RESEARCH ARTICLE

Structural Identification and Analysis of Remains and Settlements of the Late Islamic Period in Abeyek Foothills

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Abstract: The Qazvin Plain and northern Alborz heights overlooking it are one of the important centers for the development and evolution of cultures in the central Iranian plateau. As we witness the continuous growth and flourishing of civilizations in different periods of time, from prehistoric to the present era in this geographical domain, this could have resulted in favorable environmental conditions such as climate, soil, vegetation and animal husbandry, as well as a suitable geopolitical condition (trade and communications) with far and adjacent cultures. Considering the desirable archeological background of the aforementioned area as well as its complexity, the expansion and evolutionary process of settlements, the paper, through the existing archeological framework intends to take into account cultural activities of communities from the formation of the Safavid rule to the end of the Qajar era in southern foothills of central Alborz, north of Qazvin Plain. In other words, the main purpose of this study is to determine the effect of the transit location and native culture of the proposed area on the formation and development of places, sites and production of cultural materials of late Islamic centuries as well as awareness of closeness and possible cultural relations with each of its adjacent geographical and cultural areas. The research method includes a methodological study of archeology with the application of a historical approach where the most important and documented data is to identify sites, documentary and pottery collection and their study is in a specific and common framework of this science.

Keywords: Archaeological Survey; Archaeological Sites; Southern Foothills of Central Alborz; Late Islamic Period.
Introduction

Qazvin province, due to its special geographical location, it has always been considered by human societies as a passage between the east, west, north and south of the country during different periods, it has played a significant role in the cultural development on the plateau of Iran. The geographical and climatic features of the Qazvin region, especially its environmental capabilities, provided favorable conditions for human settlements, from the prehistoric to the Islamic era. Its proximity to areas included of valleys around Sefid Rud, Alamut, Taleghan and the margin of the central plateau is another factor effective in shaping the basis and the need for conducting this research. Due to the archeological important of the region, a proposal entitled “Archaeological study of the southern slopes of the Alborz mountain range in Abeyek city” was presented to the Cultural Heritage, Handicrafts and Tourism Organization of Qazvin province in the form of three working seasons in 2006 that included the study of the villages of Zayaran, eastern and western foothills of the central part of the city of Abeyek. During these three seasons, a number of sites and archeological remains from different periods were identified that were introduced and studied in the course of the present research. Our understanding of cultural and historical development and evolution of the region in the Islamic period necessitates a research to clarify the culture and civilization of the Islamic period. This necessity can meet a part of unknown aspects of the late Islamic period, especially in the field of architecture and urban planning (Najafi, Mafi and Akhundi, 2009).

Research Aims

- Investigating the process of formation, development and related factors in the settlements of the late Islamic period in the region.
  - Studying the findings of the surveyed areas in order to compile a relative chronology.
  - Providing a suitable platform to register sites in the Cultural Heritage Organization of the country in order to prevent their destruction.

Research Questions

- What is the impact of the transit location of the area on the formation, development and
evolution of places and archeological sites from Safavid to Qajar era? And what have been the similarities and possible cultural relations with each of the geographical and cultural areas of the neighboring regions?

Research Hypotheses

It looks like this a special geographical location has caused Qazvin province to act as a bridge between East-West and North-South throughout different periods; as a result, the region possesses special importance and has attracted human societies from the antiquity and has played a significant role in cultural development and evolution of the Iranian plateau and neighboring areas.

Research Background

The Qazvin plain, as one of the most important centers of the formation of the first rural communities in the north-central part of the Iranian plateau, where a lot of research has been done, but in its mountainous areas, no systematic and scientific survey has been done. Meanwhile, there have been surveys and excavations on surrounding areas that help us understand the region’s culture, among which we can refer to archeological activities of the University of Tehran from 1970 onwards that was founded by late Ezatullah Negahban (Neghaban, 1997: 314). In the following years, some of the most important archeological studies whose results were cited directly or indirectly, are: Tepe Zagheh (Salehi, 2000; Malek Shahmirzadi, 2003); Tepe Ghabrestan (Fazeli and Abbasnejad, 2006: 80-79); Speculation of Tepe Zagheh (Fazeli Nashli, 2007; Fazeli Nashli and Aliyari, 2006); Subsequent excavations of Tepe Zagheh (Mulla Salehi et al., 2006); Review of Tepe Ghabrestan (Fazeli and Abbasnejad, 2006).

With reference to the general archaeological studies of the Qazvin plain, none of the comprehensive archaeological research has been conducted on foothill areas. As a matter of fact, most of the results of these studies are in the form of organizational reports that have not been published, such as: The survey of Taleghan region by Nasser Pazouki in 2003; the program of the archeological sites registration of the Abeyek region by Rezaei Kalaj in 2005-06; Surveys of the Qazvin plain along Eshtehard road by Lily Niakan in 2004-05; the survey of the Semirom Tarom Sofla region by Rezaei Kalaj in 2005; Surveys of Andajrud
region by Atousa Mo’meni in 2006 and Saeed Ganjavi Mirfattah (Ganjavi, 2004); Researches of Hamideh Chubak on Alamut Castle since 2007 (Chubak, 2007); the exploration at Tepe Nargeh, Takestan in 1999 by Khatib Shahidi; excavations at Tepe Uzbeki by Majidzadeh in 1999-2000 (Majidzadeh, 1999); the archaeological survey and identification of Abeyek foothills in 2006-07 and 2012 by Farzad Mafi and Reza Akhundi; the rescue exploration of Mazra Cemetery by Farzad Mafi and Reza Akhundi (Mafi, 2007: 3).

Research Area
The time frame of this research, the late Islamic period and its geographical Area, are: from the southern heights of Alborz, its slopes and southern domains overlooking the Qazvin Plain.

Map 1. The Political Division of Qazvin Province, Abeyek section (Zendehdel, 1998: 23)

Geography and Climate of Research Area
The geographical extent of the area of the study includes northern heights of Zayaran villages, eastern and western foothills including part of Southern Heights of Alborz and mountains such as: Bali Chal, Javar Chal, Akhdar, Didar Chal, Siyah Kuh, Sir Kuh, Qileh Batagh, Leilickak, Haftkhani, and Berya Kuh with heights between 2400 and 2800 meters from sea level. The extent of these heights is in a way that the plain is not seen among them and principally even space between the mountains
is in the form of foothills that are used for cultivation and orchards. A number of canals originated from water channels are present at the heights. Among the most important rivers in this region can be named as Zayaran, Behjatabad, Madamabad, Hilalrud, Abveres and Haft Cheshmeh. The climatic condition of the Abeyek region can be compared with that of the Mediterranean (Hedayati, 2012: 77).

Collection of Sites

Out of 77 identified sites of the Islamic period in the proposed research area, 34 are from the late Islamic period, in terms of their settlements and spatial distribution such as: 1- Tepes, 2- Intact buildings/structures and, 3- Remaining cemeteries.

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| 2 | 2 | 6 | 8 | 3 | 15 | 34 |
Ancient Tepes

These tepes are both in natural and artificial forms where in the first type, the upper layer or a part had human settlements, and in the second type, tepes were taken shape over time and contain several meters of archeological remains while some having several cultural periods. In the current study, the following are the most important settlements in the form of tepe:

**A: Sireh Darreh Tepe:** This is located in the western Abeyek foothill in the northeastern part of Shokrnab village, which is a large area with an extent of about five hectares. The slope of the tepe is toward the west and, today, it has taken the step-like form due to its agricultural use. The 300 meter long and 160 meter wide tepe is in a straight line some 800 meters southeast of the village of Chenasak in a crescent shape. The middle part of the site has a rocky surface. Two channels, which have water for about nine to ten months, are located around the tepe. The study of the surface-level pottery, which is not very extensive, indicate the tepe has late Islamic period settlement.

![Diagram](image_url)

**Fig. 1. Location Outlines of Sireh Darreh Tepe (Kohandiyar Pazhouhan, 2006-7)**
B: **Kamar Saran Tepe**: It is located in a straight line in the western foothill of the central part of Abeyek city, 700 meters south of Chenasak village, 350 meters west of Tepe Shokarnab and 670 meters northeast of Tepe Kalangdasht. This is a large area with an extant of approximately 500 meters in the north-south direction and 300 meters in the east-west...
direction, which has a gentle slope of about 5° on the eastern parts. The two rivers of Imamzadeh Darreh flow on the western side while a southern canal of Chenasak village flows on the eastern side. Evidence and remains on the surface are very similar to other Islamic sites around it. The dispersal of pottery fragments in the area is relatively good (about six pieces per square meter) and there are many rubble stones that indicate the architectural remains whose higher in density in the southeastern part is, which is worth noting. A number of these rocks have also been collected by local farmers. The northern and southern parts of the tepe are surrounded by orchards of Chenasak and Shokarnab villages, where scattered pottery fragments can also be seen.

Fig. 4. Location Outlines of Kamar Saran Tepe (Kohandiyar Pazhouhan, 2006-7)
**C- Ghooed Qala Tepe:** It is situated in the western foothill of the central part of Abeyek city, at 1500 meters and 30° north-west of the village of Chenasak. This is a very large
enclosure of about 10 hectares with dimensions of 300 meters north-south and 350 meters east-west. There are more scattered pottery fragments in the northeastern part as well as the accumulation of rubble stones possibly from architectural remains. Chenasak residents also believe that this tepe was part of the present village and had settled in ancient times. The area is relatively flat but somewhere it has slope with about 30°. There are two relatively large streams in the area, one with a flow of eight to nine months and the other is known as Ghodd Qala River. The surface-level pottery distribution is not very dense.

Fig. 7. Up: Sketch showing location Ghodd Qala Site of Chenasak Village (Kohandiyar Pazhouhan, 2006-7); Down: Ghodd Qala Site
Fig. 8. Up: Pottery Design from Ghooq Qala; Down: Pottery Fragments of Ghooq Qala

Architectural Remains

A collection of this group includes structures that have survived, in whole or in part, to this day, the most important of which are shrines/mausoleums and other places. In this
collection, one can see clay, stone and brick remains as well as other components used in architecture. The most important of these remains are below:

**A: Imamzadeh Sabzeh Poosh:** This site is located in the eastern foothill of the central part of Abeyek, 1,670 meters east of Hajiabad village. The 4.3m long and 3.5m wide building is in the north-south direction and is built on a stone slab with approximately 10 x 6m dimensions and 8m height. A staircase leads to the entrance at the eastern side. The building plan is circular that is closer to an oval shape. The internal diameter and height is 3.1m and 1.8m, respectively. Bricks and stones with lime mortar are used as building materials. The dome is covered with colorful blue, yellow and black tiles that, except at some places, are shed. The interior has been renovated and covered with cement in recent years. There are scattered pottery fragments around this site that belong to the late Islamic centuries.

![Image](image_url)  
**Fig. 9. The General View of Imamzadeh Sabzeh Poosh, View from East; Bricks of Dome Covering; Pottery Fragments from Imamzadeh Sabzeh Poosh Site**

**B: Todaran Village Bath/Hammam:** It is located in the eastern foothill of the central part of Abeyek, inside the Todaran village texture, south of a mosque. The building, which is still
in use, is made of limestone and mortar. The entrance which is on the south leads to a square chamber that has two bench-like projections with a truncated arch in both northern and eastern sides. The space serves as a locker room, with a pool in the middle and a door at the west, leading to the main bathroom and washing area. The washing room is also rectangular with two platforms on both north and west sides, similar to the locker room. The reservoir is located on the southern side, which is divided into two parts for hot and cold water. These waters reach the pool through a pipe. In the pool, the hot and cold waters are mixed and prepared for the use. The roof is covered with domes that have Horno in the center, in other words an opening for lighting above the ceiling. The tun or greenhouse is located on the southern side under the water reservoir, which is heated with mazut, wood or oil and diesel.

![Fig. 10. Right: Todaran Village Bath, Entrance View from South; Left: Todaran Village Bath, View of Water Reservoir](image)

**Abeyek Cemeteries**

During the course of studies, 10 cemeteries were discovered and determined to be from the late Islamic period based on tombstones and inscriptions on them. These cemeteries are located around present villages and are not so large but damaged and destroyed by unauthorized excavators in search of artifacts. For more familiarity, two of them are introduced below:
A: Imamzadeh Hadi Cemetery: Tombstones made of marble can be seen in this cemetery, a number of them are either destroyed or broken. The images engraved on the stones include seal and rosary, gun sling, gun and gunpowder, sword and dagger, rose and horse with saddle and the perfect harness. The inscriptions on tombstones include the name of the dead, father’s name and the year of demise. The stones are cream-colored marble, and are cut in rectangular with parallel sides and inscriptions on them in Thuluth script. It is worth mentioning that there are also graves without tombstones in this cemetery.

![Sketch of Imamzadeh Hadi Cemetery and Gravestones](image)

Fig. 11. Sketch of Imamzadeh Hadi Cemetery and Gravestones

B: Chenasak Village Cemetery: One of the features of this cemetery is the use of cubical tombstones with different dimensions between 60 to 90cm in length, 40 to 60cm in width and
30 to 50cm in height. These stones are decorated with regular and consecutive geometric patterns in the form of Girih tiles, and on the margins, Thuluth scripts has been used to inscribe Qur’anic verses and introduce the deceased. The most interesting example of this type is the one measuring 60 x 90 x 45cm, on one side of which there is a pattern resembling a life cycle, and on the opposite side there is a man riding a horse. On the main face of this stone has inscription and in the center of it, there is a plant similar to *Gul-e Sehpar* (coriander). Among other large stones used in this cemetery are simple ones with a cubical appearance and with a gable-shaped face, sometimes resemble a camel-hump shape. Other stones are also used, which are generally white marble with 20x30cm dimensions, on which the name of the deceased is engraved, and decorated with designs such as sling, rosary, vases, and sprinklers.

![Abeyek survey project](image)

**Fig. 12. Sketch of Chenasak Village Cemetery and Gravestones**
Introduction of Archaeological Data of the Late Islamic Period

There are many obstacles and restrictions identifying the cultural status of the country’s different regions during the late Islamic era. The concentration of late Islamic enclosures and sites in Abeyek foothills indicate specific social changes and developments during this period. Likewise, they are indication of a significant increase in human settlements compared to previous periods in villages in western and eastern foothills and Zayaran. Of 34 sites and artifacts discovered from the late Islamic period, 19 are tepes. The largest is Sireh Darreh Tepe with an extent of over five hectares and the smallest is Anar Darreh with an area of less than one hectare. Tepe Kharjan and Tepe Karbalaee Qasem at an altitude of 1422 meters above sea level are considered to be the lowest elevated sites, whereas, Tepe Kezlek at an altitude of 2242 meters is the most elevated one. The rest of the sites are located between these two elevation parameters. As mentioned earlier, with the exception of Chenasak (Qala Mohalle) and Tepe Kharjan in Khuzenan, there is no other evidence of permanent settlement and villages from the late Islamic period. And, other sites of the same period were only temporary or seasonal (Yaylak) settlements.

It has led to the formation of many sites in this research area, Existence of special environmental conditions with mainly mountainous features of the study area that despite the flat space between the mountains, soil fertility, abundant water resources
including springs and waterways and rivers (including Ziaran River, Behjatabad and ...) for agriculture and horticulture and monogamy of the region. According to the chronology of the type of pottery discovered in these areas and their distribution in the western and eastern parts, the type of interregional and extraregional communication in the Qazvin plain can be traced.

From the area under research, blue and white and Kubachi type pottery with Safavid-era characteristics are obtained. Studies show that Iran is one of the main centers of the blue and white pottery production, Many blue and white specimens have been identified in Iran that are comparable to the specimens obtained from the study area. Some of the key centers of the blue and white pottery production in the late Islamic centuries were: Neyshabour, Natanz, Kashan, Naein, Qazvin, Qom, Tehran, Urmia, Isfahan, Zarand-Kerman, Yazd, Shiraz, Mashhad, Tabriz and Hamadan (Tohidi, 2008: 288-282).

The Late Islamic era pottery of the Abyak foothills are principally wheel-made with enough bake and enameled and are mainly made of dough clay and soft sand, in some
cases, minerals such as lime. Kubachi pottery has a white body and usually painted with deep green, brown and blue colors. They have glass-like glaze with scrolling and arabesque flowers and leaves (Pottery recovered from Tepe Karbalaee Qassem and Tepe Ghood Qala). The blue-and-white pottery has pea-colored dough adorned with geometric, herbaceous, and other decorative motifs. Their bodies are made of soft dough and are decorated with white clay glaze and blue color inclined to azure under the glaze. Sometimes, they are seen with green and purple glaze.

<table>
<thead>
<tr>
<th>Ghood Qala (NW of Chenasak village)</th>
<th>Kamar Searan (South of Chenasak village)</th>
<th>Kelangdasht (South of Chenasak village)</th>
<th>Sireh Darreh (SE of Chenasak village)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
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Table 2. Acquired Pottery and Comparable Samples (Authors, 2019)

A total of 10 cemeteries from the late Islamic period are found in the Abeyek region, which are located at an altitude of 1,300 to 2,150 meters above sea level, with Siahkuh Cemetery being the most elevated at an altitude of 2,112 meters and Miankuh Cemetery being the lowest at an altitude of 1,321 meters. Meantime, the largest and richest cemetery in terms of extent and archeological remains is Chenasak Cemetery with 400 × 300 meters
dimensions, where the remains of different Islamic periods can be seen, and the smallest is Khorram-Ava Cemetery with dimensions of 100 × 40 meters. The most important features that can relate these cemeteries to later periods are tombstones that have date writing on them such as Chenasak Cemetery, Ghood Qala Cemetery and Josnavaye Cemetery in the western foothills and Miankuh Cemetery in Zayaran village.

In the past, architects tried to obtain the required construction materials from the nearest places and were not inclined to get them from other places and be self-sufficient (Mahjoor, 2004: 63; Pirnia, 2008: 32). These features can be found in the studied buildings in the region (baths and shrines), which have the characteristics of an Iranian architecture with introverted features and ecological or idyllic materials. In particular, introversion in the construction of the bath has been observed in this building according to the cultural characteristics of the Iranian plateau.

This has also been applied in bathrooms to preserve internal heating. But the rotation and break down of stairs of bath toward vestibule and Sarbineh are based on the fact that this and even the location of the vestibule between the entrance and the corridor, is not only for maintaining the warmth of the bathroom environment, but also to blind passers-by into the locker room (Kiani, 2000: 14; Pirnia, 2008: 198-199). The method of construction and composition of materials, including the celestial type (Columbus dome), Hornos, platforms and arches (truncated arch) and the plan and time of construction as a whole, these buildings are often in line with the Isfahan style whose origin, according to researchers in the field of art of architecture, is the Azerbaijan region. In fact, the extent and bodily parts of the baths of each village has been considered in proportion to its population (Pourdehimi and Gorgi Mahlabani, 2007: 63; Pirnia, 2008: 27-26).

In general, the common feature of baths in the region, apart from people-like, avoidance of futility and needlessness are the use of the eco-friendly materials in the structures, including river stones, which were in abundance due to the climate of the region and the existence of numerous permanent and seasonal rivers (Ebrahim and Malek Mohammad, 2010: 306-308).
Mausoleums/shrines are also another part of the stable buildings in the Abeyek region, that number of them related to the Late Islamic centuries such as Imamzadeh Salimeh Khatoon and Imamzadeh Sabzeh Poosh. What attract the attention in these mausoleums most is the use of locally-available materials made of local stones, bricks of Safavid and Qajar periods as well as tiles and ceramics. Instances of these types are found in the rest of sites of the same period in this region. Finally, this collection of building lack special feature as they have no special elegance. In the area around the sites, pottery fragments are also scattered, which belongs to the late Islamic centuries.

Conclusion
The field and documentary researches conducted on the situation of the Abeyek foothill region during the late Islamic period were determined, that 34 of 148 sites are related to that periods. Of these, 19 are ancient tepe, five intact buildings and 10 cemeteries distributed throughout the region. With regard to the dispersion of the sites, it can be said that the most widespread of them is in the eastern village with 15 sites, of which 10 are tepe, three are cemeteries and two (baths and mausoleum) are permanent buildings. There are 14 sites in the western village, eight of which have tepes, five have cemeteries and one with intact building. Five ancient sites have also been identified in the Zayaran area, four of which belong to tepe and one is related to a cemetery. With these features, it is clear that the eastern villages of Abeyek in the late Islamic period have the most concentration of archeological sites that is due to favorable geographical conditions and communication routes.

Out of 34 sites of the late Islamic period, 19 are in the form of tepes, with the most important cultural remains there being pottery. The white and blue pottery, visible at all sites, is the most important type that is considered to be the most important pottery characteristic of the Safavid period. Another type of pottery that is specific to the Safavid era and has been obtained from these sites (Tepe Karbalaee Qassem and Tepe Ghodd Qala) is Kubachi type. In addition to Safavid-era pottery, there are also from pottery from the late Qajar period, which is very similar to prehistoric pottery, which can probably be
introduced as pseudo prehistoric (prehistoric quasi-pottery) that are obtained very rarely. Cemeteries can be attributed to the late period based on two characteristics: One is the special pottery and the other is inscriptions (engraving) on gravestones/tombstones of 100 to 200 years old.

Other types of acquired remains from the Abeyek region are buildings that still intact, such as baths and shrines/mausoleums. These structures have been attributed to these periods by comparing them with similar examples in other regions. Yet, in some of the tepes, special features of this period have also been seen, such as the use of tiles (Imamzadeh Shah Sabzeh Poosh) which can be attributed to the Qajar period. The second which is most visible is the use of roofs that are specific to Qazvin and neighboring areas. Since this region experiences rains in the form of storms and often high-speed winds, the roof of the house is built in a way that could resist these climatic conditions. The results obtained from the late Islamic period of the Abeyek region indicate that the construction and use of eco-friendly materials have been involved in buildings for reasons such as affordability, quick accessing to materials and better adaptability to climatic conditions of the region.

The Abeyek foothill region for its various reasons and special geographical location as well as being on the important ancient route called Khorasan (a link between east and west of the Iranian plateau) is among the areas that play an important role in reconstructing the history of cultural, political and social developments in the central, northern and northwestern plateau of the country. In this regard, Qazvin region was connected to the sites of the central Iranian plateau and northwestern Iran from prehistoric times and this continued to historical and Islamic periods. In the late Islamic period, the cultural affinity of this region has been more with the cities of Isfahan, Zanjan and Tabriz.

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شناخت و تحلیل ساختاری آثار و استقرارهای دوره متأخر اسلامی کوهیپه‌های آییک

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چکیده: یکی از مراکز مهم تکوین و تطور فرهنگ‌ها در فلات مرکزی ایران، دشت قزوین و ارتفاعات شمالی مشترک بر آن است. چنانکه در دوره‌های مختلف زمانی شاهد رشد و شکوفایی پیوسته تندرست‌های آن مانند آب و هوای خانک، بوشش گیاهی و جانوری و همچنین موقعیت مناسب زمین‌پرپیچیده (تجاری و ارتباطی) با فرهنگ‌های دور و نزدیک بوده است. بررسی و درک چگونگی عوامل متغیر بر پیژندگی و گسترش استقرارهای دوران اسلامی متأخر در این منطقه حائز اهمیت بوده است و چنین پژوهش ارزشمند است که مطالعه یافته‌های مربوط به منظریات، تحقیقات و وصف مطالعه‌ها را امکان می‌سازد. به نظر می‌رسد که یافته‌های این مطالعه به بررسی و تحقیق بهتر و درک بهتر منابع فرهنگی و اجتماعی این منطقه نیاز است.

کلید واژه‌ها: بررسی باستان‌شناسی، کوهیپه‌های آییک (زمره تای پاپان قاجار)، استقرارگاه اسلامی، منطقه، شناسی، دانشگاه آزاد.

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