



Sustainable Conservation of Vernacular Heritage Domed Houses in Karaköy (Şanlıurfa, Suruç), Turkey¹

Mehmet Uysal

Assoc. Prof.Dr., Necmettin Erbakan University, Faculty of Engineering and Architecture, Department of Architecture Konya, Turkey, mimuysal@gmail.com

Koray Özcan

Assoc. Prof.Dr., Pamukkale University, Faculty of Architecture and Design, Department of Urban and Regional Planning Denizli, Turkey, korayzcan@gmail.com

ABSTRACT

This paper attempts to define *in situ* conservation–development strategies for sustainability of vernacular architectural heritage composed of domed houses dated approximately seven–thousand years in Karaköy (Qere) Village (Suruç, Şanlıurfa Province) in southeastern Anatolia region of Turkey in terms of conservation–development of cultural identity and heritage values. It is considered that this paper tries to contribute the literature on architectural and rural planning concerning vernacular architectural heritage and also the preparing of planning–implementation studies and also architectural design projects relating conservation–development strategies to the future.

Keywords: Vernacular architecture heritage, sustainable conservation, domed house, Turkey.

1. INTRODUCTION

The most important problem of mankind has been housing after adopting a sedentary life. Scientific researches indicate that 90% of the existing houses all over the world are units of vernacular architecture. This ratio corresponds to approximately 800 million dwelling units.

It would be appropriate to assert that the most authentic dwelling units under vernacular architecture are domed houses. Domed houses are observed in a vast geography from Italy to Iraq and Georgia to Cyprus. In Turkey, the oldest known domed house dwellings exist in the Southeastern Anatolia region, in Harran and Suruç (Durukan 1999). It might be asserted that the domed houses in these settlements exhibit similarities with tents

¹This study was presented at Domes in the world 2012/Florence congress by congress referee presentation [Alberto Bove].

and other temporary housing types and techniques used in nomadic lifestyle and they are among the earliest samples of domed house types (Başaran 2011, Sami and Özdemir 2011, Akin and the others 2011) .

This paper attempts to define conservation-development strategies for sustainability of vernacular architectural heritage composed of domed houses dated approximately seven-thousand years in Karaköy (Qere) Village (Suruç, Şanlıurfa Province) in southeastern Anatolia region of Turkey in terms of conservation-development of cultural identity and heritage values (Figure 1).

It is considered that this paper tries to contribute the literature on architectural and urban planning concerning vernacular architectural heritage and also the preparing of planning-implementation studies and also architectural design projects relating conservation-development strategies to the future.

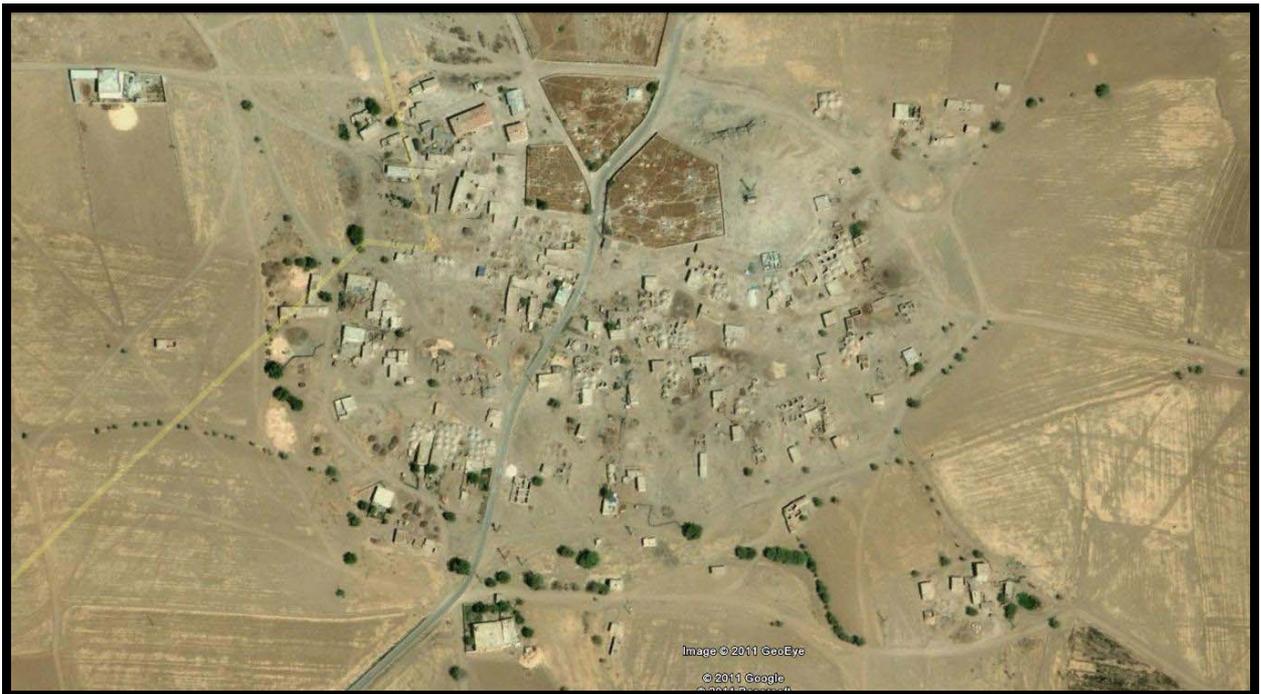


Figure 1. A general view of Karaköy

2. RESOURCES AND METHODOLOGICAL FRAMEWORK

The main sources of this paper are based on written sources consisting of survey report, historical documents, and also, visual sources such as archaeological and architectural remains.

The methodological framework of this paper in the context of *in situ* conservation-development and presentation strategies is based on a process of three stages.



Firstly, by using morphological analyses focused on the architectural characteristics, the domed houses were assessed in terms of spatio-functional characteristics getting data from transferred on to the plans or schemas.

Secondly, the domed houses were analyzed according to the rural planning principles to define the spatio-functional role in the settlement fabrics.

Thirdly, the strategies were proposed to the conservation-development of cultural identity and heritage values. These strategies were importance in terms of the both the preparing plans and projects relating to architectural design, urban planning and its implementation process and improvements of the possibilities of in situ presentation to the future generations.

3. ANALYSIS

It is analyzed to determine the spatio-functional characteristics of domed houses as the spatial products of vernacular architectural heritage by using written resources such as historical text and architectural studies, and inventories. Also, the visual resources such as existing development plan, topographical maps aerial photos and photographs about domed houses in particular.

In this point, it is examined that few published studies on domed houses of Harran the southeastern of Turkey in particular (Başaran 2011).

3.1. Settlement Pattern

In the context of this study, Karaköy Village with the domed houses is analyzed both architectural characteristic and rural planning/settlement patterns depending on the historical and cultural origins and geographical aspects. It is known that the southeastern Anatolia is one of the earliest human settlement sites of Anatolia. The village of Karaköy is located on a tumulus dating back approximately seven-thousand years (Figure 2). Tumulus is the focal point of the settlement and surrounded by domed houses (Figure 3). It has a hot-dry climate and its height above the sea level is approximately 540 meters. The village depending on rural economy and arid geographical aspects indicated a compact plan according to settlement pattern and enclosed cultivating areas such as pistachio, cotton, wheat and chickpea-lentil (Şahin 2007).



Figure 2. Settlement Pattern



Figure 3. General View of Settlement

3.2. Architectural Characteristics

The housing units of the village were analyzed in order to functional identity, constructive character, and also, architectural form. So, it can be said that the domed houses are organized as the combination of basic cells such as geometrical forms in spatial terms (Figure 4). Housing units composed of different units were designed in order to meet the basic needs such as sleeping and eating (Figure 5). The form of houses that evokes a tent, were established spontaneously and evolved over time (Figure 6, 7). Generally, domed houses indicate unique typology structure in geometrical form such as square, dimensional aspects such as circular form and also, constructive materials such as brick made of clay. Also, they have bioclimatic aspects like the domed vernacular houses of Harran (Başaran 2011).



Figure 4. A View of a domed house



Figure 5. A view of different units



Figure 6. A View of domed houses



Figure 7. A view of domed houses

4. STRATEGIES

First, it must be declared an archaeological and historical conservation area by the Council of Immovable Monuments and Antiquities and the domed houses having archaeological and architectural values must put under protection immediately. Also, it is analyzed *in situ* conservation, preservation and presentation alternatives by architectural history and urban planning history studies.

Second, it must be organized a comprehensively technical team consisting of archaeologist, architects, urban planners and historians for surface survey. Also, it should be prepared a wide inventory relating with architectural and archaeological heritage values of the domed houses. It must include many findings about architectural documents or reports, measured drawings (interior or outdoor), restoration projects, construction materials analyses in order to regeneration and conservation project. Also, it must determine and examine how the process of physical change and the historical stratification of the archaeological site.

Thirdly, it must be prepared an integrated *in situ* conservation–development plan. It should involve not only buildings as domed houses but also entirely rural settlement topography as the domed houses and their environments. Also, conservation–development plan must define planning and implementation criteria in detailed and *in situ* conservation, preservation and presentation opportunities.

Fourthly, it must be prepared a heritage management plan for sustainable conservation of historical, architectural and archaeological values. The aim of the management plan must become to determine how *in situ* conservation development and to examine presentational opportunities concerning the integration of an archaeological heritage site



within cultural–economic rural life, as well as examining the issue of the transfer to succeeding generations of educational activities and scientific research. Also, it presents (probable) alternative solutions related to management, financial and law problematic with relation to planning and implementation, in order to decide how a plan for preparing a process for *in situ* sustainable conservation–development could be carried out. It also aims to redefine the local identity values in national and international platforms by planning and architectural designing studies based on spatio–functional analyses in order to development of economic life.

REFERENCES

- Akın, G., Akın, N., Eres, Z., and Ivedi, B. (2002). *Şanlıurfa Birecik–Suruç Kırsal Mimarlık Envanteri Raporu*, TUBA Yayınları, pp.119–192, Ankara.
- Başaran, T. (2011). “Thermal Analysis of the Domed Vernacular Houses of Harran, Turkey”, *Thermal Analysis of the Domed Vernacular Houses of Harran, Turkey, Indoor and Built Environment*, 20(2), 11–22.
- Sami, K and Özdemir, İ. (2011). “The vernacular houses of Harran and cultural heritage–Turkey”, *International Journal of Academic Research*, 3(3), 148–157.
- Durukan, A. (1999). *The cultural heritage in the towns of Birecik, Halfeti, Suruç, Bozova and Rumkale*, Başbakanlık GAP İdaresi Yayınları, Ankara.