Traces of Birdhouse Tradition in Anatolia

Çiğdem Tekin and C. Zeynep Oğuz

Abstract—The birdhouses and dovecotes, which are the indicator of naturalness and human-animal relationship, are one of the traditional cultural values of Turkey. With their structures compatible with nature and respectful to humans the bird houses and dovecotes, which have an important position in local urbanization models as a representative of the civil architecture with their unique form and function are important subjects that should be evaluated in a wide frame comprising from architecture to urbanism, from ecologic agriculture to globalization. The traditional bird houses and dovecotes are disregarded due to the insensitivity affecting the city life and the change in the public sense of art. In this study, the characteristic properties of traditional dovecotes and birdhouses, started in 13th century and ended in 19th century in Anatolia, are tried to be defined for the sustainability of the tradition and for giving a new direction to the designers.

Keywords—Birdhouse, conservation, human-animal relationship, traditional identity.

I. INTRODUCTION

An ATOLIA possesses a very rich architectural identity as a result of the different cultures it embraces. The formation of this identity is affected by cultures, traditions, religions, geographies and climatic conditions. There are numerous architectural productions which can be a subject in regional differentiations of architectural character formations. One of them is the bird houses that Turkish art had developed with its distinctive qualities.

Bird houses are elegant indicators of love of nature and animals in Anatolian culture. These structures, away from aesthetic worry, both beneficial and designed by good standards of judgement, are productions of a high level civilization. Apart from the nests produced by birds, there are houses done by people and more than that there are birds' water bowls, bird hospitals and buffets d'eau as interesting productions of animal lovers. They form a visual reference catalogue in the history of architecture regarding the materials used, the techniques applied, building types, facade organizations, curtain systems as well as elements like windows, doors, grids and guard rails [1].

In Anatolia, bird houses either can be made just for love and protection and these types can be seen on the building as a little model of the building or can be done for commercial purposes and can be seen in forms independent of the building. These buildings, that are different in architectural character, are formed as a result of the geographical, climatic and local material properties of the region they belong. This variation gave an identity of its own to the structures. However, this tradition vanished today due to different reasons. It is important that we know the structure no matter what its building aim is, for the continuity of the tradition to keep the best examples of human-animal love alive.

II. BIRDHOUSES

Turks fed and protected birds in bird houses believing that doves guard the lovers; swallows protect the houses, where they build nests, from fire; immigrant birds like storks go to holy places. These bird houses do not aim anything commercial but are built just as a result of animal love.

The bird houses have a special place in the history of Turkish plastic arts. With their architectural styles and forms bird houses are important documents of Ottoman Empire Era by means of different examples done in different regions and in different periods [2].

The history of bird houses goes back to old ages in Anatolia. The first bird house known is on İzzettin Keykavus Şifahane (Hospital) built in 13th century in Sivas. The bird houses, joined in Ottoman architecture after 1370s, became common at the 16th century. They become as a tradition at the 17th and 18th centuries and were made in spectacular styles. This tradition continued till the 19th century. More than symbolising the love and mercy of the Ottoman people, miniature arts also unfolds the elegant taste, wide imagination, the strength of the details and the architectural understanding of the artist, forming the Turkish art.

The bird houses, designed for sparrows, swallows, doves and storks usually, were first built on mosques, madrasahs, libraries, inns, Turkish baths, tombs, bridges, churches, synagogues and palaces, afterwards they were also placed on wooden houses. However, bird houses did not reach today as a result of burning of the wooden houses. Bird houses were not only an architectural tradition but at the same time it is a tradition of Ottoman foundations based on charity and good deeds.

Bird houses were built on structures like court walls, municipality buildings, covered bazaars, mosques, fountains, royal mint, dervish lodge, classrooms, small mosques, houses, inns, graveyards of the mosques, public kitchens, police stations, coffee houses, bridges, aqueducts, libraries, madrasahs, candle ateliers, clock towers, children schools, palaces and tombs. Along these structures the bird houses placed on fountains, aqueducts and bridges show that Turkish people made landscape organisations adding bird calls to water ripples; the bird houses on the inns tell attention is given

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to the sheltering of the animals like the people; and the birdhouses on the children's school point out the fact that it was done on purpose to infuse animal love to the children [1].

The bird houses are placed on sun-receiving, windprotected, south facades of the structures. Special attention is given to place them at high and secure places. The bird houses are divided into two according to their structures.

A. Cove Type Bird Houses

The first type of the bird houses are structures that can be found at any surface without any excessing parts outside (Fig. 1-2). These are built up by cavities, that are formed on the surface and dimensioned by bird sizes, either alone or a few cavities lined side by side or downwards. The ones which are made of stone are more common. However, there are types where brick and wood is used together. The best examples of this type are the bird houses of İstanbul Süleymaniye Mosque, İstanbul Yeni (New) Mosque, Üsküdar Yeni Valide Mosque [3],[4].



Fig. 1 Cell type dovecotes [5]



Fig. 2 Extension type dovecotes [6]

B. Extension Type Dovecotes

The second type of the bird houses is the ones with an artistic value and they are a little model of the structure they are placed on. They are the bird houses, added on the facade, protruding, resembling a palace or a kiosk with its elegancy. They usually belong to 18th century. With the same materials the balconies, windows, little rooms, window cages, canopies are produced with the tiniest details coherent with the original structure. On the bird houses, which show differences in every building, there are the oriel window type additions, balconies, arched windows, roofs, domes, mangers and water bowls (Fig. 2-3-4). The best examples of this group are found at Üsküdar

Ayazma Mosque, Üsküdar Yeni Valide Mosque, Üsküdar Selimiye Mosque (Fig. 3-4-5-6) [3].

Different types of bird houses can be seen on the same mosque. As an example, on the Üsküdar Ayazma Mosque there are four types of bird houses of different properties (Fig. 3-4).



Fig. 3 Üsküdar Ayazma Mosque [6]



Fig. 4 Üsküdar Ayazma Mosque [6]



Fig. 5 Üsküdar Yeni Valide Mosque [6]



Fig. 6 Üsküdar Yeni Valide Mosque [6]

Bird houses can be grouped as: cladded on stone walls, stone carved, stone relief, framing on alternating walls, cladded on alternating walls, stone facade cladded on alternating walls, brick facade cladded on alternating walls, carved on alternating walls or constructed with plastering techniques [2].

Bird houses are constructed with wood, stone, brick and composite materials, and decorated with paint, plaster, stone and brick. These are built by carving, masonry, and stucco techniques. Although the wooden examples are lost in time, the stone, brick and composite material examples have reached today. According to the remaining examples, it can be stated that bird houses are mostly made with coarse sandstone and the marble examples are few in number [1].

C. Bird Houses on Chimneys

Developed by a different process than the other two types, there is a third type of bird houses on the chimneys. This different process is the use of chimneys as bird houses with the change of the function. These come as variations of one cell on the facade or more than one cell on the facade. Bursa Yenişehir Sinan Paşa Kulliyye (Fig. 7) Public Kitchen chimneys remaining from 16th century and Merzifonlu Mustafa Paşa Palace chimneys in İncesu, Kayseri can be given as examples [2].



Fig. 7 Bursa Yenişehir Sinan Paşa Kulliyye [2]

III. DOVECOTES

Despite the fact that the contemporary use of dovecotes have decreased, the custom of feeding doves and existence of dovecotes contributed to the living of people and agriculture in Anatolia for centuries and played important roles in the sustainability of the ecologic system [7].

In ancient Greek mythology the dove representing Aphrodite, the goddess of beauty and love, is often mentioned in the books. The first religious information about doves can be found in the Old Testament. After the flood, Noah sends a dove to see if the land is dry or not and the dove returns back with an olive branch giving the good news of the life on earth. So the dove is accepted as the global symbol of peace and friendship. In the New Testament it is written that a white dove, representing the Holy Spirit, descends during the baptism of Christ. As a result dove is the symbol of Holy Spirit in Christianity. In the Koran it is stated that the cave, in which Mohammed sheltered while escaping from the Qurais tribe, was closed with a spider web and also a dove made a nest on the top of the entrance of the cave. As the cave was thought to be unused with the help of the animals, Mohammed was saved. Therefore most of the Muslim people regard the dove as a holy and propitious animal and do not hunt and do not eat its meat. As a result of this respect, birdhouses are made for the birds to shelter in Islamic architecture [2].

It is known that the dove manure named as "koğa" is an important export product in the Ottoman Empire. In the Ottoman Government Archives, there are documents related to the request of the foreign countries and various sales. It is known that dove manure is used in vineyards in Cappadocia; for the production of buckthorn which is the trade product of the times, in Kayseri; in Diyarbakır region to increase the fruitfulness in watermelon cultivation. For the manure demand, special structures are needed to collect and save the manure in wild dove feeding. These structures are named as "Güvercinlik" (For Doves) and "Boranhane" (wild dove house) in Diyarbakır. The dovecotes in Cappadocia region are as cells carved in stone or special towers, the dovecotes in Diyarbakır are buildings made of adobe [8].

The farmers around Kayseri region used dove manure to receive more products from limited fields and to increase fruitfulness in gardens and vineyards. Consequently numerous dovecotes are constructed. The dovecotes seen in Kayseri can be divided into two groups as rock-carved dovecotes and the chimney typed ones, drawing attention with their chimney like extensions.

A. Rock-Carved Dovecotes

The rock carved dovecotes mostly seen in Kayseri area is a result of the region's geologic properties. The volcanic tuff rocks are carved into living spaces, not only for doves but also for human, as a result of their easy-shaping properties.

There are relatively narrow openings serving as the entrance on the facades of this type of dovecotes and the surroundings of this entrance holes are decorated by the local artists, according to the traditions and social life of the time, to draw the attention of the birds (Fig. 8-9). The paints used for decorating the outer surface of the dovecotes are obtained from the soil which is called as "yoşa" in the region, containing wild weeds and iron oxide. The four tonnes of green are obtained from walnut shell and leaves, yellow from buckthorn, dark red from dried grapes, pink from onion tunic, brown from alder shell and cow urine is used to give glow [9].

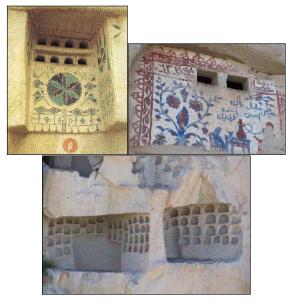


Fig. 8 Rock carved dovecotes in Cappadocia [10]



Fig. 9 Rock carved dovecotes in Cappadocia [11], [12]

The decorations carrying marks of the emotions, thoughts, messages and creativity of the local artists, are dated to 18th and 19th century. The figures of men smoking water pipe and people dancing a local dance of "kılıç-kalkan" are noteworthy among the simple and mystical figures of the Cappadocian artists. On the dovecotes of Göreme, Çavuşin and Zelve

valleys, the Wheel of fortune motifs, which are one of the oldest motifs of Anatolia, are seen [12]. These little structures, which are not paid much attention most of the time, are very important to show examples of Turkish Islamic Civil Art, which is very rare in Cappadocia region.

The rock-carved dovecotes are also seen in Ani ruins in Kars. The dovecotes at Ani are built by carving the rocks around Bostan River (Fig. 10). The dovecotes show different plans due to the position and dimensions of the rocks. As the bird houses show a neat work and are made of little rectangular equivalent spaces, it is thought that they are made by Ani artists with a special purpose. The bird houses at Ani show that communications by birds are used at Ani [13]. The rock-carved dovecotes are also found on the entrance of the underground cities (Fig. 11) [14].



Fig. 10 Rock carved dovecotes at Ani ruins, Kars [13]

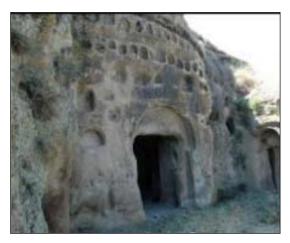


Fig. 11 Rock carved dovecotes on the entrance of underground cities [14]

B. Dovecotes with Chimneys

During the studies in 2005 at Ağırnas valley, Kayseri, dovecotes of the Byzantine period were found (Fig. 12-13). The intensity of the dovecotes and the care given to the structures show how important the dove manure was as a living resource and manure was produced here consciously. Not another settlement, having that many dovecotes, was met among Byzantine rock settlements. The dovecotes have similar architectural properties. And the similarities of the structures with the Turkish period dovecotes are surprising. The entrance facades of the dovecotes show a careful labour. The cross motifs in the structures made by relief or engraving techniques and the straps on the vertical or diagonal axes of the pyramidal roofs are unique and important properties special to the region. The walls of the structures have roost niches and the ground is decorated with water bowls. There is large manure collecting and storing areas either rectangular or disorderly planned, related to the dovecotes [15].



Fig. 12 The dovecotes with chimneys at Nevşehir region [8]



Fig. 13 The interior space use in dovecotes with chimneys [8]

The dovecotes are made up of functional units, like chimneys, pools, nests, feeding platforms and sun bathing eaves organized in a specific order. The structures, where only manure collecting for producing buckthorn, the important agricultural product of the times, is planned, are constructed with local materials and in harmony with the region's topographic characteristics (Fig. 14-15) [10].

There are many dovecotes in the Gesi region, which is in east Kayseri and its famous vineyards. The Gesi dovecotes are made up of two parts: the part that is carved in the stone as a cylindrical reservoir where the bird nests are and the prismatic tower, constructed of stone, placed on the top of the reservoir. The reservoir part helps the birds to lay eggs and reproduce and protects the birds from the climatic conditions. The tower prevents the entrance of human and animals, which may harm the birds. The security towers are designed with different plan types, different heights and different construction techniques and are compatible with the slope of the area they are built on. The harmony with the land and the articulations are planned

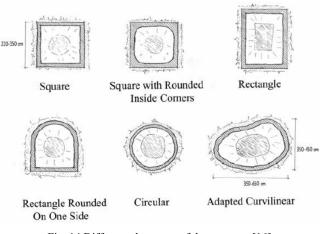


Fig. 14 Different plan types of dove towers [16]

skilfully.They are like a show of a long-established construction tradition in the region regarding the wall-making labour.

The main nesting area, which is placed under the chimneys groups which may be regarded as randomly lined up while looking from the surface, is a real product of design which combines function with basic construction application.

Without any worries about the form, the underground part that is designed according to the topographic conditions while keeping the functional properties in mind, reflects a genuine architecture [10].

Except the dovecotes in Kayseri region and around, the dovecotes specially designed for manure production can be

found in Diyarbakır region often. As the wild dove is called as "boran" the dovecotes are named as "wild dove's house" (Fig. 16-17-18).

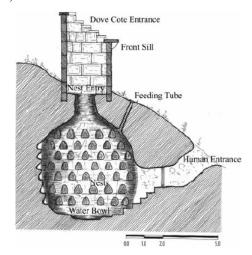


Fig.15 A typical section of a dove cote through the nesting space [7]

The people farming in the rural areas of Diyarbakır, made a dovecote near or on a higher place while constructing their houses. The aim is primarily to obtain dove manure. The manure collected from the dovecote every year, is used in agriculture. There are dove entrance holes at a high point, near the roofs of outer surfaces of these buildings. These holes refer to different directions. However, the entrance holes, which are closer to ground on a sloped area, are closed to prevent the entrance of various animals and to prevent against the wind. Usually one of the main facades of the dovecotes is directed to the scenery. The numbers of dove entrance holes are usually more on this side. The simplest of these rectangular shaped spaces are the ones with one room. This place called "one roomed dovecote". Partitions are called as "lüle" in the local language. The dovecotes in the Karaçan village usually are made of one, two, three or five lüles. To develop a bigger dovecote, there is an example having more partitions. The building material used gives opportunities for these additions. Usually the walls of these rectangular dove shelters are made of adobe. These walls averagely 55 cm in width and four meters of height are even wider till one meter height from the ground. The roof covered with earth is flat [17], [18].



Fig. 16 Dovecotes at Diyarbakır [19]



Fig. 17 Dovecotes at Diyarbakır [19]

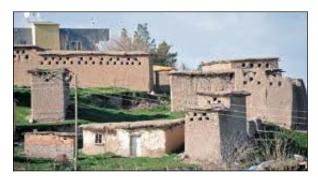


Fig. 18 Dovecotes at Diyarbakır [20]

After the spreading of artificial manure in Turkey in 1950's and 1960's, the need of dove manure had decreased both in Kayseri and in Diyarbakır and the dovecotes had lost their function.

It is important for ecology and tourism activities to make efforts for the return of the doves, which are known as friends of humankind and symbolising the peace, to their living areas through the historical timeline.

IV. CONCLUSIONS

As one of the old and important indicators of "mercy" and "animal love", that we are losing day by day, the traditional bird houses and dovecotes, as pieces of a sustainable environment, must be carried on to next generations with all their originality.

The dovecotes are as areas of unspoiled cultural heritage and reflecting the traditional rural life of the area are qualified as to draw attention of the visitors.

The dovecotes are structures documenting a period not only in means of architecture, but also agriculture, economy and social history. The required repair and maintenance must be given to these functional structures, which are built by simple construction techniques and with basic materials from nature, for keeping them alive.

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