse
21	53	15	52	26	9	4	9	39	2

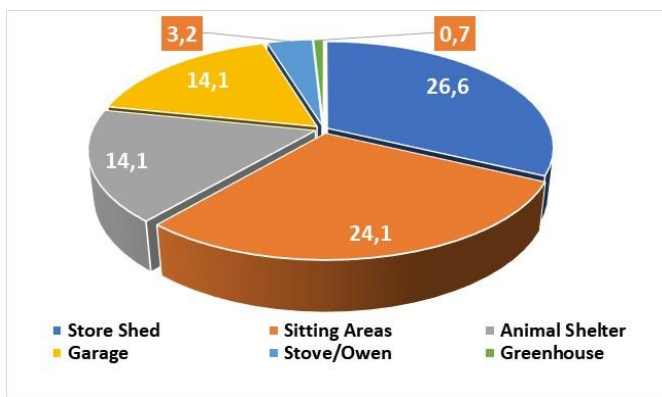


Figure 2. Structural elements placed in detached family house gardens.

With having these data, it could be suggested that many of the detached family house gardens have significant aesthetic and functional deficiencies. Considering the highest number of structural elements was found to storage shed (26.6%) that giving clues on the aim of garden usage rather than aesthetic appearance and comfort for users.

However, some sitting areas have also placed on some of the family house gardens (67 count; 24.1%). But most of them looks like very simple structures and not intend to improve landscape value of gardens. Moreover, these outdoor spaces have with varying roof heights, should be integrated with other hardscape elements to provide edge pieces for garden users. In addition, only limited number of sitting structures are intended for climbing vines.

Dog houses and chicken-coops could be grouped as places for domestic animals that smaller versions of human domiciles while agricultural animals more often live in barns and stables. These structures are often placed into garden when these animals are outdoors and on areas around a garden to protects them from atmospheric conditions (heat, cold, wind and rain) and secure them from predators. However, the dog guards the possessions of the owners from unwanted/unexpected people or animals. Although chicken coops and barns are agricultural structures and generally used for house livestock. They are most common structures that built in rural home gardens (i.e. cottage gardens). Moreover, 14.1% of studied detached family home gardens in urban neighborhood (in Isparta city center) was found to be have one of these structures. Particularly 9 barns were noticed that had seen to be used for goat and sheep housing rather than larger animals (cow, cattle or horses). In this respect, it is important to

consider that toxic plants, herb, or trees should not be planted in these gardens and or away from the livestock that can't access it.

In addition, 9 stove/owen had found for using to make bread and other cooking purposes. These are a clear evident with animal shelter data that some of the urban families would like to follows their rural habits or lifestyles still continue in urban gardens. In most cases a greenhouse attached to garden could be increased the value of home. But in this study only two greenhouses were found without any aesthetic value or standardized built environment.

Figure 3 show some selected family house garden's urban furniture elements. It can be seen that some elements had established a modern aesthetic appearance (Figure 3 A-D) while others look like a cottage village garden that utilized for animal feeding (Figure 3 E-G), cooking (Figure 3 F) and car parking (Figure 3 H). However structural elements could be improved aesthetic value of gardens. But many of garden has lack of that property due to user of gardens not demand on that context.



Figure 3. General views of some family house garden's structural elements (A-B, D: Some plastic figures; C: Marble sculpture; E: Barn; F: Brick stove/Owen; G: Chicken coop; H: Car garage).

Figure 4 show some structural examples found in some family home gardens. It can be seen that water objects (Figure 4 A-C) established a modern aesthetic appearance while randomly constructed and placed greenhouses (Figure 4 E-F) no established any aesthetic appearance and functionality on landscape applications. However, the terrace (Figure 4 D) and sitting area (Figure 4 G) looks like well-organized and function on gardens as they intended. It can be clearly seen that although it wanted to make a reserved area in garden (Figure 4 H), without knowledge

on used elements, it looks like very negative appearance and not functioned.

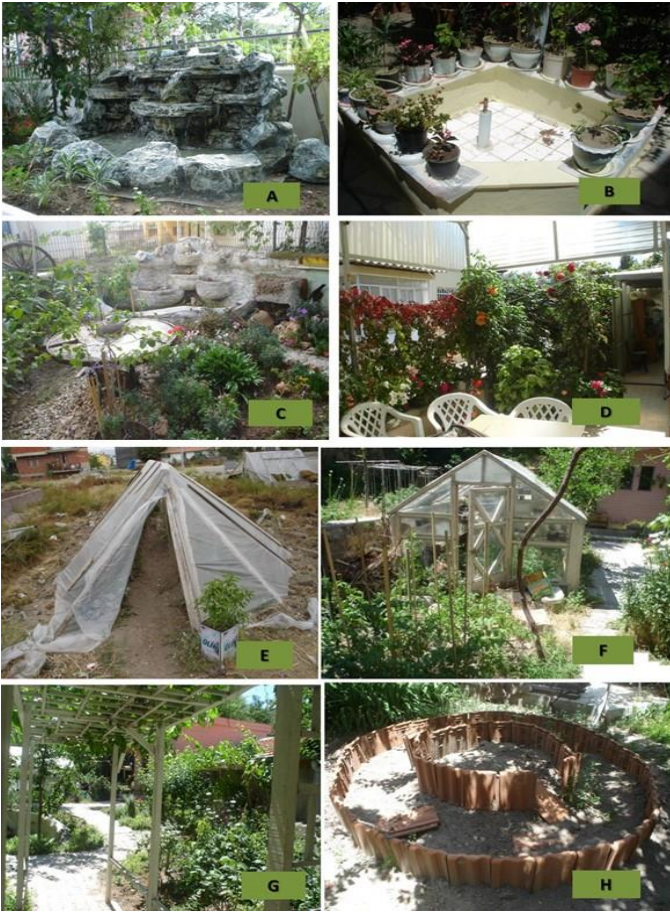


Figure 4. Some urban furniture elements and structures found in family house garden's (A-C: Water features; D: Terrace and sitting elements; E-F: Greenhouse G: Pergola H: Reserved part).

4. Conclusions and Recommendations

Because the residential environment is a broad concept that includes the neighborhood and social environment. However, it also covers the socio-physical relationship of the households within complex world. Moreover, the detached family house gardens in the city center should be differ in terms of function and structural design elements since they have usually a smaller area than other residential complexes.

Based on observed gardens element's functions and categories, the benefits of these structures directed with their properties. However, it has observed that most of the detached family house gardens has not design with realistic sense, versatile functionality and not follow landscape design practices. The following recommendations would be made in the context of the home garden's urban furniture and structural elements.

1. It was suggested to responders that garden should not be exact form and rigid whereas it should be flexible for planting, furniture or structural designs that make the space changeable with the desired style and atmosphere.
2. It was seen that the previous life styles of house owners were reflected in their detached house gardens. However, there is not much specific variety in the elements used in these gardens. Especially residential units close to commercial centers should be restricted to use some elements such as; animal shelters, stove/ovens.

3. Considering the night use of the gardens, they should be designed in a way that will not cause abandonment and prevent some crimes from being committed, to provide security factor for the home owners.
4. The light levels must be considered for well-designed garden to availability when sun light is not enough to see objects. However, there was only two home's gardens have some lighting elements without and special placements or consideration its functionality.
5. It could be recommended these urban gardens that smaller openings or structural elements should be included in order to allow the plants room to ramble. In this sense, it allows to control the space that to be used in the way intended.
6. Due to livestock in gardens, plants that may be harmful to animals should not be included in these gardens.
7. It is important to consider, insects can more easily find their way into home via the greenhouse. Hence the greenhouse constructions should be carefully designed in suitable part of gardens.
8. In the arrangement of gardens, the attention should be paid to the profession discipline of landscape architecture. As a requirement of the modern era, the approved landscaping project must also be made compulsory before the construction permit of the residential areas within the municipality boundaries. Therefore, it should be determined in the city scale that are suitable for the climatic conditions of the region.
9. The competitions in residential gardens which the local people are encouraged to organize their garden by choosing the most suitable and aesthetic elements, rewarded by local administrations.

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