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Understanding Cultural Interfaces in the Landscape: a Case Study of Ancient Lycia in the Turkish Mediterranean

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Abstract

Landscapes by definition include interactions between man and nature. Our actions, perceptions and beliefs create and shape the landscape over time. The aim of this study was to evaluate aspects of the Lycian landscape in the Turkish Mediterranean, testing an approach based on interpreting cultural interfaces. Interfaces between past and present, between man and nature, between culture and space and between the visual and the spiritual were evaluated in relation to a selection of specific landscape elements: ancient tombs, and local vernacular structures. The Lycians constructed tombs to be their houses for the afterlife using the inspiration of their actual houses. The persistence and the continuity of the original design and construction techniques utilised in the tombs, still found today in granaries, beehives and chimneys, was explored in terms of the types of cultural interface. The results of the study showed that the authenticity of the Lycian landscape is a unique agreement between past and present on land sharing the same knowledge and forms, and in this respect cultural interface can be an instinctive communication tool between pattern, process and product in understanding the associative cultural values within the landscape which are worthy of conservation.

Keywords: Landscape, cultural interface, Lycia, rock tombs, Turkish Mediterranean

Introduction

The concept of landscape embraces both cultural and natural qualities of a particular territorial area (Krönert *et al*, 2001). According to the European Landscape Convention landscape is defined as 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors' (Council of Europe, 2000).

Bell (1999) noted that all landscapes are a combination of exceptional patterns which arise as a result of a range of natural and cultural processes while Harvey & Fieldhouse (2005) indicated that landscape is the historical result of the different uses made of a place and a multivalent form of knowledge.

Landscape architecture is the art and science of planning, design, management and stewardship of the land which involves natural and built elements, and cultural and scientific knowledge (ASLA, 2003). Swaffield (2005) stated that landscape architecture is a profession of landscape understanding, and it is important to have a sound comprehension of the structure and significance of the landscape from a disciplinary point of view. This is particularly crucial in relation to sustainability and the protection of cultural and natural values and processes within a landscape. In relation to this landscapes can be read from many perspectives, as nature, habitat, artefact, system, wealth, ideology, history, place or beauty. When developing a strategy to document a landscape of cultural value, it is therefore important to be able to read it in its context of place and time (Birnbaum, 1994).

As landscapes conceptually have both holistic and complex multi-dimensional characters, they can bridge both natural and cultural aspects at once. The term 'interface' refers to relationships or associations between two characteristics or features of a landscape. In the literature, interfaces are seen as opportunities for innovation and creative dialogue (Yunkaporta & McGinty, 2009); while in the media, a landscape interface is a construction of memory and experience, presented as a pictorial interpretation of the landscape that unfolds in a gradual progression along a timeline from the ancient to the modern world (Spiegel, 1997).

Nakata (2002) considered that understanding cultural interfaces allows for a range of possibilities, such as the places where we live and learn, the places that condition our lives, and the places that shape our future. The study of cultural interfaces in landscape research is one approach for understanding how a landscape evolved in the past and how products and processes from various points in the past continue to shape its present condition and are likely to continue shaping it into the future (Palang & Fry, 2003).

PECSRL (2006) discussed a wider interpretation of interfaces, not only as areas of exchange, but also as areas where spatial and historical processes coalesce. Wardell-Johnson (2007) suggested that interactions between people and the landscape in which they live reflect social practices and values that are played out at the complex interface of the human and ecological systems.

The interface can link past and present, time and space or man and culture, while cultures reflect variations between different geographic, ethnic or socio-economic groups at the same time or between the same groups at different time periods or both. Therefore, understanding cultural interfaces in landscape research is valuable tool for comprehending

how cultural layers in the landscape that come through time along with processes and products continue to affect us.

The discourse of, and research using, cultural interfaces in landscape as a framework requires an interdisciplinary approach for apprehending and bridging the past and present and the material and non-material worlds within the landscape. From a historical viewpoint, landscape archaeology, the study of human activities and the resulting spatial and temporal structures and historical geography, which focus on understanding the long story of how people have made our landscape over time, are two of the most relevant disciplines from which landscape architecture and landscape research can benefit.

Landscape archaeology studies the ways in which people in the past shaped nature consciously or unconsciously to create landscape. Joyce (2009) suggested that ritual and symbolism are subjects of archaeological study through the examination of individual artefacts, the identification of symbolically important locations within archaeological sites and landscapes, and the analysis of contextual associations between location and products.

The landscape that we have inherited can have similar attributes but the time element in any landscape may vary according to several factors, such as the period in which the area was first settled, or the degree to which prehistoric or historical elements have survived. However cultural heritage in any given landscape can only be acquired from well-researched information, and therefore we must learn to read the landscape, its facts and symbols, as well as its systems and transformations (Feliu, 2003). It is important to combine technical approaches with classical historical-geographical methodologies when examining cultural interfaces within the landscape (Palang & Fry, 2003).

Since landscapes of cultural value with a significant time depth contain so much potential meaning it is a challenge to identify and interpret the range of aspects that may need to be conserved or managed for the future. This is where the concept of interfaces becomes especially useful and can establish a communication between physical manifestations and intangible values as well as other associations which have adhered to a landscape over time. There are several categories of interface that may be interpreted (Palang & Fry, 2003; PECSRL, 2006): those between past and present, between man and nature, between culture and space and between the spiritual and the visual.

The Turkish Mediterranean region was a key location for many ancient human civilisations. The diverse nature of the surroundings and environmental conditions, particularly the favourable climate, allowed people to inhabit and develop regions of different characters through their diverse cultures. In ancient times, Lycia, known as ‘the land of lights’ was located in the Taurus Mountains with direct access to the Mediterranean Sea. One of the most notable aspects of the Lycian civilisation since the 500s BC and onwards was the practice of constructing elaborate rock tombs.

The aim of this study was to test the effectiveness of the concept of cultural interface in the landscape by analysing a particular landscape, and applying it to a specific area, that of a part of the modern Turkish Mediterranean known in ancient times as Lycia. This is a particularly appropriate location because of some remarkable continuities and adaptations of the landscape, in the form of a number of distinct elements which persist to the present time, yet have been utterly transformed in function over the millennia. These elements are the

unique rock tombs to be found there, whose form persists in contemporary vernacular buildings such as granaries, beehives and chimneys.

The question for this research therefore was: does the application of the concept of cultural interface significantly improve our understanding of cultural landscapes as exemplified by the Lycia region and the transmission of the style of ancient rock tombs to local vernacular constructions? The scope of this paper is a multi-interface approach to landscape analysis and can help to evaluate and present the cultural insights within landscape that may be especially valuable and particularly remarkable.

Study Area, Materials and Methods

The ancient Lycia region of the south-western Turkish Mediterranean was chosen as the study area (Figure 1). Known as the land of lights, the history of Lycia traced back to 2000 BC. The early inhabitants called the area *Trmmise* or *mountain peak* in their language Luvi (Çevik, 2002).

The Lycians became established as a democratic league with 23 major cities, of which Xanthos, Pinara, Tlos, Patara, Myra and Olimpos were the centres of administration, justice, military, finance and religion (Bayburtluoğlu, 2004). Xanthos was the capital; Letoon was the mythical birthplace of Apollo, god of the sun and of Artemis, goddess of war and wisdom; Myra was the place where St. Nicholas lived. Table 1 summarises the main periods of ancient Lycian history.

Figure 1.

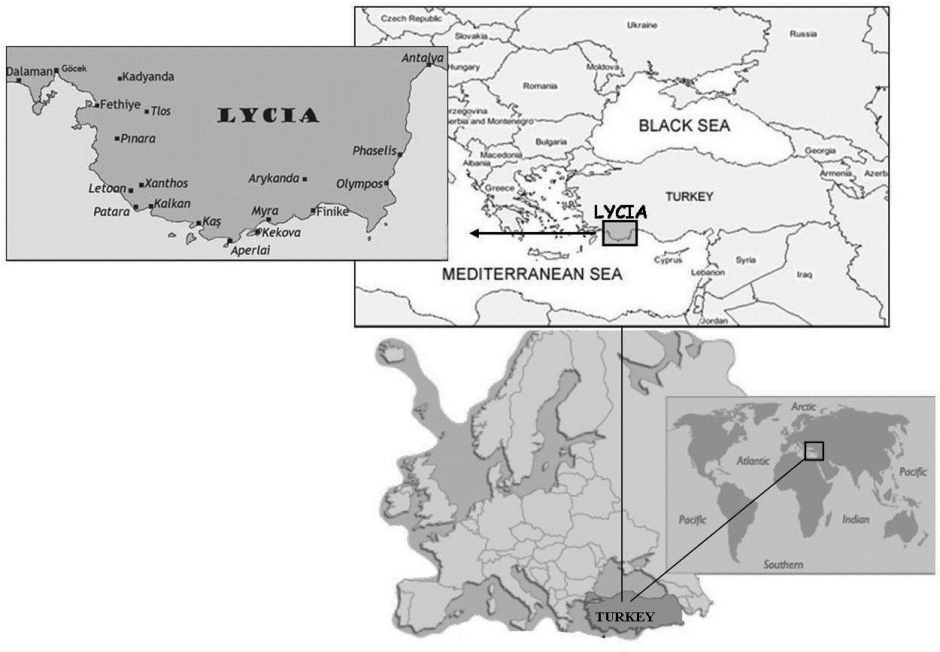


Figure 1. Map showing the location of Lycia region in the Turkish Mediterranean

Table 1. Chronology of the ancient Lycia region (adjusted from Borchhardt, (1999; Çevik, 2002; Antalya Valiliği, 2004; Bayburtluoğlu, 2004; Akşit, 2007; Umar, 1999)

Period	***Occupation and important episodes***
2000 BC	- Appearance of the first Lycians, called Luqqu or Luqqa in eastern Egyptian sources - First human record of an axe found in Lycian city of Tlos
1400 BC	- King of Hittites, Şuppiluliuma, announced the concord of Lukka (Lycia)
1375 BC	- King of Cyprus complained about Lycians (Lukka) to Egyptians
1284	- Lycians allied with Hittites in Kades war between Hittites-Eygpt - Egyptians referred to Lycians (Lukki) as one the sea peoples
1200 BC	- Frigian Dynasty
720 BC	- Lycia region fell under the influence of the Attika-Delos Sea League
750 BC	- Gagai, Korydalla and Rhodiapolis in Lycia established as Greek cities
600-700 BC	- Xanthos was the capital
500 BC	- Rock tomb architecture first recorded
540 BC	- Persian occupation
520 BC	- First stamped coins
470 BC	- Victory of Kimon, Commander of Attika-Delos in Eurymedon
405-358 BC	- Persian occupation
360-333 BC	- Karia Dynasty
334 BC	- Arrival of Alexander the Great and Macedonians
301-197 BC	- Ptolemaic rule (Egyptian-based dynasty)
192 BC	- Seleucid rule (Syrian-based dynasty)
200 BC	- Lycian League was set up, with 23 Lycian cities
190 BC	- Handed over to Rhodian
168 BC	- Roman Senate recognised the freedom of Lycia
43-200 AD	- Lycia became a Roman state
141 and 240 AD	- Earthquakes devastated many cities in Lycia
300-325 AD	- Recognition of Christianity - Myra was metropolis
324-337 AD	- St Nicolas of Lycia was a bishop during the reign of Emperor Constantine
540 AD	- Plague epidemic
600-700 AD	- Prosperous growth in Lycia
1207 AD	- Arrival of Seljuks
1300 AD	- Menteşeoğlu Principality
1390 AD	- Arrival of Ottomans
1830 AD	- Political reforms in Ottoman State
1923 AD	- Foundation of Turkish Republic

The study material comprises the exceptional landscape elements of rock tombs and the local vernacular constructions still found there and built to this day; the local granaries, beehives and house chimneys in the Lycia region.

The method of the study was based on the interpretation of cultural interfaces in the Lycian landscape, aiming at understanding different characteristics of selected landscape elements in their historical, cultural, architectural and spiritual contexts and to comprehend their time depth.

This was a mainly desk-based study which started by surveying the archaeological heritage and vernacular constructions in the Lycia region and their explicit associations, using a number of sources. Some field visits were carried out both at archaeological sites and in the surrounding rural areas where vernacular constructions are most available in order to search some of the elements under investigation; firstly the rock tombs, noting their unique design, structure and location; and secondly, comparing these with present-day vernacular structures found in the landscape. Following this identification, the examples were interpreted using the

four types of cultural interfaces based on Palang & Fry (2003) and PECSRL (2006) as shown in Table 2.

Table 2. An approach for different interfaces of landscapes (adapted from Palang & Fry, 2003; PECSRL, 2006)

Interfaces	***Meaning***
Between past and present	Interface between past and present brings time depth to the cultural landscape
Between man and nature	Interface between man and nature explains the type of product and process of the landscape
Between culture and space	Interface between culture and space reflects the cultural identity and individuality of the landscape in a particular place
Between the spiritual and the visual	Interface between the spiritual and the visual reflects the effect of belief and perception on the visual character of the landscape

Rock Tomb Culture in Ancient Lycia

The most significant feature of the Lycia region that distinguishes it from other ancient places in Anatolia is the appreciation of local cultures and the creation of Lycian rock tombs (Bean, 1997). Akurgal (2008) reported that the Lycians built the most interesting and magnificent civilisation in Anatolia. They owned architectural items carved on and made from the rock.

There are different records for the number of cities and the corresponding sites of tomb in ancient Lycia. According to Bean (1997) and Akşit (2008), Pliny (1st century AD) claimed that there were 70 cities in Lycia but only 36 of these have been identified. The east Lycian city of Idebessos, located at the intersection of coast and mountains, was amongst 50 settlements recorded in the *Miliarium Lyciae*, an ancient document found in Patara (Çevik *et al.,* 2009). On the other hand, Strabon (2005) mentioned that there were 23 cities with voting rights in the management of the Lycian League. However, 39 major cities with important tomb sites can be identified so far, according to Çevik (2002). Nevertheless, there are some other minor cities and rural settlements which are less important and it is likely that new tomb sites will be uncovered in the ancient Lycian region.

Rock tomb construction was started in Lycia by 500 BC and continued to the 300s AD and beyond. The exact number of rock tombs is not known. Four hundred monumental tombs built mainly in the 4th century BC in the city of Lymbra, demonstrate how large and rich this city must have been. There were around 345 tombs recorded in Olimpos, of which 44 were in the form of a sarcophagus (Çevik, 2002); and the number of rock-cut tombs in Myra alone is estimated to be over 100. However there is no clear picture about exact number of tombs in the Lycia region, as there are some still buried underground, which it is hoped will be excavation; some have been destroyed, and some removed.

Regarded as the house of the dead, a tomb is primarily a repository for the remains of the deceased, and the term can refer to any enclosed interment space or burial chamber of any type or size. The rock tombs are also regarded as funerary monuments, which performed social functions for the families and communities to which the deceased belonged and in order to connect the dead with the living the builders reflected the design of their traditional wooden houses in the appearance of the tombs. Efendioğlu (2010) noted that there was a

cemetery foundation in ancient Lycia with the aim of protecting the tombs from damage, stating that the people who vandalised tombs and violated the rules were defined as faithless.

According to Bean (1997) and Çevik (2002), the main rock tomb types in ancient Lycia can be classified as monumental, pillar, sarcophagus and rock-cut tombs (Figure 2).

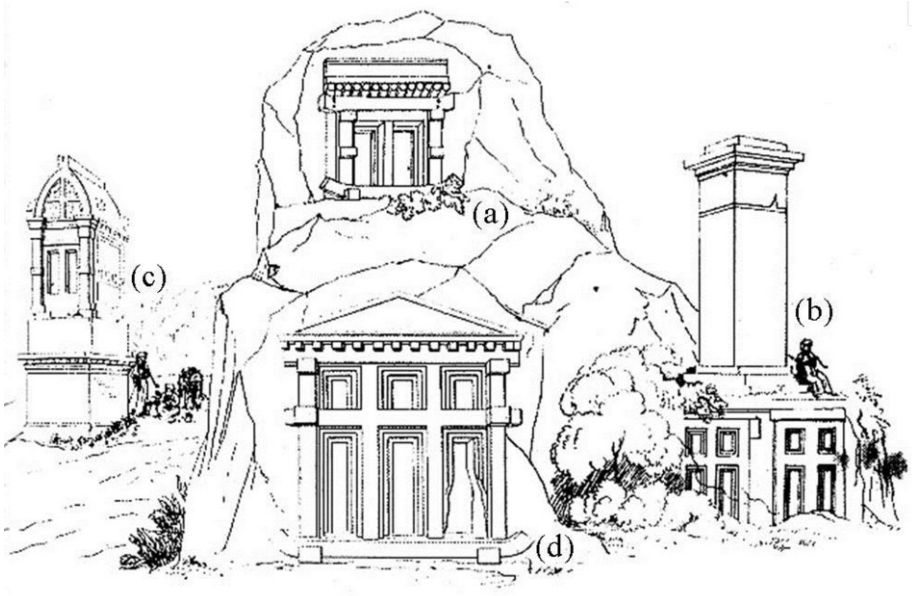


Figure 2. Lycian rock tombs: (a) monumental, (b) pillar, (c) sarcophagus, (d) rock-cut (Çevik, 2002)

Monumental Tombs

Monumental tombs were grand in scale, and some were in the form of temples to reflect the wealth and prestige of the family concerned. They often recorded some kind of political statement or a biography of the dead person, carved on the facades of the tomb. Bean (1997) has shown that the grandest monumental tombs in Lycia were usually built by the most important rulers of the time and mainly in the Ionian style consisting of two columns.

Pillar Tomb

Pillar tombs were often attributed to important dynasties and consist of a single prominent pillar or column with two main chambers, one of which is square and carved out of the upper part of the pillar.

Sarcophagus

Being a common form of burial structure, sarcophagi can be found in a great range of sizes. They are a sophisticated type of tomb that emerged from interment traditions and are regarded as an important part of Lycian art. A sarcophagus consists of four parts: a base, a grave-chamber and a crested lid, and a hyposorion under the main grave-chamber. They are often decorated with reliefs, usually on the sides and crest of the lid, but sometimes on the grave-chamber also.

Rock-Cut Tomb

The most elaborate tomb type in Lycia is the rock-cut tomb that was carved into the living rock. Some of these rock cut tombs were in the form of a temple and had two columns, an epistyle and a pediment with elaborate carved reliefs, while others resembled houses (Figure

3). Rock cut tombs often held more than one body, and many burial chambers contain several stone couches upon which gifts were left and the dead were laid, often whole families being laid to rest there. The entrance of a rock cut tomb was sealed with a sliding stone door that ran sideways along a groove.

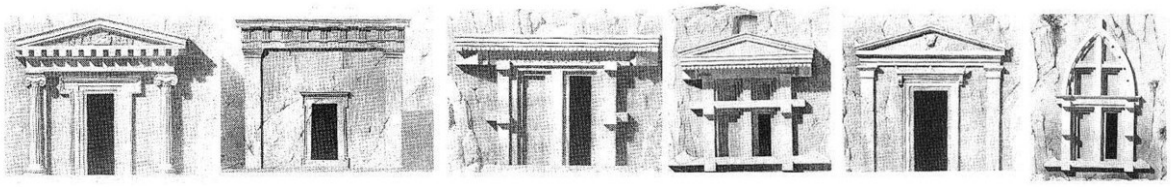


Figure 3. Examples of rock cut-tombs from ancient Lycia (Çevik, 2002)

Since these rock cut-tombs were perceived to be the houses of the dead within which the soul resided, they were appropriately modelled on the style of the wooden houses occupied by the living. Rock-cut tombs have all the construction details and accessories such as doors, windows, pegs, door handles and door bolts accurately carved (Txier, 2002). A rectangular entrance door on the front facade, planking on both sides and beams to support the roof were carved to closely resemble the wooden construction.

Originally, the tombs were probably built from wood, but were later were carved into the rocks in order to last indefinitely. The resulting monumental burial complexes were frequently connected to each other by stairways. The facades of the rock-cut tombs were also carved in the form of a house front, and the reliefs often revealed information about the profession of the person buried there, while the tombs of the wealthier Lycians were often finely worked with elaborate decorative relief carving.

Rock-cut tombs in wooden house form are commonly found in Pinara, Tlos, Telmessos, Myra, Lymyra and Antiphellos. In Pinara, even a plan of the city was carved on one tomb facade. In order to make rock-cut tombs in Pinara, the sculptors must have been suspended down the rock face (Txier, 2002). Living around the 1st century AD, Pliny called the inhabitants of Pinara ‘bird people’ after visiting the place (Akşit, 2007) owing to the locations of tombs up on the cliff faces out of reach from the ground.

Vernacular Constructions

Vernacular constructions incorporate and may modify local features in material, form and design as they are adapted and reproduced over time, although there is also inherent conservatism in vernacular architecture. There are three main vernacular elements which form the subject of this study: granaries, beehives and the chimneys found on local houses. The construction periods of these existing local vernacular structures used in the study differs vary considerably. The granaries were built around 1870 (Güçlü, 2007); the local vernacular houses, with typical elaborate chimneys, were built around 1920 onwards. The beehives located in upland areas above 2000 metres elevation date back to the 1800s, due to the fact that there has been a long inhabitation in the Taurus highlands by the Turkish nomadic Yörük people prior to the development of coastal settlements.

Granaries

Relatively small storehouses for grain, granaries are still widely found in the rural landscapes of ancient Lycia (Figure 4). The construction method of granaries is based on the use of joined and locked wooden pieces without using pegs or other fastenings. Such construction techniques also maintain the strength and solidity of local buildings, where cedar (*Cedrus libani*) and juniper (*Juniperus exelsa, Juniperus oxycedrus*) are the main construction materials.

Wheat growing traditions and the need to store grain out of reach of vermin go back to ancient times. The Lycian land was an ideal location for cultivating important products, grain in particular. Xanthos was the centre for growing cereal crops, whereas Patara and Andriake were known for their large grain warehouses (Antalya Valiliği, 2004). Lloyd (2000) pointed out that Myra owed its fame for being an important harbour where huge grain ships traded in cereals and in 2nd century *Horrea Hadriani*, reference is made to the silos of Emperor Hadrian, massive structures used to store supplies before they were transported (Çevik, 2009). Local granaries are still used to store cereals such as wheat, barley and chickpeas today.

As a reflection of traditional house construction in ancient Lycia, there is a strong sign that the form of granaries was inspired by the rock tombs, or by the original houses portrayed in rock tombs and for which the tombs are the main evidence of their construction, so that the construction method has persisted through different cultural phases and times, leading to the identical artefacts of today's landscape (Figure 5).

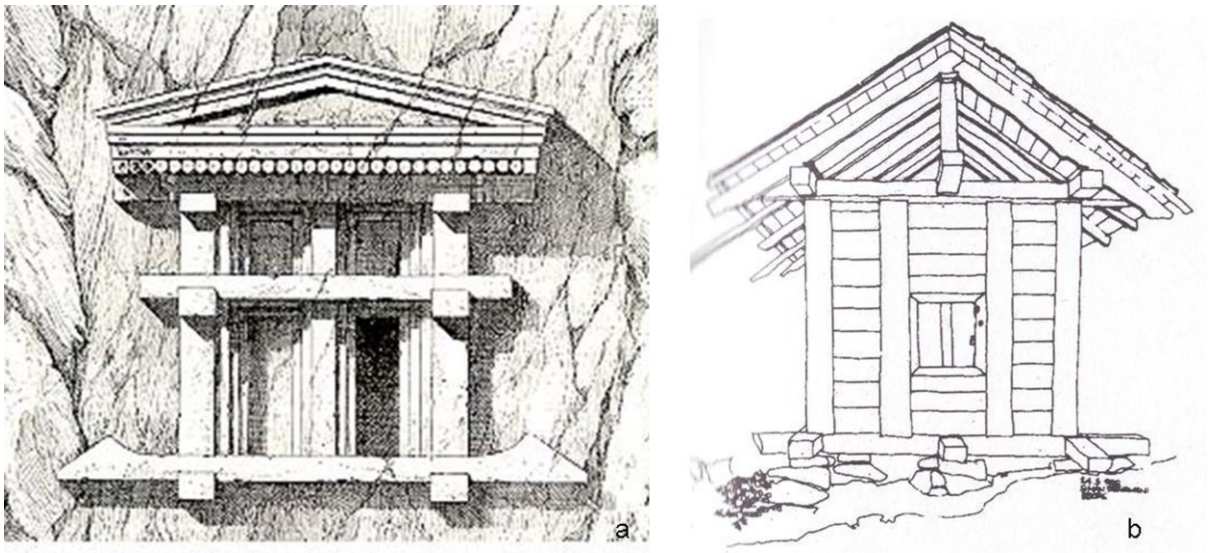


Figure 4. (a) An illustration of a rock-cut tomb and (b) a local granary in the ancient Lycia region (Bektaş, 2005) showing the similarity in design



Figure 5. Examples of local granaries in the ancient Lycia region

Beehives

The beehive is a kind of an enclosed structure in which bees live, raise their young and store their honey. Masetti (2002) defined beehives as enclosures built to protect hives from incursions by predators.

There is a sophisticated relationship between beehives and architecture (Ramirez, 2007). Depending on the geographical characteristics of the area, the design and construction of beehives has been inspired by local materials and traditional models in a wide range of locations around the world. Concerning the design of beehives from ancient Egyptian to modern times, Sheppard *et al*. (2001) emphasised the point that while many cultural connections between the ancient peoples and present-day inhabitants of Egypt have been severed and many old ways and technologies have been replaced, some remain. Similarly, as seen in Figure 6, local beehives in the ancient Lycia region appear to borrow strongly from something of the tomb architecture or the original timber models used for tombs found locally.

Günay (2008) noted that beehives in the Lycia region are a kind of tower constructed on a platform consisting of wooden beams extending on four sides. The body of the beehives consists of dry wall braided by very close girders with an average height between 5 and 10 metres with a triangular hive made of hollow logs on top.

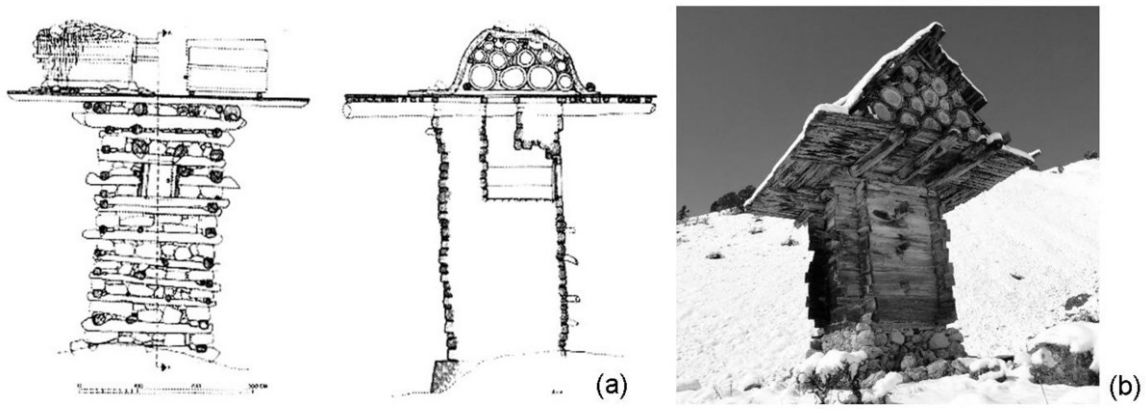


Figure 6. (a) An illustration (Çevik, 2002) and (b) an example (Islamoğlu, 2007) of modern beehives in the ancient Lycia region

Chimneys

Vernacular architecture incorporates the multi-layered, mysterious, evolved, and imprinted aspects of the environment (Deubzer, 2005). In architecture, every element can reflect the *genius loci* and thus the culture and identity of the place. Being one of the integral building elements in vernacular houses for the escape of smoke from a fireplace or furnace, chimneys tend to be functionally identical features which nevertheless also reflect the style of the building and have an aesthetic role in the landscape.

As a distinctive part of the visual character of traditional buildings, the chimneys of local houses in Lycia bear a strong resemblance to some of the types of tomb, especially in the sense that they tend to be seen as silhouettes against the sky, as were some of the tombs (Figure 7).



Figure 7. Examples of chimneys from local houses in ancient Lycia region resembling some of the types of tomb

Interpreting the Cultural Interfaces of the Lycian Landscape

Swaffield (2005) articulated that landscape knowledge can be grounded in different ways of conceiving the landscape, perceiving the landscape and achieving an integrated understanding of it. At this point, for better comprehension of the relationship between rock tombs and vernacular constructions in the Lycian landscape, the four types of interface are considered in turn: between past and present, between man and nature, between culture and space and between the spiritual and the visual.

Interface between past and present

The interface between past and present focuses on the temporal relationship and the persistence of building forms in Lycia. As an inspirational tool, tomb types from the past which were themselves based on the vernacular structures of the time are mirrored in vernacular buildings today such as granaries, beehives and chimneys.

Rock tombs were carved like the facades of timber Lycian timber houses, complete with protruding beams. Bektaş (2005) indicated that the Lycians used their traditional construction form of timber houses and reflected it in the rock tombs. Reliefs on the facades strongly symbolise the wooden architecture (Şahin & Adak, 2002). This style has been carried on over

time and through major cultural changes so that the same details can still be seen in the region, in the form of different vernacular constructions.

Günay (2008) remarked that the sarcophagus was modelled from the wooden granaries of ancient times, while Bayburtluoğlu, (2003) considered that local granaries in Lycia, built without using metal or pegs are the living examples of original wooden house architecture in Lycia.

The other unique outcome of Lycian art was the creation of local beehives reflected strongly in pillar tombs. However, in this case there is a converse cultural meaning between these two landscape elements in terms of the past and present interface. In contrast to the common recognition that tombs are the houses of the dead, beehives are the houses of life for bees, reflected in their creation of honey, which has valuable life-enhancing properties. In terms of design interactions between the two Çevik (2002) wrote that although the pillar tombs and sarcophagi seem to be typical burial structures, they have nevertheless taken their models from daily life.

The quality of stonemasonry of the Lycian masons is noteworthy and was especially significant in the construction of tombs. The question remains open as to whether the technique of interlocking joints in timber, that local craftsmen still use today in the construction of granaries and beehives, has been inspired by the rock tombs themselves or whether the original techniques utilised in the tombs have remained alive, handed down from master to apprentice through history and across cultures.

Interface between man and nature

The natural aspects of the interface concern the use of materials found in the locality, and the selection of sites in the Lycian environment which were harmonious with the natural setting. The soft limestone in the region was ideal for carving and for depicting the fine detail found on the tombs. Şahin & Adak (2002) and Zoroğlu (2005) reported that this local limestone allowed the artists to carry out carving as fine as on wood in ancient Lycia. Idil (1998) and Özdilek & Çevik (2009) also wrote that the material for making sarcophagi was the smooth and easily sculpted local limestone.

The ancient Lycians were inspired by their wooden houses and skilfully reflected these structures in rock. They chose steep and rugged mountainous places to establish their cities, and their tombs resemble fine and delicately constructed wooden houses (Txier, 2002). Bean (1997) and Önen (1989) noted that the rock-cut house tombs have one, two or sometimes three stories, from which protrude the ends of beams, and which strongly imitate the construction of the wooden houses that can still be observed in Lycia today in the form of granaries.

Wooden granaries in Elmalı and Sinan Değirmeni built without using pegs are the finest examples that exist today of descendants of ancient Lycian house architecture (Bayburtluoğlu, 2003). Reflecting the Lycian house construction method, granaries made of cedar and juniper wood are often found at higher elevations in today's Lycia, for example in Bezirgan, Elmali and Sinan Değirmeni above 1000 metres, where natural and durable materials from the cedar forest are readily available.

Tombs showing a double-sloping roof that forms a gable at each end portrayed on the rock faces are thought to be examples of contemporaneous Lycian houses using the same technique (Barışcan, 1997). The design is also adapted to the climate – the overhanging roof

sheds the rain effectively and the raised construction keeps vermin away. The same cedar wood is used in beehive construction.

Some specific construction details visible in the carved tombs show that the original houses on which they are based may also have been constructed from the same type of timber. For example Kamiya (2000) identified decorative curved baseplate and foundation beams shown as being constructed from jointed wooden sections, which shows the difficulty of bending cedar faithfully expressed in tomb construction.

Other materials in local vernacular constructions appear to be various; beehives are constructed from natural materials such as stone and locally grown cedar and juniper wood, while stone, brick and concrete are used in the construction of house chimneys.

Interface between culture and space

Spaces are considered to be one of the primary means by which landscapes are organised, understood, used and experienced (Dee, 2001). Landscape encompasses the experiences that form memory and meaning and can be tangible as well as symbolic. Katlenborn & Bjerke (2002) consider that landscape and natural places contribute in their own right to the development of a sense of place.

The originality of Lycian art is exceptional amongst that of ancient Anatolia, expressed especially in its funerary architecture, reliefs and sculptures. Rock tombs were a symbol of high status in ancient Lycia expressing social wealth, power and chivalry.

The style of rock altars and niches in the rock tombs shows that their design was heavily influenced by Anatolian beliefs as well as previous Anatolian civilisations. They believed in a spiritual afterlife; hence tombs were placed on the higher rock outcrops with an overview of the whole city and in some cases, like in Xanthos and Demre, overlooking the important communal buildings such as the theatre. Thus, whether noble or common, rich or poor the souls of the dead within the tombs guarded and watched over the people of the city below.

As in the case of the Lycian city of Myra, there were often small paths, gates and stairs to allow people to reach the tombs on the rock faces. These give us an idea about the city texture of Lycia. It was a kind of city plan that was visually easily recognisable. Çevik (2009) considers that Lycian rock-cut tombs are not only the imitation of civil architecture but also the imitation of a civic settlement.

The setting of the tombs, high on the cliffs, also allowed the mythical bird which carried the souls to the sun to fly in and out of the tombs easily. Kunar (1995) noted that the Lycian people believed that their souls would be taken to the sky by a god. Therefore, tombs in either sarcophagus or rock-cut form were placed on the hilltops or the highest point of the mountains. The location of these tombs was both a necessity for the religious beliefs and also part of the demonstration of power, so that the space was to some extent defined by such monuments. These therefore impart a strong character to the Lycian landscape.

Feliu (2003) observed that landscape belongs to the vital and imaginary experiences of the subject and is an individual construction on one level, but when a community with a particular culture shares the same values, the identity of a specific landscape instead becomes a social structure. Vernacular constructions occupy certain spatial patterns in the Lycian landscape; granaries, beehives and chimneys of local houses were items with different social functions. Related to rural life, crop production, beekeeping and housing, they reflect local ownership and territorial structures but in a much more modest way.

Interface between the spiritual and the visual

Historical landscapes provide tangible and intangible evidence of human habitation through time. Cultural history and similarities reflected in material, construction methods and the visible form of landscapes are all associated with the spiritual and visual qualities of a place.

Johansen (2004) highlighted the fact that past meaning cannot be perceived from a monument without access to the social context of its production. Rock tombs were the creation of Lycian people – men, women and children – who lived within this landscape and believed that the monumental tombs were a kind of link between this world and the afterlife.

Spirituality refers to the deepest values and purposes that people have. The interface between the spiritual and the visual reflects the effect of belief and perception on the visible character of the landscape. The motivation behind the construction of monumental tombs in Lycia was the strong belief in the spiritual life and the afterlife. On the reliefs of the Lycian rock tombs, mythological figures and heroes were depicted, which can be regarded as a visual communication of the spiritual realm that was clearly an important aspect of tomb construction, design, decoration and location.

In the ancient Greek world, coins were placed in the mouth and on the eyes of the dead person. This was to pay the ferryman Charon of Hades, god of the underworld so that soul of the dead person could cross over the river Styx into eternal life. Such symbols were associated with the belief in life after death, manifested and reflected on the rock tombs as well as in the burial traditions of ancient Lycia.

According to the beliefs of the ancient Lycians, the soul of the dead person was transformed into a bird which flew away while the physical body stayed behind. The tale of the phoenix, the invisible sacred bird which rises anew from the ashes, may derive from this belief. Instead of the mythical phoenix, the Lycians used the pigeon or dove to represent the soul of the dead. With their varied colours and names, each pigeon was converted into a specific soul and rested in the tomb (Çevik, 2002).

It was important that the house within which the soul dwelt should closely resemble the one, the person lived in when they were alive so that the soul would not feel uncomfortable or alienated. Lycian master masons therefore carved detailed replicas of the original wooden houses into the rock. A dead person was buried with his/her possessions and gifts placed inside the tomb as a ceremonial preparation for the spiritual world. Engraved pictures and carved decorations on faces of the tombs blend stories about social events, mythological scenes, battles and funerary ceremonies with various artefacts as well as depictions of daily life, plants and animals characteristic of the region were the manifestations of Lycian art. According to Özdilek & Çevik (2009), scenery of warfare carved on the tombs reflected the power, glory, pride and freedom of spirit of the deceased in the other world.

Cultural Interfaces of the Lycian Landscape in a Pattern, Process and Product Cycle

In the broadest sense, landscapes are a form of literature that can be read on many levels (Sprin, 1998) and in various ways. Correspondingly, cultural interfaces of the Lycian landscape in a pattern, process and product cycle are summarised in Table 3. The interface between past and present allows us to analyse time depth within the landscape, and the interface between man and nature reveals the basic processes that created the Lycian landscape which is still in progress with the continued use of various natural materials and

products. The interface between culture and space brings identity and individuality to the landscape in a space continuum while the interface between the spiritual and the visual empowers the visual character and also imparts meaning to the landscape.

Swaffield (2005) indicated that there is a hint of the science of landscape as process and pattern and of different cultural readings to be found in the landscape. Process implies a series of actions or functions that cause the landscape to evolve over time (Bell, 1999). Sprin (1998) suggested that material, form and space are sensed and shaped by processes. Accordingly, a model of the flow of pattern, process and the resulting product in relation to cultural interfaces of the Lycian landscape is given in Figure 8. The pattern of the landscape originated from Lycian houses where the rock tombs provided a time-space process linking with granaries, beehives and chimneys (Table 3).

Table 3. Cultural Interfaces of the Lycian landscape

Interfaces	***Meaning***	***Lycian Rock Tombs***
Between past and present	*Time depth*	The forms of Lycian rock tombs of the past still live on in the granaries, beehives and house chimneys of the Lycian region today. The reflection of Lycian house type tombs into local vernacular architectural products for more than 2500 years has been intermingled with perceptions, beliefs and artefacts.
Between man and nature	*Process and product*	Lycian rock tombs were a special example of the interface between man and nature. Using local topography and natural materials and their fit to the natural settings, most notably their locality, carvings on the limestone rock faces, as well as local timber in vernacular constructions maintain the intact relationship with nature intact.
Between culture and space	*Identity and individuality within a place*	Interface between culture and space of the Lycian rock tombs brought uniqueness to the identity and individuality to the cultural landscape in the region. The spatial patterns of tombs differ from those of local vernacular constructions but remain closely related to the landscape
Between spiritual and visual	*Spirituality in visual character*	Rock tombs in ancient Lycia were regarded as the house of the dead people's souls. The motivation of their belief in a spiritual life after death was reflected on the visual character of house as the route to the after world they believed in.

The varieties of local architectural products resulting from the interface between man and nature have been a source of *cultural diversity* in the Lycian landscape. The uniqueness of the rock tomb form is one of the elements which ascribe *cultural value* to the region through the interface between the spiritual and the visual.

Cultural identity is strongly associated with the ways in which people interact with their landscapes (Stephenson, 2008). Taylor (2008) reported that cultural landscapes are at the interface of culture and nature, tangible and intangible heritage, biological and cultural diversity – they represent a closely woven net of relationships, the essence of culture and people's identity. The term identity refers to the role of the landscape in the self-definition of a group of people or cultures. Referring to this definition, the interface between culture and space in ancient Lycia marks the *cultural identity* that originated from rock tombs, while the vernacular constructions, also being genuine to the area bring a different but related cultural identity. The interface between past and present provides *cultural continuity* as a gradual development in time leading to the development of a rare landscape (Figure 8).

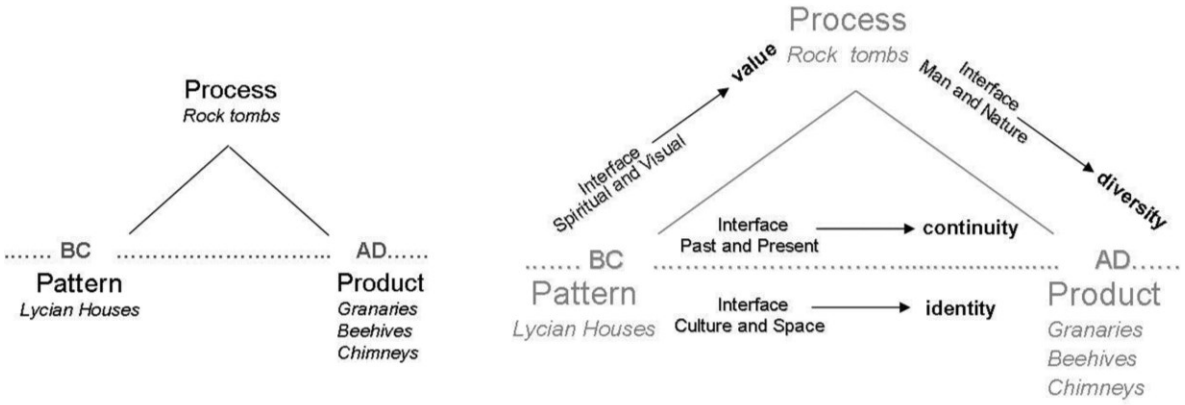


Figure 8. A diagram showing the flow of pattern, process and the product in relation to cultural interfaces

Discussion and Conclusions

Landscape is a tangible expression of the spatial and temporal relationship between people and the physical environment, shaped to varying degrees by social, economic and cultural factors (Council of Europe, 2000). This is most visible in relation to ancient cultures where continuity and persistence lead to time depth and add a certain strength of character to such landscapes.

Menzies & Titchener (2009) wrote that landscape is a cultural construct in the same way that justice and language are. We perceive and value landscape according to our culture. When the layers of different cultures are blended with diverse interpretations, the cultural content of the landscape becomes highly important for understanding the sense of continuity within the landscape.

Palang & Fry (2003) recognised that there are four things to bear in mind when studying landscapes; forms, functions, processes and context. Spirn (1998) advocated that it is important to respond to the landscape's surface form, and also to the processes that shape its underlying structure.

The aim of this study was to evaluate the Lycian landscape in the Turkish Mediterranean, and to test the cultural interface approach as a tool for understanding how geographical and cultural aspects overlap in the Lycia region and how cultural interfaces can provide a distinct communication tool within the pattern, process and product cycle. Time depth, cultural processes and products, identity and individuality within a place, and spirituality expressed in the visual character of the cultural landscape were major concerns for this study.

Human landscape perception, cognition and values directly affect the landscape and are affected by it (Nassauer, 1995). Landscape patterns can be understood in one way as the visible manifestation of the processes at work in the landscape. Bell (2001) asserted that patterns and processes are indivisible and feed back to one another. As perception connotes recognition and interpretation of sensory stimuli based chiefly on memory, the process in Lycian case has been influenced strongly by the perception of the cultural and visual context of the landscape and its elements.

Our goal in this study was also to understand non-visual aspects, historical continuity, aspects of perception and something of the historic layering of the landscape. In this respect the process, pattern and product model demonstrated how interfaces can disclose cultural diversity, cultural value, cultural identity and cultural continuity in the Lycian landscape, while process divulged both tangible and intangible evidence.

Landscape acquires an ethical, aesthetic and historic sense, gains symbolic values and is presented as a cultural sign (Feliu, 2003). Symbolic meanings are also often attributed to landscapes (Schama, 1995). Such a complexity of roles is too often overlooked, particularly when the various features appear simultaneously in a particular landscape as many layers of the same structure. Taylor (2008) emphasised that connections between landscape and identity and hence memory are fundamental to understanding landscape and the human sense of place.

The Lycians created their houses for the afterlife using the distinguished inspiration of their real houses in a most logical way, being fitted into the local topography and on to the limestone rock faces. However, while remaining part of the living cultural heritage, the recognition of local vernacular constructions are inextricably connected to the past via the types of cultural interface defined and analysed here. The most notable example of the sense and spirit of place (*genius loci*) of ancient Lycia is the rock tomb and its reflections in vernacular artefacts. The key to this is the persistence and the continuity of the original design and construction techniques utilised in the tombs yet visibly functional today in the granaries, beehives and chimneys. With preservation, authenticity is one of the major concerns (Palang & Fry, 2003) and the authenticity of the Lycian landscape emerges from a unique agreement between past and present on land sharing the same knowledge and forms based on associative cultural and visual values.

Rowntree & Conkey (1980) pointed out that cultural landscape is in one sense created and transformed by *symbolic* human action. The rock tombs in the Lycian landscape are distinctive examples expressing the symbolic interaction between man and nature, past and present, culture and space, the spiritual and the visual. Farina (2008) presumed that landscape is a semiotic interface between organisms and resources which simply introduces a new way to evaluate attributes that increase our confidence and knowledge about this complex subject.

Landscape can be like a book, one which tells us who we are and how we arrived at this place that we call the modern world, and which can tell us about human origins and history and social progress (Fairclough *et al.,* 2002). Landscape studies search for the way in which people in the past shaped nature consciously or unconsciously depending on the interaction of many factors. Using 'the interface' as the mode of interpretation in order to comprehend and read the cultural landscape was our aim in this study which we hope will improve the integration of cultural history with landscape research.

Because analysis of cultural landscape history enhances the possibilities of creative practice in conservation, design and planning, analysis of the different interfaces can be used as an effective tool. Here, studying landscape is an interdisciplinary mission in which landscape architects, planners, historians, archaeologists, geographers and other related professionals need to cooperate for the evaluation and understanding of the meanings behind the landscapes that we see. In this respect, the Lycian landscape is interwoven with perception, architecture and artistic work, local knowledge, vernacular artefacts and natural

settings as a result of cultural and historical processes which are simultaneously autonomous and culture-bound and must be handled using interdisciplinary approaches.

Connectivity and persistence are important for protecting unusual examples of past experiences and knowledge and relates to landscape management issues. Jones *et al.* (2007) wrote of the great diversity and the quality of the landscapes that we have inherited and how we should seek to preserve or even enhance their diversity and quality, instead of allowing them to decline.

The application of the concept of interfaces can be used as the basis for informing landscape protection and management policies and practices. The interface can be located at the junction presented by the present, where we look backwards into the past and forwards into the future. Demonstrating recent patterns and forms of the landscape originating from the past will have many subjective and objective values to offer for the future in maintaining cultural continuity. At this point cultural interfaces can help communication in landscape design and planning and help to strengthen the basic knowledge of historic landscape protection and management.

As special places, monuments are imbued with a symbolic value and act as landmarks that allow orientation in space and time (Atik *et al.,* 2010). According to Palang & Fry (2003) landscapes have a role to play in the shaping of local, regional and national characters, and there is a tendency towards landscape as a cornerstone of regional and national identities. Lycian rock tombs, as demonstrated by this research, reflect the unique identity and individuality of the Lycian region in the Turkish Mediterranean. Today the entire Lycian landscape is still dotted with numerous funerary monuments and rock tombs, and their vernacular reflections in granaries, beehives and chimneys, with different functions and meanings.

Palang & Fry (2003) stated that time and space is an important interface for the development of our understanding and for theory development in the realm of cultural landscape analysis and management. The research described in this paper, exposing the interface approach to the analysis and interpretation of a specific landscape, suggests that the concept has much to offer and that it should help to provide a strong connectivity and persistence among different landscape aspects in spatial, temporal, spiritual and cultural terms.

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