Changes in Rural Architecture: Urbanisation in the Rural Eastern Black Sea Region of Turkey

Özlem Aydın

Dr., Department of Architecture, Karadeniz Technical University, TURKEY

Esra Lakot Alemdağ

Assistant Prof., Department of Architecture , Avrasya University, TURKEY

ABSTRACT

The purpose of the study is to examine social and spatial changes in traditional dwellings in the central villages of Trabzon city which is part of the Eastern Black Sea Region of Turkey. In order to determine reasons for new settlements in the rural areas of Trabzon, the villagers were interviewed. By means of the observations and interviews, whether or not the socio-economic structure of the region and the villagers' lifestyles could have effects on the settlements was researched. Besides this, how the traditional dwellings chosen from the research area had gone through the changes in terms of structure, space, and production process was analyzed by regarding certain intervals. The study found that the natural structuring of the village and general silhouette of the rural area in which the study was conducted has changed in recent years, marked by a shift from single-storey detached houses to multi-storey apartment buildings.

Keywords: natural environment, rural architecture, traditional dwellings, architectural culture, sustainability, Trabzon/Turkey

INTRODUCTION

Rural settlements are those which meet the needs of the local people; suitnatural environments, land forms, and the climate; and acknowledge the importance of local cultural values. With their agricultural activities, types of leisure activities, social structures, natural environments, houses and other units, rural settlements impact the creation of architectural culture via a historical process.

Approaching the definition differently, the Urban Dictionary defines a "village" as a settlement area which may be distinguished from a city based on its administrative structure, social and economic characteristics or population density.It is also characterized by agricultural functions, and its houses and other buildings reflect thatmeans of living (Keleş, 2008). The village settlement area in this definition refers to development areas of existing settlements whose cadastral surveys have been completed and which do not have development plans.Sudden changes in settlements, fast-developing construction techniques, and social mobility in the evolutionary process of architecture tend to alienate people from traditional building types. As a result of the perceived superiority of urban life over rural life, traditional buildings deteriorate and a new culture of building types emerges, and accordingly, the memory of the past is erased.

Spatial dedifferentiation dates back to the modernization process experienced in 1950's in Turkey. Usage of reinforced concrete that started and became widespread within that period has taken the place of local construction material and traditional construction methods. As a result, the rotation from dwellings built with local construction material using traditional methods to reinforced concrete blocks of apartments built by force of the modernization process occurred so fast. The criticism by Jenks for structures projected and built in accordance with modernist doctrines and built-up areas having occurred as a consequence of aforesaid fact is as follows (Jenks, 1977, p.93; interpreter: Eyüce, 2005, p.13). "…disregarding a region and traditions completely and therefore being lack of local context and local/cultural identity result in producing built-up areas in which collective memory is ruined and being full of meaningless structures built as a result of chasing innovations and disregarding the past entirely whatever it takes.

The process mentioned above make its presence felt in small-sized cities and rural areas as well as in large cities which seem to have been cast in the same mold. In their relevant search, Kukaracı and Aktemur (2003) examined what kind of changes the vernacular domestic architecture of the city Erzurum, located in Eastern Anatolia Region of Turkey, had undergone depending on the process of modernization and concluded that a domestic architecture which was unfit, unidentified, and didn't keep up with the indweller's culture of living had developed within the process in Erzurum.

Another search conducted in the Suruç District of Şanlıurfa indicated that due to a set of natural and socio-economic matters which arose in the last 30 years, the pace of migration from village to city had accelerated and the village residents preferred the reinforced concrete houses to their vernacular style dwellings they left in Suruç(Şahinalp,

2012). Beside this, another search conducted in the village of Kızılcık, the province Isparta, the Marmara Region aimed to determine what sort of changes the rural settlement underwent within social-spatial structure and processes. According to the latter search, historical conscious and local cultural wealth started to disappear as a result of leaving the vernacular style dwellings and settling in a reinforced concrete building within the process of modernization and the same search in Kızılcık also revealed that the conversion which became prevalent in the rural areas started to damage tradition, place attachment and natural beauty, which reflected on the land generation process (Şenol and Akan, 2011). In the study Doğanay and Orhan (2014) conducted in the town of Şavşat, the province Artvin, Eastern Black Sea Region of Turkey, the vernacular style country houses and their main problems were handled. They stated in this study that the number of reinforced concrete structures, which were out of harmony with the vernacular style domestic architecture, increased up to 50 percent, and the existing vernacular style country houses were in ruins.

When we made a literature review, we did not encounter any comprehensive studies that analyzed the structural imperfection concretely and sociologically in the rural areas of the city Trabzon, Eastern Black Sea Region of Turkey. In this regard, the purpose of the study is to evaluate the periodical change process of the vernacular style domestic architecture in rural areas of the city Trabzon within the existing texture and reveal the reasons. In addition, the findings obtained from the study can shape the researches aimed at providing urban – rural integration and enable to analyze properly requirements in rural areas and relevant settlements.

Rural Settlements in the Eastern Black Sea Region

In the "scattered settlement" pattern typical of the Eastern Black Sea Region, houses are generally built for individual families on mountainsides, mostly in groups of a few houses, sometimes spaced one or two km from one another. The vertical spurs of the southern mountains that reach to the sea, the countless hills, and the small clusters of houses scattered on the mountainsides and buried in the forests and greenerycomprise the natural silhouette of the region(Figure 1), (Gür and Batur, 2000). In the villages, the houses are detached, surrounded with gardens on four sides.Climate, land, topography, building materials, lifestyles and means of living are factors directly affecting this natural settlement.

Figure 1. The scattered settlements of the Eastern Black Sea region (Gür and Batur, 2000)

The rural settlements in the region reach from the coastal areas towards the hinterland along narrow or wide valleys. The altitudes of the village settlements in the region reach as high as 1500–2000 metres. The settlements are not static; the population densities in the villages differ in winters and summers. Some urban dwellers go to the villages for the tea, hazelnut and tobacco harvest, and the villagers take their animals to mountain pastures before the weather gets hot.In addition to population movement based on harvesting, stockbreeding and climatic factors, another factor to be considered is the numbers of people living away from home. As a result of this displacement, women in the villages outnumber the men. When the men, accustomed to working in metropolises, return to the villages, they are frequently unable to work in the villageas they used to. This phenomenon certainly plays an important role in the work patterns in the Eastern Black Sea Region in assigning more work to women (Özgüner, 1970).The traditional houses in the Eastern Black Sea Region are designed to accommodate sons, wives and even grandchildren, and can be extended by linearly increasing the number of bedrooms and building additional entrances for family members bringing a new spouse to live there(Gür and Batur, 2000).

Traditional Residential Architecture in the Eastern Black Sea Region

The houses in rural areas of the Eastern Black Sea Region are so dispersed within the boundaries of the villages that there are usually no central areas or small squares. Therefore, gardens and level areas owned by the people themselves are used for settlement purposes. These areas are typically arable lands, so suitable sites for building are chosen without a concern of being close to neighbors. Until relatively recently, people living in rural areas of the Eastern Black Sea Region built their houses in accordance with climatic requirements from building materials collected from around the building site and using building techniques they had learnedin the area.

Typically, these building materialsare primarily timber and secondarily stone. The building type is masonry with timberwork walls infilled with bricks or adobe. Stone material as a load-bearing element is used widelyin the villages of Trabzon and Giresun. In the past, shingleswere used as roof cover, but zinc roofing later became common(Figure 2).

Figure 2. The traditional Black Sea houses in the rural areas

The traditional Black Sea houses in the rural areas of Trabzon are found in clusters of a few houses, usually built on slopes with the sitting side at ground level and the facing side overlooking the valleys and open spaces. A sub-level (basement) is used as a stable for dairy stock, and the ground floor as the living space. In the spaces built above the basement, the flooring material is primarily wood,although sometimes surfaces of compressed earthare found. This "aşhane" or "yerevi", literally "a living space with a kitchen in a corner," is where all daytime activities are conducted(Figure 3). As protection against possible outside dangers, this section has few windows,and these generally have interior wooden shutters.

Figure 3. Interior view of aşhane (yerevi) (Özen,2011)

Sofa (hall) is a common space providing connection with each room in traditional house. Each room opens to the sofa. Sofa is a passage and also it's a place where people gathered in the house.

Figure 4. Interior view of sofa (hall) (Gür and Batur, 2000)

The bedrooms are on the opposite side, overlookingthe valley. The walls of these rooms are infilled in stone, and their interior surfaces are commonly coated with plaster. The floor and ceiling coverings of the rooms are wooden. The ceiling of the aşhaneis not covered: roof beams and the roof covering are visible(Figure 5,6,7), (Gür, 1989; 2000).

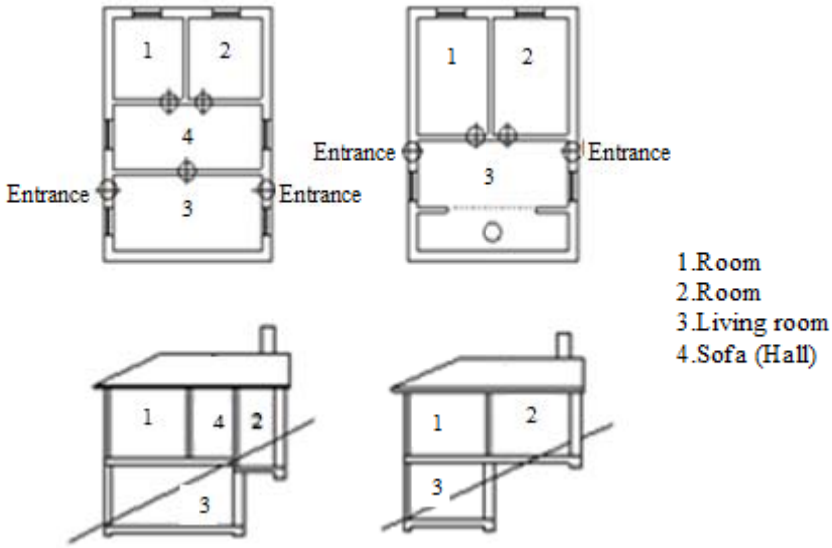


Figure 5. Shematicdiagram and Sectionschema for commonresidential type in Trabzon

Figure 6. Traditionalruralarchitecturalpatterns in Trabzon (Aydın, 2010)

Parallel to the concept of the "rural settlement" as explained above, the rural settlements in the Eastern Black Sea Region today are different from those of the past due to developing technology, new needs emerging from changing living conditions, social changes, and the inefficacy of relevant laws and regulations.Up to the mid-20th century, the users of these homes applied the house typologies of the past effectively in their housing preferences. People have always been affected by the house types they have always seen, known and lived in, and have always felt the need to build and live in the same house types. In this way, the character and identity of the rural architecture of the Eastern Black Sea Region was passed from one generation to the next**.**However, new ways of living acquired through the migration of the villagers to towns, cities and other countries in the 1960s began to affect the plan types and structures of the houses in the rural areas(Sümerkan, 1990). By the end of the 20th century, with the impact of modernization on all quarters of the society, from cities to rural areas, traditional lifestyles and architecture had deteriorated, such that theynow seem set to disappear.

Present-Day Rural Settlements

The traditional houses built in the rural areas beginning approximately 50 years ago maintained, to a great extent, traditional plan types and general appearances, and remained in harmony with the natural environment, though with certain changes in construction systems. In this middle period, increased diversity of materials, ease of availability and transportation, and a desire to enhance conditions of comfort had begun to precipitate change. The houses built in the villages in this period had one or two storeys, the construction type was masonry, and the building materials were either brick or cement blocks. These houses were not very different from the traditional houses, and remained largely compatiblewith the general silhouette of the village and with the surrounding nature (Figure 7, 8).

Figure 7. Presentruralarchitecture in harmony with natural structure (Aydın, 2010)

Figure 8. Interior views of present rural architecture examples (Aydın, 2010)

In recent years, however most people living in the villages of Trabzon have been importing urban building types to the villages and consequently, "concrete country houses," a new type of house;have begun to dominate the village silhouettes. The one- or two-storey concrete country houses built among the multi-storey buildings are not as traditionally distinctive as houses were in the past, and their presence in the rural areas is an emblem of how the villages are being invaded by houses that are unaffected by the geographical environment and that are similar to the houses in the urban areas (Figure 9).

Figure 9. Reinforcedconcretevillagehouses (Aydın, 2010)

These increasingly numerous concrete buildings are in stark contrast with the area's environmental characteristics, such that thevillages are gradually losing their local characteristics. Gür (2002) pointed out that uncontrolled and unplanned development has become prevalent in the rural areas, and characterizedthe deterioration of the rural areas as a systemic deterioration and corruption (Figure 10), (URL-1).

Figure 10. Settlementpatternsincompatible with ruralarchitecture (Aydın, 2010)

Structuring in the rural areas of Turkey has turned into a composition beyond the traditional texture in recent years. This composition has been faced especially in the rural areas of Black Sea region because of the fact that the land is so valuable and inadequate for the local people. Insufficient and inadequate land has forced the settlements to grow vertically rather than horizontally. Therefore, two or more story rural houses have been built in the region as a result of increasing population (Uzun, Yomralıoğlu, 2005).

METHOD

The methodology of the present study consisted of an evaluation of these new developments in the context of the social and cultural sustainability of present-day rural architecture. To this end, the study identified traditional characteristics and qualities of spatial organization of Trabzon's rural architecture and sought to define the basic spatial needs of the old and new in the context. Data were obtained through observations and interviews in the field.The study includes the central villages of the city, Trabzon and consists of 4 central villages(Figure 11). The main reasons why these 4 villages are included in the study are that these central villages have been incorporated into the urban area out of the village built-up area boundaries and that the populations of these villages, which are generally stable and averagely 1000, slightly vary from summer to winter(Table 1).

Table 1. Distribution of villagepopulation and the distripution of housing (Trabzon Municipilaty, 2009)

	Central Villages			
	Çilekli	Çimenli	Kavala	Bulak
Population	856	2100	1449	833
The number of housing	335	735	570	340

The central villages of the city, Trabzon chosen as sample of the study (Cimenli, Kavala, Bulak, and Cilekli) are located in the boundary of Eastern Black Sea region and 4 to 9 km far from the city. These villages in which typical black sea climate rules over have dominantly a dispersed settlement pattern as is in the black sea region. The main source of livelihood in the villages is hazelnut farming. Beside this, garden farming is among the sources of livelihood. Cattle's farming is considered – even if just a bit – a source of livelihood. The villages chosen as sample of the study are in every sense exposed to the effects of the city Trabzon due to being close to the city. All requirements of the villages like goods and services are provided from the city Trabzon. Advanced highway networks and short destination make it easy for a certain part of the villagers to travel daily to the city for work.

Figure 11. Turkey map and villageborders (study area) on the Trabzon map

The methodology of the study points at two procedures. For the first one, 15 families chosen from the search area by means of simple random sampling were interviewed and asked to answer semi-structured questions. The interviews were conducted with 3 or 4 dwellers from each of the villages. The participants were asked why they built multistory structures similar to those in the city other than rural architecture and their relationship with the city. It was required that those who were interviewed had built a multistory

structure and/or been living in that structure. The settlements were empirically photographed examining their current conditions.For the second one, the periodic typology of the houses in the village Kavala was analyzed (plan, section, facades) in order to set an example for the others. Unlike the other chosen central villages, Kavala is a rural area in which the recent structuring examples are often observed. In the conclusion part of the study, social and physical factors that lead to structural changes are determined and and so are the effects which these changes have on natural formation in rural areas.

FINDINGS

Data Obtained Through Interviews

The hypothesized causes of this unplanned development in the rural areas were examined under the following titles.The sample groupconsists of individuals with various agegroups (36-65 yearsold). Whenconsidering the Professional status of participantswho have beeninterwiev, wefacehouswives, employees (self-employment, officers), and retirees. %65 of the participantsreside in villageswhile the rest, %35 dwell in villagesinsummer, in urban in winter.

Changes in Socio-Economic Structure

Due to the ease of transportation between the city centers and the rural areas and the easy availability and supply of social services and daily needs, the populations of these villages have increased. In addition, the easy connection with the city centers has made it easy for the majority of the village dwellers to carry out economic activities in the cities. The factor of accessibility to the city has moved the social life of the villagers away from homogenous rural life. Someone who chose to live in a village after retirement expressed his view thus: "This is not our village, but we bought some land here and built a house. It hasfine, clean weather, transportation is easy, and we have a supermarket. We have municipal and public bus services." Mobility towards the peri-urban villages is remarkable as a feature of the new population.

The burgeoning relationship of villagers with the city resulted in imitation of urban life. The villagers applied effort to improve the comfort of their houses, and began buildingnew houses to that end. A person working in the city center remarked: "Would this be suitable in a village? Yes, it would. This is not a village—villages are being urbanized. Even if a single-storey building is built in a central village, it will be demolished soon. Such buildings are being built in parts of the centralvillages that are nearer the city center but, in my opinion, there are already too many multi-storey buldings." He thus acknowledges how the social and physical structures of the villages

have changed because of the influence of the city. It becomes evident that the cause of inter-village population mobility is the connection between the city center and the villages to which people migrate.Doğanay and Alım conducted a survey concerning rural dwellers' perception on urban area with the villagers in Yesilyurt, a central village of Trabzon (Doğanay, Alım, 2010). At the end of the survey, it was concluded that the dwellers did not want to settle into the city even though many described it as education, health, shopping, and business center. Besides this, they found out that environmental pollution, overcrowding, traffic problems, and noise were regarded as major unattractive aspects of cities. Furthermore, migration also takes place in the villages of the peri-urban districts, though this migration is not as intense as in the villages of other districts. The expansion of urban into rural areas due to migration, and the desire of the wealthy to build a second or even third house in the villages are factors increasing the deterioration of the rural areas. For example, two interviewees explained their reasons for having a second house in the village as follows: "We have a house in the city but we prefer the village. We are more well-off here than in the city. This is both a village and a city—we have no transportation problems." Such comments show that those who have migrated from the country to town have created on their own a model similar to that created in the West,known as the "suburb."

Disruption of the Integrity of Lands

Housing activities in the village settlements are propelled by the need to house new families that have left the family home, the splitting of families caused by the division of lands among family members, and the settlement of one or a few families in other areas due to the expansion of the family.Because the populations of these villages do not change considerably either in winter or summer due to the short distance between them and the city center, and because of a lack of sufficient lands for growing families, people have started to build multi-storey buildings. An interviewee who had built a 5-storey building in the village explained his reasons as follows: "For those who live in the villages near the citycenter, it makes no sense to build a single-storey country house. For example, because my land is not big enough to build separate houses for each of my children, and in order to meet their needs and not to divide the land into parts, I built a 5-storey building." This explanation seems the most plausible cause for the emergence of multi-storey housing in the rural areas.On the other hand, some families living in the villages live in flatsin multi-storey concrete buildings they built instead of in old-style single-storey houses. One of the interviewees remarked, "I demolished the patrimonial house and built a new one. For the time being, it has two storeys and I live on the ground floor. I only laid the bricks of the upper floor, without plastering. I am of the opinion that one of my sons will one day come and stay here." The cause of this

unfinished architecture, full of expectations, is open to discussion. In the 21st century, urban–rural migration is not as intense as had been anticipated. It is regrettable that such expectations of fathers, which are unlikely to come to frution, result in the construction of multi-storey buildings in the rural settlements.

Lack of Master Builders Skilled in Traditional Building

Along with recent economic and social changes, construction systems have also started to change. One of the reasons for the deterioration of traditional architecture is that master builders who use traditional construction materials and who know the stone, wood and soil are almost extinct. The employment of master builders who know only modern building systems in the construction of new country houses results in buildings resembling urban architecture. One interviewee who had built an apartment building in his village that has a lift and a fire-escape stressed the quality of these master builders: "Old houses are good for your health, but I built a concrete building in acordance with modern-day conditions. I worked with accomplished master builders". The present-day interest in the old also emerges in the country houses. Considerable numbers of people build old-type of houses in the peri-urban villages and spend their weekends and summers there. One interviewee, a medical doctor, bought some land in a village and built a house. He spoke to the lack of old-style master builders: "When building this house, I wanted it to be a traditional Black Sea house. However, I could not find a good master builder who could use the wood and stone skilfully. The house was built by builders that I found in the city." Among the interviewees, there were many similar observations.

Ease of Application of New Materials and Material Diversity

Depending on the climatic conditions of the area, the traditional houses were built using the most suitable materials and components. While the traditional master builders chose their materials from the natural environment, modern builders prefer industrial building materials. This shift has been considered a milestone in the evolutionary process of construction, and preferences have turned to such materials. The choice of materials was also simplified, such that today advanced building materials made possible by modern technology are used as opposed to the stone, soil, lime, and wood used by the traditional master builders. The fact that constructing a concrete building is relatively cheaper than constructing a traditional building was mentioned by four of the interviewees, who remarked upon the lower prices and greater variety of modern materials.

Lack of Inspection

There is a general lack of an effective exercise of authority on the part of the agencies responsible for the prevention of environmental deterioration in the rural settlements and urban areas, along with legislative inadequacies, and an inability to foresee the future resultsof such unwanted outcomes. It is a well-known fact that none of the apartment buildings that have been built in the central villages have been inspected. As a result of this lapse on the part of the Special Provincial Administrations, such buildings are still being built. Although the interviewees declined to address that subject, they suggested that the apartment buildings being built in the villages should not be thought strange. They also pointed out that the phenomenon is the result of the proximity of the villages to the city center. Based on the observations of the sample houses studied and the statements of the interviewees, it was concluded that the plans for these houses had been drawn either by architects or by master builders. One villager working in the city center said: "I got the plan of my house from an architect. I slightly changed the building dimensions and started the building. I did not give any money to anybody or any information to any institution." Clearly, there is haphazard, uninspected and uninformed building construction activity in the villages.

Typological Identification of Houses

The locational characteristics, plan types, façade characteristics, and construction system characteristics of the sample houses were analyzed, and in this way was constructed a house typology, ranging from the traditional house to the modern house, for the central villages of Trabzon. An architectural form is created by climatic, cultural and social factors, and traditional environments are created as such architectural forms are passed to subsequent generations with few changes. These forms, used for long periods of time and tendingnot to change, are the sources of the image guidingthe designer's activity on the form (Uras, 1993).For the houses from various periods to be studied in the village Kavala, an analysis of plan characteristics, plan types, sectional views, appearance, and accessibility graphics was conducted, and analysis tables were generated(Table 2).Furthermore, from the traditional to the modern houses, a plan elements table was created based on an analysis of changes in plan characteristics, spatial dimensions, and used and unused spaces(Table 3).Table 4 presents the analysis of façade characteristics, use of materials, and construction techniques of the houses analysed.

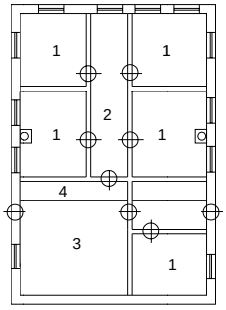
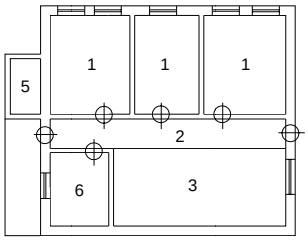
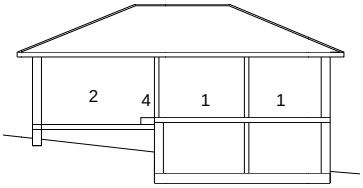
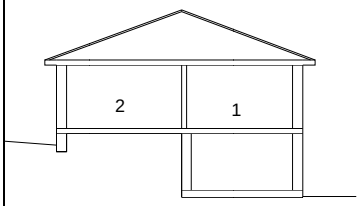
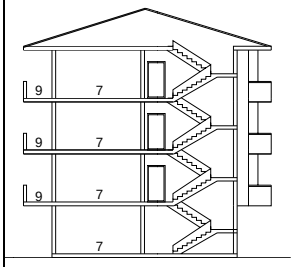
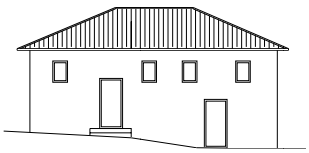
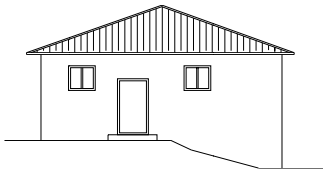
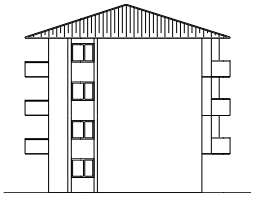
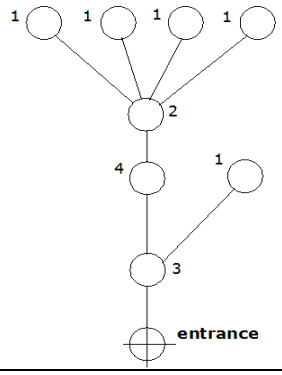
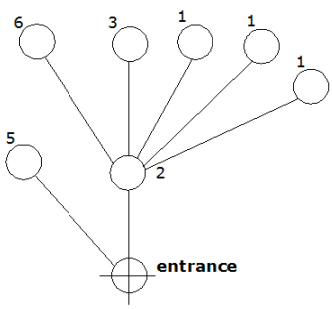
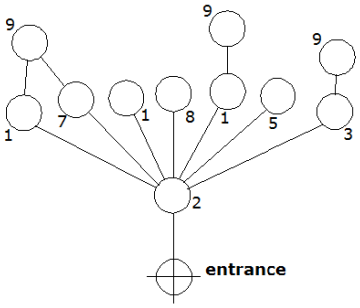
Plan Analyses

The most important factors shaping the traditional plan types in the rural settlements are lifestyle, climate, topography, sun, scenery, and materials used. In traditional rural Trabzon architecture, the basement floors house infrastructural units and cowsheds, and

ground floors house the living spaces and general service units (closet, bathing cubicle, fireplace, aşhane). Houses have two entrances, one on each ofthe two opposing façades. In some houses, rooms are accessible through the aşhane or yerevi, and in some through a door that opens from the seki (a half-meter-high stone or mud bench used for seating in front of the houses in summer) to the sofa. Due to the slope of the land, the aşhane is placed on the ground. Rooms are built above the basement, and face the sunshine and scenery. The country houses built in the period after the 1960s bear traces of the traditional architecture. However, changing lifestyles, developments in construction systems, changing conceptions of materials, and easy accessibility to thesealso changed the plan type of the traditional houses. The most important changes are that such components as the fireplace, aşhane, bathing cubicle, and closet have become parts of houses or spaces annexed to the buildings.

The houses built in this middle period carry such traditional traces as having entrances on the two opposing sides. Access to rooms is still from the kitchen, which replaced the "aşhane," and from the sofa, which is directly connected to the living room. While in the past the toilet was separate from the house, it is now adjacent, accessed directly from the house. In the traditional houses, the unit placed next to the "aşhane," genarally used as a cellar or a small room, now functions as the bathroom. In most of the houses, the ground floors containing the living units are placed above the half basements to take advantage of the slope. As in the traditional houses, the rooms face the sun and the scenery. After the period of the construction of new houses still resemblingtraditional houses, there emerged the modern-day concrete country houses/apartment buildings in terms of plan types, construction systems, materials, and façade characteristics—multi-storey buildings which share most of their characteristics with urban architecture and which are far from traditional. The units of these houses, depending on function, are designed to be in different places as compared to the traditional houses, and are independent of one another. There is only one entrance to the modern buildings, and a stairway connects the floors. Furthermore, these houses have semi-open balconies not found in the traditional houses. It was observed that these houses are generally built near the road with no consideration for landscape and climatic conditions(Table 2).

Table 2. Detection of the plan-section-façade

	Traditional House	1960-2000 Period	2000-2010 Period
	House Type B*+GF*	**House Type** B+GF+1	**House Type** B+GF+1+2+…+10
	The number of housing 83	**The number of housing** 165	**The number of housing** 322
PHOTOS			
PLANS			
SECTIONS			
FACADES			
ACCESS GRAPHS			

*B: BasementFloor, *GF: GroundFloor
1.Room, 2.Hall, 3.Kitchen (Aşhane), 4.Seki, 5.Toilet, 6.Cellar, 7.Living room, 8.Bathroom, 9.Balcony

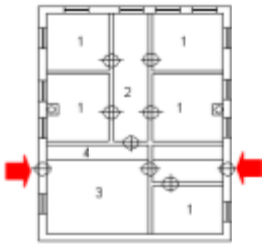
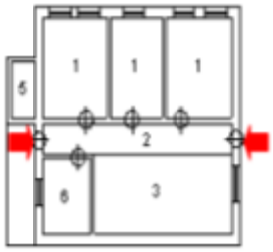
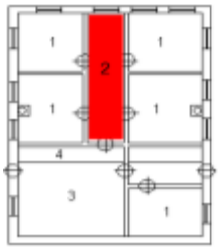
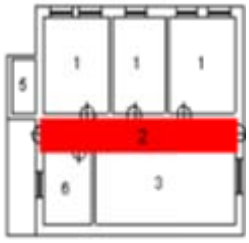
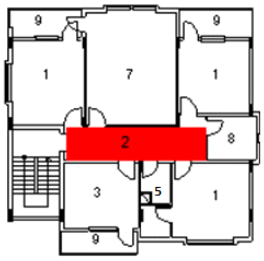
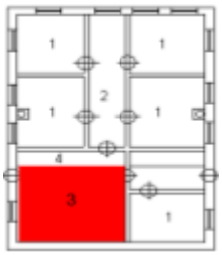
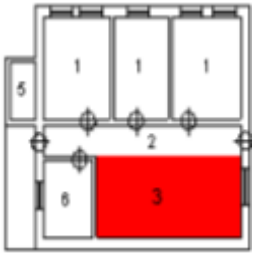
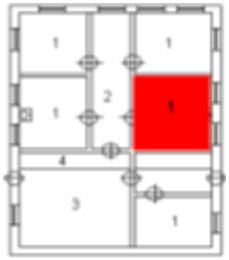
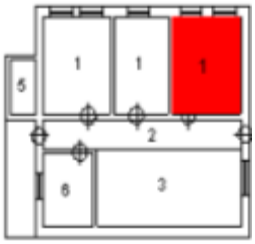
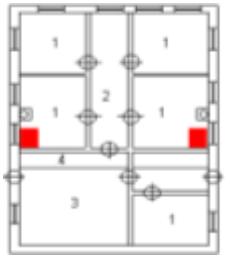
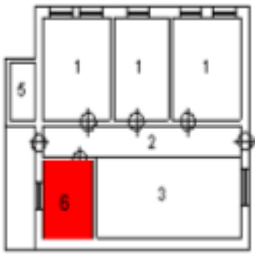
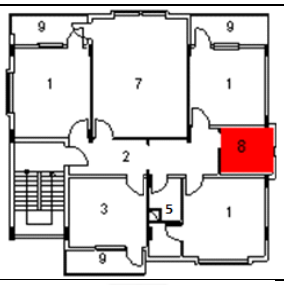
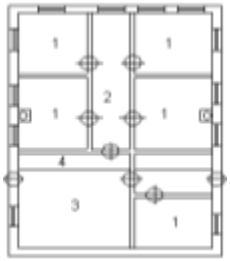
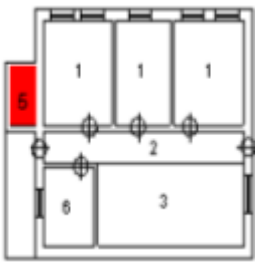
Analysis of Plan Elements

A separate examination of each of the house components in the architecture of rural Trabzon clearly reveals the extent of the change that has occurred in that context. In the traditional houses and in the modern buildings resembling the traditional houses, the entrances are placed on two opposing sides. Because the buildings built in rural areas in recent years are apartment buildings, they have single entrances. The sofa in the traditional house was designed as a hall used to access the 'köşkoda' (a small rectangular room in the best corner of the hall) and the bedrooms, and which usually has a front. In later periods, the sofa was designed to be used both as the space upon which the entrance of the house opened and as the hall on which the doors of the rooms opened. The "aşhane" (yerevi) of the traditional house, where the households carried out their daily activities and kitchen-related activities, maintained its functions in later periods. In the modern-day apartment buildings built in the rural areas, the functions of the kitchen are different from its traditional functions, and it is built as a separate, smaller unit.

The living room, also called the "köşkoda," was the room in which guests were entertained and which was used on special days. This unit of the traditional house has been exchanged for a living room or guest room in modern-day buildings.The "köşkoda" and the living room are relatively bigger and have more diverse characteristics than the other rooms. The bathroom (bathing cubicle) of the traditional house was in the bedroom that was built a bit higher than the room floor. In the houses built in the middle period, the small room near the second entrance of the house and next to the kitchen was typically used as a bathroom. By contrast, although the bathroom in the apartment buildings is a separate unit, it is also found in master bedrooms as the master bathroom. While in the traditional house the WC was a separate unit on the basement floor, in the buildings built in the middle period, it was designed as a unit annexed to the building and connected to it via the second entrance of the house. In modern-day buildings, the bathroom is inside the house.

None of the traditional houses in the sample had balconies. However, thiselement did appear in the buildings of the later period. This finding indicates that the balconies became part of rural Trabzon house architecture under the influence of modern architecture. It was observed that, depending on changing living conditions and needs, the spaces constituting the house have changed over time. This being the case, it can be said that during the transition from the stone house to the apartment building, living spaces have lost their ties with the past both socially and physically(Table 3).

Table 3. Detection of elements of the plan

	Traditional House	1960-2000 Period	2000-2010 Period
Entrance			
Sofa (hall)			
Kitchen (Aşhane)			
Living room (Köşk oda)			
Bathroom			
Toilet			

1.Room, 2.Hall, 3.Kitchen (Aşhane), 4.Seki, 5.Toilet, 6.Cellar (also used as a bathroom), 7.Living room, 8.Bathroom, 9.Balcony

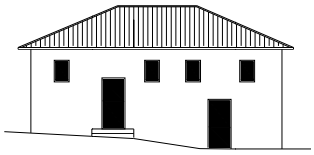
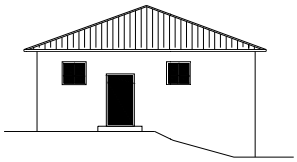
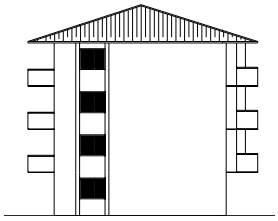
Façades and Building Characteristics

In traditional Black Sea rural architecture, the ceiling heights of the houses vary between 2,80–3,5 m, and the windows are approximately 0,5x1 m. In the non-traditioinalhouses, average ceiling heights vary between 2,80 and 3,00 m, and the window dimensions vary according to space dimensions. Buildings are usually located on sloping lands, and the the walls of the basement, built to take advantage of the slope and the walls of the ground floor, are stone, 55–60 cm thick. The insides of these walls are typically plastered and the outsidesunplastered.

The floor of the "aşhane" (yerevi), placed on the ground, is typically compressed earth, and the floor covering of the room above the basement is wood. In light of the climatic conditions, the houses have hipped roofs covered with mission tiles. In the houses of the middle period that carry traces of the traditional houses, the walls of the basement floors are made of stone and those of the ground floors of brick or briquette. All the walls of these buildings are plastered. The bottom ofthe building which sits on the earth is concrete, and other rooms have timber flooring. The roof is covered with mission tiles, interlocking tiles, or zinc roofing.

An examination of the modern-day houses in the villages in terms of their construction systems and materials reveals that they are far from traditional construction systems and are incompatible with rural architecture. Unfinished buildings which do not employ a masonry construction system, in which stone has been replaced by bricks, and whose façade ratios and roofs have been changed, have already started to assume a prominent place in rural architecture. The analysis table shows the compactness (wall surfaces) ratio in pale colors, and the void (windows, doors, etc.) ratios with dark colors(Table 4).

Table 4. General futures of the houses

	Traditional House	1960-2000 Period	2000-2010 Period
PHOTOS			
COMPACTNESS RATIO-VOID RATIO			
MATERIALS AND CONSTRUCTION SYSTEM	• Basement wall: Stone wall • Ground floor wall: Stone wall • Floor: The room's floors are wood. The kitchen's floor is soil • Window: Wood joinery Roof: Pitched roof, Turkish style tile covering • Masonry	• Basement wall: Stone wall • Basement floor wall: Stone / briquette/brick • Floor: Wood over basement, sitting on the ground floor concrete • Window: Wood joinery • Roof: Pitched roof, Turkish style tile covering /Marseille type tiles /zinc covering • Masonry	• Basement wall: Brick wall • Basement floor wall: Brick wall • The upper floors: Brick wall • Floor: Reinforced concrete • Window: Wood joinery/PVC • Roof: Pitched roof, /flat roof, Marseille type tiles /shingle roof • Reinforced concrete

CONCLUSIONS

In consequence of the observations and interviews which have been made in the city Trabzon, Eastern Black Sea Region of Turkey, there seems to be significant changes in the vernacular style architecture ideally representing the geographical characteristic of the region in a major part of the central villages. In the study area, some of the local dwellings, which draw attention owing to their unique architectural texture, seem to be considerably blasted and unusable due to neglect. Moreover new dwellings by which a significant part of the vernacular style village houses have started to be replaced seem to be high-rise reinforced concrete buildings out of keeping with vernacular architecture of the area. Among the reasons why these new dwellings have been erected as multi-story structures is shortage of residential land and the fact that families want to erect buildings in which they could reside together with their children who are married or will get married in future. Another reason is that the young generation does not want to live in

the old vernacular dwellings in which they think most of comfort requirements are not provided. Therefore, the vernacular style dwellings within the study area have been mostly used as summer houses today. As is known, material procurement and finding a construction foreman for the vernacular style frame houses are hard and much more expensive compared to the past. For this reason, ease of building reinforced concrete structures has an impact on building such dwellings as reinforced concrete.

In the rural areas examined as part of the study, it is obviously that physical and social changes have occurred over time. In this regard, planning in rural areas, preservation orders, and enforcement notices becomes crucial. However, it is clearly seen that recently erected apartment-style dwellings that the vernacular style dwellings have been replaced by in the central villages of Trabzon have not been inspected by local authorities. On this matter, the major tasks fall to local actors, most notably municipalities. For planning of rural areas, local architectural approaches that are sustainable and environment-friendly must be used as base. Moreover new synthesis which will maintain the harmony lasting for centuries between structured and cultural environments must be deployed. In addition, it is required to raise the public awareness of erecting architect-designed houses which do not damage the natural silhouette of the villages, have a height restriction, both represent the architectural characteristics of the region and keep up with the requirement of modern life.

REFERENCES

Doğanay, S., Alım, M. 2010."Türkiye'de Kırsal Nüfusun Şehir Algısı Üzerine Bir Araştırma: Yeşilyurt Köyü (Trabzon)", Eastern Geographical Review, 15(23):171-184.

Doğanay, H., Orhan, F. 2014."Şavşat'ta Geleneksel Köy Meskenleri ve Başlıca Sorunları", Ataturk University Journal of Social Sciences Institute, 18(1): 273-297.

Eyüce, A. 2005."Geleneksel Yapılar ve Mekânlar", Birsen Publisher, 13.

Gür, Ş. Ö., Batur A. 2000. "Rural Architecture in the Eastern Black Sea Region/Doğu Karadeniz'de Kırsal Mimari",Milli Reasürans T.A.Ş., İstanbul.

Gür, Ş. Ö. 1989."The Concept of Typology, Standardization and Modular Coordination in the Eastern Black Sea Vernacular Architecture", Congrés International sur la MerNoire, Congress book, 322-341.

Gür, Ş. Ö. 2000."Doğu Karadeniz Örneğinde Konut Kültürü", The Building Information Center, İstanbul.

Jenks, C. 1977."The Language of Post Modern Architecture", Academy Editions, London, 93.

Keleş, R. 2008."Kentleşme Politikası", İmge Publisher, Ankara.

Kukaracı, U.,Aktemur, A. 2003."Modernleşme Süreci İçerisinde Erzurum Konut Mimarisinin Geldiği Nokta", Atatürk UniversityJournal of FineArtsInstitute, 11: 45-62.

Özgüner, O. 1970."Köyde Mimari Doğu Karadeniz", METUFaculty of Architecture, Ankara.

Sümerkan, M.R. 1990."Doğu Karadeniz'de Kırsal Kesim Geleneksel Ev Plan Tiplerinin Yöresel Dağılımı", Turkish Folk ArchitectureSymposium, Symposium book, 173-184.

Şahinalp, M.S. 2012."Yok Olmaya Yüz Tutmuş Bir Kırsal Mesken Tipi Veya Kültürel Miras: Suruç Kümbet Evleri", Gaziantep University Journal of Social Science, 11(3): 881-916.

Şenol, P., Akan, E., A. 2011."Kırsal Yaşam / Kırsal Konut: Bir Yaşam Biçimi Olarak Geleneksel Kırsal Konut Üretiminde Kızılcık Köyü Örneği", SDU Faculty of Arts and Science, Journal of Social Science, 24: 143-160.

Uras, T. 1993."Tasarlama Düşünme Biçimlendirme", İTUFaculty of ArchitecturePrint works, İstanbul.

URL-1.http://www.arkitera.com/haberler."Kırsalda da yapılaşma sorunu yaşanıyor".

Uzun, B.,Yomralıoğlu, T. 2005."Doğu Karadeniz Bölgesinde Dağınık Yerleşim Sorunlarının Mülkiyet Açısından İrdelenmesi ve Kırsal Arazi Düzenleme Modeli", Eastern Black Sea Region Development Symposium, 381-392, KTÜ, Trabzon.

Photos

Aydın, Ö. 2010. Trabzon.

Özen, H. 2011. Trabzon.