# A TRADITIONAL WOODEN STRUCTURE TECHNIQUE FROM ANATOLIA. WOODEN GRANARIES IN THE ANCIENT REGION OF LYCIA (TEKE PENINSULA)

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**Abstract:** Teke Peninsula, known in the Age of Antiquity as Lycia, was a land of fertile plains and the scene of many settlements that contained storage areas bearing evidence of agricultural production dating to the Neolithic Era. Among the most important witnesses to the past production of the region are the wooden granaries that are still being used today. They are a manifestation of the area's rich agricultural production and at the same time, a reflection of the wealth of its wooden architecture. The main aim of this article is to describe the architectural design and structural details of the wooden granaries of the Teke Peninsula, known as Lycia in the Age of Antiquity. The information provided can thus be transferred to future generations as documentation of the history of agricultural production in Anatolia and of the wealth of wooden architecture that displays firm ties to the past.

**Key words:** Architectural heritage, Lycia, agricultural production, granary, wooden architecture, architectural continuity.

# 1. Introduction

The area known as Lycia in the Age of Antiquity is located to the west of Antalya, one of the most important cities in the Mediterranean Region of Anatolia; Lycia was the name given to what is now known as the Teke Peninsula (Figure 1). The name "Teke" derives from the Teke Principality, a settlement originating in the times of the Seljuks [10]. On the southern border of the area is the Mediterranean; the

north border starts from the immediate west of Antalya, stretching toward the southwest, forming an extension of the Bey Mountains and the Akdağ mountain chain toward the northwest [2]. Antalya constitutes the area's eastern border, the Gulf of Fethiye its western border.

Lycia, meaning "land of light," occupied today's Teke peninsula, a predominantly mountainous region. The western extension of the Taurus Mountain Range is situated within the boundaries of this

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region and is called the "Lycian Taurus Range" [10]. Much of the Lycian coastline is made up of rocky cliffs. This topography has permitted the creation of a harbor at various locations. Strabo writes that the Lycian coast is rough, uneven, and impassable but that the harbors are very well equipped [11].



Fig. 1. Teke Peninsula (Antique Lycia).

Google Earth

The low coastal parts lying at the foot of the rugged terrain are enriched with a Mediterranean climate, while the highlands exhibit cold and snowy continental weather conditions. region's longest stream, at 60 km, is Xanthos (Eşen Stream), into which many small tributaries flow. Another source of flowing water in the region is the Arykandos Stream (Başgöz), which is nourished by the high mountains in the north. The inner regions that are not affected by the Mediterranean climate are in the southwest-northeast direction, covered by fertile plains that stretch up to 15 km [2]. Among these plains are Elmalı and Korkuteli in North Lycia, Eşen and Kaş Bezirgan plains in Central Lycia, and Finike plain in South Lycia.

As today, Lycia in ancient times had a concentrated covering of flora. This blanket of vegetation was comprised of pine, cedar, and cypress forests as well as shrubs and small trees. The Lycia of

antiquity is particularly famous for its cedar and cypress woodlands [2]. The Lycians used these two types of trees for making ships and houses [11]. Timber played an important role in the economy of the region, besides being a significant object of trade [18].

The region has been the scene of significant agricultural production since the Neolithic Age. Indicators of the agricultural history of the area are the silos containing large storage jars that stand adjacent to the houses in some of the settlements of the Neolithic period and the Early Bronze Age. Karataş-Semayük Levels I-II contain a village settlement that reveals evidence of the rich agricultural production in the area. There is a rectangular two-story structure surrounded by walls in the center of the village. There are wattle and daub houses situated around this central structure which was used as housing on the upper floor and had numerous storage jars on the lower floor, demonstrating its function as a storehouse. The structure in fact belongs to the village administrator and functions as a communal granary [6]. The back rooms of the long and narrow megaron-type of houses at Karataş-Semayük were used as granaries [13, 14, 15].

The tradition of the granary is also seen in the region during the Roman Empire period. The granary (Hadrian granarium) behind the swamp on the northwest of the hills of the ancient city of Patara, the first capital of the Lycian Union in the time of Emperor Hadrian, was built by Hadrian and his wife Sabina in the second century AD. Hadrian granarium was 56 m long, 32 m wide, and consisted of 7 rooms. There is another granarium in another Lycian city, Andriake, which was built during the reign

of Hadrian in 129 AD (Horrea Hadriani). This granary comprised 7 sections, it was 65 m long and 32 m wide; its interior measurements totaled 2307 m<sup>2</sup>, making it one of the three largest Roman granaries [2].

The wooden granaries that are still being used today in the plentiful plains of the region are important witnesses to the past production of the region. The grains and legumes cultivated in these fertile plains were stored in these structures, which are situated in Doyran Village, Sinan Değirmeni in the district of Konyaaltı, Antalya, in Bezirgan and Gökçeören (formerly Seyret) Neighborhoods Bezirgan plain in the district of Kaş, and in the villages in the Elmalı and Finike plains.

These granaries, the most significant representatives of the region's culture of wooden architecture, caught the attention of the British archeologist Charles Fellows in the nineteenth century. Fellows likened the construction system and facades of the granaries to those of the Lycian housetype rock-cut tombs [7, 8, 9]. Later, many other researchers delved deeper into the facade features of the granaries [3]. One group of scholars compared the buildings wooden with the Lycian houses, maintaining that it was these that were the antecedents of the Lycian house-type rock-cut tombs and that the construction technique of the Lycian houses was still alive today in the wooden granaries of the region that was once Lycia [4, 5].

This article thus aims to describe the region's wooden granaries, so much an important part of its urbanistic and cultural landscape. While previous articles in the literature have predominantly treated the similarities between these structures and the Lycian house-type rockcut tombs and Lycian houses, this paper

will describe in detail plan, the construction systems, architectural details, wooden joint techniques, and materials, facade features, craftsmanship of the structures in an attempt document Anatolia's agricultural past as well as these buildings that have been part of the rich history of wooden architecture in the region, thereby contributing to providing knowledge for future generations.

### 2. Materials and Methods

Grains from the fertile plains constituted the main product of the regional economy. The agriculture-based economy featured the principal cultivation of wheat and barley. Storing the grains was equally as important as achieving production. The wooden granaries that are known to have existed in the region for the last 250-300 years are evidence of the farming culture and bulk storage methods adopted in the area.

Seeking to introduce the architectural design and structural details of these granaries, in August 2021 the author made an investigation of the granaries that abundantly exist in the villages of Doyran in Konyaaltı, Antalya, in the Elmalı Plain, Sinan Değrmeni, and those in the Kaş Bezirgan Plains, Gökçeören (formerly Seyret) Neighborhood, and in Finike Plains, Yazır Neighborhood. The granaries, which stand as a legacy of wooden architecture, were surveyed and photographed, and their plan, construction systems, wooden techniques, structural features, building materials, and facade characteristics were documented to provide information for future generations as a contribution to the literature. Additionally, interviews were held with the village folk to gather more information about the granaries' use, their ages, architectural elements, and their locally assigned names.

### 3. Wooden Granaries

The economy of ancient Lycia (Teke Peninsula) relied on agriculture and the wooden granaries are important witnesses to the agricultural production history of the region. Agricultural activity was mostly concentrated in the villages of Doyran, Antalya Konyaaltı, Sinan Değirmenleri, Elmalı Plain, the Kas Bezirgan plains and Gökçeören (Seyret) Neighborhood, and in the Elmalı Finike plains.

The granaries stood as annexes to houses and stored legumes and cereals cultivated in the fertile plains of the region. Some of them were erected in the courtyards of the houses while others were built collectively in an area close to the village that was used as a thrashing field. The granaries in the villages of Konyaltı Doyran, Sinan Değirmenleri, Kaş Bezirgan, and Gökçeören (Seyret) were not adjacent to the houses. These were built close to the villages on slopes to protect against rain and floods. They were used as thrashing locations and erected side by side in an area that was called "ambar altı." These were guarded by watchmen. The watchman would guard the granaries when the village folk went upland. The watchman who provided security for the granaries would live in the same village with his family and be awarded a share of the yield for his service. In the villages of Elmalı plains, the granaries stood in the courtyard. Every house had a family granary in the yard. Sometimes the granaries of two families

would be in the same yard. It is possible to see granaries in every village in Elmalı especially in Müren, Beyler, Karamık, Bayralar, Gölova, Eymir, Kuzuköy, Söğre, Gökpınar, and Yapraklı. Another area in the region that has granaries is Finike Plain, where granaries connected to houses can be seen in Neighborhood. Some of these granaries are freestanding in the house yards while others adjoin the garden walls. The granaries inside the courtyards stand at a point far from the house as a precaution against fire.

The granaries, called "tahta ambar" (wooden storehouse) and "gavur ambarı" (infidel's storehouse) by the village folk, primarily store wheat and barley, and also chick-peas, corn, oats, beans, lentils, and other legumes and grains. The granaries are where the village folk not only stored their agricultural products, but also some of their valuables. They sometimes even safeguarded cash and gold. Sometimes the property stored would be mattresses and quilts and also daily utensils such as pots and ladles [16, 17]. The village residents say that some of the granaries used to belong to the Greeks and others were inherited from their own ancestors.

They estimate that the granaries are 250-300 years old and were not built in any particular directional pattern. However, the collective granaries were built aligned with the topography. The courtyard granaries do not seem to have been situated according to any directional preference, but it is observed that some were built on an east-west axis.

# 3.1. Construction Systems and Materials

Although of different dimensions, all of the granaries were constructed in the same way. Granaries were usually built on top of several large rocks and aligned on top of each other, an arrangement that raised the structure to about 40-50 cm off the ground (Figure 2). The reason for raising the granary was to ensure that the foundation was flat and also to make sure that air circulated beneath the building.

The raised structures were thus protected from water and earth. Granaries were not directly built on the ground as protection against humidity; this practice also promoted pest control. There are however rare examples of buildings constructed in masonry in the dry wall technique on top of a sub-basement.



Fig. 2. Granaries rising on top of rocks (Author)

In this case, square or circular crosssectional floor beams are placed at 0.5 m intervals along the short edge of the structure on top of the foundation rocks. The width of the main bridging joists is 13-15 cm. Above these can be found beams laid reversely (along the long edge) again at intervals [16]. The beams in both directions are tied together with a wooden joint; this interlocking technique is locally called "kurtboğazı" (wolf's throat) (Figure 3).



Fig. 3. The corner beams joined together in the kurtboğazı joint system (Author)

The interlocking "kurtboğazı" technique uses square-cut timber, where rectangular cavities are opened in two directions to allow for the top piece to fit into the lower one [12]. The ends of the beams interlocked in the kurtboğaz system that are placed on top of the main floor beams sometimes project only from the four corners and sometimes both from the corners and from the center of the front and back facades, while some project outwards from all sides (Figures 2 and 3). These projections give the granary a characteristic appearance. The complete structure of the wooden granary is situated on this base. The granaries are constructed from cedar trees, known in the area as "katran." Cedar trees are longlasting, hard, and durable trees that also have antiseptic property. This property helps to keep insects and other pests away from the structure [1]. The granaries

made of cedar (katran) have a rectangular plan and are either one- or two-storied. Although their dimensions may vary, in general the granaries in the region measure on average 2.5-3-4 m long x 3-4.6 m wide and 3-4 m high. The smallest stores 9 tons, and the largest 18-27 tons of grains [16]. In the villages of Beyler, Bayralar, and Karmık in Elmalı, the granaries are a symbol of the prominence of wealthy landowners ("aghas/beys") who built granaries of a dimension of 4x8 m at a height of 5.5 m. These towering granaries have a capacity of holding 40-50 tons of grain [10] (Figure 4). Some of the granaries belonging to the aghas and beys had sitting rooms. These rooms were designed for housing the watchman who was guarding the grains. This type of granary was called "ambar ev" (storagehouse).





Fig. 4. The large 20-40-ton-capacity granaries belonging to the feudal aghas and beys of Elmalı, Beyler Village (Author)

The granaries usually consisted of a single rectangular space. Some of the villages of Elmalı and Sinan Değirmeni, which derives its name from the old Sinan Değirmeni in Doyran Village in Antalya

Konyaaltı, are locations where the granaries only have a single space. The granaries in Sinan Değirmeni have a small, slightly raised, single door in the center of their facades (Figure 5). The single-space

granaries in the villages of Elmalı Plain have a door that is 1.5 m high in the middle of the facade from which the space is accessed by means of a moveable wooden ladder (Figure 5).



Fig 5. Granaries consisting of a single space, with and without stairs in front (Author)

In front of some granaries, however, there is an open-air section. This section of the granary, seen in the villages in Kaş Bezirgan and Gökçeören (Seyret), the mountain village of Yazır in Finike, and in some of the villages of Elmalı, is called "sundurma" (porch) in Bezirgan and

Gökçeören, and "köşk" (kiosk) in the villages of Yazır and Elmalı. Rising 1.5 m above the ground, these sections serve the purpose of providing a space to facilitate the loading of the product onto horses and donkeys (Figure 6).





Fig. 6. "Köşk" types of granaries in Elmalı and in the village of Finike Yazır (Author)

The products loaded in this way are taken to the mill to be ground. The "sundurma" structure of the Bezirgan timber granaries does not have a banister,

except in the *köşk* structures in Elmalı, where the banisters are of wood. Sometimes a moveable wooden ladder is used to access the *sundurma* and the

köşk. Underneath the ladder is a "seki taşı" (platform stone) to facilitate loading. In both types, the roof has wide eaves to protect the *sundurma/köşk* from rain. In the "köşk" type, some products are left to dry, while during the summer, the owner's family may use this as a place to sit and even as a place to sleep during warm summer nights. The granary is accessed through the *sundurma-köşk* section. The door dimensions are around 1 m x 70 cm. The motif on each granary door is different. The motifs carry the signature of the craftsmen who built the granary. The

motifs on the doors are also the only decorative element in the granary. Besides the main door, the large "agha/bey" granaries in Elmalı have bin lids, locally called "çeşme" (fountain), on the lower part of their side facades for loading products (Figure 7). Also in the granaries in the Elmalı Plain, there are small openings, locally *kedilik* (cat holes), on the lower part of the granary doors to allow cats to go in and out to catch rats below (Figure 7). The granaries have no windows.



Fig. 7. Right: The side facades of the "aga/bey" granaries in Elmalı have unloading lids called "çeşme" (fountain) (Author). Left: The "cat holes" (locally kedilik) on the granary doors in the Elmalı area (Author)

The rectangular granary space has been completely constructed in wood masonry. Granary construction involves interlocking wood systems, from ground to roof. Nails are not used in the construction of the granary due to the risk of decay and subsequent insect invasion. If nails are to be used at all, wooden joints (locally *mih*) are preferred to metal nails. Granaries that are built completely with interlocking wood systems are portable and can be dismantled and easily moved to a different location.

The granary space made from timber cut from cedar trees is assembled and constructed by means of one of the joint systems used in the region, locally known as "çalma boğaz." In the "çalma boğaz" joint system, the wooden walls are built using a system of creating channels (locally kiniş/keniş) into which the tips of the timber spikes are fitted. The timber is fitted into these channels (kiniş/keniş) with a corbeling technique, ultimately forming the walls (Figure 8).

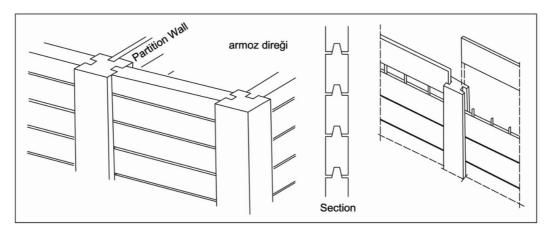


Fig. 8. Channels (kiniş/keniş) in the "çalma boğaz" joint system, section and wooden nails (mıh) (Author)

Wooden posts are placed at 70-90 cm intervals before the walls of the granary are constructed. The thicker posts at the corners are locally called armaz/armoz direği (corner post). These corner posts (armaz/armoz direği) have channels (locally called kanat, or wings) that have been opened from two directions. The posts in-between have channels (kiniş/keniş) opened on three or four sides (called three-kanat or four-kanat) if there

is an interior partition, or channels opened on two sides (called two-kanat) if there is no inner partition [19] (Figures 9 and 10). Sometimes wooden nails (mih) are used between the posts but the general practice is not to use nails at all. The walls are constructed by laying 3 cm-thick cedar tree planks of a dimension of 60-80 cm parallel and on top of each other to fit into the channels (kiniş/keniş) (Figure 11).

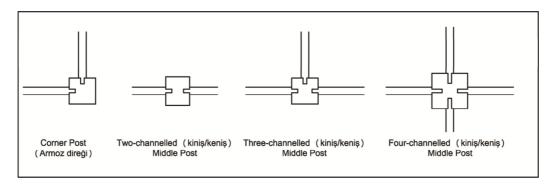


Fig. 9. The direction of channels in the corner posts (armaz direği) and other posts (middle posts) in the "çalma boğaz" joint system (Adapted from: Tayla 2007, Fig 385)

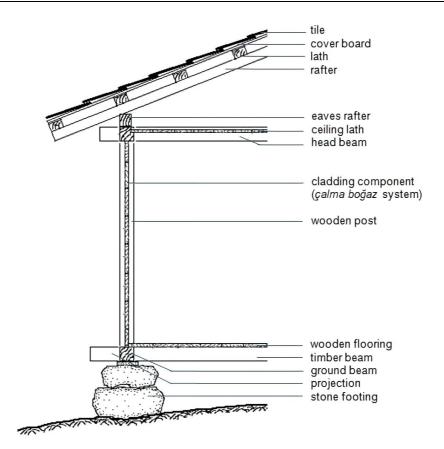


Fig. 10. A detail of the system (Author)



Fig. 11. Right: The head beam of the top wall construction is fitted into the posts in the "kurt boğazı" joint system (Author). Left: Channels (kiniş/keniş) opened in the posts and the timber planks fitted into the channels (kiniş/keniş) (Author)

This "çalma boğaz" system thus consists in piling up straight planks of timber between the posts and opening channels

(kiniş/keniş) in the desired direction. Because of the thickness of the planks, their ends are whittled on a slant so that they fit more easily into the channels (kiniş/keniş). The posts sit on the base beams that rise up from the ground and fit into the upper rim of the wall construction (head beam) in the "kurt boğazı" joint system (Figure 11). The most striking characteristic of structures built in this system is that they can be dismantled, moved to another location, and rebuilt.

Horizontal beams can be found sometimes on the side and back facade walls for reinforcement. These beams can be found in the granaries—even in the large "aga/bey" granaries—of all the villages of Elmalı and in the Finike Yazır storehouses; they are joined to the

wooden walls with the "kurt boğazı" joint system. The horizontal beams, which are joined at the corners in a half-interlocking technique, are extended to form a projection (Figures 3 and 6). Horizontal beams cannot be seen in the granaries of Konyaaltı Sinan Değirmeni or in Kaş Bezirgan and Gökçeören (Seyret).

# 3.2. Plan Type

The spatial plan of the granaries consists of box-like rectangular sections that surround a U-shaped interior area (Figures 12, 13, and 14).

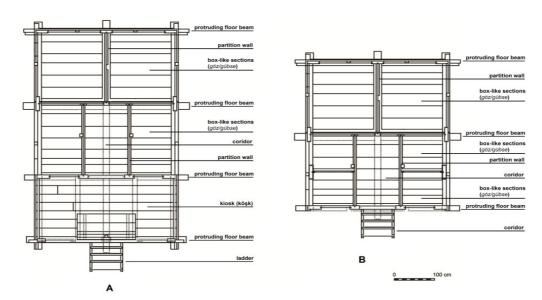


Fig. 12. Plan of the granary. A: With Köşk. B: Without Köşk (Adapted from: Özakın 2008, Figure 12)

These box-like sections are locally called *göz* or *gübse*. On average, a granary will have four, six or eight *göz/gübse*. The sections can be enlarged by removing the wooden separators [16]. The total area of utilization is on average 25-30 m<sup>2</sup>. A different grain is loaded into each section *(gübse/göz)*. The height of the interior is

3.80 m. A narrow corridor leads from the entrance to the base of the granary. Underneath the wooden floor of the corridor are also sections with or without lids in which grains are kept (Figure 15). These compartments can also be used for storing dried foods in baskets or sacks.

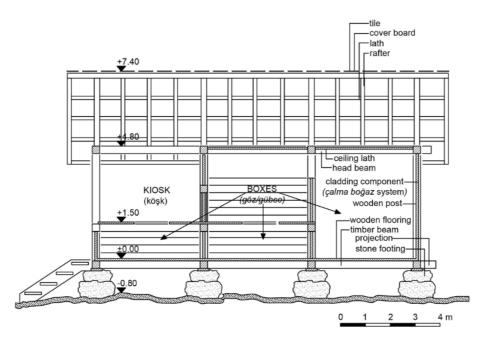


Fig. 13. Longitudinal section of plan type with sundurma (porch) (Author)

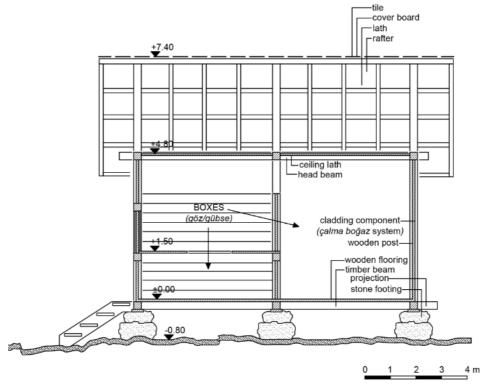


Fig. 14. Longitudinal section of plan type without sundurma (porch) (Author)



Fig. 15. Compartments (gübse) below the granary floor, on the side, and in the back (Author)

There are usually four box-like sections (göz/gübse) on the two sides of the narrow corridor. Across from the corridor, at the back, are two larger gübse (Figure 15). Sometimes there is a platform, or seki, in the section in the back. The "köşk"

structures in front of the granaries in Elmalı and Yazır have compartments (göz/gübse) in the floor to store goods. These granary compartments (göz/gübse) can be seen when their wooden lids are lifted (Figure 16).



Fig. 16. Right: Interior of Elmalı "Ağa/bey" granaries. Gübse with wooden lids on the base of the granary (Author). Left: Granary lids on the base of the "Köşk" (Author)

The depth of the compartments (*göz/gübse*) is 150-300 cm. The product is poured directly into the compartments

(*göz/gübse*) without using plastic bags or sacks. This way, the product is exposed to the air and remains fresh and ready for

consumption. The grains are loaded into the compartments (*göz/gübse*) at the end of July or the beginning of August. From here, they are taken to the mill. The spatial plans of the large "aga/bey" granaries in Elmalı are the same, with box-compartments (*göz/gübse*) surrounding the long U-shaped corridor. The number of compartments (*göz/gübse*) is higher in these structures. *Gübse* with wooden lids can be found on the floor of the granaries (Figure 16). In both types, fruits and

vegetables are stored in the entrance corridor.

All of the compartments (göz/gübse) in the granaries and the box-like walls of the compartments are built with the "çalma boğaz" joint system (Figure 17). This time, channels (kiniş/keniş) have been opened from three of four directions in the wooden posts [19]. This technique allows the addition or subtraction of a compartment (göz/ gübse) when it is necessary [10].



Fig. 17. Göz/gübse in the sections of the granary, built in the "çalma boğaz" joint system.

Channels (kiniş/keniş) opened in two and three directions (Author)

# 3.3. Roof System

The roofs of the granaries are freestanding and steep gabled with wide eaves. The original roofs are the "padavra" type, made of thin slats of wood (Figure 18). This roof covering is called "tura" in the region [10]. The padavras were later covered over with bricks. Today,

deteriorating roofs are covered over with sheet metal.

The slope of the roofs varied in each of the regions studied. In the Kaş Bezirgan plains, roof slopes vary in the range of 110-120%. In the granaries of the villages of Gökçeören (Seyret), Finike Yazır, and Elmalı plains, roof slopes are between 90-100%. The slope in Sinan Değirmenleri is 40-50%.





Fig. 18. Padavra type of roof (Author)

Roof tie beams also vary. In Sinan Değirmenleri, the height of the tie beams in the middle and at the two sides of the roofs are on average 16/10 cm. The granary roofs in the villages of Kaş Bezirgan, Gökçeören (Seyret), Finike Yazır, and Elmalı plains do not have a middle tie beam. In these roofs, the rafters are on average 10/15 cm. The brick tile battens are on average 6/8 cm and have been placed at intervals of an average of 40 cm.

In the granaries of Sinan Değirmeni in Doyran Village, the front and back

pediments of the gabled roof have been left open for ventilation purposes. On the other hand, since the roof has wide eaves, rain cannot penetrate the granary. The eaves cover the "köşk" and "sundurma" in granaries that have them. In some granaries in the villages of Kaş Bezirgan and Gökçeören, as well as in the villages of Elmalı Plain, the sides of the steep gabled roofs lean halfway down the granary and are supported with wooden buttresses (Figure 19).



Fig. 19. Supporting wooden buttresses of the steep gabled roof. Granaries in the villages of Kaş Bezirgan and Elmalı Plains (Author)

Another characteristic of the roof systems of the granaries is that the wall construction is such that the head beam projects outward from the frame beams and main ties at the corners, hanging over the structure by 20-25 cm (Figure 20). The protruding main floor beams, the

supporting horizontal wall beams, and the projections are called "piştuvan" in the region. The *piştuvan* gives the granary facades a characteristic appearance. All the elements of the roof are joined in the "kurt boğazı" technique (Figure 21).



Fig 20. In the construction of the roof walls, the ends of the frame girders of the head beam and of the tie beams are projected outwards at the corners and forward in the middle, all elements of the roof being joined together using the "kurt boğazı" joint system (Author)

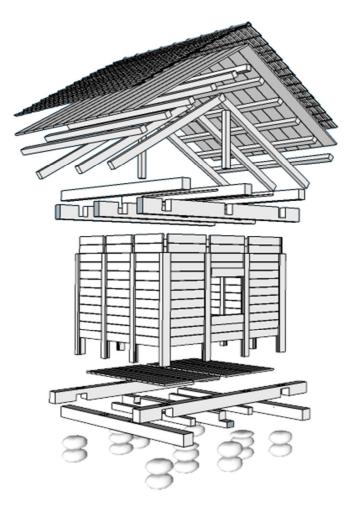


Fig. 21. A visual representation of the analysis (Author)

# 4. Conclusion

The wooden granaries of today's Teke Peninsula are witnesses to the production history of ancient Lycia. These wooden granaries reflect the wealth of agricultural production and represent examples of the wooden architecture of ancient Lycia, making it clear that they are an extension of the Lycian culture. Each one of these storehouses, which is seen in almost all of the rural settlements in the area, is a

symbolic monument to the culture of Lycia. The granaries embody the elements of Lycian architecture and are a valuable indication of architectural continuity. It is unfortunate however that these unique elements of the architectural legacy of the region are not being sufficiently protected. Under the influence of changing social and economic conditions and due to circumstances such as migrations from villages to cities, some of the structures are not being used and

because of this, they are prone to damage and deterioration. The number of granaries in Kaş Bezirgan was once 250; this number has now dropped to 100. In the same way, the number of granaries in the village of Kaş Gökçeören (Seyret) has decreased from 150 to 50. In Finike Yazır, the granaries used to number 200; now only 150 are standing. The number of granaries in Antalya Doyran Village Sinan Değirmenleri used to be 284; today only 86 exist (Table 1).

Table 1
The location, year of construction, previous numbers, numbers existing today of the granaries, and their plan types

Location	Construction year*	Previous number	Number existing today	Plan type
Sinan Değirmenleri	between 250-300	284	86	single place (without sundurma or köşk)
Kaş Bezirgan Plain	between 250-300	250	100	with sundurma
Kaş Gökçeören (formerly Seyret)	between 250-300	150	50	with sundurma
Elmali Plain	between 250-300	One in every	More than half	Single pace with köşk and without köşk
Finike Yazir	between 250-300	300	150	with sundurma

<sup>\*</sup> As stated by granary owners;

A promising development has been that in 2012-2013, the granaries in the villages of Kaş Bezirgan and Gökçeören (Seyret), representing documentation of the rich agricultural legacy of Anatolia, were designated as registered cultural assets to be conserved. However, the Finike Yazır granaries have not as yet received this designation. The granaries of Elmalı Plain were taken under protection with the "Kırkambar Project" that was launched under the "Common Cultural Heritage: Preservation and Dialogue

between Turkey and the EU–II (CCH-II) Grant Program." The project calls for the re-functionalization of some of the granaries by their owners.

It is a fact that although these valuable structures, assessed today by the locals of the region as their "family heritage," can be officially registered, they can also fall prey to the challenges that climate conditions and time present. Some granary owners who cannot sufficiently and regularly maintain the structures

<sup>\*\*</sup> As stated by granary owners.

choose to sell them to touristic facilities in the region.

The granaries of this region are in actuality an open-air museum that contributes greatly to the ambiance and cultural landscape, and it is important that they be preserved as works of cultural heritage and passed on to future generations. Granaries are significant examples of traditional vernacular architecture and striking elements in the stages of agricultural development in Anatolia. Their preservation is of vital importance.

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