Interior Granaries and Cabinets in Traditional Dwelling Use as A Local Identity Component: The Case of Antalya Akseki[18]

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Abstract

Warehouses are cultural assets that are a product of hundreds of years of architectural tradition in the geography of Antalya with their very different settlement, construction technique, material, craft, and usage qualities. The grain warehouses investigated in this direction represent the local identity components unique to the region. These warehouses, whose numbers are rapidly decreasing; a large part of it has disappeared due to reasons such as rural-to-urban migration, socio-economic reasons, lack of conservation awareness, and ignoring of interior reinforcement elements in conservation approaches. In this study, grain warehouses and cabinets from the reinforcement elements in the interior use of Antalya Akseki traditional residences; Within the scope of local identity components, functional forms of formation were analyzed in terms of construction technique and material use. With this study, it has been revealed that the granaries and cabinets in the use of interior space, which is one of our local identity elements, should be protected without disappearing and evaluated in terms of sustainable qualities and transferred to future generations.

Keywords: Antalya / Akseki, Traditional Dwelling, Interior, Local Identity, Granaries and Cabinets

Introduction

Cereal, which is as valuable as water for the continuation of human life, has a very important place in the history of humanity. There should be a place where the crops obtained from the soil will be maintained. Mankind has revealed the warehouses that will maintain cereals by using the experiences and existing production techniques in nature. The techniques used in agricultural activities have been used for centuries as well as warehouses for centuries, perhaps even thousands of years.

The word warehouse has passed from Persian "Anbar" to our language. Due to the "n-b" incompatibility in Turkish, it is pronounced in our language as "storage". Warehouses are mostly defined as the place where foods are stored in the type of cereal (TDK, 2005), cereal warehouses are used for the storage of cereals such as wheat, barley, and rye, especially in rural architecture. Warehouses are a sine qua non of agriculture, which is the source of livelihood for the people. In this respect, many households have a warehouse. The more crop from the landowners, the more crops they built, has built a warehouse to hide next to her

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house. These formations, which are built in traditional houses as part of our local identity, provide much data to humanity in storage areas.

Local identity can be defined as a concept that shows the formation of traditional settlements, defines the character of a place, and gives meaning to that place. For this reason, local borders are defined by societies that share the same culture and geography, physical form formations, and cultural factors that constitute the local identity (Koç, 2018). Location and local identity become concrete by historically existing architectural spaces. Thus, these local elements, which affect the formation of building and building elements as an architectural process, shape the reinforcement formations used in the interior of the building.

As a part of local identity, the use of traditional houses; The family structure of the people living in the region is shaped by the influence of religion, culture, social relations, climate, and topography. The storage (cereal) action, which defines an important service action in traditional houses, has a local approach that is inspired by both the socio-cultural and natural environments in terms of interior reinforcement fiction. In this context, the storage areas, which are traditional houses as the fruit of centuries of experience from past to present, have original qualifications, as well as protecting, recording, and sustainability of these areas is very important for cultural identity (Açıkel & Elinç, 2020).

In this context, the Antalya Akseki region, which is selected as a research area, has also hosted many different civilizations since ancient times and has a very rich cultural diversity. The fact that the region is an intensive settlement and production area since ancient times has brought a great variety of rural architecture. Traditional houses examined in the region of the region contain fixed and moving warehouses in the building. Although they have lost their qualifications, most of these warehouses are still used. Although it is thought that these warehouses are 100-150 years old in the light of the information obtained in the interviews with the local people, unfortunately, their numbers are gradually decreasing and defeating time.

It is also seen that these warehouses in the interior of the traditional houses are far from a legal and conscious protection framework. Grain warehouses, which offer the most advanced form of natural and cultural heritage, live with traditional space use and rural architectural texture and offer the most interesting examples of experiences, knowledge, and harmony with the natural environment.

The aim of this study is to contribute to the transport of cereal warehouses, which are proof of thousands of years of rich agricultural production history and evidence of civil architectural culture. In this context, in ensuring the protection and sustainability of cereal warehouses that shed light on a period with their historical functions and cultural characteristics; It is important to reveal the typical characters and to determine the visual, ecological, and architectural characteristics.

Materials and Methods

In this study, cereal warehouses, a component of rural architecture within the scope of the Akseki region of Antalya province, were discussed in the study (Figure 1). In this context, the cereal warehouses in the interior of the traditional residences of the Akseki region are examined and the purpose of use and physical, social, cultural, and so on. features have been tried to be put forward. Scientific written sources were scanned as a research method and cereal warehouses were determined by using observation and one-to-one interview techniques with the local people for field studies. Detected grain warehouse and cabinets; Original qualities, architectural and technical details were drawn.

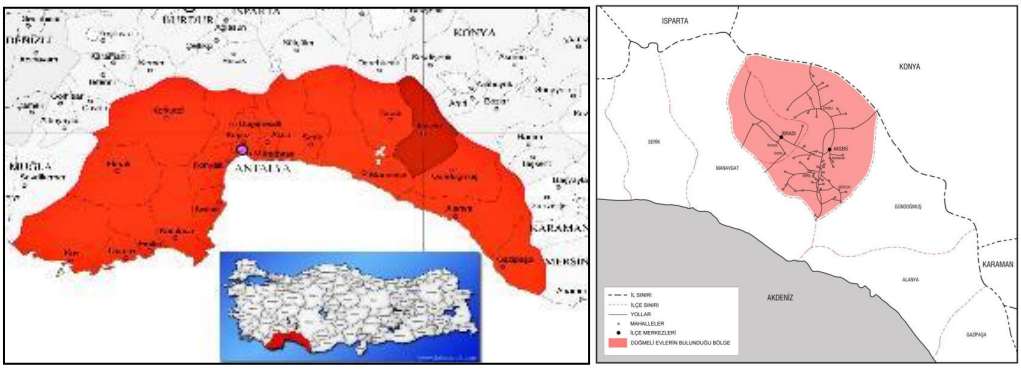


Figure 1. Antalya-Akseki region and the region where traditional residences are seen (Bakışlı, 2019)

Akseki traditional residence is known as "button houses ". Although it is not known exactly which date the first examples of "buttoned houses özen are available, and the construction dates of the oldest examples that have survived to the present day are dated 330 years ago. Residences that are representative of the oldest examples are still widely used (Manav & Çalışkan 2017). The fact that "button houses" have a limited distribution only in the Akseki-İbradı region in the Taurus Mountains makes this traditional dwelling example very interesting (Figure 2a).

a.   b.



Figure 2a. Akseki traditional housing example; **2b.** Dry wall building technique (Kavas, 2011)

The main materials in the traditional architecture of Akseki consist of stone and wood materials. In Akseki, located at the foot of the Taurus Mountains, the stone was used with the influence of geography. Pine and cedar forests spread over large areas in the same geography also constitute the source of wood material. The name 'Button House' comes from the dry wall-building technique applied in the masonry+carcass system (Figure 2b).

Rural dwellings are designed for two floors. The entrance of the general one is from the ground floor and there are also those designed to receive entrance from each floor depending on the topography (Karayazı, 2015). They are usually located in the middle of the garden or on one or both sides of the garden, facing the street.

In residential buildings, the ground floor is divided into fattening and storage sections. At the entrance of the ground floor, the projection of the sofa is called "evöğün" or "ahıraltı" in the region. In this part, there are haystacks, cellars, woodsheds, rarely poultry, pens, and barns. This space also includes the staircase entrance or the staircase itself (Figure 3).



Figure 3. Akseki Button House Ground Floor Layout

The living floor is designed in 2 ways: cellars and rooms. On the living floor, there is a "kafeönü" space raised with seki on one side of the sofa. Distribution is provided from the sofa space to the rooms. Each of the other rooms on the living floor includes the equipment named "başmak (fireplace)", "dolap", "yüklük", "musandıra", "gusülhane", "lambalık", and "terek" (Figure 4) where a nuclear family can sustain its life (Figure 4).

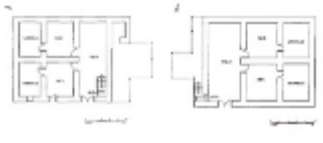


Figure 4. "Kafesönü", Sofa and Room Settlement

When an observation is made by considering the classification of Eldem (1954) on Turkish House Plan Types, three types of plan schemes, which are outer sofas, inner sofas, and middle sofa in the residences in the Akseki district center, emerge. The type of plan-free plan is not found in the Akseki district center today (Başarır, 2001). In general, the houses in the villages are designed with outer sofa. This sofa can be rectangular or 'L'. The outer sofa fiction formed

in the form of 'L' is called 'outer sofa' and such sofas are evaluated in two separate groups according to whether or not it is an "eyvan" (Table 1).

Table 1. Plan typology of traditional residences in the Akseki region (Akkaya, 2005)

	"Eyvan" with outer sofa	"Eyvansız" with outer sofa	with center sofa	with inner sofa
				
				

In the traditional residence of Akseki, the interior reinforcement elements are usually fixed elements and are fixed to the wall and located in the sofa or room, which is the main space. These units include "yüklük", "cabinets (niches)", "warehouses", "rack (sergen)", fireplaces, etc. There are also movable reinforcements used in sofa, room, pantry room, and storage spaces. These are stored units where items and food such as "chests", "warehouses", "stumps", "jugs", "baskets", "sini (tray)", cradles, etc. are placed (Figure 5).



Figure 5. Furniture usage examples

One of the original uses in the formation of traditional housing reinforcement is the fixed and moving grain warehouse and cabinets that constitute the subject of the study. These reinforcement formations and use have regional unique qualities in the traditional Anatolian residence (Figure 6a, 6b).

a.  b.  

Figure 6a**.** Use of six grain storage; **6b.** Fixed and moving grain warehouses

Warehouses are cultural assets, which are a product of hundreds of years of architectural tradition in Antalya geography with their very different settlements, construction techniques, materials, workmanship, and usage qualifications. In this direction, the grain warehouses investigated represent the original local identity components of the region.

In this context, Akseki traditional residence is examined by the cereal warehouses in the use of interior use, cultural, social, and physical, and so on. its qualifications have been tried to be put forward. Cereal warehouse and cabinets detected; Within the scope of local identity components, functionally shaped forms have been analyzed in terms of construction technique and use of materials.

Findings and Discussion

Natural Environment and Grain Warehouses Relationship

Geographical factors are primarily effective in the images and usage forms are taken from region from region to region (Elibüyük and Güzel, 2000). However, the effect of cultural, historical, and social variables is seen. The dwellings that follow the geographical environment and carry the influence of their environment are more rural dwellings (Denker, 1960). It carries the traces of the geographical environment in which the materials, shapes, and different parts of the rural dwellings are in the form of organizations (Tanoğlu, 1969).

It is possible to easily understand the effect of the natural environment on the dwelling from the materials used. The abundance of the material in the environment, easy to reach and supplying cheaply led to the local people turning to the natural environment (Polat, 2016). Therefore, we can say that the warehouses are concentrated in the mountainous mass rich in forest and in the settlements located on the sides of this mass. The fact that the warehouses are completely made of the wood shows this situation. Cedrus Libani (Lebanese cedar or Taurus Cedar) and Juniperus Communis (Juniper Tree) trees were generally used as wood materials. Features such as not being curved, durability, and not being wolfed are among the reasons for the selection of Cedrus Libaninin (cedar tree) (Figure 7).



Figure 7. Cedar and Juniper Tree Images (Danacı, 2012)

In the Eastern countryside, there are fixed and moving warehouses that are described as - domestic warehouses in the settlements where agricultural land is not sufficient, such as the Akseki basin, but the commercial activities in cereal products are active.

The insulation of the products stored in the warehouses from moisture and outdoors is also built by raising from the ground plane in order to prevent the wooden material from wear. In this way, the raised floors provide ventilation, as well as prevent the inside of the warehouses from receiving moisture (Figure 8).



Figure 8. Grain Warehouse built on wooden feet

Relationship Between Human and Economic Activities and Cereal Warehouses

Just as human (social) factors are a strong factor in indicating the characteristics of the resident of the residence, the economic factors have such a strong effect in indicating the characteristics of the house add -ons (Tunçdilek, 1967).

The basic economic activity in the rural area of Antalya is based on agriculture, animal husbandry, and forestry. In these settlements, the people of the region produced or purchased on the trade axis with the tubing structure fictionalized with the storage areas. The formation and use of this furniture come from storage for needy purposes contrary to known fiction (Figure 9).



Figure 9. Large -sized cereal warehouse images

Place Selection in Cereal Warehouses

Akseki-İbradı basin traditional houses, which we examine in the Eastern countryside, cereal warehouses; It is seen that the building is used in the sections separated as a cellar room on the ground floor and in the entrance halls called stony. There are also warehouses positioned in sofas, which are part of the living floor in the structures. It has also been found that the lower part of many loads, which are also used in the room, is used for storage purposes (Figure 10). In the selection of the location of the warehouses, it is seen that the places that are easy to reach in the space and the northern sections that receive little light due to the storage conditions of the grain are preferred.

a.  b.

Figure 10a**.** Cereal warehouse in the use of "sofa" and "taşlık"; **10b.** Grain warehouse in the use of "Yüklük (cabinet)"

Structural and Functional Features of Granaries

Inside the home, cereal warehouses show rectangular and square plan schemes. Their dimensions are shaped according to their location. These warehouses in the housing can be classified as fixed and moving. Fixed Sofa, cellar rooms in the rooms, and storage areas in the

use of under-load use. Mobile formations generally in the use of the ground floor are generally noticeable (Figure 11).



Figure 11. Fixed and moving warehouse samples

It has been seen that the warehouses, which are large and more in number in structure, are probably found in the structures where we have lived in common with wealthy families or several families. The warehouses on the ground and upper floor of the houses are placed in the north direction. Grain is poured and taken from the square-sized caps opened to the upper part of the warehouses. In the use of the load, it has the same characteristics as fixed and moving warehouse masses (Figure 12).



Figure 12. Structural and Functional Features of Warehouses

When the plan and architectural features are examined,

The warehouses are placed on a platform raised from the ground in "sofa" and "taşlık" that do not show ornamental properties and are created with a completely wooden material passing system. It is seen that it is supported by a horizontal and vertical bar in wooden junctions on the front surface. It is thought that the planning scheme is constructed by considering the place where the housing will be placed in the first construction stages of the moving wide-mass warehouses in the use of the ground floor (Figure 13).

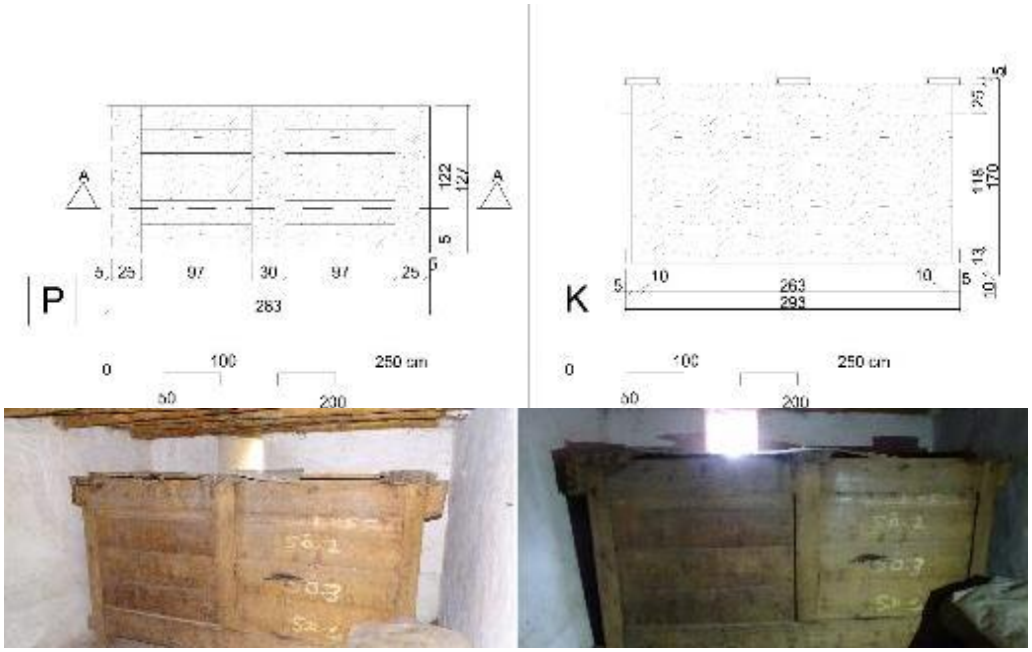


Figure 13. Moving Warehouse Drawing

When the fixed grain warehouses are examined, the rectangular plan scheme is featured. The upper part consists of 3 pieces of lids. The covers are designed in 55 centimeters square size. It does not show ornamental properties, vertical wooden slats appear on the front surface. The warehouse is in the Sofa space, which is the floor of life of the mansion. It is positioned on the northern part of the sofa to the platform raised from the ground. The warehouse equipped a functional equipping completely with the passage system. Due to its location and function, it is classified as a fixed grain warehouse. In this context, it can be said that cereal warehouses have an important function in the organization of domestic space in traditional houses (Figure 14).

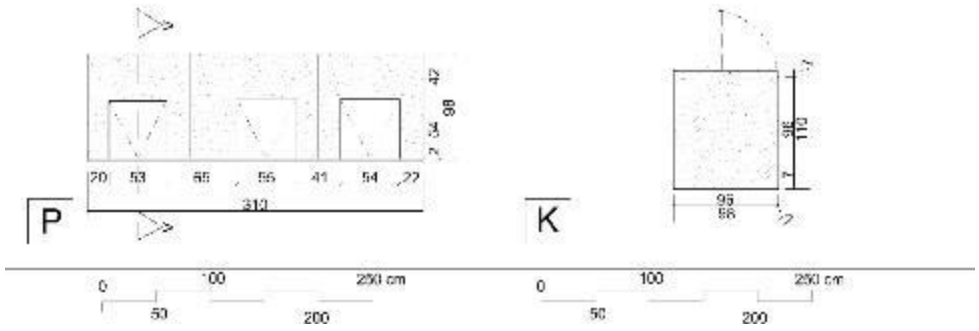




Figure 14. Fixed Warehouse Drawing

When the size and location of these warehouses in the space were examined, it was found that the assets were found in the housing of families. When the storage capacities, function, and usage details were examined, the warehouses were used within the scope of storage rather than commercial activities.

Material-Technical and Decoration in Cereal Warehouses

The home warehouses, which we examined in the traditional residences of the Akseki region, were made with the technique of passing completely wooden materials. The cedar tree and juniper tree were used as material in the home warehouses. In the construction of warehouses, the timber obtained from the cedar tree is shaped in the hands of the master with the stacking and passing technique. The warehouses were formed with the combination details called "wolf mouth" and "swallow tail" in of the cedar trees (Figure 15).

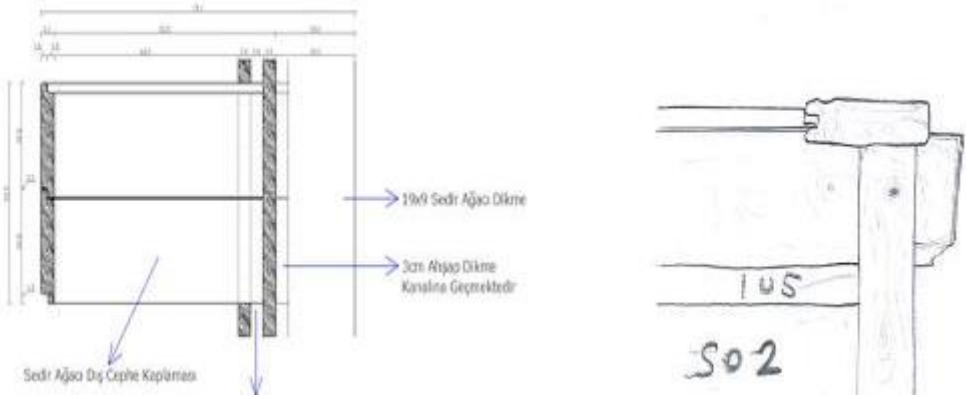


Figure 15. Drawing of Wooden Moving Details

The warehouses we examine in the countryside of the Akseki region do not show decoration properties. All the warehouses were made for functional purposes. Regular rhythm and aesthetic visuals were gained in the warehouses, horizontally and vertical wood, and regular rhythm and aesthetic visuals (Figure 16). These could not go beyond creating rectangular deletions. During the oral interviews in the study area, it was also found that the masters who made these warehouses were not grown and that there were very few known warehouses.



Figure 16. Decorating qualities of warehouses

Conclusion and Recommendations

The Akseki Region of Antalya Province has had an important place in the Mediterranean Basin from ancient times to the present day in terms of its natural and cultural riches. Although a wide variety of agricultural products are grown due to the advantages of the Mediterranean climate of Antalya Province, the unsuitability of the geography of the region has shaped the residential interiors and the equipment used.

Everything local with its cultural values and natural beauties covers traditional architecture and determines the character of the region with all these features. Traditional dwellings reflect social and social life; With their users, designers, spatial structure, and organization, it is an important example of local architectural expressions. The interior action areas and the reinforcements used in the local architectural expressions also carry traces of the architectural identity of the geography where it is located and enable us to have information about that region. The need for storage, which is the action of residential interior space, and the space and reinforcement formations shaped by this need are also part of our local architectural identity.

The most important of these is the furniture that stands out as the storage and protection of grain, which is our basic need. These products have regional and original features in terms of traditional Anatolian housing as well as archival quality. The identified granaries and cabinets contain many components of local identity as part of our cultural identity.

When the local identity elements and problems for the domestic granaries examined within the scope of the study are evaluated:

- These warehouses are important examples of civil architecture,
- That the warehouses were made with the technique of passing without using nails,
- As a material, the fact that they were obtained with the cedar tree is considered sacred in our culture,

- Forgetting the construction-technical and qualifications of these products made by traditional methods, the fact that it is succumbed to the natural conditions and disappears,
- In the approaches to protection, the interiors do not see enough attention, dismantling these products and selling them unconsciously in various places,
- As a furniture element, the necessary awareness and cultural consciousness cannot be created for the protection and sustainability of these warehouses.

Today, when the value of agriculture and agricultural products can be stored for a long time increases all over the world, it should be evaluated in terms of protection, sustainable storage, and storage conditions and transferred to future generations as our local identity components.

References

Açikel M. & Kaynakci E. Z. (2020). Antalya'da Geleneksel Tahıl Ambarları, In: Koçakoğlu, B. and Çakılcı, D. (Ed.), *Antalya Kitabı-3 (Antalya'da Doğa ve Medeniyet)*. Palet, Konya, s. 387-405.

Akkaya, N. (2005). *Akseki İlvat Köyleri ve Çevresindeki Geleneksel Türk Evlerinin Mimari ve Süslemesi*. Yüksek Lisans Tezi, Selçuk Üniversitesi, Konya, 293.

Bakışlı, D. (2019). *Antalya İli Akseki İlçesi Sarıhacılar Köyü Özgün Yapısal ve Mimari Özelliklerin Belirlenmesi*. Yüksek Lisans Tezi, Yıldız Teknik Üniversitesi, İstanbul, 179.

Başarır, B. (2001). *Akseki, Hacıgüzeller Evi.* Yüksek Lisans Tezi, İ.T.Ü. Fen Bilimleri Enstitüsü, İstanbul, 676.

Danacı, H. (2012). *Yöresel Mimari ve Kültürel Peyzaj Analizi: Antalya Elmalı Örneği*. Yüksek Lisans Tezi, Akdeniz Üniversitesi, Antalya.

Denker, B.T. (1977). Yerleşme Coğrafyası–Kır Yerleşmeleri. *İstanbul: İstanbul Üniv. Yayını*.

Eldem, S. H. (1954). Türk Evi Plan Tipleri, İ.T.Ü., *Mimarlık Fakültesi Yayınları*, İstanbul, 237.

Elibüyük, M. & Güzel, A. (2003). Şanlıurfa İl'inde dönemlik ve geçici bir yerleşme: Hollik. *Ankara Üniversitesi Coğrafi Bilimler Dergisi,* 1(1), 55-67.

Karayazı, S. S. (2015). *Akseki İlçesi, Belenalan Köyü Kırsal Mimari Doku Özelliklerinin Değerlendirilmesi*. Yüksek Lisans Tezi, Gazi Üniversitesi Fen Bilimleri Enstitüsü, Ankara. 271.

Kavas, K. R. (2011). Patterns Of Environmental Coherence in The Rural Architectural Tradition of Ürünlü (Akseki-İbradı Basin). *M.E.T.U. Journal of the Faculty of Architecture*, 28(1): 23-40.

Koç, S. (2019). *Geleneksel Konutların İç Mekân Kurgusunu Yerel Kimlik Unsurları ile Okumak: İslamköy Örneği*. Yüksek Lisans Tezi, Karadeniz Teknik Üniversitesi, Trabzon, 164.

Manav, K. & Çalışkan, V. (2017). Geleneksel Bir Mesken Tipinin Turizmde Çekicilik Potansiyelinin Araştırılması: "Düğmeli Evler" (Antalya) Örneği. *Doğu Coğrafya Dergisi*, Ocak, 22 (37): 215-240.

Polat, S. (2016). Uşak İlinde Bir Ev Eklentisi Olarak Ambarlar. *Marmara Coğrafya Dergisi.* 34(230-243): 232-233.

Tanoğlu, A. (1966). Nüfus ve Yerleşme, *İstanbul: İstanbul Üniv. Yayını*. No: 1183.

TDK, (2005). Türk Dil Kurumu Türkçe Sözlük. *Türk Dil Kurumu 4. Akşam Sanat Okulu Matbaası*, ISBN 975-16-0070-7 Ankara: 2243.

Tunçdilek, N. (1967). Türkiye İskân Coğrafyası–Kır İskânı (Köy-Altı İskan Şekilleri*). İstanbul: İstanbul Üniv. Ed. Fak. Yayını*. No: 1283.