

Dovecotes and Cave Dwellings of Gesi – Kayseri (Turkey)

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Fig. 1. Location map

Short information about the region and the history of dovecotes and cave dwellings

Kayseri, the capital of ancient Cappadocia, is one of the Mid Anatolian cities of Turkey. Gesi Valley; which is located near to this city, emphasize the historical importance of the area with its ancient buildings. Gesi Valley has the typical characteristics of the geology and morphology of the Cappadocia, formed by the dominance of the volcanoes, where one of the tiny streams of Kızılırmak passes through soft volcanic rocks (IMAMOGLU et al., 2005).

Early examples of bird houses as a part of Turkish culture date back to the 15th century. On the other hand, it had taken three centuries to gain perfection and master pieces of these traditional structures have built in 18th and 19th centuries (ERMAN, 2014). These structures generally reflect the stonemasonry culture of that period; they have stone carved small bird houses placed into the wall textures, and are very different from the structures built as dovecotes, both as for architecture and purpose of building (ERMAN, 2014). The basic aim of bird houses was to protect the birds from attacks by people and animals, and also from bad weather conditions, whereas dovecotes in several regions of Turkey such as Kayseri, Nevşehir and Diyarbakır are built as independent structures with the aim of using the doves, not protecting them (ÖZEN, 2012). The date of first dovecotes in Cappadocia is not known exactly, but it is certainly known that the main income source for the people in Kayseri was the trade of local agricultural products in 19th century, and that the dovecotes were used to provide the important element named *koğa* (dove fertilizer) in the cultivation of these products (ISCEN, 2007). Other sources argue that some doves were eaten and their feathers used as filling material in home textile products, as they are strong insulators (IMAMOGLU et al., 2005). In addition, dove fertilizers were used in the production of gunpowder.

Beside dovecotes, there is another important cultural heritage in Anatolia. The older dwellers of this land started a tradition to continue for centuries, by digging the rock and living in it. The date of first appearance is not known exactly, but it is assumed that the date of cave dwellings goes back to the 11th century. Despite several examples used for diffrent aims can be seen at the other regions and cities, it is obvious that these structures carved on the valley walls in Kayseri are used for settlement, as well as those in the Gesi Valley. Gesi cave dwellings, established in valley sides, are different from the similar examples of Efkere, Gürpınar, Kayabağ (Darsiyak) and Güzelköy (Nize), and also presents dovecotes which are unique to the region because of their combined structures with cave dwellings.



Fig. 2. Cave dwellings of Gesi



Fig. 3. Dovecotes of Gesi



Fig. 4. Inside of a dovecote in Gesi





Fig. 5, 6, 7. Frescoes in a church



Structural Properties of Dovecotes and Cave Dwellings

The cave dwellings at Gesi are settled on the slopes as two or three sets, and some of them have steps reaching to the door (Fig. 2). With the exception of those cave dwellings that were dug for special purposes, they have typically no frescos or stonemasonry excluding little holes on the ground used as storage or stoves, shelves carved on the walls and suspension handles. They are designed as consisting of one or interconnected two rooms with windows sometimes, a few small rooms were added to those. The only exception of this simplicity is a church of which the frescoes are protected up to date (Figs. 3 and 4). The church has a dome ceiling and an altar and at least two graves carved on the ground (Fig. 5); through a corridor, a second building with wider and higher ceiling is reached. Common characteristic of all these rock settlements are the niches carved as quarter squares on their walls for the doves. Another common characteristic is represented by the later realization of dove chimneys.





Fig. 7 and 8. Dovecotes and cave dwellings of Gesi

Gesi dovecotes, numbered as 142 in some resources, have a unique and different architectural structure when compared with the dovecotes architecture in Turkey and neighbouring countries (BÜYÜKMIHÇI, 2006). For instance, the dovecotes in Esfahan, Iran are towers with their internal walls covered by niches, and opened at the top (AMIRKHANI et al., 2009); in Diyarbakir region, Turkey, they are buildings with four squares named as “boranhane” and with several holes close to the roof to help doves enter easily (BEKLEYEN, 2007). In the nearby town of Kayseri, Nevşehir, the structure is completely different: buildings with niches or small holes carved on the walls of chambers built in the rocks or directly on the surfaces of the rocks, and decorated by designs made with a paint a kind of mixture of soil and mud named yoşa and a handmade gypsum plaster made mixing egg’s white and plant extracts (GÜLYAZ, 1995).

The dovecotes can be examined in two sections. The first section is the part at the surface, built as stone woven chimneys, 2-3 m high and 1-2 m wide, can be grouped in three categories such as four squares, half circle, and circle shaped ones. In all three types, the opening of the chimneys are built as horizontal and sometimes dip in the same direction as the slope, through steps or, in other cases, by cutting the stones directly. The construction techniques of the aforementioned chimneys are also different: some are built by putting stones one on top the other without any cement as some of them are bounded stone walls. Some of the walling stones have decoration on chimneys or vaults for doves, but some of them do not (Fig. 6).

The second section consists of the rooms covered by niches with quarter circles, with 20-25 cm height and 15-20 cm diameters, and located underground. The architecture of these rooms is grouped in two types: the first one is the simple structure with a room or two interconected rooms built as a dovecote with horizontal and short corridors going inside through the slope with 6-13 square meters and 4-6 m of height (Fig. 7). The second group covers the cave dwellings which have been modified and turned into the underground room of a dovecote and sizes of those built as a cave vary a lot with heights changing between 2,5 and 6 m (Fig. 8).

While dovecotes with the first type of underground sections can be see in a few valleys in Kayseri; the ones in the second group, established on an older cave dwelling by building a chimney on top of it later, are unique to this valley, as far as it is known. Even though the architectural forms are different, two buildings have similarities in basic elements and functions. In both examples we see a chimney section for the doves to enter in and go out, an underground section with walls covered by high-ceiling roosts, probably where the doves could fly and the fertilizers be collected, and a corridor through which the underground section can be accessed. In modified rooms, there is a door instead of this corridor.

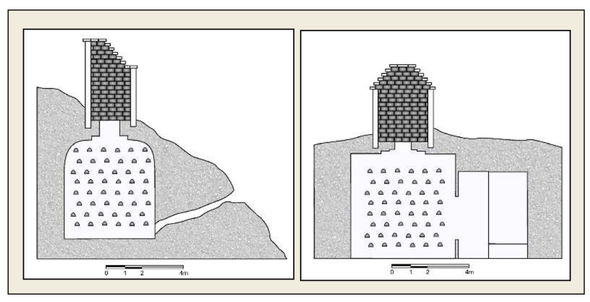


Fig. 9. Sketch profile of a dovecote (left) and a cave dwelling transformed to a dovecote (right)

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