



Documentation of Rural Architectural and Textural Characteristics and Determination of The Problems of Akseki Belenalan Village

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ABSTRACT

The purpose of this article is to document the settlement texture, structural features and socio-economic situation of Belenalan Village, Akseki, Antalya, which was never studied before. In this context, historical and geographical information were researched, data about the public buildings were obtained, inside and outside documentation of the dwellings and typology studies were conducted, regarding elements and spatial organization and problems concerning a single structure and the whole village were determined as a result of analysis and social surveys about the settlement texture, and these are presented here. It was aimed to use this documentation study as data for the following conservation practices.

Keywords: *Belenalan village, Rural architecture, Conservation, Documentation, Akseki*

1. INTRODUCTION

Studies regarding the conservation of historical and cultural values dates back to the years before Christian era. These studies which were about the development

and reclamation of towns in the past have subsided in the recent centuries to a single building together with the apprehension of the importance of cultural stability, development of the consciousness of administrators and

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people and the increase of technological opportunities in construction. Especially, subsiding of theoretical studies into practice have been playing an important part for many buildings. This situation which can be observed more clearly on the basis of monumental buildings has recently developed on behalf of the civilian architecture, and thus, it was determined to form a collective consciousness. However, studies regarding rural architectural buildings are at a beginning level and insufficient. In theory, recommendations of European Council in 1977 (The Granada Appeal) and 1989 (Recommendation no.(R89) 6 on Protection and enhancement of the Rural architectural heritage) are considered important developments. In 2014, Bursa and Cumalıkızık village being considered as world heritage by UNESCO and the continuation of studies about Yörükköyü, Safranbolu are important due to the fact that they are encouraging. Nevertheless, insensible implementations intended for unearned income due to the fact that most of the buildings are not registered have been threatening rural architecture. For this reason, every passing day is a loss of time in the annihilation of rural architecture.

Belenalan village chosen within the context of the study is one of the important rural settlements due to the fact that it is functional as it has dwellings built via a technique special to Akseki-İbradi basin and as the daily life still goes on, and its physical continuity is still intact as its texture is not destroyed. It was declared as an urban protected site and conserved by Antalya Cultural Heritage Conservation District Board on November 22nd, 2011 and with decree no. 166 but no study has been conducted.

Within the scope of this article, data obtained from analysis regarding the texture of the village, typological data as a result of locating insides and outsides of the buildings and demographic data from social surveys are presented. It is aimed to establish a basis for the conservation studies which will be conducted after the data obtained.

2. HISTORICAL BACKGROUND OF BELENALAN VILLAGE

As in other rural buildings and settlements in Anatolia, written documents regarding Belenalan village and its buildings are quite rare. Enhoş claims that the villagers came from 'Belen' area of Antakya 200-300 years ago and settled in this area, that for this reason the first

name of the village is Belen and that it changed into Belenilvat and lastly into Belenalan [1]. However, Özkaynak states that the name of the village is not present in the records of Defter'i Hakani, therefore he guesses that it was established after 980 (A.D.1572-1573). Regarding the village, he stated that he presumed it became a neighborhood of Büyükilvat village and thus it took the name Belenilvat after "Yerle karye" is scattered [2]. The first 'hatip' (official Muslim orator) was assigned in 1833 to the old mosque of Belenalan [1,3]. For this reason, it can be said in certainty that the village was established before 1833 in accordance with the facts, and it can be said with precautionary record that it was established in 1750's.

Belenalan village is situated on the 94th kilometer of Manavgat – Konya highway. On the east of the village Çanakpınar, on the south Bucakalan, on the west Büyükalın and on the north Sarıhacılar villages are located.

3. ARCHITECTURAL, PHYSICAL AND SOCIAL ANALYSIS OF BELENALAN VILLAGE

3.1. Settlement Features

As the other villages in Akseki, Belenalan village is also situated on the slope of mountain. Streets are developed organically in harmony with the land; it is settled as to cut northwest-southwest axis which is the blowing direction of the main winds. Wideness of the streets range between 2,5 – 3 meters. On the original streets surface covering which was formed via pressing rubble stones into the soil ground is present, whereas the others are covered with stone chips and asphalt. This covering is maintained by pouring stones between 15-30 cm -which are called as 'helik' locally- used to build dry stone walls over the soil ground and pressing them in time. In most of the streets that are built on a slope water was gathered to cisterns via caving in a part of the street. As the water installations in the village is not working, cisterns are the sole collecting areas for drinking and domestic water. There are no sidewalks. As the roads move away from the dwellings towards agricultural and forest areas, they are left as soil ground. Buildings in the village are situated such as to let light, wind and view for other houses. All the houses are inside garden areas, and they are separately situated from each other (Fig.1).



Figure 1. General photographs of Bucakalan village

3.2. Structural Features

Public buildings:

There are a total of 50 buildings in the village. Public buildings that are present today are Belenalan old mosque, Belenalan mosque (Concrete), Belenalan primary school, cisterns and 5 storages (Fig. 2).

The load bearing walls of the primary school were built with a 'timber-reinforced rubble stone masonry with projecting tie-beams' technique, which is unique for Akseki - İbradı basin, and called 'düğmeli' locally. The

primary school is not used today, due to lack of students. Sümbül, in the interview with Mustafa Güzel - the mukhtar of Belenalan- in 1989, expresses that the primary school was last used in 1988, and that the children were transferred to Bucakalan village as their number decreased [4]. During the field study, The building which uses the same courtyard with Belenalan old mosque is locked, and therefore it was not possible to maintain its plan set-up (Fig. 3a).

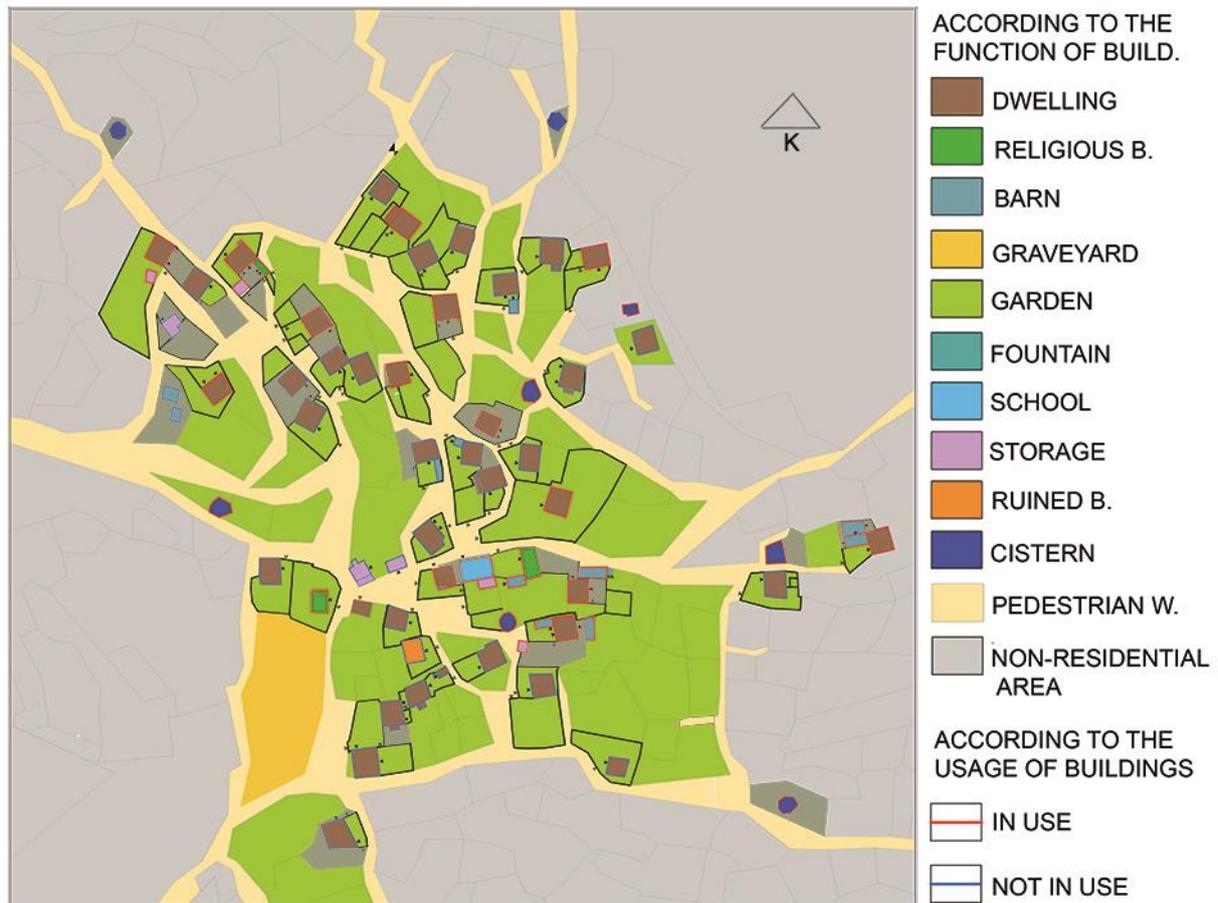


Figure 2. The function and current usage analysis of the buildings in Belenalan village.

As the oldest information regarding Belenalan old mosque is that first 'hatip' assignment was in 1833 [1], therefore its construction year can be assumed to be 1833 with precautionary record. The building is one of the rare examples with its 'şadırvan' (water tank with a fountain) made for a single person, its indigenous wooden minaret standing on a single boom pole and with its mihrab and minbar which carry examples of qualified authentic wood work [3]. It is only used in special occasions such as mevlüt (Islamic memorial service), but not used for daily *namaz* (prayer) sessions (Fig. 3b, c).

Belenalan mosque is a concrete building having a central space, and it is in use constantly.

According to the sources, it is known that besides the present buildings, a market and two madrasahs were present in the village. Regarding the madrasah, Özkaynak said: "Two madrasahs were founded by Hocazadeler and Tahir Efendiler. Many students graduated from them" [2]. However, it was not possible to locate them.

In 1989, regarding the market in the village, Sümbül said: "I looked at the place where the old market was

found with grief; I could only see the wooden shutters of a couple of ruined shops. It is as if never bundles of dry goods on camels came down here from Alanya..."

[4]. However, it was not possible to locate the market as well.

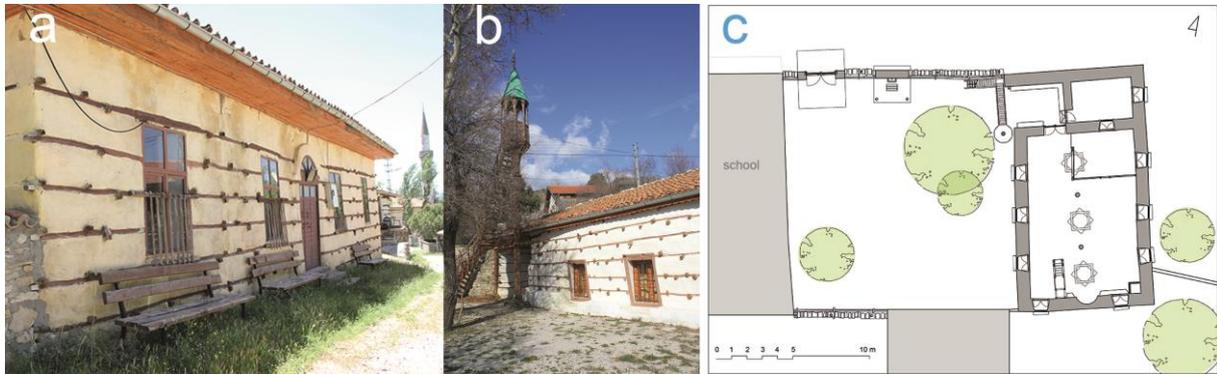


Figure 3. Belenalan village elementary school (a), Belenalan village old mosque (b), Ground floor plan of Belenalan old mosque (Restitution) (c) [5].

Dwellings:

All the dwellings are situated inside their own garden area. In general, the dwellings are situated in the middle of the garden, and the street line is composed of the garden wall. In few dwellings, the houses are situated on the edge of the garden and are in direct relation with the street.

Dwelling gardens are entered through garden doors with curb or pent roofs having wide eaves (Fig. 4a). These double winged wooden doors are called 'borta', and their lock systems are indigenous. This locking system which is called 'traka/ tıfraz' is used in indoor doors and

windows as well as garden doors. Gardens are separated from roads or other gardens via a wall called 'semerkandi' or 'kuşkonmaz' (Fig. 4b). These walls consist of wooden curtains over

the dry stone furring walls which built as the same technique used in the dwellings and public buildings load bearing walls; 'timber-reinforced rubble stone masonry with projecting tie-beams'. Dwellings gardens are rarely firm ground; generally they are left with soil. In general, there is a furnace which is used to prepare winter food and a grapevine arbor called 'iskanet' locally, which is used as shade for animals and people (Fig. 4c).



Figure 4. Examples of a courtyard door (a), The 'semerkandi' (kuşkonmaz) (b) and the grapevine arbor 'iskanet'(c).

All the dwellings in the village are two-storey buildings. The ground floors in the village dwellings were allocated to animal shelter and storage. The barns were mainly specialized for goats, while the storerooms open on a central space called 'evöğün' or 'ahıraltı' which is a geometric projection of the common room or 'sofa' found on the second floor.

The ground floors in the village dwellings were allocated to animal shelter and storage. Entrance to the ground floor of the dwelling is through 'borta' which is the name given to the garden door also. The door is

opened on a central space called 'evöğün' or 'ahıraltı' which is a geometric projection of the common room or 'sofa' found on the second floor. Generally, 'evöğün' is used for circulation, and it rarely includes an animal feeder called 'bahna' and other elements. Spaces such as stairs, hovel, barn and hayloft are used via 'evöğün' (Fig. 5b). The floors were left as packed soil or were a combination of soil interspersed with stones called 'helik' locally (Fig. 5c). The timber cross girders placed on the load-bearing walls along the shortest dimension are rough-hewn and left uncoated, are formed the ceilings of ground floor (Fig 5. a, b).



Figure 5. Photographs of 'evögün' (a) , the ceiling (b) and the floor covering (c) of Belenalan dwellings.

CLASSIFICATION OF BELENALAN VILLAGE DWELLINGS ACCORDING TO THE 'SOFA'						
SEMI OPEN SOFA (BASIC)					SEMI OPEN SOFA WITH IWAN (L-SHAPED SEMI OPEN SOFA)	
GROUND FL.						
FIRST FLOOR	 D.N.16	 D.N.40	 D.N.10	 D.N.20	 D.N.27	 D.N.18 D.N.24

Figure 6. The typology of Belenalan village dwellings according to their common room 'sofa'

The association with the first floor which is the living space, is maintained through stairs which opens to the hall directly from 'evögün' or associated with 'evögün' via its door. In the region, steps of the stairs are called 'basak' and the railings are called 'duraklama'. Stairs are entirely made of wood, and they are supported by two notchboards: one adjacent to the wall and the other vaulted on timber columns(Fig. 7h). In some of the dwellings, stairs which is situated in front of the main load bearing wall opens to the hallway on the upper floor, which is called 'aralık'. This hallway is a space that associates the balcony called 'ayazlık' (Fig. 7j), the hall and the toilet with each other. All these spaces are constructed with wood.

All the dwellings in the village are set-up with a semi-open sofa. In some dwellings, semi-open sofa extends in the middle of the rooms and is associated with the other façade. This kind of semi open sofas are called 'semi open sofa with iwan' or 'L-shaped semi open sofa' (Fig. 6).

The 'sofa' is a common place for every family living in the dwelling. Within this context, there are examples which harbor a furnace called 'başmak' to cook with or to heat the place. In one corner of the rectangular shaped 'sofa', a timber projection is built. This projection which is called 'kafesönü' in the region is designed with a 'seki' (Fig. 7c, k). There are no variations for this projection in the village.



Figure 7. Photographs taken from Belenalan village dwellings

There are two versions of the set-up of the room and the storage, and the room's association with the 'sofa'. In the first one, connected spaces are present, which provide a room and a storage room for every family and are associated with the 'sofa' via single door (Fig.6, DN16, DN40, DN10, DN20, DN27). Such dwellings constitute the majority in the village. The other set-up consists of a single room for every family and a storage for all the families. Such a set-up is seen in dwellings with 'semi open sofa with iwan', and all the spaces are associated with the 'sofa' with separate doors (Fig.6, DN18). Such residences are in the minority in the village.

Rooms include all the solutions for the needs of a family. It is set-up with closet (yükçük) (Fig. 7b, d), ablution niche, cupboards (Fig. 7f), sideboard

(musandıra), lampstand (Fig. 7f) and furnace (başmak) (Fig. 7e). Walls are coated, and there is a shelf named as 'terek' on the wall, which extends all the way from end to end. The floor is covered with timber lining. The ceiling is set-up as lathed wood ceiling, and a wooden centerpiece is definitely used on geometric centre of it.

In the cellar, there can be a small cupboard arbitrarily. The ceiling is simple, and the walls are coated arbitrarily as well.

On the living floor of the residence, especially the craftsmanship of wooden architectural elements, ceiling, door and window craftsmanship of the rooms are qualified (Fig.7a, b, c, d, e, f, g). Within the scope of the study, wooden centerpieces, wardrobes, windows and doors are examined, and their typologies are determined (Fig. 8)

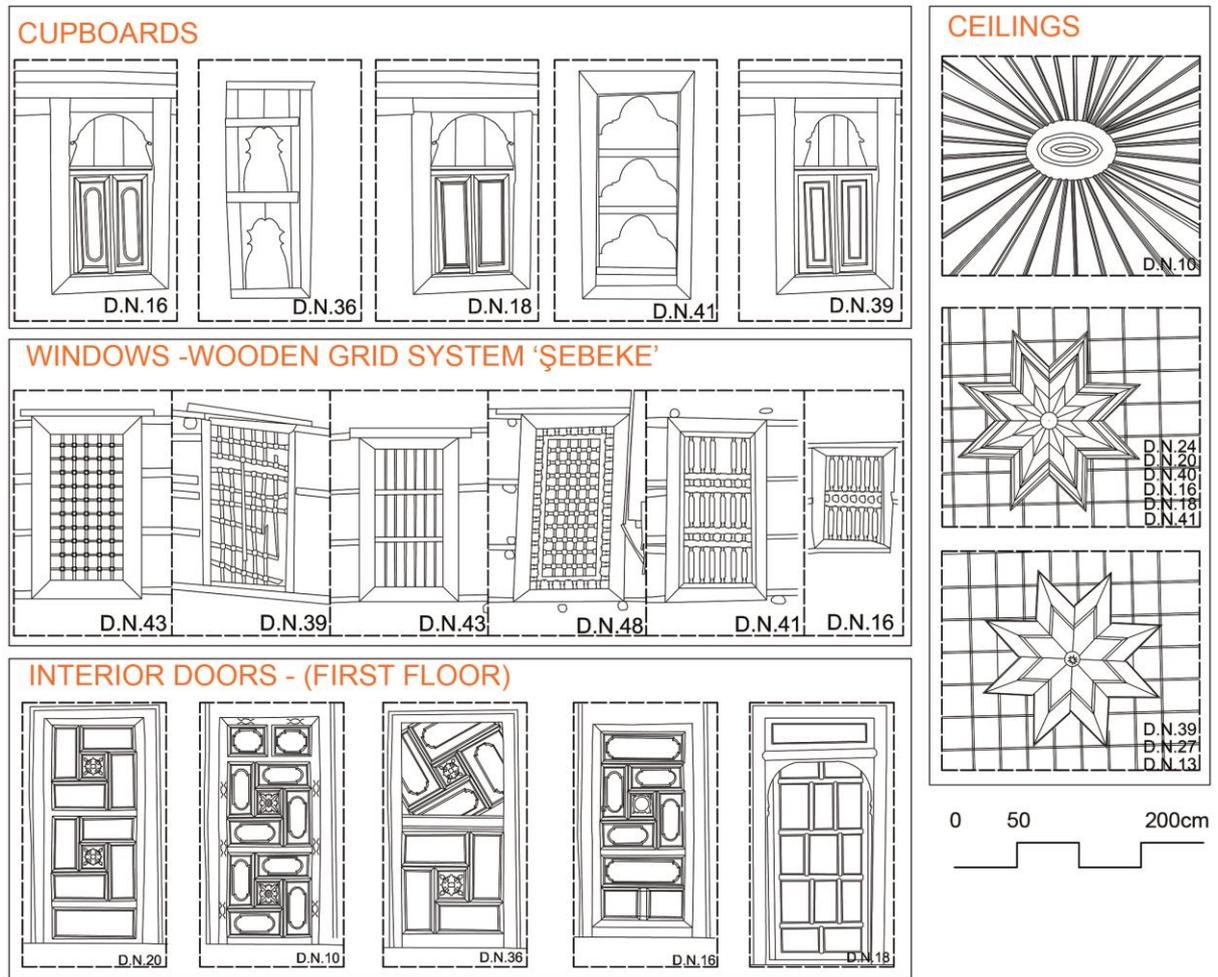


Figure 8. The typology of the cupboards, window grids, doors and centerpieces of the ceilings

3.3. Construction Technique

The construction technique, 'timber-reinforced rubble stone masonry with projecting tie-beams', which is unique for Akseki - İbradı basin, and called 'düğmeli' locally is used in the historical buildings of village. The

dwellings which are called 'düğmeli ev' in the region are built with this technique via the masters of the region.

In this technique, walls are composed of rubble stone without mortar. These stones are called 'helik' in this region, and they are collected from the vicinity. During the erection of the wall, the rubble stones are bolstered by timber bond beams 'hatıl' and projecting tie beams 'düğme-piştuvan' placed every 40–60 centimeters. This distance is called 'destur' in the region and is determined by the master builder, using his forearm as a measurement. Deflection of the beams outside the wall from the incoming load is prevented with the help of projecting tie beams called 'düğme-piştuvan'. These projecting tie beams can be positioned on the bottom and/or top of the bond beams. All these

timber elements are joined by dovetails. The wall is formed by repeating this system constantly until it reaches the required height. For beams 'hatıl' or projecting tie beams 'düğme-piştuvan', cedar and/or Syrian juniper is used as wood (Fig. 9).

Floor is made via extending rough-hewn timber girders into the wall with 20-40 cm space between them. Timber linings are nailed directly onto these timber girders. The roofs of the dwellings are gable roofs sloped in two directions. Although it is known that roof covering was used to be chipboard 'ahşap yonga levha', there is no example left today. All the roofs have Marseilles or Turkish tiles.

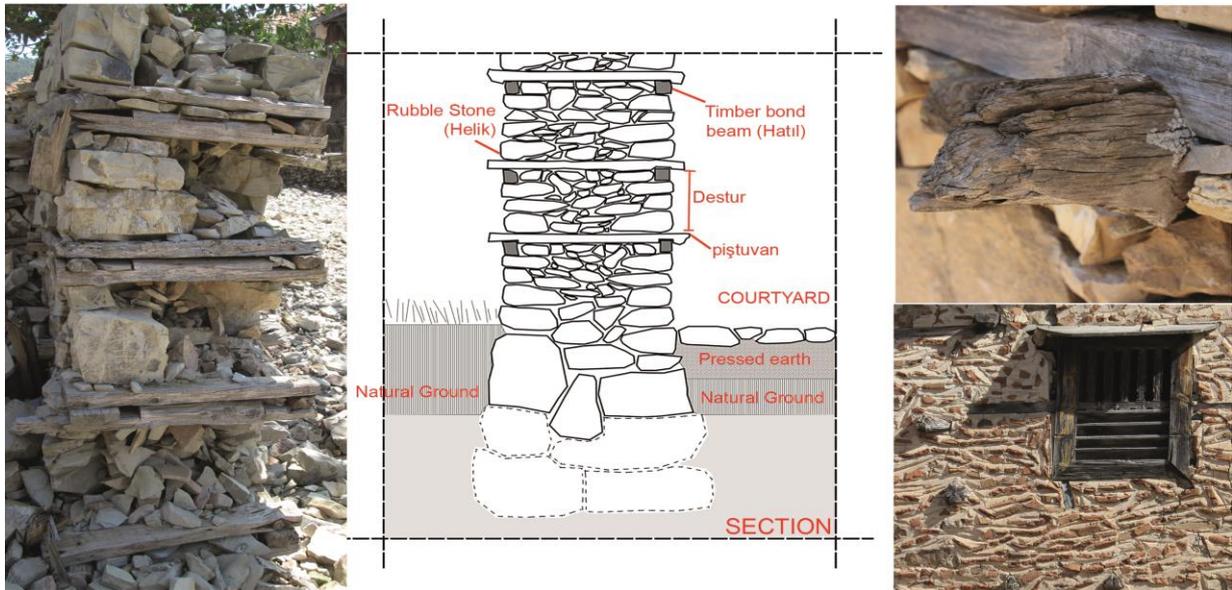


Figure 9. The construction technique of Belenalan Houses

Most of the buildings in Belenalan village are traditional buildings constructed via the system described above. Very few buildings are concrete, and they are in use today. Most of these concrete buildings

are cisterns. Only one of the dwellings is ruined, and others are standing although they have various problems. The ratio of the buildings that are in good condition is determined to be 33% (Fig. 7).

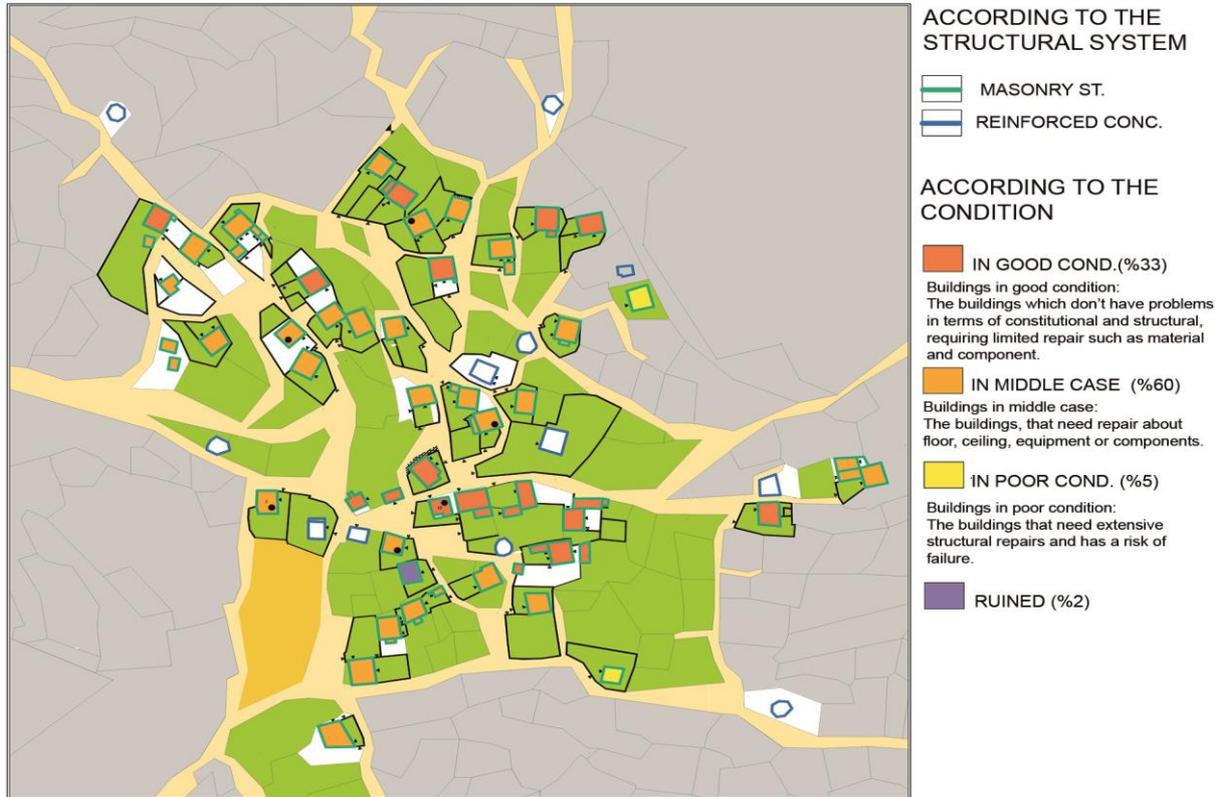


Figure 10.The structural system and the condition analysis of Belenalan village traditional buildings.

3.4. Social Analysis of Belenalan Village

The research about the social structure of the village was realized via social surveys with the families living in the village. 2 out of 12 families participated to the survey, and the following results were obtained:

- 12 families reside in the village four seasons. Owners of the rest of the 33 residences either visit the village in religious holidays and summer holidays for a few weeks or never stay in the village.
- 6 of the families which live in the village consist of 4 people; 2 of the families consist of 3 people; and 2 of the families consist of 2 family members.
- Most of the villagers are 60 and over 60 years old. Young and middle aged population which is composed of people between 11-60 ages live in the surrounding cities such as Antalya, Konya and İzmir due to unemployment, lack of agricultural activities and animal husbandry, and they visit their elderly in the summer or religious holidays.
- Most of the villagers are illiterate. However, half of them are elementary school graduates. The only student in the village goes to Akseki district for elementary school.
- Most of the villagers own the houses through sales of the house. Only one of the families has been residing in Belenalan since their ancestors. Other families came and settled here from other villages.
- In the survey about occupational distribution, it is seen that most of the elderly live on pensions. Animal husbandry is the second occupation. One family live on the money that their grandchildren send to them.
- Monthly amount with which they require for living is determined to be 800-1000 Turkish liras averagely.
- Village people most of which are elderly travel to neighboring districts, especially to Manavgat and Akseki for health and shopping purposes. There are no health services and no markets for daily needs. The closest shopping opportunity is found at Ömer-Duruk facility on the road to Manavgat – Akseki. Besides its

social opportunities, this facility is the most important work place in which people from Belenalan, Bucakalan and Büyükalan villages are employed.

- Neighbourhood relations are strong as most of the locals are related. Neighbors come together often for cooking, cleaning, and socializing. According to the information obtained from the surveys, mostly there are no discrimination between women and men who come together during weddings or public organizations. Weddings are held on the street or in Ömer Duruk facility.

4. PROBLEMS DETERMINED

Problems that are determined during the studies of Belenalan village are as follows:

- Endeavors regarding tourism in Akseki İbradı basin has been continuing fast. The area was announced to be a "Tourism Center" via a decree of the Turkish Cabinet in 2005 [6]. Investments regarding tourism increased via the help of the law for the encouragement of tourism; an agenda has been started to be produced via projects such as Kardelen Eko-Tur (Kardelen Ecological Tourism) project [7] aimed at supporting botanical tourism which is run by Mediterranean Association of Municipalities (AKBB) and West Mediterranean Development Agency (BAKA). In this respect, the village has been left susceptible to insensible and/or wrong applications regarding tourism.
- There is a shortage of water in the village due to the fact that the present water supply network system is not in operation. Concrete cisterns that are built for water supply are not eligible for drinking water supply. There is a leakage in to it from the cesspools of residences around them.
- There is no public transportation to the surrounding city and districts. As few of the villagers have automobiles (2 families), there is a transportation problem. 2 km must be walked in order to reach the main road when trying to reach to Manavgat and Akseki districts, which are the closest districts. This situation is a problem since most of the villagers are elderly.
- The villagers complain that their garbage is not collected. Garbage that is accumulated around their environment is harmful and causes hygiene problem. Also, it is a factor that draws wild or harmful animals to the village as well as causing a visual pollution. This problem is tried to be solved via burning them by the villagers, and this situation causes fire risk as the village is surrounded by forests.
- Present roads turn into mud after rain and snow, and this makes transportation difficult. After heavy snowfall, the connection with the main road is interrupted for a long time.
- There are no arrangements such as parks or playgrounds regarding socializing of women, elderly and children who reside in the village or come for a visit in the summer.
- Residences are not used due to migration which has been an issue for a long time and has been increasing in time. Wearing off and deterioration in the abandoned residences increase; residences which are exposed to atmospheric conditions crumble.
- Due to abandonment of dwellings, they cannot be repaired when needed. As a result, the risks of security and sudden collapses occurred because of fast decay.
- Lack of material resources or opportunities makes it hard to intervene to the dwellings.
- Dwellings which are situated on the higher part of the village –over the hillside- are abandoned due to lack of transportation.
- There are no health care center, police station or fire department in the village, which can be benefitted during an emergency.

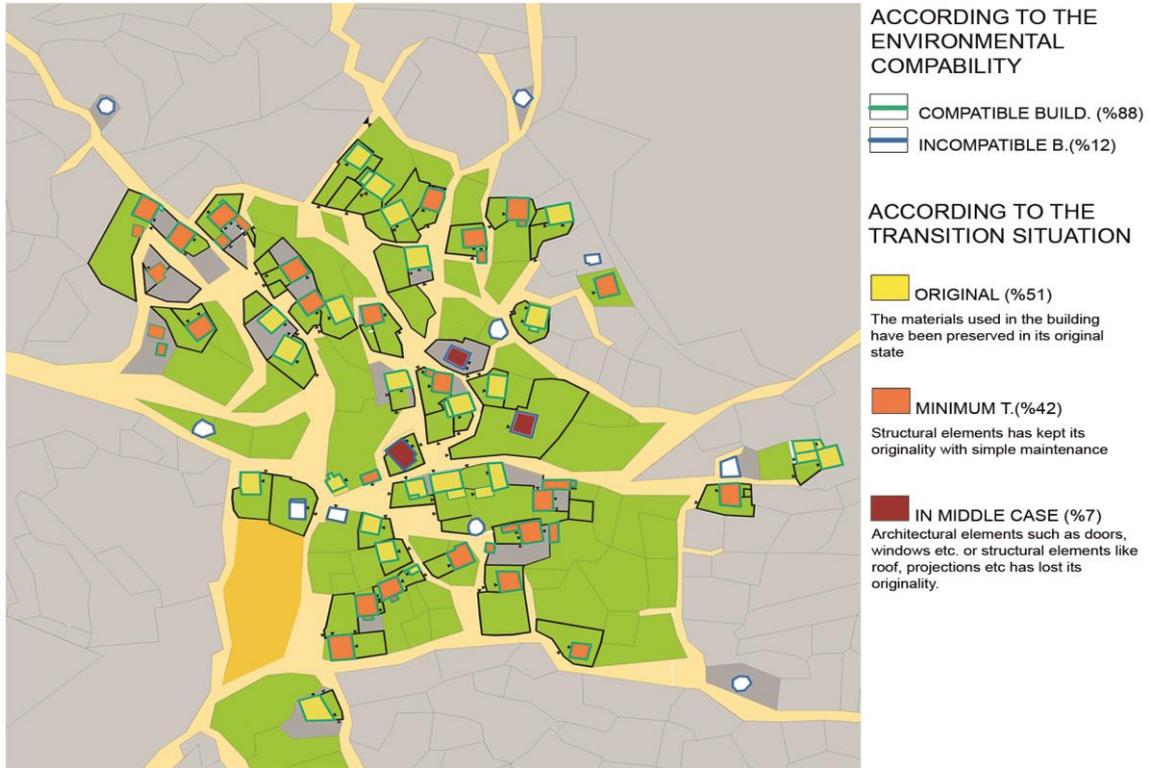


Figure 11. Environmental compatibility and authenticity analysis of Belenalan village.

- There are no markets or shops for supplying needs in the village.
- Agricultural lands around the village are not ploughed as the young population has migrated.
- Wooden architectural elements and structural materials of the dwellings which are left without owners or beneficiaries are removed and sold or burned.
- Materials that are not visually or physically compatible with the original materials used in the present texture have been used as there are not enough master builders, authentic material resources are insufficient and authentic materials are sold at high prices.
- Old construction elements are changed with unqualified and unfit elements regarding the texture due to insensibility, lack of supervision and the need to produce cheap solutions.
- When needed, the uniformity of texture is disrupted via unqualified additions.
- Lack of marketing, advertisement and publicity which will enhance the economy of the village and the increase of migration make it difficult to interfere residences. However, this situation maintained the authenticity of the texture.

4. CONCLUSION

Belenalan village, which has limited visual connection with the main road, is hard and troublesome to reach except via special vehicles. Due to these hardships and never being studied/heard of before, its buildings and the settlement features of the village could be mostly left authentic until today. With its untouched nature and intact authentic texture, the village exhibits the characteristics of a cultural landscape. It is important to preserve and to transfer it with these features to the next generations because it is one of the rare villages that are left intact and it harbors valuable examples with qualified wood work and indigenous construction techniques. Within this context, it is necessary to produce physical, social, economic and cultural projects about the area and to determine applicable policies and strategies urgently.

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