A Documentation of Traditional Halfeti Houses

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Abstract

Halfeti is a county of Şanlıurfa Province however it was partly submerged under Birecik Dam after the dam was built. This settlement was titled “Slow City” in the year 2013 and thus became the touristic centre of the region with its cultural and natural heritage. Halfeti is among the few settlements where the authentic texture is preserved with its small but functional courtyard houses made of local stones compatible with the topography and in integrity with the Euphrates River. In this study, the general layout characteristics, plan types, facade patterns, materials and structural systems of traditional Halfeti houses are analysed and preservation suggestions are presented.

1. INTRODUCTION

Halfeti, is a county of Şanlıurfa Province. Potbelly Hill (Göbeklitepe) Archaeological Site dated 11,500 years back from today known as the world’s oldest religious temple is located in Urfa that has a rich cultural heritage belonging to the prehistoric and historic ages. Whereas Halfeti had integrated with Rumkale known throughout history as Şitamrat, Urumia, Kal’a Rhomeyta, Hisna dhe Romeye, Kałatül-Rum, Afamiyal Urum Gala-Rum Gala. Rumkale is a settlement dating back to 1230 BC to Proto-Hittites [1]. Johannes one of the apostles of Jesus Christ is said to have lived in Rumkale and multiplied the copies of The Holy Bible in a room carved out of the rocks [2].

In the year 2000 after Birecik Dam was built, the eastern part of Halfeti was submerged in water. From that time on, the centre of the county had been moved to Karaotlak Village towards the south of the old settlement [3]. With this move, the population of the Old Halfeti consisting of Rüştiye and Şimaliye districts had even further decreased and some of the houses started being used only during the summer months. The climate of the county shows the Mediterranean Climate characteristics with hot and arid summers and mild and rainy winters with the influence of the Euphrates River. The economy of the county is sustained by agricultural products such as wheat, barley, lentil, pistachio, grapes and olives and by ovine breeding [4].

Halfeti settlement had been declared an urban archaeological site in the year 2002 and steps have been taken for the protection and sustenance of the cultural heritage after the houses have been taken under protection with the registration procedures performed. Halfeti was declared a “Slow City” by the Cittaslow International Committee in the year 2013 and this in turn increased its recognition in the national and international tourism sectors. Although the reactivation of the county with tourism is a positive development; the habitation being focused on tourism brought along its own risks in terms of the protection of the cultural heritage (Figure 1). Halfeti should be transported to the future along with its...
stone houses overlooking the Euphrates River, its mysterious city towards the west of the settlement now submerged in water and its historical heritage in its close proximity.

Figure 1. A general view of Halfeti

2. THE CHARACTERISTICS OF TRADITIONAL HALFETİ HOUSES

Traditional houses are shaped with topographic, climatic and cultural inputs. In the South-eastern Anatolian Region, Diyarbakır, Urfa and Mardin come first as the places best reflecting the architecture of housing. Urfa houses are placed on cross-cutting streets with plans having iwans for summer and winter and courtyards [5]. Mardin houses have the iwan in the centre and rooms to each side of it having a symmetric plan and being located on a slope [6]. Diyarbakır houses have somewhat small openings in Suriçi to small side streets, having courtyard facades with white lime mortar (cas) decorations and having an order of space for seasonal use [7]. The traditional houses of the region have common characteristics such as being self-enclosed, inward oriented, having courtyard plans, with masonry work constructions using stone materials and with flat roofs [8]. When Halfeti houses are compared with the other settlements in the region in terms of their topographical and architectural characteristics, similarities are observed with Birecik, Mardin, Midyat and Savur houses.

2.1. The Settlement Characteristics of The Houses

The primary factors in ascertaining the settlement area in Halfeti are the topography and the view of the Euphrates River. The houses have been embedded in the topography and laid out in a cascade form on the 40% sloping land [9]. The settlement consists of main streets in a parallel line with the valley and smaller streets connecting them to each other in the vertical direction [10]. Due to the slope, there is no vehicle access to the narrow and uneven streets other than the main road. The main rock where the settlement is located is of limestone material. The houses have been constructed after being placed on the caves on the main bedrock. The access to the houses is provided through the streets of stairways being connected to the two main roads built in a parallel line to the slope. Initially the houses were detached from each other, however as the family members got married and wanted a house of their own, the plots between the houses were utilised to turn them into attached houses. Courtyards and gardens are placed between the structural masses of the houses. Although the topography limits the sizes of structures and poses a problem of access, it still provides advantages such as availing the view from all of the houses, the construction of appropriate spaces for service units on the ground floors (the caves being used for requirements such as stable, floor furnace, cellar, toilet, water storage etc...).
In Halfeti there are 103 traditional stone houses and 1 monumental structure (Central Mosque) registered as immovable cultural assets to be preserved. The courtyard of the Central Mosque and public buildings such as hammam, shrine and masjid composing the focal point of the settlement are submerged in water. In the context of this study, 57 traditional houses located between Orta Street and Atatürk Street around the Central Mosque and in Şimaliye District had been surveyed and their measured surveys are drawn. The houses to be included in the study after the analysis on site are selected on the basis whether they bear the typological characteristics of the settlement, whether they constitute an urban silhouette with the Central Mosque being the focal point and whether the owners were showing sensibility for their houses to be documented and preserved (Figure 2).

2.2. The Layout of Plans

Halfeti houses have single or double storeys. While the bottom floors are being used as the service spaces (storehouse, stable, floor furnace or toilet) utilising the cave rooms established by carving out of the limestone bedrocks, the top floors are reserved as living spaces with iwans and rooms. On the floor reserved for living, the room placed perpendicular to the slope is the master room. Master room is also called “the tip room” or “the beak room” sometimes. The narrow side of the rectangular room faces the north-west / west / south-west directions. The houses that have been placed perpendicular to the contour lines constitute a cascade since they are lined one after the other and they are differentiated from other settlements since they are able to utilise the roof of the adjacent house due to its lower elevation (Figure 3).
The planning of Halfeti houses differ in terms of their being a mansion or their being for the use of a single family. The mansions where the higher income group of people live are great and ostentatious structures built by joining a few plots towards the top parts of the settlement or closer to the centre. The other houses were built in a smaller size and with a more austere architectural style for the families of middle income range. The elements bearing the characteristics of the houses are courtyards, iwans and porches.

The plot and the placement of the houses are defined by the slope of the land, the shape of the street, the view and the location of the rock caves. The most common plot types in the placement of the houses are the middle and the corner plots (Figure 4). The entrances into the buildings differ depending on the slope and the facade of the plot on the street. The buildings have an entrance both from the street directly and through the courtyard. The most utilised type is the entrance through the courtyard (Figure 5).

The structural masses are located on one or two storeys in one of the corners of the plot in general. The structural masses consisting of closed, half open and open living units differ in terms of their “I”, “L” and “U” plan types (Figures 6-7).

In houses with type “I” plans the structural mass has got a rectangular schema. In examples of such houses with two storeys, a porch could be observed on the ground floor stretching out between the courtyard and the closed space. The porch had been made use of as a terrace on the first floor.

Houses with type “L” plans are a more developed version of the houses with type “I” plans. In this plan type, in the living quarters of the facade overlooking the courtyard there will be terrace and an iwan. And houses with type “U” plans are a developed version of the ones with type “L” and type “I” plans. This type is formed with three masses being placed around a courtyard and such houses have an iwan in the central mass on the facade overlooking the courtyard and a terrace and a corridor (gezemek) on the other facades.
2.3. Spaces

In Halfeti houses, the spaces are divided into three sections as open (courtyard, terrace, garden), half-open (iwan, porch, arch) and closed spaces (rooms and services spaces such as stable, storage unit, cellar, kitchen, hammam and toilet).

2.3.1. Open Spaces (Courtyard / Garden / Terrace)

In Halfeti houses, the courtyard is the space where the service units and the living spaces of the home are connected to each other. Most of the day to day chores are undertaken on the courtyard. In the courtyard there will be a garden, a well and a watering trough for the live stock. The courtyard will be pressed soil, stone paving or the rock itself (Figures. 8-9). There will be direct route from the street to the courtyard. Other than the entrances through the courtyard, there are also examples where the entrance is to the first floor of the building from the street due to the slope. In examples where the structure has a direct access, the courtyard can be reached from the terrace on the first floor. For the structures where the entrance through the courtyard is left under the waters after they rose are provided through a door opened at a later date from the street on the upper level.

The terraces are the living spaces where the structural space on the ground floor is carried backwards with an axis or within a module. In houses which do not have a courtyard, the terraces serve the same purpose. The terraces are reached through an uncovered set of fliers from the courtyard. On the top floor there will
be a direct access from the rooms into the terrace, and sometimes there will be an access to the iwan from the rooms and then to the terrace from the iwan. Terraces are also places where the day to day chores such as drying or tomato paste making, etc... are taken care of just like the courtyards. In hot summer nights, the terraces are used for sleeping. The garden will either be adjacent to the courtyard or will be placed in one corner of the courtyard. There will be an olive tree or a grapevine creeper in the garden and vegetables are also grown.

2.3.2. Half Open Spaces (Iwan / Porch / Arch)

Iwan will be covered on three sides and top and will have an opening to the courtyard and it is a common characteristic half open space in the planning of houses in the South-eastern Anatolian Region. There are two types of iwans in Halfeti houses one on the ground floor and the other on the top floor. Iwans are used as a protection from the hot summer sun and also for functions such as eating, sleeping and generally spending time just like courtyards and they are covered either with squinch or wooden beams. The open facades of the iwans facing the courtyard have either half circle or pointed arches. The arch stones are either plain or decorated. Nowadays the iwans are being closed and turned into rooms, bathrooms or kitchens (Figure 10).

In a small number of Halfeti houses there are porches on the ground floor between the rooms or the cellar (storage) and the courtyard covered on three sides and the top. Porches are shade and cool spaces. They have two or three spaced arched passages depending on the size of the buildings. The top of the porches constitute the floor of the first floor terraces. The top covers are provided by wooden beams (Figure 11).

![Figure 10. An iwan](image1)
![Figure 11. A porch](image2)
![Figure 12. An arch](image3)

**Figure 10. An iwan**  
**Figure 11. A porch**  
**Figure 12. An arch**

Arch (kabaltı) is the local name for passages like corridors with the street at the bottom and the room on the top. Arch is a temporary area of waiting to be protected on the streets from the sun and the rain. An extra space is provided as a living space with the room that has been built over the arch covered with squinch or with wooden beams. These are usually the living rooms on the top floors of the houses (Figure 12).

2.3.3. Closed Spaces

The rooms being closed spaces in Halfeti houses have the interior furnishing for a family life. The rooms are used for living, eating, entertaining guests and cooking during the day time and sleeping during the night. From this point of view, every room has got the character of a whole house. There are niches with or without wooden doors in the rooms. The sides, closet doors and tops of the niches on the walls of mansions and big houses main rooms are enriched with wooden decorations (Figures 13-14). The niches are used for keeping the bedding, shoes and displaying objects. The niches used for keeping the bedding inside have a width of 80-120 cm and a height of 90-150 cm, however the other niches have smaller dimensions. The tools used for making the house warm during winter are stove, floor furnace and charcoal burners. The floor furnaces are located in an area covered with stones at a depth of 5-10 cm on the floor and a width of 30-50 cm. Fire is not burnt in a floor furnace. The coal that has already been burnt is placed on the stone of the floor furnace and thus the space is heated. The charcoal burners are made up of copper or brass. When the charcoal is burned it is brought inside the room and changed places to heat the different parts of the house. The stove (ocaklık - piğerik) that is used for cooking can be seen
in the rooms, kitchens, courtyards and iwans of Halfeti Houses. The stoves might be built on the surface of the wall as a protrusion on the outside or might be level with the surface of the wall or might be caved into the wall.

Figure 13. Wooden closet decoration  Figure 14. Wooden decoration in the room

2.3.4. Service Spaces (Stables/ Barns)

In traditional Halfeti houses, in order to contribute to the family economy, stables are built on the ground floors for keeping the mounts and some ovine cattle. The stables are carved out of the softer limestone rocks above which the houses are placed. The stables have access through the street or the courtyard. The main gate opening from the street to the courtyard is kept high and wide with the mounts in mind. Inside the stables there are rings on the walls, feed boxes and niches for keeping barley and hay (Figures 15-17).

Figure 15. A staple example  Figure 16. A staple plan  Figure 17. A barn example

The barns are the spaces where the grains to be used during the year are stored. The barns are located on the ground floors and some are carved inside rocks naturally with barrel vaults sometimes ventilated through the courtyard with a loophole window sometimes from the street and in the form of rectangles and they are generally cooler places. The floors are either soil or rocks. Inside the barns there are water cisterns carved into the rocks before and they are used for the water requirements. The water is filled into the cistern with the water ways carved into the rocks and then being used in accordance with the needs.

2.3.5. Wet Areas (Kitchen/ Hammam/ Toilet)

Halfeti houses have their kitchens in their courtyards. In the kitchen opening to the courtyard, the stoves are placed into the walls where the food is cooked and the water is heated. In addition, there are stoves for cooking in the terraces and iwans on the top floors (Figures 18-19).
The bathing requirements are met at the hammams of the county or in the rooms at the doorsills of the houses in Halfeti. The water outlets are provided to the courtyards through gargoyles or water canals from the sills. The richer families have built hammams inside their houses. Such hammams are covered with domes with their furnace section adjacent to the bathing unit. Today at houses where they do not have hammams, the bathing requirement is sorted with additions to the rooms or the courtyards. The toilets in Halfeti houses are close to the entrance door and in square shapes with the measurements of roughly 80–90 cm. The water usage is provided through drainage to the cesspools opened to one corner of the toilets since there is no sewage system.

2.4. Facade Systems

The facade elements making up traditional Halfeti houses are protrusions, doors and windows. The houses are dominated with simplicity and the facades are very much alike. However the details of decorations, window arrangements and the protrusions constitute the differences between the houses. The houses are constructed in a self-enclosed manner and they cannot be seen from the street. On the narrow sided facades of the houses facing the Euphrates River there are single or double window groups; on the longer sided facades there are double, triple or quadruple window groups or iwans. Iwan being in the corner or in the middle, having arches or straight lintel creates differences in facades. The iwans are generally found on the north-west and south-west looking facades.

The street facing facades of the buildings have generally been kept blind for reasons of privacy and security. Small sized windows on the ground floors of the building facades are for the ventilation and lighting of the service spaces. The windows of the ground floor rooms or the doors opening to the stables and other service units are placed on the living quarters of the facades facing the courtyards. The walls of the courtyard are built with the height of 2.50 – 3.50 m to avoid the courtyard being seen from outside and also to avoid access from outside using lined rubble or cut stones (Figures 20-21).

The doors on the facade have different sizes depending on where they are placed. The courtyard doors have a width of 100-150 cm, the doors of the rooms have a width of 75-90 cm and they are usually 170-220 cm high, either having pressed arches or straight passages with single or double wings. The courtyard
doors that have survived till today are the doors that are called cubbed (enikli) or lambed (kuzulu) doors. The cubbed door that is seen as a common feature of the traditional houses in and around Şanlıurfa is a small passage for the ease of use of the people living in the house and the cattle that are fed in the house in the middle of the bigger door. The whole of the door is opened with an iron rod attached to the pivot on the wall (Figures 22-23).

Figure 22. Examples of single winged door

Figure 23. Examples of double winged door

The room windows have arches and are in the rectangular form with the width of 65-85 cm, and the height between 100-170 cm. The top windows built for the purposes of ventilation and lighting might be in the square, rectangle, circle or oval forms. The windows on the facade create different types depending on the laying of the lintel and keystone locations. The windows with pressed arches can be seen in the houses of previous times and straight lintel windows can be seen in the recently built houses. The windows have two wings and sections. There are usually iron bars and very rarely wooden bars in the front sides of the windows (Figures 24-25).

Figure 24. Examples of window

Figure 25. Top window types and their decorations

The arches of the iwans are built in the forms of half circles, pointed arches or as straight lintel. The decorations are more on keystones and springers. In mansions the whole of the iwan arch will be covered in stone decorations. On the top floors of the houses located on disorganised plots there are set-square protrusions in order to take care of the slope of the street and to provide a flatter and bigger space. There are no closed protrusions inside the houses in the form of alcoves. The protrusions are placed on flat and chamfered pendentive stones (Figures 26-28).
In Halfeti houses, the decorations can be seen on the fringes, iwans, on the consoles in front of the iwans, on window sills, on lighting windows and on the stairways. The stone profiles used for decorative purposes on the stairways and railings show differences in terms of their shapes and sizes.

2.5. Construction Technique and Materials

Limestone, wood and metal are the materials that are used in the construction of Halfeti houses. The load bearing walls built with masonry are constructed using the double wall technique where the interior and exterior surfaces are cut stones and the gap in between is filled with rubble. The wall thicknesses are between 50-70 cm. The niches built in order to keep the bedding and display decorative objects are done using the thickness of the walls. The interior wall thicknesses are between 18-50 cm and depending whether there are niches on the walls this thickness increases. On the walls and arches where the surface of the facade is up to the squinch starting point of the iwans and porches are covered with proper stones with the height of 25-30 cm. And the foundation walls of the building including the ground floor are built using rubble stones. In the interior spaces, the wall surfaces of the walls are sometimes plastered and sometimes not. The lap joints and the cast mortar are rubble stones and lime. The wooden materials is provided using the walnut, mulberry and pine trees around and used for the doors, windows, ceilings, closet doors, stairways and railings.

The top flooring in the houses is covered with squinch made up of wooden bearings or cut stones (Figures 29-30). Squinch flooring is used in the rooms of the ground floor on the iwans and porches and flat flooring is used on the top floors. Wooden bearings are used both for the middle gap and the top flooring. The wooden bearings placed with gaps of 40-50 cm depending on the width of the room with the diameter of 15-20 cm are either used plainly or with decorations on them by painting. The beams are placed on the walls or stone pendentives (Figure 30). The wooden beams are covered with bushes, etc, and then soil is kept in between for the purposes of insulation. The middle gap is filled with stones, schappe and wood. The top cover is a flat roof and covered with pressed soil mixed with hay. The soil roof is mixed with hay so that it does not leak when it is raining. Metal is used as a material for the iron bars in front of the windows of some houses and as railing for the stairways of some of the houses. The railings are done using splice system.
3. THE DETERIORATIONS OF TRADITIONAL HALFETİ HOUSES

Part of the traditional texture had deteriorated after being submerged in the water in the aftermath of the construction of the dam. The first factor causing deterioration without the water but with the human and nature involvement is the vacated houses due to the construction of the dam when people’s vegetable gardens are submerged in water and they had to migrate and the houses were left to decay. The second factor is the additions and alterations by the new owners of the vacated houses in terms of their own needs. The third factor is the partial or whole demolishing of the houses due to making new roads.

Since sufficient awareness has not been created in Halfeti in respect of the migration and protection that took place, caused wrong interventions to the houses. The kitchens, bathrooms and toilets that were missing inside the buildings have been built on the iwans and inside the rooms using brick walls, the soil roofs being turned into reinforced concrete, the wooden window sills and doors being replaced with iron and pvc materials caused features against the traditional texture. In addition to this, the iwans and the windows were shut down, the doors were made into smaller versions, some windows have been joined together into bigger windows and so the unique buildings have changed their character with all such interventions. As for the houses that have not been maintained and repaired, humidity surfaced due to the top coating and the ground, so the stone surfaces started getting moulds, flowering and the wooden beams started decaying and the walls have come down (Figures 31-33).

Other than such factors, the administrators who have not spent the sufficient effort and did not have the sufficient vision in respect of preservation allowed the public buildings and hotels to be built as multi storey buildings in reinforced concrete and along with tourism, the shoreline has been filled with giant lighted signs and the visual pollution caused by the floating restaurants and the demolishing of the houses close to the streets for meeting the car parking requirements and restoration works undertaken for transforming the plans and facades of traditional houses into small hotels and commercial establishments all risk the title of slow city and cause the historical texture to disappear (Figures 34-36).

4. CONCLUSION

Halfeti was declared an urban archaeological site in the year 2002 and was given the title of Slow City in the year 2013. During the process when building the dam was being discussed, only inventory and documentation works had been undertaken for the houses that are going to be submerged in water and the
detection and registration procedures have not been undertaken for the other buildings, a development plan with the purpose of preservation had not been created which are the legal and administrative deficiencies regarding the subject. The traditional texture of Halfeti houses are getting deteriorated day by day with the changing users and the demolishes, re-constructions, additions and dividings undertaken by the tourism operators. In addition to this, the lost city of the county to the waters of the dam and the surrounding historical tecture around it continues to be the focus of tourism.

Despite the structural deteriorations of Halfeti houses that have been mentioned in the 3rd section, intervention by the methods determined by Ahunbay [11] such as “reinforcement, integration, renewal, cleaning, making healthy, re-use”, could provide for passing the structures on to the future generations safely. Most of the houses need simple repair work such as cleaning the wooden materials, partial alterations, plastering, painting, filling of the lap joints. For the houses where the load bearing system is preserved however repair and maintenance is required, the wooden beams, pendentive stones and the cracks on the walls should be repaired and thus the preservation should be provided. The solidly existing houses that require maintenance should be repaired and cleaned in terms of their wooden doors and closet doors and windows using soft brushes manually. The decaying beams should be replaced with the same materials of the same sizes. The decaying stones should be replaced with new ones, the emptied lap joints should be filled with the same materials in accordance with the original ones. As for the cracks on the stones, the tiny cracks should be filled in with stone dust mixtures.

Regardless of the reasons, partially damaged or missing structural elements of traditional Halfeti houses should be restored in accordance with restitution plans prepared in accordance with the traces of the building, old photographs, architectural structure, comparisons of similar buildings and written and oral sources. The kitchen, toilet and bathroom units as per the requirements of today should be arranged on the ground floors of the houses without interfering with the living quarters of the top floors.

Halfeti has become a touristic spot and so while the traditional houses are needed to be re-used for different functionalities such as boutique hotels and restaurants the authentic form of the structure should be preserved. The annexes and additions to the buildings should be in conformity with the rest of the authentic structure of a plain and comprehensible nature. All kinds of interventions to the houses should be undertaken with the approval of Şanlıurfa Regional Protection Board of Cultural and Natural Assets. In order for Halfeti’s Slow City title and its historical texture to be protected an area administration should be established and a development plan for protection should be prepared. In the leadership of such area administration, the inventory of cultural assets should be drawn, plans regarding preserving and protection should be implemented and the local people should be educated in respect of sustainable tourism. Taking the position and tourism potential of Halfeti into account, plans for protection should be developed for the structures that are not within the urban archaeological site close to Rumkale, Savaşan Village and the centre of Halfeti.

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CONFLICTS OF INTEREST

No conflict of interest was declared by the authors.

REFERENCES


