SYMBOLIC MEANING OF CEMETERIES FOR USERS: "KARŞIYAKA CEMETERY CASE"

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ABSTRACT

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This thesis evaluates cemeteries as an open space entity of urban land, which conveys high social and cultural values through its sacred and spiritual landscape._These sacred sites are closely integrated into community history and carry social meanings, in addition to their aesthetic and ecological values as an open green areas with its habitats, biological diversity and wildlife reserves. By this study the "symbolic and emotional meaning of cemetery" from the users' eyes is investigated and the relationship between users' preference and perceived elements among the users of Karşıyaka Cemetery is explored.

Keywords: Cemetery Culture, Funeral Customs, Death, Grave, Karşıyaka Cemetery

MEZARLIKLARIN KULLANICILAR AÇISINDA SEMBOLİK ANLAMI: "KARŞIYAKA MEZARLIĞI ÖRNEĞİ"

Ertek, S.Deniz Şehir ve Bölge Planlama Bölümü Tez Yöneticisi: Assist. Prof. Dr. Anlı Ataöv

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Bu tez mezarlık alanlarını kutsal ve ruhani peyzajlarının yanısıra, yüksek sosyal ve kültürel değerler barındıran kentsel açık alanlar olarak değerlendirmiştir. Bu kutsal alanlar, açık yeşil olarak barındırdıkları habitatları, biyolojik çeşitlilikleri ve vahşi yaban hayatıyla, estetik ve ekolojik değerlerinin yanı sıra, toplum tarihiyle yakından ilişkili, sosyal anlam taşımaktadırlar. Bu çalışma ile, mezarlık alanlarının sembolik ve duygusal anlamı kullanıcıların gözünden irdelenmiş ve Karşıyaka Mezarlığı kullanıcılarının tercihleri ve algıladıkları öğeler arası ilişki araştırılmıştır.

Anahtar Kelimeler: Mezarlık Kültürü, Cenaze Törenleri, Ölüm, Mezar, Karşıyaka Mezarlığı

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CHAPTER 1

INTRODUCTION

In the 20th Century, the condition of the open - green spaces are viewed as the indicator of civilization and the standard of living in urban life. Cemeteries are considered as open green areas in urban settings are "the unavoidable urban zones for human beings that complete their limited lives on earth" (Cengizkan, 2003). Cemeteries are the spaces that "dead have been buried in order to protect the bodies from scavengers, weather or hygienic conditions and sanitation" (Uslu, 1997). The manner which people deal with their dead reflects on differences in perception and in cultural values. Respectively, cemetery design differs from culture to culture as do the funeral customs and religious believes. Different religious settings offer different manners for celebrating the death. Cemetery culture involves philosophic, religious and symbolic aspects which are mostly shaped by the religious beliefs. Beliefs about death and after life affect the funeral customs including ceremonies, rituals and rites, which affect people's emotional experiences. In funerals, mourners are accept the reality of the loss, express thoughts and feelings, gain support and understanding, learn new roles of coping without the deceased, facilitate emotional re-location, find a time/place to grieve (Francis, 2005). Also these sacred sites are closely integrated into community history and carry social meanings, in addition to their aesthetic and ecological values as an open green areas with its habitats, biological diversity and wildlife reserves. In other words, cemeteries are special land uses with its sacred atmosphere and requires special design approaches evaluating its symbolic, social, cultural, ecological and recreational aspects.

Contemporary park-like cemetery planning includes the secondary functions that the site serves besides its basic functions. These secondary functions are meeting the public needs and serving recreational spaces, creating an open green areas for urban green network both people and ecology with its habitats, biological diversity and wildlife reserves, helping mourners for their grief statement with therapeutic environments creating a cultural value and social identity with the historic tombstones, endless roads, sacred and spiritual landscapes.

1.1. Problem Definition:

Cemeteries in Turkey face the problems of lack of identity, site design, care, emotional satisfaction, management, renewal and technical subjects. As a result cemetery sites become over dense used disposal areas, devoid of the other social and cultural functions expected from the cemeteries. In Turkey the design of cemeteries is often not given the consideration which it requires. Design solutions are frequently dictated by functional requirements and not enough attention is being given to their aesthetic value and users' environmental experiences.

With the rapid urbanization of metropolitan areas and the transformation of social, economic and demographic structure, cemeteries become inadequate to fulfill the community needs. Although the Anatolian society has a large cemetery culture, cemeteries today turn into urban problem areas, with the lack of space for burial and their insensitive design to accommodate its appropriate use. Graveyards are cramped; greenery, seating, places for pray is inadequate; the flow of pedestrians is passed over graveyards; burial sites are full of heavy marble structures (Uslu, 1997). Today's cemeteries are mostly stuck in the dense urban settings. It might be impossible to heal mourner's grief statements with that overcrowded, undesigned and unrespectful cemetery. Cömertler (2001) further adds the management malfunctioning, which neglects care, security and cemetery renewal. Research shows that the aesthetically poor environment is

worsened by a lack of maintenance and vandalism (Francis 2005). Francis (2005) emphasizes that the "Good visiting experiences are often associated with well maintained cemeteries and can be supportive". The cemeteries serve appropriate recreational needs, so that they become socially acceptable places. (Clayden and Woudstra, 2000). Cömertler also criticizes the unconserved historic cemeteries which are neglected and transformed into other urban land uses such as housing or industrial. As a result a significant part of our historical, cultural and ecological environment is vanished (2001). Moreover, my review of literature shows that the comprehensive studies about cemetery design have not been studied yet in the academic arena. The lack of comprehensive research, which offers suggestions and solutions for the problems, is another significant problem. Salisbury (2002) declares that the landscape and urban designers are responsible for the design and planning of new cemeteries, memorials and urban parks. They have to seek alternative solutions for the disposal problems of deaths.

As an alternative design solution to social problems of cemeteries, Woodland Cemetery which is the fastest growing environmental movement in UK as well as USA. A woodland cemetery, also known as an eco- cemetery or green graveyard, is a burial ground where the body is returned to nature, in a biodegradable coffin, with a tree planted over or near the grave. The woodland cemetery is also known as a nature reserve burial ground, eco- cemetery, memorial grove, green graveyard or garden of remembrance (Salisbury, 2002). By plant designing the ecological cemetery with the native species, the cemetery provides less maintain requirements. Thus, the aesthetic appearance of the woodland cemetery enhances automoticly, with less maintenance.

Clayden and Woudstra (2000) declare that there is a demand to overcome the lack of identity of cemeteries. This has encouraged green burial (Woodland Cemetery) as an alternative to the more traditional ways. According to this approach, cemetery planning process requires interment places as well as to preserve historical and cultural heritage, to contribute to the urban ecosystem and landscape and to provide active and passive recreational

opportunities for citizens. Also the most significant advantage of Woodland Burials is their healing role to the people who are in grief statements. Salisbury (2002) claims that trees are important elements in the emotional formula for handling grief, memorializing loved ones and expressing the pain. A woodland cemetery provides an environment where death is placed within the context of larger natural life cycles. The natural landscape of the woodland cemetery provides a therapeutic environment for the grieving. As a result because of these advantages that Woodland Cemetery provides, in England and USA Woodland cemeteries are encouraged as a new approach.

What is the role of a cemetery in the Turkish context of contemporary urban life? How the role of cemeteries changed from past to the present? In this thesis, I will explore these questions by focusing on a cemetery site in Ankara, which seems to encounter some of the problems I raised above. In Karşıyaka Cemetery, which is a prototype of the cemeteries in Turkey, the same problems can be observed easily. The greatest problems are based on the care (maintain) issues. Karşıyaka Cemetery shows quite neglected visual appearance full of marble rows and lack of green areas (Figure 1-2). Cleanness and lack of the monuments, utilities, path ways, furniture and plants brings about unorganized and unpeaceful spaces in the cemetery. The cemetery furniture such as notification panels, sign boards, watering pots, benches, taps, lighting and art works is not arranged with a design approach. Also the entrances do not reflect the "sacred Gates" of the sites. Waste collection is provided with oil barrels and it is possible to see a barrel near a grave in a disrespectful manner for both the deaths and the alive. Planting design is generally hold by the relatives of the deceased unconsciously. Every green, dark conifers are dominant with their depressive characteristics. Even, the Quibble orientation is broken in some graves due to the severe land shortage. Disorderly formation of the graves because of the "high rant value" of the parcels, lack of maintenance and vegetation, parking, pedestrian circulation and accessibility problems, under construction-infrastructural problems in new plots, poor municipal services with

the irrelevant guards and officials (Cengizkan, 2003) and finally lack of meaning and identity.



Figure 1: Karşıyaka Cemetery Full Of Marble Rows (Winter 2005) by Ertek, D.



Figure 2: Karşıyaka Cemetery (Winter 2005) by Ertek, D.

Registration factors, geographical factors (soil, topography and wind direction), demographical factors (number of rate of death, age groups, death reasons, etc.), urban factors (view, accessibility, and landowner) and sociocultural factors (traditions and religions) constitute the basic determination factors in cemetery planning and design (table 1). The registration of the dead, his/her demographical information, geographical conditions of cemeteries and cemetery location within the urban context can vary from religion to religion, from country to country, within a subregion in a particular culture, and even from one era to another (Uslu, 1997). However, religious doctrines and practices show generally unchangeable characteristics. Religious beliefs play an important role in people's beliefs about after life, funeral customs, interment techniques as well as the cemetery design and planning. This assigns a particular focus on the socio-cultural meaning of cemeteries, as well as on how the cemetery design and planning accommodates that shared meaning by the users of interest. People's needs and preferences become vital in the context of producing a responsive design in cemeteries.

Table 1: Basic	factors in	n cemetery	planning	and design

Registration	Geographical	Demographical	Urban	Socio-cultural
factors	factors	factors	factors	factors
Hygienic	Soil	Number of rate	View	Traditions
Managements	Topography	of death	Accessibility	Religions
		Age groups	Landowner	
		Death reasons		

This thesis will assess how cemetery culture is shaped by different religious, how cemeteries are produced in traditional cities, which have affected the social and cultural life of Anatolia, and how cemeteries changed in modern cities through a case study in Karşıyaka Cemetery in Ankara. Also in terms of the purpose of my thesis I intend to review the socio-cultural meaning of cemeteries, because I investigate the preferences and needs of the users of cemeteries. While investigating the cemetery culture I realize that the cemetery culture is strongly shaped by the religious doctrines (table 2). Religion determines the beliefs about after life, funeral customs, interment techniques and cemetery design as well.

Religion doctrines	Cemetery culture		
	Beliefs about death and after life		
	 The disposal strategy of the body 		
(burial or decomposition, cremation,			
mummification, embalming)			
	The funeral rites and ceremonies		
	• The shape, direction, arrangement and the		
	construction of the interment space or the		
	cemetery		
	 Grief and mourning customs 		

Table 2: Relation between the religion and cemetery culture

In the first chapter, before reviewing the different religions and their effects on Anatolian cemetery culture, I will explain the basic concept about the death phenomena, purpose of the funeral customs, interment techniques, architectural arrangements and grief statements which are shaped by religion.

In second chapter, I evaluate traditional cemetery types of Shamanism, Buddhism, Judaism, Islam and Christianity in terms of its design, layout, its location in the city, the way death is perceived and grief is experienced. In the third chapter, I review the development of cemetery culture in Anatolia to show the conflict between today's phenomenon and the historical setting in terms of respect, sacredness and design issues. Also I assess the production of Karşıyaka Cemetery in Ankara as an urban space. I will reflect on its location in the urban context, ownership, its layout, and design features.

In the final and result chapter, I present the users' responses on their perception of the Karşıyaka Cemetery as well as their emotional and behavioral responses to the environmental attributes. To support this, I use empirical consequences of a case study in Karşıyaka Cemetery in Ankara.

1.2. Purpose of the study and Rationale:

The perceptive attributes of cemeteries can have an affect on people during their mourning process and afterwards visits. In this project, I aim at investigating the symbolic and social meaning of cemeteries from the users' eyes and exploring the relationship between users' preference and perceived elements. I also intend to assess the characteristics of cemeteries and their relationship to the environment. I particularly focus on the Muslim setting, and thus, study the interaction between people and the Karşıyaka Cemetery in Ankara as a case study.

In this thesis, I define the cemetery as an open space entity of urban land, which conveys high social and cultural values through its sacred and spiritual landscape. These sacred sites are closely integrated into community history and carry social meanings, in addition to their aesthetic and ecological values as an open green area with its habitats, biological diversity and wildlife reserves. Some physical environment of cemeteries include the cemetery entrance, administrative buildings, lawn areas, natural features such as forests and lakes, barriers, paths, vegetation, distance and qualities such as light, sound, and noise. Cemeteries are identical. Different religious settings offer different manners for celebrating the death. In turn, the cemeteries surround the death with different form aesthetics. Even within the same religious setting, we

encounter a different type of cemetery environment. The recent argumentation both in the literature and in practice emphasizes the re-healing affect of "ecocemeteries" on people's grief. Canada, Europe, and the US constitute the countries where more and more eco-cemeteries are planned. This study will also explore if ecological design principles in cemeteries will create a similar affect in a Muslim setting among the users of Karşıyaka Cemetery.

CHAPTER 2

CEMETERY CULTURE AND RELIGIONS

2.1. Definition of Cemeteries and Conceptual Explanations

Cemetery is a place for final disposition and demoralization of the human remains, including but not limited to only a graveyard, also including, mausoleums, and columbarium or scattering gardens. Research shows a number of definitions highlighting different meanings of cemeteries. Rugg (1998) provides a rather technical definition of cemeteries, as a final resting place, is defined as "usually municipally owned and managed and often comprise large areas of land for burial, initially on the outskirts of urban settings" (Rugg, 1998). Cemeteries generally, are the spaces that dead have been buried in order to protect the bodies from scavengers, weather or hygienic conditions and sanitation (Uslu, 1997). Considering their meaning as a final resting place, Cömerter (2001) gives a broader definition for cemeteries and asserts that they are special land uses within the urban fabrics, which require a special planning and design approach evaluating the concept in terms of its symbolic, social, cultural, ecological and recreational aspects apart from the hygienic and functional aspects. Clayden and Woudstra (2000) emphasize the ecological asset of cemeteries for the city and their affects on people's emotions. Worpole (1997) defines cemeteries as "a cemetery is not an all-weather pitch, neither is it simply a nature reserve: it is a complex, historical and social cultural legacy of great emotional meaning." Cemetery design and the unfolded activity differ from culture to culture with respect to the different funeral customs and religious

beliefs. The sites are closely integrated into community cultural and social meanings.

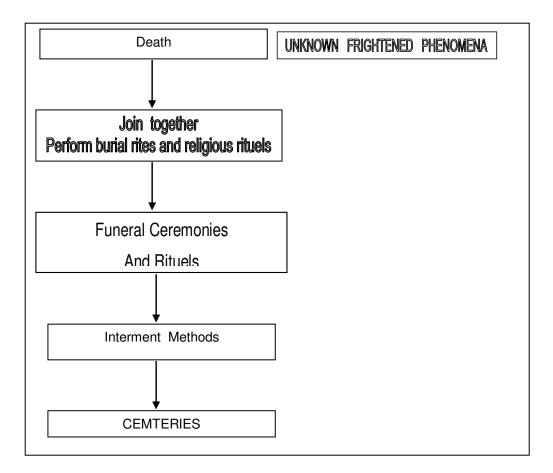
With reference to these various aspects of cemeteries, in this study, I view cemeteries within its cultural, religious, ecological and social dimensions. In the following section, for understanding the basic concepts, I will focus on the relations of cemetery culture and its components: death phenomena, funeral customs, interment methods, architectural and design features and grief statements.

Cemetery culture involves philosophic, religious and symbolic aspects. The cultural value of cemeteries is strongly affected by the religious beliefs which are mostly shaped by the death phenomenon and after life beliefs. The perception of death as the inevitable end of life changes with respect to the religious beliefs, which, in turn, affect the interment techniques and disposal methods of the death body. In other words beliefs about death and after life have affected the funeral customs including ceremonies, rituals and rites. However, it is significant that beside the religion, cultural structures and interactions also shape the beliefs about death and after death. In different cultures, the perception of death has changed from being a natural part of the life to being a taboo. In this point, religions and sorted philosophical movements have had a significant role in shaping the fear and beliefs about death and so the cemetery culture of all civilization. Thus, the consideration of death determine and shape the disposal techniques (burial or decomposition, cremation, mummification, embalming), funeral customs and cemeteries (Table 3).

Before reviewing the effects of different religions (Shamanism, Buddhism, Judaism, Islam and Christianity) on cemetery design, I will discuss the issues on which religion has direct influences. These basic aspects include death and funeral customs, principally four interment methods and grief statement. I will then focus on spatial and architectural definitions such as tombs, niches, scattering gardens, columbarium, urn gardens, memorial, mortuary, ossuary,

and necropolis. By doing so, I aim to discuss the cultural dimensions in this part and variations of the religion phenomenon.

Table 3. The relations between the death and funeral ceremonies performed in the cemeteries.



2.1.1. Symbolic and Social Meaning of Death and the Funeral Customs:

The death phenomena, a frightened and unknown change for the human being, influence the purpose of the funeral customs, which, thereby affects the interment methods and as well as the cemetery design. In this section I intend to discuss "the meaning of death", "the consciousness for death", "how death is carried out in societies historically and culturally", "funerals and their meaning for people", "differences between cultures with respect to the meaning of death and the funeral ceremonies".

The idea of immortality is the answer to a profound human question that shapes religions. The question, which is posed relates to "What happens to a person after life?." The history of funeral customs and death rituals is parallel to the history of mankind. The immortality anxiety and burial rites are as old as civilization. In most cultures such as Shaman Turks, Anatolian cultures, Egypt cultures, Hindu cultures, Judaism, a classical point of view in defining death, seems to be life itself or another plane of existence. Death is perceived as a break of life, on the way to a continuation of life by other means. Religions defend that the spirit does not disappear, it survives forever. In other words, death does not mean the end of live, although the Oxford Advanced dictionary's definition is: "The end of life; the permanent cessation of vital bodily functions, as manifested in humans by the loss of heartbeat, the absence of spontaneous breathing, and brain death."

In the thesis of Uslu (1997), the medical definition of death is explained as "coming to the end of physical existence". Uslu states that "death is the process includes first disappearing of effective heart contractions due to any reason, second ending blood pumping and respiration functions and finally, occurring unreturnable damages due to disoxygenatedness on organs and tissues".

Freud said that the aim of life is death. The implication of Freud's concept is the idea of the death instinct as an innate tendency toward return to an inanimate state. Also in his second implication of this concept of the death instinct is that "every organism wants to die in its own fashions" (Lifton and Olson, 2004).

After death, communities bury their deceased ones with a religious ritual as a farewell and mourning ceremony. Human beings are the only species which bury their dead bodies (Szamotolski 1989, Uslu, 1997). Aides has remarked that although it is not certain, human being is the only living creature who is aware that 'one day death will come' (Uslu, 1997). In other words, only human beings have the consciousness of death, and it is this consciousness which makes human as human. However, death is still an unknown phenomenon, and thus, for many people a horrible state, because both primitive man and, after enlightened age, modern man could not control and understand it. In different time and cultures, death has been perceived in different ways either as a natural part of the life or a taboo.

Since the prehistoric times, so as to overcome this supernatural and unknown change, (the death phenomena), individuals have intermitted their bereaved ones with funeral customs and community attach. It was an attempt to cope with fear or unknown feelings by joining together and performing rites. In Funerals, mourners accept the reality of the loss, express thoughts and feelings, gain support and understanding, learn new roles of coping without the deceased, facilitate emotional re-location, and find a time/place to grieve (Francis, 2005). Salisbury (2002) emphasized that fear of the dead is a common theme in many funerary practices around the world. According to him, some of the first burial customs appeared in order to protect the living from the spirits, which caused the death of the person.

The cemetery culture is based on the immortality of spirit which is described in all religions – from the most primitive to developed ones such as Totemism, Shamanism, Buddhism, Jewish, Christianity and Islamic. Cömertler states that this immortality expectation against death has become one of the great desires of human throughout the history. Also in historical process, beside this religious belief, corpses have been buried mainly in soil so as to protect the

body from scavengers and the ravages of weather or for hygienic conditions and sanitation (Uslu, 1997).

Death phenomena and disposing the death mean different from one culture to another and thus the funeral customs related to death beliefs are different. Native Americans say that death is a private phenomenon between mother and individual like the birth moment between mother and baby. Also, in Red Indian belief death is not a continual event like other things within a life. It is only a transition from one type of existence to another. Death is not perceived as a terrible lifetime experience; on the contrary it constitutes an opportunity to celebrate continual evolution of spirit. When life comes to an end, individuals' conscious must be free and there must be a prayer in his heart. Because of those beliefs, when a person dies, they think his/her soul become free. There is no place for fear where love is (Goldman&Neiman, 1999, Cömertler, 2001). In respect of Shamanism, a person consists of a material body and soul concept composed of "tin". And if "tin" leaves the body, they believed that death occurs (Güneş, 1995). In Orhun inscription, it is explained that the tin is fly like a bird when a man dies. In Judaism reveals a new life after death which is believed the universe called heaven and hell. It is named "seol" (encyclopedia of Religion History, 1999). Also Muslims, believe in an afterlife, too. In respect to Islam, death is only a bridge from the world to another universe. According to the Buddhist faith, individuals pass through a series of reincarnations until they are liberated from worldly illusions. Death is a way to reach the next reincarnation and move closer to nirvana which is defined as a state of absolute bliss (Robinson, 1970).

However, among cultures there are some similarities. Almost every culture and civilization ever studied has three things in common relating to death and the disposition of the dead: "Some type of funeral rites, rituals, or ceremonies, A sacred place for the dead, Memorization of the dead" (Salisbury, 2002).

Even today the fear of the death and the religious beliefs are the significant motivation behind the funeral customs, traditions and the interment

techniques. This fear leads individuals to perform ceremonies. After death, funeral ceremonies helped individuals to handle with their grief. The most important purpose of the funeral customs today is its helping mood to confirm the reality of death. The funeral allows people to remember and honour their loved one in a special way and face the pain of their loss.

2.1.2. Interment Techniques:

The study of social anthropologists on the technical practices of disposal of the dead body and the complex social reactions of the persons, have shown how great is the variation of practices. Since the death of the first human being in the world, people have disposed their dead in different manners. With respect to different religious beliefs and values, human beings have used different techniques for the final disposition of human remains and marked the interment spaces (Francis,2000). I intent to review different cultures in terms of their "interment techniques", "their purpose with respect to after life beliefs". I chose to investigate the most significant ones are: Egypt culture, Anatolian culture, Gallerian, Persees culture, Hindu customs, Western culture. Then at the end this part, I will present the interment techniques (inhumation, cremation, mummification, embalming).

The first known body is buried 75.000 years ago (Cömertler, 2003). Caves provided both shelter for the dwelling and a sepulture for the dead bodies. The first evidence of deliberate burial was found in Paleolithic caves, and fields of prehistoric grave heaps. Prehistoric discoveries include both individual and communal burials (Salisbury, 2002). Hunters bury the bodies to protect them from wild animals. Afterwards, humankind produces different body disposal techniques and interment spaces with funeral ceremonies in respect to their religious considerations. Thus, different ways of body disposal methods show a religious character and they tend to be deeply embedded in cultural traditions.

The most significant and known culture about interment ceremonies is Egyptian culture with their Magnificent tombs. In ancient Egypt, Egyptians believed an immortal life and to achieve a successful rebirth. They consider the preservation of the material body was necessary, so they mummified the corpses. However the kings only were buried into the pyramids in the ancient Egypt. Until the age of the pyramids (the old kingdom) mummification was not fully developed and bodies were simply wrapped in linen. The corpses were buried in the chambers in tombs. The ancient Egyptians developed the coffin to keep bodies from touching the earth; this burial practice was continued by the Greeks and Romans when they used the burial form of disposal. At the end of the Naqada period (by around 3000BC) burial goods and tomb size became more starkly polarized. There were exceedingly rich tombs, with many burial goods and complex funerary architecture. However, graves of very poor people were designed with almost no burial goods. Egyptian society had become a class society and this is clearly visible in its burial customs (Wolfram, 2003).

The typical burial place of high elite officials at this time is the palace facade tomb (Figure 3), a funerary complex consisting of two parts. First part is the underground chambers reserved for the dead.

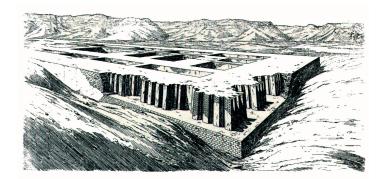


Figure 3: Palace facade tomb at Naqada, in Egypt (Wolfram, 2003).

Second part of the facade is the superstructure, built above the ground. During the burial the tomb was filled with many goods (Figure 4) important for survival in the next world. The goods are generally, the several beautiful stone vases, containing trace of food, for the meal of dead, pottery and stone jars, jewellers (2003).

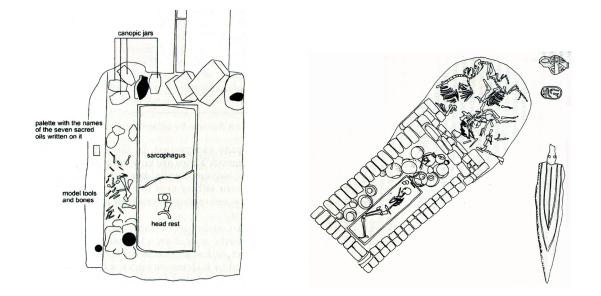


Figure 4: The tomb was filled with stone vases, containing trace of food, for the meal of dead, jars, jeweller in Egypt funeral culture (2003).

Another significant example is Anatolia, where several civilizations ruled in and produced a coherent cemetery culture. Burial is an old tradition in Anatolia. Moreover cremation method has been used even in the prehistoric times with the influences of old Shamanistic belief system (Uslu, 1997). Interment space and tomb types have showed various characteristics depending on the deceased social and economical statue and society's common beliefs. The first interment space in Anatolia was caverns. Later times, bodies were dried under the sun and then buried under the houses in the New Stone Age. Dead was buried with some food and presents in cedars under the houses in Çatalhöyük (Akurgal, 1990, Uslu, 1997).

In Anatolia, jars, clay, box tombs and urn pots were used to preserve cremated remains and the bodies (Figure 5). Hittites used pithos-burial tombs between 2000 BC and 3000 BC apart from basic inhumation tombs. Urartu civilization after Hittites buried bodies into the ground directly or first cremated, then the cremated remains were placed on urn pots and buried into the ground. Royal tombs in Urartu civilization were built monumentally. They resemble like a house. Burial chambers were built under the ground. Urartuians were buried the bodies with worldly goods, presents and weapons (1997).



Figure 5: Children Grave in an Urn Pot, Gordion Museum, Polatlı, 2005 by Ertek

D.

In Frig cemeteries, disposals were buried into the wooden burial chambers in rectangular pits except king Midas's grave. It was constructed on

the ground and 3.25 m in height. Lycia, Lydia and Frig civilizations constructed monumental tombs carving the rocks (Figure 6). In 450 BC, with the architectural characteristic of Lydia, ancient Greece and ancient Egypt, a great mausoleum was built in Halikarnassos for the Karia ruler Mausolus. Most of the dead were buried in "hoker" positions (Soydaş, 2002).

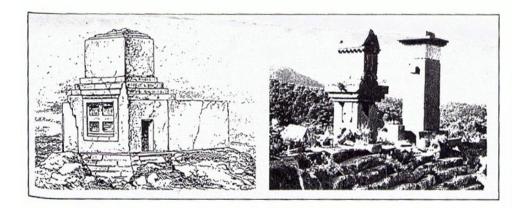


Figure 6: Free standing rock-cut tomb in Foca, and Lykia tower rock cut tomb (Akurgal, 1990).

There are also lots of different examples around the world that perform different interment techniques. In Galler, the red colored corpses were found in the excavations. Red as the color of life is painted on bodies to celebrate the new life after death (Uslu 1997). In Parsees societies of Bombay, corpses were placed on a hilltop which was so-called "Towers of Silence", to be eaten by eagles (Tiryakioğlu, 1992, Uslu, 1997). Other Eastern and Western people think that to leave a dead body unburied is improper, even indecent and insulting. According to Hindu customs, dead body is cremated with a great ceremony and display of emotions (Francis, 2005). Dead is sometimes left to sea, ocean or a river. But, probably burying method has been used most frequently all over the

world both in past and present. Among Judaism and Muslim teaching except burying, other techniques are strongly prohibited.

On the other hand, in the western culture, people used to dispose the corpses by cremating or burying out of the settlements. But later, the prohibition of the cremation by the church, intramural burials was gain importance (Aries, 1976, Cömertler, 2003). This situation continued until the Industrial Revolution. Then, first in France, later in other European countries and finally in America, a crucial distinction namely "cemetery reform" was realized due to land shortage and sanitary problems of the churchyards. In accordance to the reform, cemeteries have been located at a certain distance to the settlements, and built as a garden. The earliest of the municipal cemeteries is Pere Lachaise in Paris. The cemetery reform allowed the use of different disposal techniques particularly the cremation, wide range of interment space types and monuments, as well as the different cemetery types such as columbarium, mausoleum, forest and park cemeteries. Presently, the cemeteries are considered for both the dead and the livings in the west (2003).

The interment techniques are mainly in four types. These include inhumation (burial in the ground), cremation (destructing by fire), exposure (lodging in a caves or treetops or setting adrift in a canoe) and mummification (preservation of the body by special treatment of the tissues with oils, etc.) and embalming (modern mummification by chemicals for preserving the body for the funeral). These informations about interment techniques will be used in next sections, while I describe the traditions in terms of different religions.

2.1.2.1. Inhumation

Inhumation means basically the decomposition of bodies. Decomposition is the oldest and the most common technique for all societies and religions. Burial can be in a simple manner that the corpse is placed directly to the soil by shrouding, with a coffin or without any spatial arrangements. This burial strategy has two different practices. One is simple burial on earth or in other interment

space. The other type of decomposition is namely sepulchre burial is relatively uncommon: it involves placing the deceased and the casket permanently in a mausoleum or tomb, above or just below the ground. Furthermore, other burial methods include aquatic burial, surface burial, post-cremation and aerial burial (placement in a canoes or trees).

In Turkey the inhumation is performed according to Islamic teaching that contains; washing the corpse, shrouding, placing it a coffin, funeral namaz, prayer and the ceremonies and burying. The corpses are buried in grave which are classified in two types in Turkey. The first one is the soil graves (in most of the rural cemeteries) the second one is tomb graves with concrete structures (usually in urban cemeteries) (Figure 7).

In woodland cemetery, also known as an eco- cemetery, burying methods are used as an interment technique. The main purpose in ecological cemetery is "returning the body to nature, in a biodegradable coffin or a shroud, with a tree planted over or near the grave".

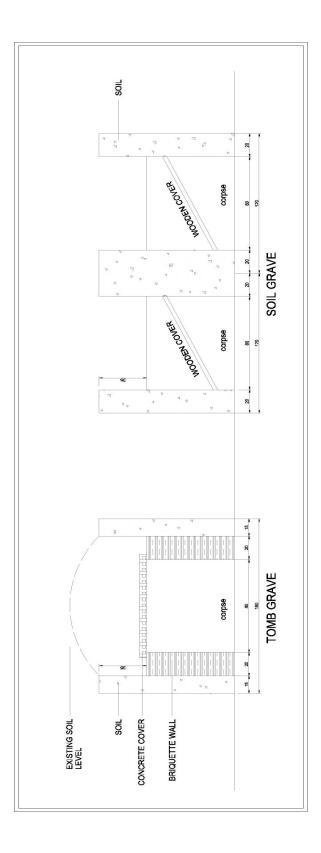


Figure 7: The structure of graves in Turkey (Uslu, 1997).

2.1.2.2. Cremation

Cremation is one of the oldest and also the most contemporary methods for body disposal. The definition of cremation in Oxford Advanced Dictionary (1983) is, burn the corpse to ashes. Cremation process begins after the funeral ceremony held at a chapel, a church or some other places. The coffin is delivered to the crematorium. After the cleaning process, the coffin is placed on a trolley and inserted into the heated (800 - 1000 degree) cremator. The coffin remains in the first chamber of the cremator for approximately 75 minutes. Then after the second cremation for 2 hours, the remains are removed and placed in a room for cooling. Then the urn is sealed, labeled and placed into a safe storage (jars), which is called ash urn or mortuary urn. The jars may be preserved in the crematorium building, buried in a garden or a grave or scattered to a river, sea or an ocean.

Mainly this technique is used in the direction of Buddhism and Hindu beliefs in the eastern societies. They burn the body to ensure spirit understanding body was died and it would not useful any more. In the modern times, also western world uses this method due to its low expense comparing with burying and other methods. In the early times of the Christianity, the cremation of the dead was not tolerated as a disposing method. Cremation is first accepted officially in England, 1884 has survived and become widespread all over the world. This process developed bit by bit until the end of Second World War. Then, cremation became entirely free and preferable in many European countries since the thousand of the soldiers have died during the war, so disposing them immediately was required. Also, the available cemetery areas were inadequate. As a result this method was supported and recommended by the local governments and municipalities. With the industrialization, rapid urbanization and so inadequacy of cemetery areas, Christian people began to accept cremation. The beliefs about that this method is disrespectful, changed and cremation became popular in all Christian countries (Aries, 1976).

However, Islam, Judaism, Orthodox Jews, most Orthodox faiths do definitely not permit complicated burying. Cremation method is not forbidden by Sikhs, Hindus, Parces and Buddhists. Islam, Judaism and most of the Christianity recommend simple burying. However Old Turks also used cremation as a body disposal method in the middle Asia according to Shaman Beliefs. Also in Anatolia, Lydia, Lycia and Frig civilizations used the cremation method apart from burial like Hittites and Urartu did (Ulsu, 1997).

According to Salisbury after the society's re- evaluation of the death process in the late nineteenth century, cultural traditions about death show diversity. However, while cremation presented a more abstract spiritual relationship with death, mourners still desired a place of memories and celebration that cremation could not provide. Similar with Salisbury, Francis (2005) declares that "The possibility of a 'continuing bond' through the material remains of the body is sometimes the explanation given for preferring burial to cremation. In her case study one of the participants says that: "Its not so final. At the grave, they are there, and also in heaven. Although they are dead, they are here." Also Salisbury, 2002 emphasized that cremation is often promoted as a more ecologically sound alternative to burial, but studies have shown that an embalmed cremated corpse produces carcinogenic dioxins, trace metals, hydrochloric and hydrofluoric acids, sulphur dioxide and carbon dioxide into the air during the process. Thus, in Woodland Cemeteries, cremation is not an adequate process because of its ecological pollution.

Already in Turkey according to the Governmental Decision about Cemeteries (Decision date of the Council of Ministers: 01.07.1931, No:11410; Date of the law behind of it: 03.04.1930, No: 1580; Date of the Official Gazette published on: 09.08.1931, No. 1868) Paragraph 224 defines that the corpse might be cremated. But, in this case, municipalities first have to prepare crematorium projects. Then, they have to get permission and certify such projects by the Ministry of Health. After that, they might start to construction. In order to get cremated a corpse following documents has to prepare:

- Health report given by the governmental health authority and informing the death not emerging from any unusual reason, and interment permission,
- A written document proving the deceased demanded when he/she was alive to be cremated after death. Or, at least three people have to attest to the truth of cremation demand of the deceased.
- A document proving the death was not emerged from any criminal event and given by the Local Police Office.

Such documents are given to the associated municipality at least 24 hours before cremation. Then, the municipal authorities approve permission for cremation, and cremation task is realized. A corpse cannot be removed from the grave to be cremated after he/she was buried once. Cremated remains have to be preserved in the proper containers within the cemetery.

2.1.2.3. Mummification

Today, the word mummy is used to mean dead body, which was preserved long ago by being rubbed with special oils and wrapped in cloth (Oxford Advanced Dictionary, 1983). The subject, mummification is defined as a specialized kind of bondage in which the whole body is secured under layers or restraining fabric, latex, leather, tape or even wraps. It is both an operation and a religion rite for body disposal.

Egypt is credited with being the first land where embalming began. Between 6000 BC and 600 AD approximately 4 million bodies were mummified in Egypt (Cömertler, 2001). The Egyptians believed that the soul would never forsake the body as long as the body was to remain intact. To that end, the Egyptians embalmed their dead to preserve them for the 'three thousand year journey' the soul was thought to embark upon, culminating in the 'whole man' arising from the dead to live with the gods forever. The Egyptian method of embalming or 'mummification' consisted of several steps, including the removal and preservation of key organs, immersion of the body in natron (sodium salt) and dehydration (Wolfram, 2003).

2.1.2.4. Embalming

Embalming is a preservation method of a dead body by using species or chemicals (Oxford Advanced Dictionary, 1983). Embalming is performed for three reasons: Firstly, disinfection to eliminate potentially dangerous pathogens. Secondly, preservation to prevent decomposition and allow time to arrange for disposition of the body without the unpleasant odors. Thirdly, restoration of the remains to a 'life- like' appearance for viewing protein when formaldehyde is pumped into the body displacing the blood. This process is usually done before the Christians' funerals who serve the deceased one in a coffin during the ceremonies. The modern embalming process is designed to prevent the body from returning to its natural elements through purification. There are rare cases in Europe, where a corpse is required by law to be embalmed. Such is the case for commercial airline transportation of the body, or cases where the corpse may harbor a dangerous and contagious pathogen (Salisbury, 2002).

In history, early Christians followed the strong Jewish tradition of burial with no embalming. During the 19 and early 20 the century great advances in medicine took place with the discovery of the circulatory system of the body, bacteria, and formaldehyde. Especially following the Civil War embalming fell into disuse due to lack of demand and undertakers of the day generally resorted to the use of ice to ward off decomposition long enough to have a funeral. Soon, embalming became common and universal practice. Salisbury (2002) focus on the environmental implications of burying embalmed bodies. He defines that embalming method, introduces a variety of toxic chemicals into the cemetery as a result, it is not compatible with woodland cemeteries. While several studies have indicated that formaldehyde leaching from cemeteries does not 'generally' pose an environmental hazard, research has indicated that decomposers will eventually consume embalmed remains. Thus, the chemicals will accumulate

and increase in concentration as they pass through the food chain. Moreover embalming significantly retards the natural process of decomposition.

2.1.3. Cemetery and its spatial and architectural components

With the need of a specific memorial place for dead ones, different cultures designate different burial sites. In this section, I review different fundamental spatial arrangements of cemeteries with respect to different religions. These include interments space, crypt, niche, scattering gardens, columbarium, urn gardens, tomb, kurgan, memorial, mortuary, necropolis and cemetery.

Interments space is "a place intended for the final disposition of human remains, including but not limited to only a grave space, but also including crypts (mausoleum crypt, garden crypt), niche (indoor or outdoor) and scattering gardens, columbarium, urn gardens". Grave means "a space, excavated in the earth or rock for the burial of a corpse". (Oxford Advanced Dictionary, 1983) In other words grave is a burial space. Crypts means "a space in a mausoleum used or intended to be used for the entombment of human remains" (Cömertler, 2001). It is a concrete enclose for interment. There are two types of crypts: mausoleum crypts and lawn crypts. Mausoleum crypts are generally above and buildings and they can be constructed in two types: concyrpt and durocrypte. *Crypt* in garden mausoleum also are usually above ground but are open to the outside rather than being in an enclose buildings. Niche means "a space used or intended to be used for the inurnment of cremated human remains" (Hasol, 2005). There three types of niches as mausoleum or columbarium used or designated to be used for inurnment or cremated human remains in an urn. Community niche means a common area where several cremation containers may be placed. Lawn niche means an interment space in an urn garden and designated to be used, for the burial of cremated remains. Scattering garden is "an area of a cemetery or mausoleum for the scattering of cremated remains in a non-recoverable manner in a common area". It is a scattering garden for

people interested in scattering the cremated remains of their loves one. Commonly, a plaque bearing an inscription with the name of the deceased, date of birth and date of death is set in the scattering garden. Scattering garden offers families another alternative for memorializing cremation (2001).

Tomb is literally, "vault or chamber constructed either partly or entirely above ground as a place of interment" (Hasol, 2005). Also tomb is synonymous with grave, but may take many forms apart from the grave, a sarcophagus or any type of monument set on the interment space. When a grave is marked by a protective or memorial structure it is often referred to as a tomb, which is derived from the Greek *tymbos* [burial ground]. It may also designate a memorial shrine erected above a grave. Also like caves, the concept of the tomb as a dwelling place for the dead is the most widespread. It may have originated in the practice, known in prehistoric times and common among so-called primitive peoples of today, of burying the dead underneath their place of dwelling. Sometimes the survivors continue to live in the house; sometimes they seal and abandon it after a burial. The Egyptian pyramids represent an example of tombs. Each society has designed several types of tombs being affected with their religious teachings. According to Fedak (1990) built tombs can be classified in 12 types:

1. Altar tombs: They are simply grave monuments that imitate the form of altars. Tombs of altar forms are numerous in Roman era.

1. Cenotaphs: It means literally "an empty tomb". They are sculptural monuments erected in honor of a person whose body has been lost or buried elsewhere.

2. Catacomb: It is an underground cemetery with chambers or tunnels having places for graves. It is defined as literally "series of underground galleries with openings along the side for the burial of the dead as in ancient Rome. They were used commonly in the early times of Christianity. They used to construct their graves and temples under ground so as to protect from the Romans attacks. Early catacombs were found in many parts of Anatolia. Also ancient Egyptians used catacombs for burial.

3. Mastaba tombs: They are the structures which were constructed first in the earlier dynastic era Ancient Egypt. The mastabas were simpler alternative to Pyramids before Egyptians erected their famous pyramids. They are built from mud brick or stone, with flat floors.

4. Pyramid tombs: Pyramids are unique tomb structures. Ancient Egyptians constructed pyramids as great tomb structures which are one of the Seven Wonders of the World.

5. Pithos-burial tombs: They were used by Hittites in the assorted parts of Anatolia between 2000 - 3000 BC. These graves offerings such as pots and pans with the deceased used to be placed in the pithos-burial tombs. It is supposed that the dead body was put on the graves immediately after death (Emre, 1978, Cömertler, 2001).

6. Mausoleum: They are large, elaborate and magnificent monuments or buildings. Mausoleum was originally so called from the sepulcher of that name at Halicarnassus, Asia Minor, erected (c.352 B.C.) in memory of Mausolus of Caria. It was a magnificent white marble structure, considered by the ancients' one of the Seven Wonders of the World (Fedak, 1990). Another unique example is Taj Mahal that was built in India with remarkable series of domed mausoleums. Many of them used as pleasure pavilions during the owner's lifetime. This celebrated mausoleum, built by Shah Jahan at Agra.

7. Stupa: It is a kind of domed shaped monumental structure used Buddhist Uygur Turks. Architectural basis of stupa lies on the kurgan graves.

8. Turbe: It is a kind of grave which has an interment place with a visiting and social space around it (Hasol, 2005). Turbe graves have been developed by Muslim Turks with the effect of old Turkish grave architecture such as tent, kurgan and stupa. Turbes were built by Turks in Karahanlılar, Great Seljuk, Anatolian Seljuk, Beylikler and Finally Ottoman period (Uslu, 1997). Cömertler stated that to make any structure is on the burial grave is not permitted in respect to Islam since such grave monumentalism may break the belief of affirmation of unity of God. Therefore, especially in the early times of Islam any structure was not built on the graves. However, then with the effect of cultural interactions monumental tombs such as turbe were constructed.

9. Baldachin tombs: They are indeed family mausoleums seen in Moslem societies. In most cases, baldachin and turbe is confused with each other. They are constructed by the rich people as a personal or family mausoleum. But, turbes are structures that were owned by a statesman and holy man and accepted as sacred tombs (Saracoğlu, 1950, Cömertler, 2001).

10. Rock-cut tombs: They were structured only at a place where workable rock formations existed. Modules, measures and proportions of rock-cut tombs show diversity. They are divided into two groups as multiple roomed graves and one roomed grave in respect to the number of units they include. Multiple roomed graves are generally designed for royal families and show monumental characteristics. Roch graves are composed of a gate in front of the entrance, a big room generally used as ceremony hall and several rooms adjacent to the big room used as grave rooms. There are angled and vaulted niches within the walls (Çilingiroğlu, 1997, Cömertler, 2001).

11. Tumuli: Tumulus structures are ancient grave mounds that belong structurally to built tombs or rock cut tombs (Hasol, 2005). However their circular plan forms makes them a separate group. They are usually low and wide mounds writ conical top, the wide exceeds the height. Many tumuli have a dorms and the nucleus, the tomb chamber (Soydaş, 2002).

Kurgan is a "subtype of Turkic structures, constructed as a burial chamber under a hill it is the first type of tomb used by old Turks in The Middle Shaman Turks" (Uslu, 1997).

Memorial is physical identification of an interment space as grave markers, headstones, footstone, tombstone, crosses, obelisks and various monuments. Headstones includes a name plate or name bar, date of birth and date of death of the deceased and may include an epitaph or commemoration of the life, deeds or career of the deceased person. For Meyer cemeteries contain grave markers "that reflects the characteristics of a deceased person's life and dates of birth and death" (Rugg, 2000, Meyer, 1997). Memorials include

historical and demographic datas of the graves and monuments. Graves have been also noted the deceased one's important contributions to the community. Especially in Western societies monumentals reflect the individual's life, social statutes, religious affiliation or characteristics of the deceased person (Figure 8-9-10).







Figure 8-9-10 : The slayts from the archive of Prof.Metin Başal of Ankara University Landscape Architecture, International Garden Exhibition, Headstone Designs, Stuttgart, Germany, 1993.

Also Christians set a cross on the grave, which has a meaning of certain church and a notion. Cross types include, Calvary, Gothic, Ionic, Botonee Crosses, Anchor Cross, St. Andrew's Cross, Celtik or Irish Cross, Crusader' Cross, Egyptian or Coptic Cross, Greek Cross, Jerusalem Cross, Orthodox, Patriarchal or Eastern Cross, Roman or Latin Cross and finally Teutonic Cross.

The characteristic of the Ottoman headstones are also significant with its "kavuk" and "fes" structures. Headstones symbolized the human abstractions and it is known this customs originated from the tradition of Middle East Turk Shaman rituals. In Ottoman cemeteries, the headstones include the kavuk if the deceased one is man or kerchief if the deceased one is woman. Also the names, ornamentals, pray, date, degree and the profession, the family introductions and the death reason was written on the gravestones (Figure 11). There was a relation between the cause of death and the headstone composition such as if dead's kavuk located near his grave instead of the top of the headstone, it reflects the execution (Laqueur, 1997).



Figure 11: Ottoman Cemetery in Istanbul (Laqueur, 1997).

Mortuary is a temporary reception for a corpse, *ossuary* is a storage place for the bones (Francis, 2005). *Necropolis* is a large and elaborate *cemetery* or burying place, literally a "city of the dead". They were usually organized outside the city walls along the roads leading into the city in a necropolis (Soydaş, 2002).

Cemetery is represented as a tract of land specifically established for burials and funeral rites in general meaning. The term "cemetery" comes from the Greek word "koimeterion" (sleeping chamber), which mirrors the contemporary religious view of the grave as a holding chamber for sleepers awaiting the glory of resurrection (Salisbury, 2002). Cemeteries are cultural institutions that symbolically dramatize many of the community's beliefs and values. Thus, they are significant historical and cultural sites. As parts of the urban green area network, they contribute urban landscape and ecosystem and provide passive or active recreation opportunities to the citizens.

2.1.4. Types of cemeteries:

Human being has produced several types of cemeteries until today. Cemetery place for final disposition and demoralization of human remains, including mausoleum, columbarium and other types. Memorial parks, graveyard, burial site, burial ground, necropolis are the synonyms of cemetery used in terminology. However these terms are quite different. Rugg (2000) highlighted the broadly discussion that cemeteries constitute a particular type of burial space. The classification is shaped by their functions, usage, purpose or social structure. In this section, I intend to review the types of cemeteries shortly. Then according to Rugg (2000), Cömertler (2001) and Salisbury (2002)'s classifications the types are: cemetery, churchyard, mass cemetery, war cemetery, pantheons, columbarium, mausoleum and forest cemeteries.

Traditional cemetery is special sites of burial, with internal layout that is sufficiently well ordered to allow families to claim and exercise control over their particular grave space and which facilitate the conducting of appropriate funerary ritual (Rugg, 2000). *Memorial parks and gardens* is designed as a park like style with administrative buildings, monumental and lawn areas, natural features such as forests and lake, walking path ways. *Churchyards* are generally located next to churches and Hazire takes place in the quibble side of the mosque yards. Mass graves are the burials which has taken large numbers of dead bodies where the corpses lack individual identity in some cases. War cemeteries are established in the sense of burying a large number of dead usually with identical markers. *Columbarium* is a structure, room or a space intended to be used for the inurnment of cremated remains. *Mausoleum* is large temple-like tomb contains a combination of structures such as crypts, niches or columbariums for interment of human remains. Rugg (2000) defines Pantheons as 'a monument or building commemorates a nation's dead heroes' and symbolizing strong political purpose as a celebration of nationhood. A *woodland cemetery*, also known as an eco- cemetery or green graveyard, is a burial ground where the body is returned to nature, in a biodegradable coffin, with a

tree planted over or near the grave. According to this approach, cemetery planning process requires interment places as well as to preserve historical and cultural heritage, to contribute to the urban ecosystem and landscape and to provide active and passive recreational opportunities for citizens.

Cemetery: According to Rugg (2000), cemeteries can be defined "as specifically demarcated sites of burial, with internal layout that is sufficiently well ordered to allow families to claim and exercise control over their particular grave space and which facilitate the conducting of appropriate funerary ritual". Although cemetery space can be regarded to some degree as sacred, cemeteries are principally secular institutions that aim to serve the whole community. The sites are able to carry multiple social and political meanings. They are generally divided into two broad categories as traditional or memorial parks.

Cömertler defines the *traditional graveyards* that "the sites, which allow or require traditional upright memorials". They may contain small-scale family mausoleums but not large – scale community mausoleums and not contain a columbarium, a crematorium. In Ankara Cebeci Cemetery and Karşıyaka Cemetery are the examples of traditional cemetery.

In his thesis, Salisbury (2002) classified cemeteries in two groups:

a. Rural Cemeteries: Rural cemeteries were large, non - sectarian burial grounds located 5 - 10 kilometers from the center of their communities (Salisbury 2002). Outside the urban settlements there are lots of rural cemeteries in Turkey with their uncrowded and more respectful layouts.

B.Lawn- Park and Memorial Cemeteries: As discussed by Cömertler (2001), memorial parks and gardens are cemeteries which have adopted a park like style and abolished the use or upright memorials. Memorial parks also include garden sections of cremated remains. They also include administrative buildings, monumental and lawn areas, natural features such as forests and lake, walking path ways. These cemeteries are designed in high qualities of the

setting, light, sound and noise. Also they serve recreational activities to the communities.

Churchyard or Hazire: Churchyards are traditional places of burial that are usually no more than one acre in size. Churchyards are generally located next to churches and owned by the national Church. Rugg (2000) states that much of the *physical characteristics* of the Churchyards resemblance like cemeteries. Salisbury (2002) defines churchyard as "A graveyard is associated with a religious denomination and were adjacent to a church building at the time the graveyard started." According to Cömertler (2001), *churchyards and hazires* are cemeteries which are situated close to a church or a mosque. Hazire takes place in the quibble side of the mosque yards. Use of mosque yards as a cemetery is abandoned by the cemetery registrations in Turkey.

Mass Grave: A fourth type of burial space is the mass grave. This term is used to define a location in which burial has taken place on a large scale where the bodies lack individual identity in some cases. This situation may arise for a number of reasons such as famine, disease, disaster or war. Also natural disasters such as the 1999 Turkish earthquake could also mean that traditional funerary practices are suspended. In Kocaeli, the sudden need to accommodate thousands of dead led to the use of mass graves and quicklime to hasten decomposition.

War Cemeteries: Although similar to mass graves, war cemeteries are established in the sense of burying a large number of dead, the war cemetery remains a very specific type of burial space. It's most obvious purpose is the burial of military dead during or following periods of conflict (Rugg 2000).

In war cemeteries, the graves are located in rows and each set of remains is interred in a single grave. Each grave has an identical marker in different size, shape and material, carrying the name and rank of the soldier interred in the grave, and a simple message. Where identity is not possible to

determine, the gravestone is marked 'Known to God' (Rugg 2000). For example The Çanakkale Consular Cemetery contains the graves and memorial of New Zealanders, French, English and Ulvians who died while serving at the peninsula immediately after the war in Gelibolu. As a consequence, the site may be visited by war veterans and family members who may undertake long journeys to pay their respects and make sense of their loss. Visits to the site may also be assigned a political purpose.

Pantheons, Columbarium and Mausoleum: *Columbarium* is the arrangements of niches that may include an entire building, a room, series of special indoor alcoves, a bank along a corridor or part of an outdoor garden setting. In other words columbarium is a structure, room or a space intended to be used for the inurnment of cremated remains. It is often located within a mausoleum or chapel and constructed of numerous small compartments (niches) designed to hold containing cremated remains.

Mausoleum is explained by Cömertler (2001) as, large temple-like tomb contain a combination of structures such as crypts, niches or columbariums for interment of human remains. Community mausoleum is a structure, above ground or partially above and partially below ground, containing crypts and niches or intended for use by members of the general public. Cömertler (2001) claims that a mausoleum ensures several advantages such as comfort, security to the users with their clean and dry space. One of the most significant mausoleums was built in Halikarnassos about in 450 BC, for the Karia ruler. Significant of this ancient monumental structure lies on its dimensions and unique art works.

Rugg (2000) defines *Pantheons* as 'a monument or building commemorating a nation's dead heroes'. The pantheon carries strong political purpose as a celebration of nationhood. For example, the Walhalla near Regensburg on the banks of the Danube holds visual representations of the heroes of Germany, including Goethe, Kant and Haydn. Also Anitkabir in Ankara attracts tourists, visitors and politicians to present their respects where Ataturk

has been resting there. Thus, these sorts of sites that pilgrimage shades into pleasure-seeking, recreation visit of the famous, melancholy remembrance or to enjoy the landscape.

Forest Cemetery – Woodland Cemetery – Eco-Cemetery:Cömertler (2001) explains the *Forest cemeteries* as "They are like the memorial gardens and park cemeteries do not allow the up-right memorials and developed in a quite low dense, generally sized in large scale." Their forestry character may be natural or a man-made development. I intend to give broadly in formations about the Woodland Cemeteries in terms of this thesis' purpose. A woodland cemetery, also known as an eco- cemetery or green graveyard, is a burial ground where the body is returned to nature, in a biodegradable coffin, with a tree planted over or near the grave. The woodland cemetery is also known as a nature reserve burial ground, eco- cemetery, memorial grove, green graveyard or garden of remembrance (Salisbury, 2002).

Salisbury (2002) approaches this alternative way of burial that the woodland cemetery reflects a sustainable lifestyle in the most personal way. He describes a man who is grieving and said: *"It's never easy to say goodbye to a loved one and this is part of the healing process. It's a celebration of lives lived. When I look at the trees, I'm reminded we're all part of a cycle."* The resulting forest establishes a living memorial and forms a protected wildlife preserve. Planting the cemetery by using natural species provides less maintain requirements. Thus, the aesthetic appearance of the cemetery enhance automatically, with less maintenance.

Woodland Cemetery which is the fastest growing environmental movement in UK and USA, emerged as an alternative design solution to social problems of cemeteries. Clayden and Woudstra (2000) declare that there is a demand to overcome the lack of identity of cemeteries. This has encouraged green burial (Woodland Cemetery) as an alternative to the more traditional ways. According to this approach, cemetery planning process requires interment places as well as to preserve historical and cultural heritage, to contribute to the

urban ecosystem and landscape and to provide active and passive recreational opportunities for citizens. Also the most significant advantage of Woodland Burials is, their healing role to the people who are in grief statements. Salisbury (2002) claim that trees are important element in the emotional formula for handling grief and memorializing loved ones and expressing the pain. Francis (2005) emphasizes that the "Good visiting experiences are often associated with well maintained cemeteries and can be supportive". A woodland cemetery provides an environment where death is placed within the context of larger natural life cycles. The natural landscape of the woodland cemetery provides a therapeutic environment for the grieving. As a result because of these advantages that Woodland Cemetery provides, in England and USA Woodland cemeteries are encouraged as a new approach.

2.1.5. Conclusion:

In this chapter I reviewed the cemetery culture in respect to the concept of death and funeral customs, principally four interment methods, spatial and architectural definitions and grief statement which influence and shape the cemetery culture. I attempted to give these basic definitions because I will explore the affects of the religion on cemeteries in the following section in which I will use this terminology in my discussions.

According to my investigation, death shapes the religious beliefs and as a result religious beliefs determine the interment techniques and disposal methods of the death body. In most cultures such as Shaman Turks, Anatolian cultures, Egypt cultures, Hindu cultures, Judaism, define death as life itself or another plane of existence. Death is perceived as a break of life, on the way to a continuation of life. Religions defend that the spirit does not disappear, it survives forever. After death, communities bury their deceased ones with a religious ritual as a farewell and mourning ceremony. Only human beings have a conscious of death and this consciousness is the one feature that makes human

as human. However death is still an unknown and a horrible state, because both primitive man and modern man could not control and understand it.

Since the prehistoric times, so as to overcome this supernatural and unknown change, individuals have intermented their bereaved ones with funeral customs and community attach. It was an attempt to cope with fear or unknown feelings by joining together and performing rites. Cultures perform different rituals and ceremonies, however among cultures there are some similarities. Almost every culture and civilization ever studied has three things in common relating to death and the disposition of the dead: Some type of funeral rites, rituals, or ceremonies, A sacred place for the dead, Memorization of the dead (Salisbury, 2002).

The most important purpose of the funeral customs today is its helping role in confirming the reality of death. In Funerals, mourners accept the reality of the loss, express thoughts and feelings, gain support and understanding, learn new roles of coping without the deceased, facilitate emotional re-location, and find a time/place to grieve (Francis, 2005).

In my investigation I also reviewed the interment methods and fine out that like funeral customs, interment methods are shaped by the religious teachings and cultural structures. These interment methods are principally inhumation (burial in the ground), cremation (destructing by fire), exposure (lodging in a caves or treetops or setting adrift in a canoe) and mummification (preservation of the body by special treatment of the tissues with oils, etc.) and embalming (modern mummification by chemicals for preserving the body for the funeral).

Inhumation means basically the decomposition of bodies that the corpse is placed directly to the soil by shrouding, with a coffin or without any spatial arrangements. This burial strategy is accepted by Islam, Judaism and most churches of Christianity and has two different practices. One is simple burial on earth or in other interment space. The other type of decomposition is namely sepulchre burial is relatively uncommon: it involves placing the deceased and the casket permanently in a mausoleum or tomb, above or just below the

ground. Furthermore, other burial methods include aquatic burial, surface burial, post-cremation and aerial burial (placement in a canoes or trees). In Turkey most common technique is the burial method according to Islamic teachings.

Cremation method is the reduction, through heat and evaporation of the human body to its basic elements and is considered a means of preparing the human body for the final disposition. Mainly this technique is used in the direction of Buddhism and Hindu beliefs. However, Islam, Judaism, Orthodox Jews, most Orthodox faiths do definitely not permit complicated burying. However Old Turks also used cremation as a body disposal method in the middle Asia according to Shaman Beliefs. Also in Anatolia, Lydia, Lycia and Frig civilizations used the cremation method apart from burial like Hittites and Urartu did (Ulsu, 1997).

Mummification as a third technique, is defined as a specialized kind of bondage in which the whole body is secured under layers or restraining fabric, latex, leather, tape or even wrap. This technique was mostly used by The Egyptians. Embalming is a preservation method of a dead body by using species or chemicals and can be defined as modern mummification. Embalming is performed for three reasons: Disinfection to eliminate potentially dangerous pathogens. Preservation to prevent decomposition and allow time to arrange for disposition of the body without the unpleasant odors. Restoration of the remains to a 'life- like' appearance for viewing protein when formaldehyde is pumped into the body displacing the blood. This process is usually done before the Christians' funerals who serve the deceased one in a coffin during the ceremonies. This method do not performed in Turkey funeral ceremonies.

After the interment methods I investigated the spatial arrangements and the architectural reflections. With the need of a specific memorial place for dead ones, different cultures designate a different burial sites such as grave, niche, scattering gardens, tomb, columbarium, urn gardens, memorial, mortuary, ossuary, necropolis, cemeteries. People have produced several types of cemeteries until today. These include traditional cemetery (Rural cemeteries and

Lawn- Park and Memorial Cemeteries), churchyard and hazire, mass graves, war cemeteries, pantheons, columbarium, mausoleum and forest cemeteries.

Traditional cemetery is specifically demarcated sites of burial, with internal layout to allow families to claim and exercise control over their particular grave space and which facilitate the conducting of appropriate funerary ritual (Rugg, 2000). Rural cemeteries were large burial grounds located 5 - 10 km. from the center of their communities (Salisbury 2002). Memorial parks and gardens are designed as a park like style with administrative buildings, monumental and lawn areas, natural features. Churchyards are generally located next to churches and owned by the national Church. Hazire takes place in the quibble side of the mosque yards. Mass graves are the burials which has taken large numbers of dead bodies where the corpses lack individual identity in some cases. War cemeteries are established in the sense of burying a large number of dead usually with identical markers. Columbarium is a structure, room or a space intended to be used for the inurnment of cremated remains. *Mausoleum* is large temple-like tomb contains a combination of structures such as crypts, niches or columbariums for interment of human remains. Rugg (2000) defines *Pantheons* as 'a monument or building commemorates a nation's dead heroes' and symbolizing strong political purpose as a celebration of nationhood. Finally I intend to give broadly information about the Woodland Cemeteries in terms of this thesis' purpose. A woodland cemetery, also known as an ecocemetery or green graveyard, is a burial ground where the body is returned to nature, in a biodegradable coffin, with a tree planted over or near the grave. Woodland Cemetery which is the fastest growing environmental movement in UK and USA, emerged as an alternative design solution to social problems of cemeteries. According to this approach, cemetery planning process requires interment places as well as to preserve historical and cultural heritage, to contribute to the urban ecosystem and landscape and to provide active and passive recreational opportunities for citizens. Also the most significant advantage of Woodland Burials is their healing role to the people who are in grief statements.

2.2. RELIGION AND CEMETERY CULTURE:

Religion has played a central role in beliefs concerning the death and after life. Religious beliefs shape the way of disposal of the death, funerary customs, the settings of the grave and tomb characteristics and obligations. Because of the religious differences, there are several variations on the grave architecture, landscaping, arrangements and funeral customs among Shamanism, Buddhism and great Holy religions such as Islam, Christianity and Judaism. The literature review shows that religions affect the cemetery culture in six different ways. These include beliefs about death and after life', 'the disposal strategy of the body, 'the funeral rites and the rules of the ceremonies', 'the shape, form, direction, arrangement and the construction of the interment space', 'the rules of the grief statement' and 'the visit rules and obligations'.

In this section, I will present Shamanism, Buddhism, Judaism, Islam and Christianity and their beliefs and practices about death and funerals in order to understand how religion affects cemetery culture. I try to show the conflict between today's phenomenon and the historical setting in terms of respect, sacredness and design issues. I will evaluate the commonalities as well as differences between the affect of different religions including on the cemetery culture. There are lot of religions around the world; I chose these religions due to their interactions with the Anatolian and Turk's cemetery culture. Karamağralı (1972) states that eastern Anatolia have had the most assorted types and cultural interactions with the east, the west and Islam, Christianity, Judaism, Shamanism and ancient Chinese. Significant centers were Erzurum, Malatya, Malazgirt, Muş-Tatvan, Halep, Van, Erciş, Reşadiye, Gevaş-Van and Ahlat-Van in eastern Anatolia.

2.2.1. SHAMANISM:

Shamanism was widespread everywhere in Siberia and existed up to the 20th century. The Old Shaman Turks include the Uighur Empire, the Kirghiz, the

Cumans, Gokturks and Oghuz Turks. They settled in Mongolia and stretched as far as west of the Aral Sea. Shamanism effected Anatolian Turk's funeral and grave traditions, which continues to affect even today with Kurgan structures and grief performances (cry loudly or sacrificing animals) (Uslu, 1997). Even after acceptance of Islam Shamanistic traditions were performed in Anatolian civilization. For instance, Karahanlı Turks buried the corpses into kurgans, but they did not perform mummification process and nor served any grave presents like Shamanist Turks did (Çoruhlu, 1999). Oğuz Turks accepted Islam like Karahanlı Turks; however, they continued to bury their remains with his clothes, weapons and wordily goods like Shamanistic traditions. Also Oğuz Turks continued to set up balbals on the graves as Shamanistic traditions. In the section below, I will review to Old Shaman Turk's customs and belief system about death as well as after death, and the cemetery architecture and its spatial arrangements.

Shaman Turks believed the life after dead and resurrection. They believed that the death occurs when the "tin" leaves the body (Güneş, 1995). They cremate the corpses before burying method. Baldik's study (2000) which depends on the Chinese sources and Turk inscriptions, show that Shaman Turks held two funeral ceremonies. The first ceremony is after the death in the tent and the second funeral ritual is arranged when the deceased is interred. Dead bodies were buried with the deceased's horse, clothes and personal belongings. The grave structure "Kurgan" was constructed as a grave by old Shaman Turks. Their grief statements were very sensitive with loud cry and screams. Also they cut their faces in the funeral ceremonies and sacrifice animals. The most important information is their interment spaces and cemeteries are arranged as small wooden or forestry areas in order to protect them from the bad souls and forces (Uslu, 1997). These kinds of cemeteries are also show the similarity with the arrangement of the Woodland Cemeteries, in terms of their forestry structure. It shows that Woodland Cemetery is not so unfamiliar to our culture.

Beliefs about death and after life: Old Shaman Turks believed that there would be another life after this life and they expect the resurrection. Byzantine sources tell us that Turks hold fire extraordinary respect and also venerate air, water and earth. However, they did not worship the fire and they did not call "God" anyone except the creator of heaven and earth. To the creator of heaven and earth, Shaman Turks sacrifice horses, oxen and sheep (Baldik, 2000). In respect of Shamanism, a person consists of a material body and spirit concept composed of "tin", "kut" and "sür". The Orhun inscription explained that the tin flies like a bird when a man dies.

Also Baldik (2000) stated that in the army, say the Chinese historians, Turk man is supposed to die or to be killed in an action. Death of an illness is considered as a shameful event in their society. According to Shamanism, a sick person is a dead in the future, thus the attitudes toward both illness and death are almost the same (Roux, 1999, Cömertler, 2001).

The disposal strategy of the body: In Shamanism dead was disposed both by cremating and burying method. Middle Asian Turks which were influenced Shamanistic rituals buried their remains either directly or after cremating or as mummified. Indeed, inhumation technique was first used with the Chinese influence, whereas post-cremation burial was developed as a result of the Indian culture and Buddhism religion. Apart from these techniques, historically Turks rarely used other methods. For example some of the Turkish tribes left their corpses in the hilly, rocky and high places to be broken and eaten by wild animal such as eagles (Saracoğlu, 1950, Uslu, 1997). Some tribes of Huns put their corpses in the coffins and hang up the coffins on the tress. After the acceptance of Islam Kirgiz abandoned that custom (Demirel, 2000).

The funeral rites and the rules of the ceremonies: Before burying the corpse, depending on the season, Shaman Turks preserved the remains within a tent for a certain period. They held two funeral ceremonies. The first ceremony was held just after the death in the tent. They turn around the deceased one's

tent seven times by horse and cut their faces so as to represent bloody tears. The second funeral ritual was arranged when the deceased was interred. As observed in the case of ancestral cave, the ceremony would take place several months after person's death. If the person dies in spring or summer, the ceremony would take place in autumn; in spring if the person dies in summer or winter, the ceremony would take place in spring. The funeral ceremony would take place on the 27th day of the month (Baldik, 2000). Roux (in Baldik, 2000) asserts that both the observations of the seasonal cycle and the day of the month reflect both death and the expectation of the resurrection.

The Chinese documents show that in the sixth century, the Turks burned their corpses before burial (Baldik, 2000). Then bury the corpse along with the deceased's horse, clothes and personal belongings. By the seventh century, the custom of burying the corpse had been largely abandoned. It is necessary to say that Turk burial rites were influenced by blooded shamanistic sacrifices like killing horses, animals and even people before putting them into the graves of noblemen. The Turks would sacrifice large numbers of slaves at their funerals. These slaves could on occasion be charged with conveying a massage to the dead man. Gold and silver would be buried with him (2000).

Little is known of the Ancient Uighars' funerary customs. The Chinese sources state that the Uighur warriors were buried standing up and armed. The Uighur in the middle of the eighth century would still bury widows alive with the corpses of their husbands (2000). The last Turk empire in Mongolia was founded by the Kirghiz in 840. One Kirgiz inscription had the dead man says "I have killed seven wolves" (2000). Baldik emphasized Roux (in Baldik, 2000) comments about the idea of the representation of the animals of Turks funerary sculpture. According to him, the killed animals mean that they will serve the hunter in the next life after death. The inscriptions from the mid-ninth century show a God of Underworld called Erklik, who is responsible for death. This God did not claim the dead man's widow: he is made to lament her loss. According to Chinese, the body would be burnt and the bones gathered and buried after a year or at the end of the same year of death (Demirel, 2000).

The shape, form, direction, arrangement and the construction of the interment space, memorial or the cemetery: The first known grave structure used by old Shaman Turks is the "Kurgan". (Uslu, 1997). Also for protecting the corpses from the bad souls, they buried corpses into the fields, gardens, even under the houses (Saracoğlu, 1950, Uslu, 1997). Uslu (1997) uses some Chinese resources to show that Hun Turks built domed and pyramidal kurgans. The kurgans interred various goods, presents and animal with the human remains and they used to wrapped the inside walls of the kurgans with silk and woolen carpets. Also they drew the picture of the deceased one and the scenes of wars that he attended. Yazar (1999) states that Hun Turks used to bury mummified corpse and located them at the north side of the kurgans.

The height and the shape of the memorial kurgans used to vary depending on the social statue of deceased. For example, the memorial of the rich was glamorous and big size. On the other hand, memorials for ordinary people were simple, modest and small. Hun and Gök Turk's tent and kurgan architecture was established in relationship with the cosmological conception. Because, both tents and kurgans were considered as microcosms. That is, dome of the tent and kurgan symbolized the world axis. Beside, architectural order of kurgans was considered as a house because of Turk's belief that there would be another life after this life. And, the humans would have also a similar life, so they would require a similar environment. Therefore, old Shaman Turks decorated kurgans as a house. Even, they called kurgans as houses in some cases (Çoruhlu, 1999, Cömertler, 2001).

Afterwards, several types of tombs and memorials were used. For instance Orhun Turks used two types of burials. First one was called as the long graves, whose length was between 5m and 100 m, and second type was the plain grave, whose surrounds used to be covered with flat stones. Long graves which were usually used by Hun Turks and Gök Turks were located by the riversides and on the foot of the rocks (Başar, 1973, Uslu, 1997).

The inscriptions specially tell us the Altaic practice that, as for the enemies whom they kill, will serve to a Turk in the afterlife. In this connection a

special word, "balbal", is used to designate either the enemy or the enemy's soul. As a symbol of enemy stone monuments was erected around the grave to respect him. Thus the enemy is turned into a balbal: he becomes the stone monument (Baldik, 2000) The most well known of the balbals were "bengütaş" as reported in the Orhun Inspirations of Tonyukuk (720 BC), Kül-Tegin (731 BC), and Bilge Ruler (Şeker, 1999, Cömertler, 2001).

On gravestones several types of figures are used by Turks, which were effected Middle Asian cultures. They include several meanings according to Uslu (1997):

Flower symbols: Rose, fuchsias, carnation, tulip, narcissus, hyacinthus

Tree symbols: Date, cypress

Animal symbols: Horse, camel, deer, ram, sheep, bird, wolf and fairy take animals Natural symbols: Moon, cloud, sun, star

Good symbols: Brooch, fez, khan jar, earring, pike, pistol, gun, janissary, headgear Fruit symbols: Pear, almond, walnut, pulm, watermelon, apricot, melon, lemon

Figures and their meanings and their periods that they were used on the grave stone ornamentations: (Uslu, 1997).

FIGURE&RELIEF	PERIOD/PLACE	SYBOLIC MEANING
Hand mill	Middle Asia, Turks, Hun	dead was a woman
Undeaded sculpture	Middle Asia, Kök Turks	the number of killed people
Vegetable motive	Middle Asia, Anatolia	sacredness, mysterious powers
Sun	Middle Asia, Anatolia	sacredness
Horse	Middle Asia, Anatolia	sacredness
Sheep	Middle Asia, Karakoyunlular	sacredness
Ram	Middle Asia, Karakoyunlular	r, Seljuks sacredness

According to Akurgal (1990), turbe is the monumental Stone interpretations of Turkish tents. The origin of the form of gonbad lies on "bark's" in Shamanist Turks. Shaman Turks placed the remains in a tent whose entry was oriented to the east and they applied special medicine to the corpse to not spoil and kept them until the funeral and interment ceremony. They got the internal organs and buried them under the ground of tent. As a result these tent graves were used in two purposes: the first one was used as an interment space the other one was used as a ceremonial hall.

Even after acceptance of Islam Shamanistic traditions were performed in Anatolian civilizations. For instance, Karahanlı Turks buried the corpses into kurgans, but they did not perform mummification process and not serve any grave presents like Shamanist Turks (Çoruhlu, 1999). Oğuz Turks accepted Islam like Karahanlı Turks; however, they continued to bury their remains with his clothes, weapons and wordily goods like Shamanistic traditions. Also Oğuz Turks continued to set up balbals on the graves as Shamanistic traditions.

Old Shaman Turks hidden their interment spaces and cemeteries by setting them as small wooden or forestry areas in order to protect them from the bad souls and forces (Uslu, 1997). This kind of space arrangement is also show the similarity with the arrangement of the *Woodland Cemeteries*, in terms of their forestery structure.

Grief and mourning customs: Shamanism dictates the desire of struggle against the death to the people. Because of this desire, death is perceived as a disaster in Shamanism. It causes the most intensive grief in Shamanism societies. Indeed, this characteristic of the concept is a normal result of the strong desire for living (Roux, 1999, Cömertler, 2001). The mourners cry and scream loudly, and they cut their faces. In the mid-ninth century the mourners abandoned to cut their faces, instead they howled while circling the remains three times. On the Altay Mountains the women in grief wear her clothes in an opposite way (reverse the clothes) in the following seven days after the interment ceremony (Demirel, 2000).

Shamanism effected Anatolian Turk's funeral and grave traditions. One proof for this can be observed at the gate of Karşıyaka Cemetery where there is a warning about cemetery behavior: "It is prohibited to sacrifice an animal for the grave and to attach cloth materials to the grave" (Figure 12). It shows that there is a perhaps still Shaman effect on cemetery culture even today.



Figure 12: Warning note about cemetery behavior in the gate of Karşıyaka Cemetery

2.2.2. JUDAISM

Judaism is one of the monotheistic religion that originating from the Middle East. I review Judaism in my thesis because throughout many centuries, Turks, as a Muslim community, have lived together with Jews in Anatolia. Thus, several interactions are expected to occur concerning with cemetery culture. In order to understand these interactions, I will investigate further in this section their perception and traditional ways of dealing with death and grave.

Judaism reveals the immortality of soul and new life after death. Judaism accepts only simple burying technique under the ground. Cremation,

mummification, mixed type of burying and other disposing techniques are prohibited. Jewish funerals take place and are performed immediately after the death. The fundamental customs of preparing the corpse for interment and religious ceremonies in three steps: First, the body is washed; secondly, head of the dead is tied with a rope from its chain and finally the corpse is shrouded. Then, in the cemetery, the funeral ceremonies are performed.

Beliefs about death and after life: Judaism reveals the immortality of the soul as Muslim teaching. For this belief system, dead does not mean the end of life. There is a new life after death including the universe of 'heaven' and 'hell'. This universe is named "şeol" in Judaism (Encyclopedia of Religion History, 1999). Jews believe that the material body is not necessary for such rebirth of the human (Cömertler, 2001). Conservative Jews believe that there will be a resurrection of the dead. In the physical sense, there will be a resurrection at the coming of the Messiah. Spiritually, the deceased will live on through the memories of the living. Orthodox Jews also believe that there is a type of physical and spiritual life after death at the coming of the Messiah. The resulting lives are lived in heaven and hell-like places.

Judaism considers human being as a spiritual existence. The essential and the valuable thing is the spirit not the material. Moreover, the death is a taboo in Jewish. For instance, no one is allowed to touch the death in Jewish culture. A person, who touches the death body, becomes filthy for seven days. Such person must be bathed to become clean again (Encyclopedia of Religion History, 1999).

The disposal strategy of the body: Judaism doctrine dictates one strategy for the disposing of the deceased that is simple burying activity under the ground. Cremation, mummification, mixed type of burying and other disposing techniques are prohibited. The procedure is similar with Muslim teaching which involves the corpse washing and shrouding. The corpse is wrapped in clean sheets, dried and dressed in a white linen shroud, which is

called "serret" (Encyclopedia of Religion History, 1999). The use of a coffin is not permitted like in Islam. The deceased must be buried parallel to the ground. In other words, the deceased one can not be placed into the grave vertically.

The funeral rites and the rules of the ceremonies: Jewish funerals take place and are performed immediately after the death. The interment practices and funeral take place in the same or following day. Jews must be buried under the earth within twenty-four hours of the death. Funerals are held at the cemetery's prayer hall, not in a synagogue. The coffin traditionally covered with a black cloth in the past, now with a blue velvet cloth embroidered with a star of David. The coffins lowered into the ground and the mourners, followed by relatives and close friends, fill the grave with earth (Francis, 2005). People pay their respects in three ways: First, by attending the funeral service; secondly, by attending the burial service at the cemetery; and finally, by supporting the family during the week of "Shiva" (a time when activities are restricted in order to grieve) following the service. Sending flowers is not part of the Jewish tradition. Instead, people would honor the deceased by making a donation to the family's favorite charity.

The fundamental customs of preparing the corpse for interment and religious ceremonies in three steps: First, the body is washed in a similar way with the Islamic principles. Secondly, head of the dead is tied with a rope from its chain. Then, foot fingers are tied to each other. Cömertler (2001) asserts that the purpose of this practice which depends on the belief of ensuring the understanding of the body was died and can not walk or speak. Finally, the corpse is shrouded without to be dried. Then, in the cemetery, the funeral ceremonies are performed. Judaism prohibits holding ceremonies or prayers in worship by no means whatsoever. Even, a synagogue yard can not be used for that. All ceremonies have to be held in front of the deceased's grave.

The shape, form, direction, arrangement and the construction of the interment space, memorial or the cemetery: Judaism defines grave as a

place for interment and visit. A grave can be used only once. The second use of the same grave is not accepted. To use of synagogue yards as a burial place is absolutely prohibited in Judaism. Burying places can only be situated in a general burial ground. It is customary to erect a tombstone approximately eleven months after the burial (Francis, 2005). Making a structure above the grave is generally desired. But, placing statues in the cemetery is not assented. A fountain should be available in a cemetery to be able to water the flowers taken place on the graves. In the orientation of the grave, the direction of Jerusalem is accepted as essence and right. Caring of the grave and cemeteries is also such an important issue in respect to Judaism. Placing a photograph of the deceased on the grave is considered popular as a respect to the dead among today's Jewish. Also a flower container may be set on the grave.

Jewish dead can not be buried close to a dead from another religion. According to the Jewish belief, separate sections should be designed for different sex, social and religious groups in a cemetery.

Grief and mourning customs: Judaism desires visiting the graves. Among many Synagogue members, it is customary to go to the cemetery at the end of the ritual week of mourning (Shivah), and again after the thirtieth day (Sheloshim) (Francis, 2000). According to the grief observations on the Jewish cemetery, Francis (2000) declares that "When the grave is filled with earth, the period of formal mourning begins. At the close of the burial ritual everyone washes her/his hands before returning to the prayer hall. Then the focus is redirected from honoring the dead to comforting the mourners, who are now seated. Following the burial, the mourners return to the home of the deceased, where they are served a meal of condolence. For close relatives other than parents, a mourning period of thirty days (sheloshim) is the standard mourning obligation. Mourners should not send flowers. Food, however, is permitted. Although, if attendees send food, it should be kosher—or food blessed by a rabbi. As an outwards of grief, the render clothing is worn throughout the first week of mourning the consecration of the memorial as the first anniversary of

the death also marks the end of the mourning period. Friends and family members gather at the graveside and dedicate the monument (2000).

2.2.3. BUDDHISM

Buddhism was reviewed within the context of the study because of its influences on disposing the corpses in the culture of Old Asian Turks. I intent to review Buddhism shortly in this part.

According to the Buddhist faith, individuals believe reincarnations, which mean that death is a way to reach the nirvana. Nirvana is defined as a state of absolute bliss (Robinson, 1970). The Buddhist cremates their corpses. At an ordinary funeral the cremation takes place within three days after the corpse is bathed, clothed, tied to a stretcher, covered with flowers. Then, cremation is performed generally close to a river. Because of their reincarnation belief, the mourners do not have a grief process. The survivors reflect positive emotional connections with the deceased by supporting the deceased's journey. They belief that the fear and yearning associated with grief bring the deceased into the negative karmic continuum.

Beliefs about death and after life: According to the Buddhist faith, individuals pass through a series of reincarnations until they are liberated from worldly illusions and passions. Death is a way to reach the next reincarnation and move closer to nirvana. Goss (1997) stated that there are third periods after death in Buddhist belief. First, there is an intermediate period called Antarabhava, between death and rebirth. According to this view the death of the body has taken place, the personality goes into a state of trance for four days. During this time the person does not know they are dead. This period is called the first Bordo. (Bordo means "in between" Goss(1997). After the end of this time the dead person will see brilliant light. If the radiance of the Clear Light does not terrify them, and they can welcome it, then the person will not be reborn. The person that becomes conscious that death has occurred. At this

point the Second Bordo begins. The person sees all that they have ever done or through passing in front of them. Then comes the Third Bordo, which is the state seeking another birth. All previous thoughts and actions purpose is choosing new parents for a person, who will give them their next body. (Cömertler 2001, Buddha Dharma Education Ass. Inc., 2001)

Robinson (1970) stated that, to a Buddhist, life is an opportunity to work for transcendence beyond transmigration, for awakening to man' original purity and for full development of our innate potentials. Death is the ultimate test of one's lifelong training in Buddhist practices.

The disposal strategy of the body: The Buddha's corpses have been cremated when they die. Robinson (1970) states that the reason to cremate in Hindu and Buddhism belief is to ensure spirit understanding body was died and it would not useful any more. Gross (1997) declares that cremations and burial grounds are haunts for hungry ghosts and demons, and they have become places for Buddhist meditation on impermanence and egoless ness. Cremation is explained comprehensively at the part of disposal techniques.

The funeral rites and the rules of the ceremonies: The Buddhist funeral performance revolves around the concepts of sharing, good conduct and meditation. Most Buddhist funerals take place at the home of the bereaved, not a temple. Only one night of viewing the body is held and this generally takes place the evening before the funeral. Inside the funeral home, a table is set up with candles and incenses which burn until the body is moved to the cemetery. The family sits at the front of the room in which the casket is placed. Visitors greet the family, offer their condolences, then go to the casket and bow. It is appropriate to send flowers. After two to five days following the death, and is conducted by monks at the funeral home. The third and final process is held seven days after the burial or cremation. It is meant to create positive energy for the deceased as he transcends to the next stage of reincarnation. The family and all their friends give food and candles to the monks. Goodwill is created by

gifts and it is believed that it helps the lingering spirit of the dead. The basic principle underlying the rituals and activities related to death is twofold, purification of bad karmas and accumulation of merits. Bad karmas may drag one down to undesirable realms, while lack of merits will prevent one from getting a good rebirth (Robinson, 1970).

At an ordinary funeral the cremation takes place within three days. Corpse is bathed, clothed, tied to a stretcher, and covered with flowers. Then, it is taken for cremation to a special place, which is generally close to a river. Here, corpse is fit on the top of a firewood pickle that consists of sandalwood trees. Later the ashes may be collected and kept in an urn (Robinson, 1970). The memorials of cremated corpses are visited in scattering cemeteries (Figure 13).

The shape, form, direction, arrangement and the construction of the interment space, memorial or the cemetery: The cremated remains are buried in the columbariums and urn gardens in modern times. Chinese burial sites are carefully selected according to the ancient practice known as Feng Shui. An ideal burial site should have high hills along two sides, low hill along a third and be open the fourth. Slow moving near the site is also a good feature. The ancient Indian Buddhist beliefs also influence the Old Turks. Kültigin Monument as a significant example height 6 m. It was a turtle statue on the bottom of the memorial.

The idea behind it lied on the "Upanişad" doctrine, which was the oldest philosophical system in ancient Indian and considered the world, was carried by a huge turtle (Figure 14). The turtle was believed as a "God" (Cömertler, 2001).

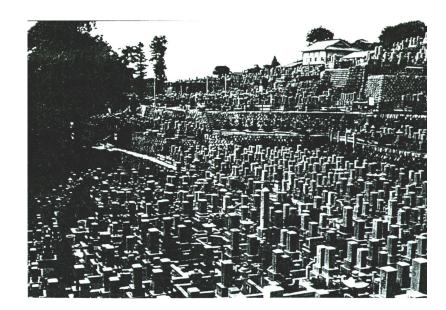


Figure 13: Buddhist cemetery (Uslu, 1997)

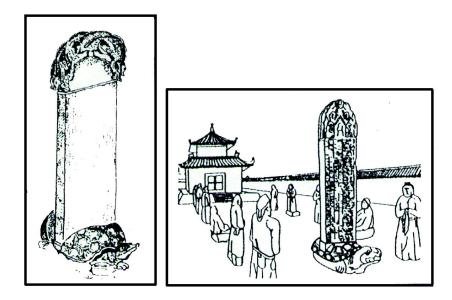


Figure 14: Turtle statue on the bottom of the memorial of Kültigin (Yazar, 1999).

Uygurs accepted Buddhism, but they buried their corpses in the place as hill like Gok Turks and Kırgız did. The dead body (?) was placed into pits under the tumulus. Heads of the corpses were oriented towards the east or the north (Saracoğlu, 1950, Cömertler, 2001). Such tombs roofed with a dome were called as "stupa". Yazar (1999) claims that stupas were used for both as an interment place and altar place. Indeed, architectural origins of these Buddhist grave structures are supposed that emerged from tent tomb of Hun Turks and Gök Turks. Afterwards, it is thought that stupas set basis of the turbe and gonbads, which were constructed in Anatolia.

Grief and mourning customs: In the Buddhist belief, people do not fear death because of the belief of reincarnation. They have a sense that everyone is impermanent and destined to die. Thus, for Goss (1999) because of their reincarnation belief, the mourners do not have a dark grief. The survivors maintain ritual and positive emotional connections with the deceased by supporting the deceased's journey. They belief that the fear and yearning associated with grief bring the deceased into the negative karmic continuum.

2.2.4. CHRISTIANITY:

The central teachings of traditional Christianity are that Jesus is the Son of God, the second person of the Trinity of God the Father, the Son, and the Holy Spirit. All the seven branches of Christianity (Catholic, Eastern Orthodoxies, Luthern's Protestans, Anglicans (English Church), Methosidts, Baptists, Christian Spiritualists, Yehovan Witnesses, Calvenists and Gregorian) agree in beliefs about death and after death. However, their disposal techniques and interment considerations are different. Thus, funeral customs and practices are different too. Some of them accept cremation method and some do not. As a result, such differences shape their cemeteries.

Christians believe a new life after death which involves heaven and hell. As a disposal strategy only burying method is permitted in early times. But, after the influences of the industrial revolution on urbanism and social structure, cremation, mummification and mixed methods are accepted. Preparation of the dead body for the funeral consists of some steps: The dead is laid, its eyes and chain are closed, and body is washed. The preparation process continues making-up and dressing of the corpse. In funerals deceased is presented in a coffin and then performed a disposal technique such as burying or cremating, mummifying or using other methods. In early time's catacombs, churchyards, in modern times memorials and park like cemeteries are designed by Christian communities.

Beliefs about death and after life: Christian doctrine says that the spirit is immortal; death is not an end only a transition from one world to another universe. Christianity indicates a new life after death and the material body is not necessary for the next world. The Christians' view on the after life involves heaven and hell. There is a good death and bad death. Good death means dying with religious beliefs, merits and in peaces. Whereas bad death indicates the hell.

The disposal strategy of the body: Regardless of what strategy is carried out, corpse has to be disposed in a time as shortest as it possible in respect of Christianity. Essentially only the burying method used to be permitted in the early times of it due to the acceptance that the material body is any for the rebirth. But, with particularly the influences of the industrial revolution on urbanism and social order, other methods for disposal were controverted widely. Then, the strategy for the treatment of the dead body has extended by means of adding cremation, mummification and mixed methods. So, Christianity has set not only one but some certain strategies for disposing. These strategies might be simply burying, mixed burying, cremation or mummification, except some special application; there is a wide consensus among the different churches.

The body disposal methods are performed in different manner in terms of their belongings to various churches of Christianity. For example, members of the Eastern Orthodox Church do not cremate deceased in spite there is no any

prohibition. They prefer to bury the deceased ones. The Baptist Church does not set any certain regulation for a disposal method. Despite of cremation being prohibited in the early times, now they allow both cremation and mummification methods. They also accept burying deceased into the sea. Christian Spiritualists consents both cremation and burying. But, they do not have any restrictions for funeral ceremonies. English Church recommend that is should be acted in respect to conditions. Thus, cremation and burying both into the ground and the sea is possible. With regard of being not any certain obligation for cremation, the Catholic Church commends the burying method. Actually there are further churches and cultural divisions within the Christianity that each has a coherent culture for the death and body disposals. However, here to mention all church's assumptions or cultural differences will force the boundaries of the study. Thus, I intend to explain the general frame of disposal methods.

Cömertler (2001) stated that with the effect of enlightenment era and so individuality emerged on life and death; industrial revolution and its influence on urbanization, rapid population growth and changes in social order; break on religious effect on death concept and burial customs, different strategies for body disposal have been accepted especially by the reformist churches such as Anglian Church, Protestant Church. But still some radical churches have not allowed cremation and other methods for body disposal.

The funeral rites and the rules of the ceremonies: In the moment death came, a member of the family closes the all doors and hang black tulle called "crepon" and a symbol the mourning situation. Then, it is time to lament for the death. A typical funeral custom is to wear black clothes to show the greatness of the grief (Ünal, 1999). But during the disposing process, relatives of the deceased are silent in respect to Christian beliefs, traditions and customs.

Preparation of the dead body for the funeral consists of some two steps: First, the dead is laid, its eyes and chain are closed, then the body is washed, and the holes such as ear and nose are closed with a piece of wool or cotton. The preparation process continues making-up and dressing of the corpse. It is clothed with a nightshirt/night grown or with a black or a white costume. The deceased hair is brushed and its nails are cut. All of these tasks are to ensure being appearance of the dead pleasantly at the last glance of him/her. In the second step, deceased one is placed into a coffin. In funerals deceased is presented in a coffin. Certain religious rites are held in a church, chapel or another worship place according to the branches of Christianity. After the ceremony, body is carried to interment place and there disposal by means of burying, cremating, mummifying or using other methods.

The shape, form, direction, arrangement and the construction of the interment space, memorial or the cemetery: Christianity defines an interment space is the final resting place of the material body. Also, it is a visiting place to pray, remember and give flowers to the deceased. Modern Christianity allows using a serious type of interment space such as grave, crypt, niche or scattering garden and applying various types of interment and disposal techniques such as inhumation, entombment and inurnment. In the early times of Christianity Catacombs were used as a burial space. Christians used to construct their graves and temples under ground so as to protect from the Romans attacks (Figure 15).

In Christian belief system, a grave can be used for several times. But, before a second use a certain time is necessary to decay. Christians consider water elements, wide grass spaces, nice statues and sculptures, a place for worship and a guardhouse in the cemetery. Also Christians want to set a cross on the grave, which has a meaning of certain church and a notion. Cross types include, Calvary, Gothic, Ionic, Botonee Crosses, Anchor Cross, St. Andrew's Cross, Celtik or Irish Cross, Crusader' Cross, Egyptian or Coptic Cross, Greek Cross, Jerusalem Cross, Orthodox, Patriarchal or Eastern Cross, Roman or Latin Cross and finally Teutonic Cross.

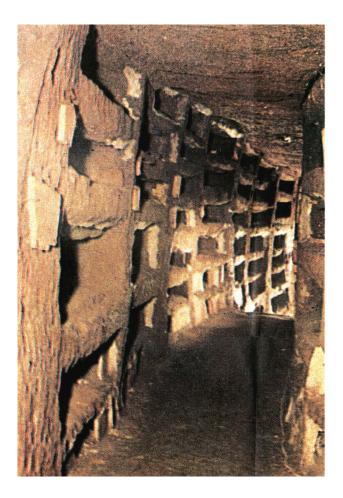


Figure 15: The main galleria of Ancient Christian Catacomb in Pricilla (encyclopedia of Religion History, 1999).

In the early times of Christianity, grave was oriented in the direction of Jerusalem or Rome. However, today this principle seems to have disappeared (Encyclopedia of Religion History, 1999). Modern Christians do not have a rigid acceptance for orientation of the grave. Also Christianity does not prohibit to be buried a person who believed another religious in a Christian cemetery. A Muslim or a Jewish can be buried in Christian cemetery for them. Also, a Christian can be buried another religion's cemetery, too. But principally it is not desired so much. The Christian cemeteries are designed with a landscape to enhance the natural beauty of its suburban location. They are sometimes

locates near the church which is called churchyard. They design *Memorial parks and garden* cemeteries which have adopted a park like style and include garden sections of cremated remains. They also include administrative buildings, monumental and lawn areas, natural features such as forests and lake, walking path ways. These cemeteries are designed in high qualities of the setting, light, sound and noise and serve recreational activities to the communities.

Grief and mourning customs: Like many other religions, cemetery visit is desired by Christianity. Nevertheless, there is no certain rule for visiting hour, time or seasons to visit. They prefer visiting in special days such as the anniversary of the deceased, New Year's Day, Christmas days, Eastern day and other holy days. Grave visits are usually realized first in the eighth and fortieth day after the interment. Also, Christians appreciate the first and the second days of every month as the day of dead. In that day, people visit the deceased and prayer for not only their deceased but also whole of them in the cemetery. The day of Dead is both a bairam and a grief day for Christians. Christianity desires some manner in grave visiting. Visitors should be clean and cared. It is avoided from the stepping on the graves, taking through a dog or another animal, shouting and singing there. On the other hand, it is desired that watering the flowers, caring graves, being respectful and silent to the deceased and also praying for them. Especially historic cemeteries can be toured as an open air museum provided that to be silent and respectful. There are several examples of touring cemeteries in Europe and United States.

2.2.5. ISLAM:

Most people living in Turkey accept the Islam, so the greatest number of the dead is Muslim. Therefore Islamic requirements about the cemetery culture will be studied so as to find out the relevant rules that support Woodland Cemetery.

In Muslim belief, there is an after life belief. The return to God is the background of Islamic beliefs and practices. By death everyone return to their creator and everyone meets God. Only the burying method is used for the Islamic teachings. Cremation, mummification or the other any method is prohibited. The funeral customs of Islam is performed mainly in five parts. Washing the corpse, shrouding, placing it a coffin, funeral namaz, prayer and the ceremonies and burying. A grave can only be directed to the Qibla. Grave structures such as tomb, room or dome are not accepted in Islamic teaching. In the funeral, crying and mourning is accepted in Muslim belief. However, crying loudly, scratching the face (like Shamanistic way), pulling the hair or hitting the knees is forbidden.

In Islamic belief, it must be avoided to cut the trees of a grave or pull the grass or herb of a grave. It is believed that the live trees and plants represent the Allah's mercy and grace. Thus, the deceased one could meet the mercy and grace of Allah by plants. Bilmen (2003) discusses that according to Islamic belief, it is common to put flowers or herbs on to a grave. However, the fundamental one is to plant a tree on the grave, except putting temporary flowers. In woodland cemetery the trees are planted on the grave as an element of emotional formula for handling grief and memorializing loved ones. *Thus, according to Islamic belief erecting a plant on the grave is agreeable technically.*

Beliefs about death and after life: The Muslims, supporters of the Islamic faith believe in an afterlife. In respect to Islam, death is the event that the spirit, which gives the live ness to an existence and leaves the body. All humans will die in the end, however the death is not considered as an end. It is only a bridge from the world to another universe. The return to God is the background of Islamic beliefs and practices. By death everyone return to their creator and everyone meets God (encyclopedia of Religion History, 1999).

The Qur'an explains that; "Every soul shall taste death" (Süre of Al-Imran, Ayet: 185).

In Muslim belief, the life in this world is not an absolute life, because this life does not last very long, and the death at the end of life is not an absolute

death. Rather, it is a transferal from one mode of existence into another one. On the created existence, death and life need each other, like night and day. To experience one we have to experience the other. When the Koran speaks of death, it usually means death in relation to life of this world (Encyclopedia of Religion History, 1999).

After death there are heaven and hell in the Islamic teaching. The Qur'an explains both the rewards of heaven and the punishments of hell. The common word that the Qur'an employs to refer to paradise is garden. In Islam the resurrection is defined as: When Seraphiel blows his trumpet for the second time, all human beings will pour forth from their graves and enter an enormous plain for the presentation to God (Murata and Chittick, 1995).

The disposal strategy of the body: Only the burying method is used for the Islamic teachings. Cremation, mummification or the other any method is prohibited. Burial must be with a shroud not a coffin (encyclopedia of Religion History, 1999). However in some circumstances burial with a coffin is accepted. These cases are:

- In the case, corpse is not in one part (because of the accident or any reason),
- In the case, corpse may constitute a danger to its surroundings,
- If the ground of the grave is wet or soft, that is, ground is not proper enough for burial without coffin,
- And also, some religion scholars have considered woman buried with a coffin well since it serves more privacy (Bilmen 1999).

Turks have done burial without a coffin. For Güneş (1995) the reason is Turks considered this practice as a Christianity tradition.

The funeral rites and the rules of the ceremonies: Bilmen (1999) explains that when a Muslim is near death, those around him or her try to give comfort and remind him/her of God's mercy and forgiveness. They may recite verses from the Qur'an, give physical comfort and encourage the dying one to

recite words of remembrance and prayer. It is recommended, if possible, for a Muslim's last words to be the declaration of faith: "I bear witness that there is no god but Allah."

In Anatolia, eyes of the death are closed, jaw is tied, head is turned to direction of Mecca, feet are come together, hands are laid side by side and on belly, all clothes are taken off, in some places bed is changed, metallic articles such as knife and iron are put on abdomen of the deceased person, room in which the deceased person is present is cleaned up, room in which the deceased lays is illuminated, Koran is read at the bedside of the deceased.

Funerals are simple but respectful in Muslim culture. Anybody who dies is prepared for burial as quickly as possible. If a person dies in the morning burial ceremony is performed at the time of afternoon prayer, if he/she dies afternoon, corpse remains at that night and buried in the morning.

The funeral customs of Islam is performed mainly in five parts. Washing the corpse, shrouding, placing it a coffin, funeral namaz, prayer and the ceremonies and burying.

1. Washing a corpse is the first task of preparation of the body for the burial which is defined as "Gasl-i meyyit" in Islam (Bilmen, 2003). Mosque yards are usually used for this task, also some cemeteries have washing places. (Güneş, 1995) The corpse is may be washed by professional or a by a family member, but always by a person of the same sex. Female corpses are washed by women washers, male corpses by male washers. Persons who perform this work are professional washers, hodjas, experienced washers, and religious men/women, one of individuals in the house of death or among neighbors in case of absence of any professional person. Washing is carried out in washing rooms of cemeteries at cities and at a corner of garden of house in Anatolian villages. The person who washes does so without special ritual but throughout the task recites the Qur'an to acknowledge God and Mohammed as his Prophet. The body is treated with respect and modesty is preserved; the task may take half an hour.

Cömertler (2001) points out that during the washing and shrouding process, some nice smell such as rose water, holly hock, henna, liquid perfume, zamzam water, comphor, musk and herb bennet are used to ensure that the Devil does not come, instead, angels come from the heaven so that the bad smell of the corpse disappear, snakes and centipedes do not appear to dead in grave side.

2. Shrouding is the second task and means covering of the body with a piece of cloth. It is called "Tekfin" in Islam (Bilmen, 2003). It is possible to see shroud in various color and kinds are used in Turkish funeral culture. But indeed, according to the Sunna of Islam a shroud is made from a cheap cloth in white color. (Cömertler 2001). Numbers of pieces are different for woman and man. The shroud for women has more parts to it than that used for men. As a female corpse is wrapped in the shroud, henna (this may also be applied to her hands before the body is washed), black cumin, rose water, Zamzam (water from a well near Kaaba) etc. are sprinkled inside the shroud.

3. After shrouding, the corpse is *placed on a coffin*, which is a wooden semi- open strongbox, and used to carry funeral in a proper manner. But, in some cases, metal instead of timber is used or an insight of a coffin is covered with a sheet iron. The average measures of the coffin are height: 200-225cm, width: 50-75cm and depth: 40-50 cm. usually the coffin is timber and in some cases it is painted in green (Güneş, 1995). This process, washing the body and after that process funeral customs and burying the corpse, is called "Techiz" in Islam (Bilmen, 2003).

Coffin is carried to cemetery by religious community. Dead person is laid in grave in the manner that his/her right hand side faces direction of Mecca. In the Anatolian culture, when the deceased is waiting for burial incense may be burned nearby to prevent any bad odors.

4. After the corpse is prepared for the funeral, the *namaz ceremony* always takes place in the yard of the mosque. Everyone should remain silent during the procession (Bilmen, 2003). Although it is prohibited to perform the funeral namaz in front of a grave, after a namaz, a funeral ceremony is

performed in front of the grave. Women and men stand separately and women must wear a veil or scarf.

5. Then, the dead is buried in the grave without a coffin. The orientation of the dead must be in the direction of the Qible. The deceased should be placed on the right side of him/her. Before burying, ties on the shroud must be untied. The dead must be buried in the accompaniment of the prayers and holy statements. Once, the corpse is placed to the grave, and then the grave is closed with board, reed or mud brick systematically. After that, the grave is covered by soil. After a ceremony at the burial grounds, visitors go return to the funeral home for more prayers and the offering of additional consolation to the family. Later, a meal would be eaten at the funeral house. (Encyclopedia of Religion History, 1999) It's an old tradition to cook "helva" in the funeral house in Turkish culture. Islamic teaching does not appreciate the burying any worldly materials with the corpse into the grave. Islamic says possessions are for only this world and grave is only a passing place of the world to the Ahret. Dead person can not deal with such things. Only his/her religious performance (will be appreciated as merit or sin) accompanies to him/her. (Bilmen, 2003).

The shape, form, direction, arrangement and the construction of the interment space, memorial or the cemetery: Muslims try to bury their dead as soon as possible, usually within a day of death. Ragheb (1991) defines that the width and length of grave is related with the dead person's measures. This hollow should be wide and deep enough to cover the body. Grave must be elevated more than one span from the ground level. The grave mustn't be too much wide and has unnecessary comfort. According to Islamic Belief graves are for one person, except some obligations such as wars or epidemics. In that case the deads must be separated with solid dividing walls. There are too many opinions about the materials that can be used in graves and one is accepted both Sünni and Şi'i. That is adobe. Usually timber is not demanded but not prohibited. Especially Hanefis rejected timber because of the idea that timber presents unnecessary ornament and extravagance effort to resemble worldly

goods. Terracotta is rejected because of the same reason with timber. Hanefis sees materials that touch fire like terracotta bricks ominous. They don't accept cooked brick to build the graves (Ragheb 1991). The upper side of the Grave is shaped convex. From the beginning of Islamic Teaching, gravesites are signed by some symbols such as stones or piece of wood as a headstone or footstone. Moreover both stone and wood should be very simple and should not state any info about dead's identity, degree or wealth. It is discouraged for people to elaborate markers because it means praise to the earth world (1991). However despite this Islamic teaching, the gravestones of Anatolian culture is show various symbols and forms on them (Figure 16).



Figure 16: The huge examples of grave stones in Karşıyaka Cemetery (Spring 2006) by Ertek, D.

There are lots of rules about funerals, graves and cemeteries of Islamic Belief in *Islam Ilmihal.* Generally the frames of these rules are: 1. The depth of the grave should be as much as the height of a human. Qibla side is carved so that the body is placed in a manner that face of dead looks to the Qibla. In front of the body, some woods, reeds and adobe materials are settled. It is a respect to the deceased one (Bilmen, 2003).

2. If the ground of the grave is so wet, gentle or soft and if it contains a risk for collapsing, two side of the grave are covered with mud brick or brick. Then, the corpse is put on the grave and a roof, which is like a ceiling and composed of board or mud brick, is made on the top of the corpse. It is called "Şakk" in Islam (Bilmen, 2003).

3. A grave can only be directed to the Qibla.

4. In normal conditions, only one corpse is buried in the same grave. But in some extraordinary cases, more than one funeral might be buried in one grave. But in that case man must be buried first. Then woman must be buried.

5. Islam requires that, preservation, caring, landscaping and a forestation of graves is the obligation of the survivors.

6. Except the necessary conditions, burying the corpse at daytime is in proper.

7. Regardless of oldness of a cemetery, it must be kept as a cemetery land. If a construction or a road is settled on the grave, the bones must be transferred to another cemetery. For Islam, the dead one's rights are important according to a respect of past generations rights.

8. Unless it is an absolute necessity, it is prohibited to open a grave. Moreover, given the same conditions, it is prohibited to bury another corpse must not be allowed. In the case of being not anywhere else to inter the remains, bonds of the previous dead are collected to one side and blocked with soil, then another corpse can be placed in the same grave.

9. It must be avoided to sleep on or next to a grave. Also it is prohibited to pollute or make dirt around the grave. It must be avoided to cut the trees of a grave or pull the grass or herb of a grave. It is believed that the live trees and plants represent the Allah's mercy and grace. Thus, the deceased one could meet the mercy and grace of Allah by plants.

Bilmen (2003) discusses that according to Islamic belief, it is common to put flowers or herbs on to a grave. However, the fundamental one is to plant a tree on the grave, except putting temporary flowers. Bilmen (2003) took a reference of a book of Imam Buhari which includes the Prophet Muhammad's sayings. According to that book, "It is a "sünnet" to plant a tree on the grave".

In woodland cemetery the trees are planted on the grave as an element of emotional formula for handling grief and memorializing loved ones. *Thus, according to Islamic belief erecting a plant on the grave is suitable technically.*

10. Graves must be visited once a week. Especially it is recommended to visit the graves on Friday and Saturday for men.

11. According to an Islamic belief, any structure, room, turbe or dome must not be constructed.

Cömertler (2001) states that there is a wrong belief among the people that to set a splendiferous structures or turbe is satisfactory in God's name. However, according to Islam, grave must be one span in height and like a herringbone in shape. This is proper manner for the Sunna of Islam. Other manners besides this shape are accepted a fault according to Ebu Hanife. From the Islam view, grave is not plastered and white washed. Also, a dome, turbe and similar structures are not built. Even, to build a masjid is a reprehensible thing. Because, cemeteries are places, which gives warning and lessons for people. They are not places for worship. Islam appreciates not outsight of the grave but insight of it. That is, Islam appraises it not an appearance but with the meaning and the performance. Thus, to build showy graves or turbes wasting money is not proper in the religious respect. There is not any virtue or merit as well. However, Yazar (1999) states that Islam jurists have interpreted the grave in different ways since a clear and certain judgment are not found in Koran. However, according to common acceptance, in order to prevent using graves as a worship place making monumental grave structures was not approved. But, still monumental grave structures such as gonbad, turbe, baldachin, and mausoleum had been built. This phenomenon is explained as reinterpretation of the old customs adapting to new religion and social conditions.

12. A dead must not be buried within the home territory where the person dies. This is accepted as a reprehensible thing because; to be buried within home is only reserved for prophets. Also buried corpses may cause lots of hygienic problems.

13. Islam does not allow stepping on the graves. Because, it is disrespectfulness to the deceased and a reprehensible thing not forbidden by God. Islam defenses that the above of a grave is belong to the deceased. For respect, it must be avoided stepping and making road on the grave. If a grave remains under a road due to some reason, bones must be gathered in a proper manner and interred to another cemetery.

14. For Islamic rules, graves from the other religions should be respected.

Grief and mourning customs: In the funeral, crying and mourning is accepted in Muslim belief. However, crying loudly, scratching the face (like Shamanistic way), pulling the hair or hitting the knees is forbidden by religion. It is perceived as a rebel to the decisions of Allah (Bilmen, 2003). Friends should share the family's grief and encourage them to accept God's will so they can return to a normal routine. Friends may bring baked goods, fruits or simple meals.

In the early times of Islam visiting a grave is prohibited. However later The Prophet Muhammad said that you do visit graves of your deceased, because grave visit reminds death. Islam requires that graves must be visited in certain times such as, Friday, Saturday, religious holidays, eve days and holy days. Rules for grave visits in Islam are composed of the followings:

- Much noise must not be done in the cemetery. Silence and piece must be provided. Crying, shouting, complaining is not allowed in a cemetery. Moreover, killing an animal as a sacrifice or making a celebration is prohibited (like Shamanistic practice).

- Stepping and sitting on a grave must be avoided.

- It is expected that visitors think about death and take some lessons.

- Visitors should pray and read the Holy Koran for the deceased people and greet them.

- It is desired that to take pain to be in the ritual ablution when visiting (Varlı, 1991).

Nevertheless, there are assorted superstitions seen in the grave visiting in Anatolian culture. Cilacı (1999) explains these superstitions as follows: to sacrifice an animal for the grave, to attach cloth materials to the grave, turbe or trees, to drink, wash with water, which is accepted as holly to throw money away the graves, to make a wish using a wish stone, to kiss the threshold of the grave, to become healthy, to overcome disease, to be able to have baby, to get married, to protect from the natural disaster such as earthquake, storm, thunderbolt and flood, to take recommendation of the deceased.

The other Anatolian tradition after the burial of the corpse is serving helva for those who come back to home of the deceased. During the meal, some proclaim "may it touch the soul of the deceased/rahmetlinin ruhuna değsin." Afterwards, a religious attendant reads passages from the Qur'an. As most of the women cover their heads. The name of the deceased's mother is pronounced with emphasis as only the mother can be known with certainty in early ages. On the evening of the burial, and the seven days following, the deceased is commemorated with similar rituals. People pray and especially read passages from Qur'an; sometimes 'mevlit' is also read. Lemonade which is a sugary drink and Turkish delight and sugar candies – in past times wrapped in paper cones- is served. 'Mevlit' is generally read on the fifty-second day of the decease is read on the fortieth and fifty-second days after the burial. On the fortieth day a dessert with honey or sherbet is served. In Mevlit ceremonies, women and men sit in different places- if it takes place in the home of the deceased, in different rooms. Mevlit ceremonies which may be organized at any time of the year and especially after burials are read by an imam or by a religious volunteer. The home of the deceased continues to be visited in the days following the burial. Neighbors and relatives bring meals for the family of the deceased for ten to fifteen days.

2.2.6. Conclusion:

The cemetery culture is strongly shaped by the religious beliefs. As a brief summary of this chapter, I intend to emphasize the essential effects of religion for the cemetery planning and design. I define the fundamental concepts of cemetery culture - death phenomena, funeral customs, interment methods, and cemetery design and grief statements – according to the five different religions, Shamanism, Buddhism, Judaism, Christianity and Islam. I evaluate the commonalities as well as differences between the affect of different religions including on the cemetery culture.

The cemetery culture of different religions has some commonalities. The first relates to the funeral process. Almost all cultures and religious beliefs prepare the deceased person to the disposing urgently. Regardless of what disposing strategy is carried out, corpse has to be disposed in a time as shortest as it possible. The aim of this urgent process is to prevent smelling, swelling and getting cold of the corpse. Also individuals have common belief that "early dispose, early forget your grief." The second involves the settlement of cemeteries. In all cultures today, cemeteries should be located outside the urban areas. Thirdly the focus is redirected from honouring the dead to comforting the mourners, who are now seated in mourning process.

Also there are significant differences between religions that affect the funeral customs and cemetery design as well. For instance in terms of their after life beliefs, Shamans Turks were buried with presents and foot, so their graves were like a room which is called kurgan. As another example, Buddhists' cemeteries are formed as scattering gardens, because of their interment technique: cremation. The orientation of Muslim cemeteries is the direction of Qibla. Jewish dead can not be buried close to a dead from another religion. According to the Jewish belief, separate sections should be designed for different sex, social and religious groups in a cemetery. In the final part of this section, I provide a comparison chart (Table 4) of all religions stating the commonalities and differences between them.

Table 4: Commonalities and differences between the religions in respect to cemetery culture.

	Shamanism	Judaism	Buddhism	Christianity	Islam
Beliefs	Belief of	Belief of	Belief of	Belief of	Belief of
about death	after life	after life	reincarnation	after life	after life
and after					
life					
Disposal	Cremating or	Simple	Cremation	Cremation,	Simple
strategy of	mummifying	burying		embalming,	burying
the body	before			inhumation,	
	burying			mixed	
				methods	
The funeral	Seasonal	Before	Meditational	After	Washing,
rites and	ceremonies,	funeral body	ceremonies	washing and	shrouding,
the	sacrificing	is washed	with monks,	making up	funeral
ceremony	animals,	and	cremation	the body is	namaz and
rules	inhumation	shrouded	ceremonies	presented in	burying the
	with worldly			funerals	body without
	goods				a coffin
Cemetery	Kurgan	Tombstone,	Urn pots and	Early times	Orientation
characterist	structures,	fountains,	scattering	catacombs,	direction of
ics	tent graves,	orientation	gardens,	churchyards,	Qibla, no
	Hidden,	direction of	columbarium,	crypt, niche,	marker,
	small	Jerusalem,	In Old Turks	In modern	room, dome,
	forestry	no other	"stupa"	times	tomb or a
	cemeteries	religious	structures	scattering	structure on
		graves in		garden, park	graves
		cemetery		like	
				cemeteries	
Grief and	Crying and	Visiting the	Preventing to	Visiting the	Crying loudly
mourning	screaming	cemetery	reflect negative	cemetery,	or scratching
customs	loudly,	grieving in	karma to the	grieving in	the face is
	cutting their	funeral	deceased one	funeral	prohibited,
	faces	home,		home,	
		honoring		honoring	
		and serving		and serving	
		food,		food,	

CHAPTER 3

DEVELPOMENT OF CEMETERY CULTURE IN ANATOLIA

In this part, assuming that today's cemetery can be affected by the cemetery culture developed in Anatolia, I review the Anatolian civilizations chronologically. The brief historical developments of cemetery culture which includes interment methods, funeral customs, rituals and cemetery design is explained so as to discuss the situation of the today's cemeteries. I intend to show the conflict between today's phenomenon and the historical setting in terms of respect, sacredness and design issues. To do that I investigate the cemetery culture in Anatolia in three parts: Before the acceptance of Islam, after the acceptance of Islam and Republican Turkey cemeteries.

3.1. Cemetery Culture in Anatolia before the Acceptance of Islam:

Uslu (1997) examined the cemetery culture of Anatolian civilization in two periods including prehistorical and historical eras beginning from 3000 BC (discovery of the act of writing). Prehistorical ages consist of the Stone Age (Old Stone Age (Paleolithic), Middle Stone Age (Mesolithic), New Stone Age (Neolithic), Copper Age, Bronze Age and Iron Age. Historical consist of The First Age, Middle Age, New Age and Last Age. Hittites, Hellenes I, Urartu, Frigs, Lykias, Lydia, Ions, Perses, Hellenes II, Byzantines, Seljuks, Ottoman and Republican Turks.

Cömertler (2001) defines that the generalization about the prehistoric Anatolian tombs and interment types chronologically can not be made because of the insufficient knowledge. In Frig civilizations the burial ground were covered by soils and grave dimensions in prehistorical ages were larger that today's graves (Uslu, 1997). The first grave in Anatolia was caverns. Later times, bodies

were dried under the sun and then buried under the houses in the New Stone Age. Dead was buried with some food and presents in cedars under the houses in Çatalhöyük (Akurgal, 1990, Uslu, 1997).

Dead was buried in the dromos burial chambers in the Iron Age. The Iron Age cemetery near Van was found and the graves were set one meter under the ground which were designed as dromos burial chambers. Generally, they were oriented at the north - east and south - west directions and there were more than one remains (20 - 80) were buried into these graves. In those mass graves, as an interment technique, cremation and inhumation into the tombs were performed. Dromos chambers generally had a rectangular base plan and were 2.50 m in height. Kavaklı (1996) determine that the most of the graves were full of several worldly presents and the dromos (entrance place) was designed in the south-west side of the tombs. In the later times from 2000 BC, nobles and kings were buried into false domed grave structures and tumuluses which are in three plan types: rectangular, square and circular (Mansel, 1942, Cömertler, 2001). Emre (1978) states that in Anatolia there are two types of interment space. These are intramural (Alişar and Kültepe) and extramural interments (Truva, Gordion, Osmankayası, Ilıca, Kazankaya and Yanarlar cemeteries). Akurgal (1990) claims that erecting a memorial structure were first applied by Finnic and Aram civilizations which includes profession, age and sex informations on graves.

Hittites buried their remains in urn pots and tomb types, both intramural and extramural ways. Jars, clay, box tombs and urn pots were used to preserve cremated remains. Hittites constructed simple and monumental tombs (Emre, 1978). Many of the pithos-burial tombs were extracted by Emre (1978) with the excavation in Afyon – Yanarlar. The Hitit Cemetery in Afyon, approximately 6 ha. in size and however, any ordering, layout or orientation principles for grave arrangements have not been proved. After the Hitites, Urartu civilization performed inhumation and post-cremation. Nobles buried into the soil directly and the public first cremated and then the cremated remains were located urn pots, finally they were buried into the ground. Royal tombs were resembles like

a house and they were built as magnificent monuments. Also burial chamber were constructed under the ground. Deceased ones were buried with valuable goods, presents and weapons. They were buried one by one or communal way. Urartuians used principally five types as simple graves, stone chest tombs, pithos-burial tombs, rock- cut tombs and dromos house tombs (Cömertler, 2001).

Frig civilization after Urartuians, buried their corpses into the wooden burial chambers in rectangular pits except the grave of King Midas. His tomb chamber (3.25m height) was built on the ground, then stones 4m. in height were piled on it and the stone pile was covered with clay. As a result above the burial chamber, they located an artificial small hill. Wooden screens found in that tomb which are interpreted as a unique art work (Akurgal, 1990). Lycia, Lydia and Frig civilizations constructed monumental tombs carving the rocks and used the cremation techniques. Origin of monumental tombs and great differences between royal and public tombs resembles the Iran culture (Akurgal, 1990).

In ancient Greek world, there were no special areas constructed as cemeteries, such as existed in Rome. The tomb structures built almost anywhere outside inhabited areas. They were located along the roads leading out from major gateways. The burial places of important people were carefully chosen and were frequently within city walls. The monumental tombs of the kings and nobles were powerfully expressive and symbolic structures which reflect the immortality and the glory of the dead person (Feldak, 1990). Cömertler (2001) states that "In the planning of many Helenistic "prestige tombs" the symbolic components dominated the design. Individuality and uniqueness were often the main consideration in planning and design of the tombs." The earliest great mausoleum was built in Halikarnassos about in 450 BC, for the Karia ruler. Significant of this ancient monumental structure lies on its dimensions and unique art works. Ancient Greeks and Roman used to bury the corpses to the bottom of their houses at the first times. This ritual is abandoned by Twelve Tablets Law of Roma and Theodicies Law. Then the graves were placed out of the Roma from then (Kilicbay, 1991). Almost in all Anatolian

civilizations located the graves out of the city walls. Location of the interment space in the Byzantine period changed comparable to antique times. They were buried within the settlements even within the facilities with Christianity (Soysal, 1996).

According to Mc Donald (1996), large number of Roman tombs survives in cemeteries and beside major roads leading up to city gates. Like baths, tombs show great various plan and elevations in spite of their common functions. The necropolis of Anemurium reflects the best preserved typical cemeteries of Roman Asia Minor. This city of deads, determined by the predominance of barrel-vaulted structures. These small and large houses locate alone, adjoining others to form a block, some consist of a single storey only or two-storied just like a city. The barrel-vault tomb chambers were stepped on a platform and had a very small door. These tombs of Anemurium are usually oriented north- south or east-west (Alföldi, 1971, Cömertler, 2001).

Through out the Anatolian history including both historical and nonhistorical periods, some different and similar body disposal methods and tomb constructions were applied in all parts of Anatolia. Table 5 shows prevailing civilizations survived in Anatolia before Turks, settlements of them, burial place whether within home/settlement or out of home/ settlement and the characteristics of physical features of cemeteries and funeral traditions. By doing this, I try to highlight the characteristics of Anatolian cemeteries to compare with the characteristics of today's cemeteries.

PERIOD	CIVILISATION	SETTLEMENTS	CEMETERIES			
			HOME	SITE	CHARACTERISTIC	
Paleolithic Era (Old Stone Era)	Hunter, Collector, Migrant societies	Karain, Beldibi, Belbaşı, Van, Adıyaman, Gaziantep, Halan Çemi-Batman,	In	In	caverns, burials under the houses, both cremation and burial methods, large graves, dromos burial chambers, mass graves at Van, rectangular base plan, 2.50 m in height, buried with presents, intramural and extramural interments, domed grave structures and tumuluses of nobles and kings	
Mesolithic Era (Middle Stone Era)	Hunter, Collector, Fisher societies	Hocaçeşmesi, Aşıkhöyük, Burdur, Kars, Gaziantep, Hallançemi, Çayönü	In	In		
Neolithic Era (New Stone Era)	Framer, Mounting, Clans, Small Societies	Çayönü, Aşıklıhöyük, Hacılar, Suberde, Çatalhöyük, Köşkhöyük, Can Hasan	In	In		
Calkolitic Era (Modern St. Era)	Agricultural, Hunter, Mounting Societies	Hacılar, Çatalhöyük, Urfa, Can Hasan, Cavri Tralası	In	In		
		Değirmentepe, Alacahöyük, Yümüktepe, Kuruçay	In-out	In- out		
BC 5500-3200 Transition to the Historic Eras, (when Police – kingdoms first appeared)	Assyrians Sumerians	Hassek Höyük, Şanlıurfa, Norşuntepe- Elazığ, Arslantepe- Malatya, Troia-Çanakkale, Limantepe –İzmir, Beyce Sultan-Denizli	Out			
Hittite	Hittite	Boğazköy, Gordion, Hattutaş	In-out		Jars, clay, box, urn pots, tombs, post-cremation and inhumation	
Antique Era BC 700-300	Lydia, Lykia, Karia	Priene-Söke, Miletos, Side, Assos, Myra, Demre, Patara	Out		carved rock monumental tombs, cremation techniques	
Hellenistic Era	Roman Empire	Bergamos, Perge- Antalya, Ephesos, Byzantine	Out		outside the city walls necropolis with major gateways, important graves within city walls, symbolic monumental tombs,	
Byzantine Period	Byzantine, Christianity	Perge, Side, Constantinapolis, Bergama, Miktos, Ephasos, Sardes, Boğazköy-Çorum, Afşin, Karaman, Erzurum, Kapadokia, Göreme, Kırşehir	In			

Table 5: The historical chart of burial locations and characteristics in Anatolia

3.2. Cemeteries After the Acceptance of Islam:

Karahanlı Turks were the first who accepted Islam. After the acceptance of the other Turks, the disposal methods, grave structures, locations and memorials were changed and adopted to Islamic teachings in Anatolia. After the acceptance of Islam, the orientation directions changed towards the Qible. Also after Islamic belief system, Turk communities abandoned cremation, mummification, burying or mixed interment methods. Only accepted inhumation method without coffin is accepted. According to Islamic doctrines, building a structure was prohibited in a cemetery, however for statements and holy man, Moslem Turks built monumental tombs such as gonbad, turbe and baldachin (Uslu, 1997). The tradition of constructed monumental tomb did not disappear even today. Moslem Turks buried remains under the ground of such tombs and catafalque was located to perform funerals. Tradition of erecting memorials as headstone and footstone continued in the Islamic period.

Turbe is seen in the Turkish cemetery culture as a site of pilgrimages and objectives of veneration. People visit turbes to make wish or pray. The entrance panel, the dome, which was a focal point of veneration, honor and political clout and the paintings of Qur'an, is located in the decoration of turbes. Also, other symbolic figures such as pomegranate tree which was associated with perpetuity and life everlasting were used in the turbe ornamentation. The first turbe tombs were constructed by Karahanlı and Gazneli Turks resembling gonbads. Conical roof of turbe transformed into domed form by Seljuk Turks (Cömertler, 2001).

Both simple graves and monumental turbes were located generally close to settlements or next to a mosque or turbes (Tuncer, 1996). Great Seljuk Turks and Karahanlı Turks set the simple graves and monumental grave structures in public cemeteries. They constructed tombs in a square and cubical forms and generally used mud brick and simple brick (Önkal, 1992). They buried the corpses into kurgans, but they did not perform mummification process and not serve any grave presents like Shamanist Turks (Çoruhlu, 1999). Oğuz Turks

accepted Islam like Karahanlı Turks, however they buried their remains with his clothes, weapons and worldly goods like Shamanistic traditions. They designed their graves as a room like the gonbads of Oğuz Turks and Seljuks. Also Oğuz Turks continued to set up balbals on the graves as Shamanistic traditions. Öncal (1992) declares that the Seljuk turbes and gonbads were built in cubical, polygonal and circular plans with a cylindrical body and circular and star shapes symbolized the paradise in turbes. Anatolian Seljuks located turbes generally in a mosque yard and cemeteries located out of the city walls (1992).

In the early times of Ottoman period turbes were built in cubical, polygonal and unroofed forms which were made of Stone, cini and wood. In the Late Ottoman period which is known as Tulip Period, with the influences of western cultures, Lowe of female, birds, flowers were used as the idea of heaven (1992). In some cases, the corpse was buried into the turbes after the mummification process. Apart from turbe or gonbads, unconstructed simple graves were placed at the close proximity to the settlements centre and just next to the facilities such as mosque or turbe. Uslu (1997) states that the place of respected holly and states man had a great role in the development of mass grave areas (graveyards). She claims that Ottoman cemeteries were like an urban park or an outdoor museum. She proves with the quotation of the impression of Italian author Edmondo De Amicis, who came Istanbul in 1874. Amicis described Galata Cemetery as "a huge cypress forest". He indicated that the graves were identified with headstones and footstones and the roads within the forest lies on curling and crossing each other. He observes that some Turks were sitting under that trees and children play around the graves. Also thousand of doves singed on the branches of cypress trees. He observes such serpentine roads in other Ottoman cemeteries, too. Goodwin (1992) defines the Ottoman love of crowds extended to the graveyards and cemeteries. These gardens of the deads were public parks without morbid connotations. The dead encircle the cities with tall tombstone among the cypresses and other trees and shrubs.

According to Cerasi (1999), generally Old Ottoman cemeteries were located at the overlooking hillsides having townscape. He states that, Ottoman

cemeteries show different location characteristics and large cemeteries were generally located in places, where had nice vistas and out of the cities. They were used for also recreational activities as being outdoor public gardens. On the other hand, small and monumental ones were located within the settlements and so contributed to the urban design. The inner city burials were banned completely in Istanbul in 1868. Then new cemeteries like Maçka and Sahrayı Cadid between 1850 and 1900 far away from settlement areas were established fort he growing population (Laqueur, 1996).

Cemeteries of Ahlat had a distinctive significance among the other world cemeteries in the Middle Age. Apart from various small cemeteries, there are six great cemeteries in Ahlat namely Harabe City, That-I Süleyman, Kırklar, Merkez, Meydanlık and Kale Cemetery. The most valuables and graves and memorials were found in Meydanlık Cemetery. Also ten tumuli were found in all Ahlat graveyards. Ahlat community buries their holy men into the monumental graves which is called tumulus. They buried the orderly people in open cemeteries (Karamanlı, 1993). Ahlat tombs with their monumental structures (Figure 17), includes inscriptions and dragon figures as permanency of Orhun Inscriptions before Islam. Ahlat graves were built in Çatma tomb, prismatic cists, şahideli tombs and most of them were made of gray and red tufa material.



Figure 17: The Picture of Ahlat Cemeteries in Ahlat Municipality web site (www.ahlat.bel.tr)

Tuğlacı (1991) remarks that non-Muslim communities buried their remains close to the churches and sacred fountains in the Ottoman period. This tradition continued until the great cholera epidemic in 1560. After the epidemic invasion intramural cemeteries were prohibited because of the hygienic factors. Bornova Jewish Cemetery and five Christian Cemetery in Izmir (Karşıyaka, Bornova English, Buca, Karabağlar and Kokluca Rum) are the significant examples of non-Muslim cemeteries (Aktan, 1999).

3.3. Republican Turkey Cemeteries and the Brief History for Ankara

As general characteristics of Republican cemeteries, Uslu (1997) discusses that the cemeteries in the Republican period developed outside of the cities. Tomb and turbe construction was prohibited in cemeteries. Great tomb monuments and mausoleums built for a few statesman and Ataturk. Uslu (1997) describes Republican Turk toms, memorials and cemeteries in her thesis and as a summary there are two types of graves, which are called earth tomb and crist graves. However generalizing their standards is too difficult because their size and dimensions vary city to city. Generally man's graves are bigger than woman's graves and they are built and designed by the grave owners. Orientation is the direction of Qible and the family plots are common in two or three units. The gravestones of the graves include name, birth and death dates of the deceased. Generally water pots are located on the graves. Turks live still in the Middle Asia survive the old customs such as locating cemeteries in the hilly areas. Generally evergreen plants are planted and the commonest tree is cypress.

In Republican period, with the urbanization and the changing characteristics of cultural values, cemeteries become over dense used disposal areas. They today turn into urban problem areas, with the lack of space for burial. Tanyeli (1999), argues that Turks gave great importance to the design of tombs throughout the history, but in Republican period except the second half of the thirties cemeteries planning and design have been considered as simply

making geometric plotting plans. Cemeteries became over crowded and gecekondu graveyards have been developed. The problems may be summed up by Uslu (1997) in the Republican cemeteries in three groups: over densely usage, inadequacy of planting designs and management problems. She states that the attitude for cemeteries as a disposal issue was seen in the middle European churchyards is observed in Turkey's cemeteries. They are planned to provide maximum interment space. They Works as body disposal centers. Cemeteries are places, where people do not desire to go unless a necessity exists. Cemeteries do not get their cultural, educational and passive recreational functions. It is not possible to observe artistic quality of the past graves and memorials in the today' cemeteries. Cemeteries resemble endless marble stores in Izmir, Ankara and Istanbul, because of the growing population. Sevencan (1999) remarks the average interment number is approximately 100 in Istanbul every day. Cömertler (2001) claims that the main problems about Istanbul cemeteries are the disorderliness of Old cemeteries and unrecorded remains, neglect and grave vandalism.

3.3.1. Brief History for Ankara and Karşıyaka Cemetery:

With the republican system Ankara became capital of the Republic in 1923. Laqueur (1997) states that with the new municipal cemetery at Cebeci was named "Asri", (the modern or contemporary cemetery) and demonstratively a very strong tradition was abandoned for the first time in Turkey by creating a non-denominational municipal cemetery. Cengizkan (2003) discusses that "One of the problems of Ankara is its establishment as a modern capital city, was related with the cemetery areas." However the district to the West of today's Ulus Square and the slopes which decline from today's Roman Hamman and the old Namazgah in the South, constituted the graveyard areas for The Muslim and Orthodox Greek populations. Also the courtyard to the Mosque of Hacıbayram and The Temple of Augustus, The Tomb of Kızılbey and its vicinity, the vicinity of the Tomb of Karyağdı Hatun, the Tomb and Religious School of

the Mosque of Arslanhane and its surroundings together with the east part of the mosque, the Tomb of Kesikbaş and its surroundings, the Mosque and the Tomb of Cenabi Ahmet Paşa and its surroundings, garden of some of the dervish convents and small neighborhood mosques formed small and dispersed grave areas within the city.

In 1924 the idea of a single and centralized City Cemetery emerged and the space for this function was allocated on the city plan, so the foundations of today's Modern Cemetery (Asri Mezarlık) was realized. The location of Cebeci Cemetery is designed in respect of Jansen's master plan (Figure 18) in 1937.

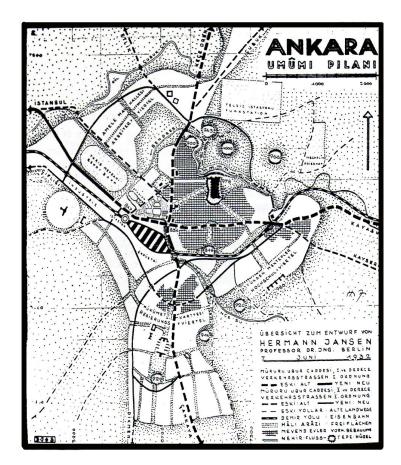


Figure 18: The Master plan of Jansen (1937) (Uslu, 1997).

The cemetery is generally for Muslim graves and also it contains Christian and Jewish sections, too. Along with the 1/1000 site plan, Elsaesser has serious consideration to the traffic approach and the entrance gate as places; a plaza for the cemetery park; areas with foundation for public activities; a section for the burial of statesmen and a monuments for martyrs. He has also produced 1/500 detail drawings and as a result a cemetery formation with a very "modern and spacious" character is observed to form a graveyard "distinct" from the other cemeteries even today (Cengizkan, 2003).



Figure 19: The Cebeci Cemetery (Municipality of Ankara web site (http://www.ankara.bel.tr/mebis/mebis.asp)

However in later years, Cebeci Cemetery was not enough to provide interment space and the cemetery land caused some accessibility problems. During 1940's a new extension was made to the Cemetery of Cebeci to the North, towards today's Siteler. The Modern Cemetery was insufficient for new daily burials from the 1960's. As a solution, four new cemeteries, which are about 27 ha. were added to urban settlements of Ankara. They are Karşıyaka Cemetery, Sincan-Cimşit Cemetery, Mamak-Ortaköy and National Cemetery Figure 20).

MUNICIPALITY OF GREATER ANKARA DEPARTMENT HEAD OF PLANNING METROPOLITAN AREA MANAGEMENT OF MASTER PLAN **ANKARA 2025** METROPOLITAN AREA MASTER PLAN STUDIES

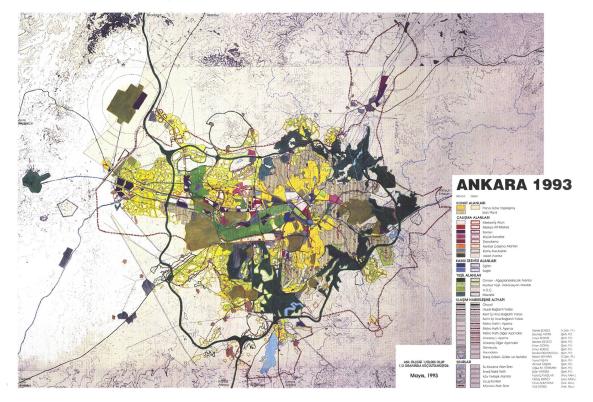


Figure 20: The Cemeteries of Ankara

Karşıyaka Cemetery is located in north-west in Yenimahalle district, near gecekondu residential area (Figure 21). In 1970, after the legal expropriation procedure, Karşıyaka Cemetery is planned with 252 sections in 1000 acre area. However, with the rapid loading of the interment spaces, Ankara Municipality begun the extension studies. Thus, the graveyard's limits extended to lvedik village and 1.707.000m2 area Forest Ministry was transferred to Municipality areas. 1/5000m Master Plan is accepted by Municipality Council in 09.05.1996 with the 225th decision. Now the area of Karşıyaka is 2.860.000m2 (oral interviews with the Karşıyaka officers).

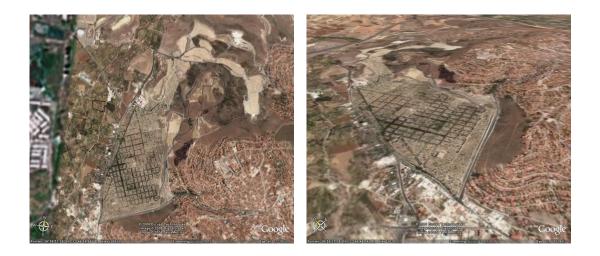


Figure 21: The satellite view of Karşıyaka Cemetery in Google Earth (2006)

Now, five cemeteries with approximately 124 ha. a land is located in Ankara, which are Cebeci Asri Cemetery (68ha.), Karşıyaka Cemetery (100ha.), Sincan-Cimşit Cemetery (43ha.), Mamak-Ortaköy and National Cemetery (only statesmen).

3.4. Conclusion:

Several civilizations were located in Anatolia during the prehistoric and historic ages. Most of them produce a cemetery culture and built unique architectural tomb styles. It is known that the burial is very old tradition that in Anatolia (Frig civilization) and the excavations shows that the grave dimensions in prehistorical ages were larger that today's graves (Uslu, 1997). The first grave in Anatolia was caverns. Later times, bodies were dried under the sun and then buried under the houses in the New Stone Age. Dead was buried with some food and presents in cedars under the houses in Çatalhöyük (Akurgal, 1990, Uslu, 1997). Beside burial methods, cremation was performed in Anatolia. Civilizations buried their remains in urn pots and tomb types, both intramural and extramural ways or in cemeteries or necropolises (city of deads).

After the acceptance of Islam, the disposal methods, grave structures, locations and memorials were changed and adopted to Islamic teachings. After the acceptance of Islam, the orientation directions changed towards the Qible. Also after Islam, Old Turks abandoned cremation, mummification, burying or mixed methods and only accepted inhumation method without coffin. Building a structure was prohibited in a cemetery, however for statements and holy man, Moslem Turks built monumental tombs such as gonbad, turbe and baldachin (Uslu, 1997). Tradition of erecting memorials as headstone and footstone continued in the Islamic period.

Great Seljuk Turks and Karahanlı Turks set the simple graves and monumental grave structures in public cemeteries. The graves were located generally close to settlements or next to a mosque or turbes (Tuncer, 1996). Anatolian Seljuks located turbes generally in a mosque yard and cemeteries located out of the city walls (Öncal, 1992). In Ottoman period, graves were placed at the close proximity to the settlements centre and just next to the facilities such as mosque or turbe. Uslu (1997) claims that Ottoman cemeteries were like an urban park or an outdoor museum with their park-like layouts and cypress forestry characteristics. Generally Old Ottoman cemeteries were located

at the overlooking hillsides having townscape. Ottoman cemeteries used for also recreational activities as being outdoor public gardens. On the other hand, small and monumental ones were located within the settlements and so contributed to the urban design. The inner city burials were banned completely in Istanbul in 1868 (Laqueur, 1996).

Cemeteries in the Republican period developed outside of the cities. Tomb and turbe construction was prohibited in cemeteries. Uslu (1997) describes that Republican Turk toms are generally in two types which are called earth tomb and crist graves. Orientation is the direction of Qible and the family plots are common in two or three units. The gravestones of the graves include name, birth and death dates of the deceased. Generally water pots are located on the graves. Turks live still in the Middle Asia survive the old customs such as locating cemeteries in the hilly areas. Generally evergreen plants are planted and the commonest tree is cypress. In Republican period, with the urbanization and the changing characteristics of cultural values, cemeteries become over dense used disposal areas. They today turn into urban problem areas, with the lack of space for burial.

CHAPTER 4

METHODOLOGICAL ISSUES

4.1. Introduction

In this study, I will assess the symbolic meaning of cemeteries from the eyes of users. To do that I explore the relationship between people's perceptions and preferences for cemetery design principles in the case of Karşıyaka Cemetery. The problems of cemeteries are known, as they are frightened, unsafe and unpeaceful, open waste areas. The problems are also related to the lack of attention given to the aesthetic value of the environment, people's emotional experiences, and environmental contribution to cemeteries with the increasing population. Thus, the challenging question of this study is how to create a cemetery environment, which is user-friendlier. To do that I use a case study research methodology to retrieve users' emotional appraisals and their preferences for environmental attributes in the Karşıyaka Cemetery. The unit of analysis in this study is a case study, which is an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used (Yin, 1984). Considering that there is no adequate work on the symbolic meaning of contemporary cemeteries, this exploratory work will be done through qualitative research method, which is nonexperimental and descriptive in nature. "Qualitative research is needed when we want to come to terms with the meaning, not the "right" or "wrong" with the phenomena under investigation" (Soderquist, 2004). Thus, in this study, I seek no right or wrong answers, but I explore users' responses to the environment in the Karşıyaka Cemetery.

In this section, I present the characteristics of the respondents who participated to the field research, the methods and techniques I used both in data gathering and in data analysis.

4.2. Respondents:

The sample of respondents is composed of the visitors to the Karşıyaka Cemetery. Approximately 40 visitors participated to my study. I used 10 men and 30 women who agreed to be interviewed.. %100 of them live in Ankara. I tried not to approach the newly bereaved visitors during the interviews in the cemetery. Interviews were intense and personal to some respondents. I took notes during the interview. Participants were visitors who used the cemetery with no companions, couples, friends, family groups, and family friends. % 90 of them are middle –age and % 10 of them are young.

Also I used in-depth interview technique with the Commissioner of Sanitary Ministry Department; İsmail Çarık and server officer; Tahir Gökçe and security officer; Eren Kaya.

4.3. Data gathering

In my study, I used on-site observations, structured and semi-structured interviews with the visitors and in-depth interviews with the managers of the cemetery.

First, I conducted on-site observations and self-assessment of the site in the terms of its physical characteristics of the cemetery. I visited the site 20 times both on the weekends and during the Ramadan Fests to document the physical aspects of the Karşıyaka Cemetery. I aim to find out the nature of the relationships between the living and the deceased and between cemeteries as a space. Secondly, I interviewed the managers of the cemetery and decision makers to gather information on the physical features and the maintenance of cemeteries. I used in-depth interview technique with the cemetery managers

and examination of plan decisions to retrieve insight about the history and the current conditions of the Karşıyaka cemetery (See Appendix 2). I used on-site observation of users' behaviors and conducted open-ended interviews on a voluntary base with cemetery visitors on the Father's Day.

Thirdly, I assessed visitors' perception of the cemetery and their emotional reactions by using structured and semi-structured interview technique. Since this is an exploratory study, I asked open-ended questions to the selected visitors (See Appendix 1). The questions are composed of four parts: Background information, visitors' perception of the cemetery, visitors' experience in space (relaxation, healing, fear), and visitors' evaluation of woodland like designed cemetery. For the *background information*, I gathered their attributes such as "alone visitor, couple, friends, family group, family friends, male, female, Age (young, elderly, middle-age), How often do they visit? (Daily, weekly, monthly, seasonal, yearly, holidays, other), "Where do they live?" and "Which mode of transportation have they used to come to this cemetery?" (Means of transportation, on foot, private car, bus, dolmuş or other). To assess visitors' perception of the Karşıyaka cemetery, I ask questions to the participants to evaluate the physical attributes of the cemetery including the element of water, texture, green areas, lightening, sound, silence, paths, planting, seating and entrance. To understand visitors' emotional experience in the cemetery, I asked questions about what they would feel about the cemetery and its components. I particularly focused on their feeling of liking, dislike, fear, sadness, healing, peacefulness, desperation, hope, and anger by asking them to rate the cemetery on a scale ranging from 1 to 10 (e.g., ranking "1" indicated the most liked; "10" indicated the least liked). I also ask questions about their activity pattern such as, gardening, talking with the deceased, praying, walking around or talking with other people. Finally assessed participants' preferences and evaluations on the woodland cemetery in order to explore if eco-cemetery design can be applied in the Karşıyaka cemetery. I asked participants to respond to open-ended questions by showing them representative images of eco-cemeteries from Europe and the US.

In the research questionnaire, the first questions helped identify perceptual and emotional aspects. I also intended to retrieve what was all in the respondents' mind by asking subsequent questions such as "Could you tell me more about this? - Could you specify further? - What are you thinking about in particular? "These questions helped determine visual attributes of each aspect. Through this approach I attempted to get more free participations of users and gain first-hand information of the experiences of users'.

4.4. Data analysis

In data analysis, I applied the content analysis technique, which is a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Berelson, 1952, Stemler, 2001). Holsti (1969) offers a broad definition of content analysis as, "any technique for making inferences by objectively and systematically identifying specified characteristics of messages". In order to allow for replication, however, the technique can only be applied to data that are durable in nature. Content analysis is defined as a useful technique for allowing the investigator to discover and describe the focus of individual, group, institutional or social attention (Weber, 1990). By content analysis technique, I classified the answers of open ended questions and I try to generalize the answers of interviews.

CHAPTER 5

RESEARCH RESULTS: KARŞIYAKA CEMETERY CASE STUDY

In this section, I will present users' responses including emotional and behavioural to the environmental attributes of the Karşıyaka Cemetery in Ankara. First, I intend to review the classifications of cemeteries so as to identify the typologies of burial sites and then link the information to my case site. Secondly, I present the relationship between the physical quality of cemetery and users experiences in space.

Cömertler (2001) categorizes cemeteries in eight typologies in her thesis. These include: 1) In respect of design of circulation and planting criteria; formal cemeteries and informal cemeteries; 2) In respect to size; small cemeteries (0-5 hectare), medium cemeteries (5-20 hectare) and large – scale (more than 20 hectares, even it may be 400 hectares or more); 3) In respect to location; cemeteries within an urban area, cemeteries out of an urban area and cemeteries located next to a city; 4) In respect to the age of cemetery; historical and nonhistorical cemeteries; 5) In respect to land ownership; private cemeteries, public / municipal cemeteries and military cemeteries; 6) In respect to management system; managed by public authorities and managed by joint – stock companies; 7) In respect to religious characteristics; homogeneous cemeteries; 8) In respect to planning approaches; traditional graveyards, columbarium including crematoriums, mausoleums, memorial parks and gardens, forest cemeteries or woodland cemeteries and national cemeteries.

According to this classification, I introduce my case site, Karşıyaka Cemetery as; formal (with grid system plan), medium (26 hectares), within urban

settlement, nonhistorical, municipal (managed by public authorities), homogeneous religion population and traditional cemetery.

Rugg (2000) analyses the cemeteries in respect to physical characteristics which are location, boundary, entrance, sacredness and roads. Also Uslu (1997) add fountains and planting to the physical features of cemeteries in her thesis. I focus and further investigate in my study the significance of the physical characteristics including the location, the boundary, the entrance, roads, fountains, planting. In the section below, I first review these physical characteristics. Then I discuss the responses of visitors and decision-makers of the Karşıyaka Cemetery to these attributes.

5.1. The physical features of cemetery:

• Location: As a "*physical feature*", Rugg (2000) describes location as the most marked aspect that defines cemetery site. Cemeteries are generally located close to but not necessarily within settlements. If the cemetery is near the church it is called "churchyard" or if it is next to mosque it is called "hazire".

Uslu (1997) asserts that a cemetery location has to principally meet two purposes: 1) Physical consideration such as, geological structure, ground water sources, soil structure, topography and orientation, view, prevailing wind direction and existing plant cover; 2) Also, supported by Cömertler (2001), urban consideration such as landownership, growth directions of the city, size, accessibility and public transportation opportunities, and distance to the residential areas and relative land values. What they mean by these considerations is given in the following paragraphs.

Geological Structure: Geological structure is essential for the putrefaction process, digging of the ground and joining of the corpse to the soil. Grave ground should be digged easily and for this reason soil grounds and alluvium grounds, which includes soil and clay are the most suitable location for a cemetery. On the other hand andesite and defeated andesite ground are not

suitable for a grave, because of their strong volcanic and rocky structure (Uslu, 1997).

Underground water level: The proper distance between the ground level and underground water level at cemeteries is at least 2.5 meter (Uslu, 1997). In the opposite cases, the putrefaction of the corpse gets difficult and there is a possibility about the spreading undesired smells, gasses and microbes (1997). Thus cemetery location should be far away from the underground water tables and drinking sources to prevent water contamination.

Soil structure: The need to putrefaction of the corpse as rapidly as possible, according to religious and health reasons, it is required that a cemetery land should have permeable soils. The permeable soils can be easily digged and contain microorganism activities that help the decomposition of the corpse (1997). Sandy soils and fine gravelley soils are the most suitable ones for a grave (Cömertler 2001).

Topographical issues: Topographical characteristics of a cemetery are depends on the orientation of slope that affects the cemetery's landuse. It is ideal that a cemetery consist of lands having %1-10 slope rate. Cemetery facilities, green areas and roads may be situated on the slope rate of %15. However, it is not proper that the rate of slope is more than %20 in cemeteries (Uslu, 1997). In order to provide easy drainage solutions, fine slope lands should be chosen. Also north orientation sides should not be selected as a cemetery site as possible as. According to Cömertler (2001), the orientation of north side slow down the putrefaction process of the corpses.

Land ownership: Other factors are land ownership of the proposed area, macro form of the city, prevailing wind direction, existence of a plant cover, relatively land value, and a desirable view. In respect to land ownership, it is recommended that to choose public lands as a cemetery area is useful approach since it doesn't needs compensation expenses. The land ownership of Karşıyaka Cemetery is belongs to the municipality.

Wind direction: Another consideration is prevailing wind direction. Places where prevailing wind direction is to the city should not be chosen as cemetery.

Otherwise undesirable smells and gasses emerging from the graves may affect the citizens negatively.

Existence plantation: In respect to existence of plant cover, densely planted areas and unforested areas should not be considered as cemetery areas. Plant may be harmed in digging works or roots of the plants may damage the graves in densely planted areas. It is desired to choose nice viewed areas as cemetery since the view may effective visitors psychology in a good manner (Uslu, 1997).

Cemeteries are normally built in a strategic place located at a prudent distance from the urban centre. This serves the dual aim keeping a sufficient in order not to disturb the peace of the mourners and the repose of the dead, while keeping it their departed love ones. These criteria normally result in choice of a site located on the outskirts of a city. It is necessary to select an easy accessible area for a cemetery. According to Özkan (1996), cemeteries should be located in areas, where access by public transportation is available. And he indicates that cemeteries, which are developed in places so far away the city, do not meet the functions that are expected from a cemetery. Also, Taner (1998) claims that the cemetery area should be maximum in half-hour distance by public transportation and in 15 km distance to the settlements. Regulations in Turkey imply at least 500m distance to the urban fabric. In respect the macroform characteristic of a city, it is a useful that locating cemeteries at the growth directions of the cities. For instance, cemeteries can be situated at the end of the sides of the city, which shows linear macro form character (Cömertler, 2001).

The location of the cemetery affects the accessibility of the cemetery, the visiting density and acceptance of the site. If the cemetery is visited, the site becomes socially acceptable place. As a result there is less vandalism in the site. Salisbury (2002) declares "In many cases one of the most important characteristics of a cemetery is proximity to the deceased family. The need for proximity has resulted in most major cemeteries being located in or very near to urban centres".

In respect to cemetery location of cemeteries can also be classified basically in three groups: Cemeteries within an urban area, Cemeteries out of an urban area, Cemeteries located next to a city. In my case study, Karşıyaka Cemetery is located within an urban area of Ankara. Accessibility within the cemetery is also a significant issue with both automobile and public transportation. For going to Karşıyaka Cemetery dolmuş and buses are used by the visitors as a public transportation. The %70 of the users comes to Karşıyaka Cemetery by Dolmuş, % 20 of them comes by car and %10 of them comes by bus. It takes to come to Karşıyaka Cemetery in between 1, 5 hour and 30 minutes.

• **Boundary and entrance:** As another physical feature, Rugg discusses the two established perimeters: the boundary and an entrance. The *Boundary* is marked by a hedge or other planting or either a high wall or railings or a combination of the two. A secure boundary has a dual purpose: protecting the dead from disturbance and sequestering the dead from the living. At Karşıyaka Cemetery there are stone walls around the site which are in 2 meters height (Figure 22). In Turkey, the Governmental Decision about Cemeteries (Decision date of the Council of Ministers: 01.07.1931, No:11410; Date of the law behind of it: 03.04.1930, No: 1580; Date of the Official Gazette published on: 09.08.1931, No. 1868) Paragraphs 9 defines that: "Municipalities have to bound cemeteries with stone, brick or mud brick *wall* depending on their budgets and 2 meters in height in order to prevent entering people or animals from the outside in respect to the 212th Paragraph of the Public Hygiene Law. Also, municipalities always have to care that wall. "Thus, it is clear that the walls are defined by the law that it imitates the designer.



Figure 22: The stone wall of Karşıyaka Cemetery which is in 2 meters height (Spring 2006) by Ertek, D.

The cemetery also has an *entrance* that declares the meaning of the site either literally or symbolically. Thus both the boundary and the entrance gate define the cemetery as a separate place with a special purpose (Rugg, 2000). Francis (2005) point out that "when you go through the cemetery gate, it is another world."

At Karşıyaka Cemetery, there are 7 entrances (Figure 23) although the Governmental Decision declares "Only one gate can be constructed and this gate will be always controlled. " It is because of Karşıyaka Cemetery's huge territory. In my observations, most of the gates are lack of maintenance in Karşıyaka Cemetery (Figure 24 - 25 - 26 - 27). The Gates are not designed with a sensitive manner to its symbolic meaning. According to my interview with the management of the Karşıyaka Cemetery, I can easily say that there is no study for the gates. The officers get surprised for that question and they said they do nothing about the Gates.

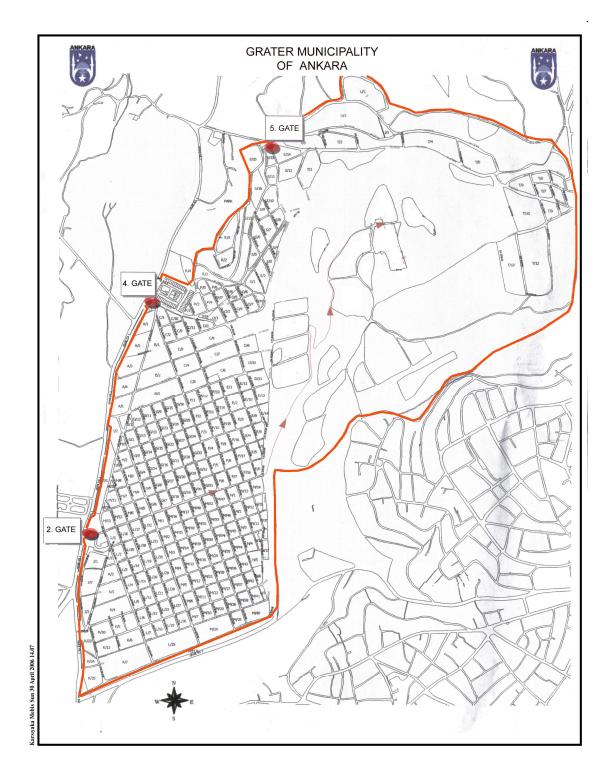


Figure 23: The plan of Karşıyaka Cemetery



Figure 24: The second gate of Karşıyaka Cemetery (spring 2006), by Ertek, D.



Figure 25: The third gate of Karşıyaka Cemetery in Spring 2006, by Ertek, D.



Figure 26: Third gate is too narrow and lack of maintenance, by Ertek, D.



Figure 27: The gate of Karşıyaka Cemetery at Ramadan Fest (winter 2005), by Ertek, D.

At first and second gate, there are operator officers that help visitors to address their graves by using CIS system in computers. The address paper (Figure 28) also includes the information of the deceased, such as his father' name, mother's name, place of birth, date of birth, date of death, reason of the death.

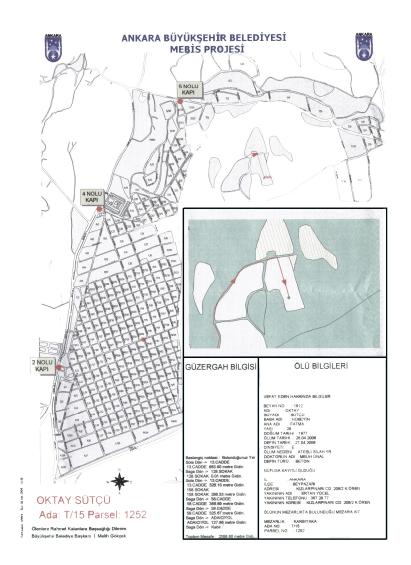


Figure 28: The address paper of the grave of deceased one.

In Karşıyaka Cemetery, %80 of Users rate 6 (dislike), %10 rate 5 (neutral) about the entrances. They are satisfied about the computer service on the gates for finding out their deceased address; however the visitors get upset about the muddy and unpainted appearance of the gates. They pointed out that it makes them feel sad when they enter the site. The entrances do not reflect the "sacred Gates" of the sites.

• **Roads and pathways:** In cemeteries also the identity of the deceased can be enshrined in the site's internal order. Implicit in the landscaping of a cemetery is the ability of users to locate a specific grave. As a result, the site will be divided by roads and paths (2000). There are also some laws about the roads in Governmental Decision. "Paharagraph11: Cemetery design has to include following components:

a) A wide road will be situated beginning from the entrance,

b) Another road passing interior side of the cemetery wall will be situated beginning from the entrance,

c) Cemetery will be divided into orderly burial blocks through fine walking paths,

d) Squatters, one or more than one, will be constructed at the proper location and size,

e) Drainage of the cemetery will be provided though water channels,

f) A religious facility- mosque- will be constructed for the cemetery officials,

g) Graves place orderly within the grave block and each graves will have a row numbers,

h) The largest road within the cemetery will be wide as much as vehicles (used for dead transportation and garbage collection) can move easily.

The roads determine the design approach whether formal or informal. Karşıyaka Cemetery is a formal structured plan with the main roads. The main roads are both used by the visitors and the vehicles and they are made of asphalt (Figure 29). There is no side walk. The path ways that locate between the graves are informal, narrow and in various constructions (new ones are concrete, old ones are stone) in Karşıyaka Cemetery (Figure 30 - 31). The concrete ones cause drainage problems, however the new plots are still being made of concrete.



Figure 29: The asphalt main roads of Karşıyaka Cemetery (Spring 2006), by Ertek, D.



Figure 30: The concrete constructed pathways of Karşıyaka Cemetery (Spring 2006) Ertek, D.



Figure 31: The stone constructed pathways of Karşıyaka Cemetery (Spring 2006), by Ertek, D.

In Karşıyaka Cemetery, % 90 of the users dislikes the roads and pathways and %10 of them rate 5 (neutral) about the path ways. The users complete about the narrow size of the pathways. Sometimes they used to step near the graves because of the narrow ways between the graves. They point out that "it is difficult to pass between the grave plots." Stepping on the graves make them nervous.

• Fountain: As physical characteristics, the fountains are the unique element in Turkish culture. Fountains generally locate at the interment sections, squares, entrances, cemetery centre and green areas. The fountains are usually constructed by the deceased one's family or charitable people. The fountains are built due to the religious considerations and desires. Also other water

facilities such as "sebil" or "şadırvan" are not used in Karşıyaka. There are 2000 fountains in Karşıyaka Cemetery (oral interview with chef of Karşıyaka Cemetery office). However most of the fountains are out of order in the site (Figure 32). Only two people are maintainer of fountain in cemetery site so it is not enough to keep them in order. Also the water pots which are usually located footside of the graves are other unique characteristics of Turkish cemetery culture. Visitors say that the fountains and water elements have relaxation effect on them.



Figure 32: One of the fountain of Karşıyaka Cemetery, by Ertek, D.

• **Planting:** J. S. Curl (1999) defines a cemetery as a "burial ground, especially a large landscaped park or ground laid out expressly for the deposition or interment of the dead". He approaches the cemeteries as well as an open park like area with its landscape arrangements. The landscape quality of cemetery is determined by the combined effect of settings, landscape design,

and planting elements. Planting, vegetation and open green spaces as a natural physical feature have a role in mourner's grief statements. Salisbury (2002) claim that trees are important element in the emotional formula for handling grief and memorializing loved ones and expressing the pain. It is common to use *plant* in the cemeteries.

Planting design is considered in two parts in cemeteries, one is prepared for both general cemetery development and the other is prepared for interment sections. Cemetery plant composition is designed for certain places such as roads, open spaces, resting areas, entrances and gates, parking areas, boundaries and active green areas. For Cömertler (2001), plants should be used in the cemeteries to articulate spaces; to emphasize certain features such as entrance, squares, cemetery name plate, to ornament the cemetery, to provide shade, to assist the easy orientation, to generate sounds as acoustical control device, to protect or to prevent undesired wind, to screen undesired views, to bound the cemetery as well as interments sections and blocks, to contribute cultural value with symbolic meaning of certain plants, to contribute to the habitat of cemetery. Cemetery plant material have be selected in the aspects of their structure (mature size, height- width), texture, rate of growth, smells, seasonal characteristics, root structure, foliage, flower (evergreen, deciduous, autumn colours), species characteristics and care requirements (See Appendix 3). Also, Kocaçalışkan (1999) indicates that taproot plants, aromatic plants, formable shrubs, ammonium plants are suitable for cemetery plant design. Cemetery plant design indicates "evergreen and deciduous plants" and "symbolic and flowering plants" in different forms, height, width and texture to design the soft landscape of the cemetery. Plants from the natural vegetation should be preferred in general and cultural plants should be used on the graves (Aktan, 2000). Planting the cemetery by using natural species provides less maintain requirements. Thus, the aesthetic appearance of the cemetery enhance automatically, with less maintenance. It is the basic idea of Woodland Cemeteries.

A cypress which is called Mezarlık Servisi is the dominant species in grave site. This species is preferred because of its aromatic characteristic that remove smell and its pyramidal form that symbolizes the rising spirits through the sky in Ottoman culture (Uslu, 1997). The evergreen trees, especially Pine species are dominant plants in Karşıyaka. Planting design is generally hold by the relatives of the deceased unconsciously. Every green, dark conifer is dominant with their depressive characteristics. The Municipal Service plant near the roads by Pine trees every year. However, there is no open green area in Karşıyaka Cemetery because of the overcrowded situation of the site. Karşıyaka Cemetery have well amount of planting material. However they are not set in respect of planting design made considering seasonal characteristics, plant requirements and users needs (Figure 33).

In the Karşıyaka Cemetery, the site observations show that there are no open green areas, monumental and lawn areas in the site, except the section of martyrs. % 60 of the users like the planting of the site and %40 of the users rate 5 (neutral). They said that gardening activity and the green appearance of the cemetery makes them feel relaxed. By maintaining the planting of the grave, survivors demonstrate an on going emotional involvement with the deceased. By gardening, trimming or watering they feel like they have a physical contact with the deceased. %90 of the users erected a plant of tree on their graves. They plant their grave however when they come to visit their graves, they saw that their plants were pulled out. It makes them feel sad and for them it is a very inrespectful manner. The management prefers pine species near the roads. Pine plants are suitable because of their strong roots. Fruit trees are not preferred.



Figure 33: The plantation of Karşıyaka Cemetery, by Ertek, D.

• **Facilities**: Cemetery utilities such as administration office, mortuary, mosque, flower shops and information kiosks are the facilities in cemeteries which are generally located close to the major entrance. Also public toilets should be built in the proper locations, capacities and numbers. At least a toilet (for men and women) should be set on the each squares and entrances (Uslu, 1996). There is a public toilet near the second gate in Karşıyaka Cemetery. Cafeterias and other resting places are designed components consider in a contemporary cemetery. For Cömertler (2001), they should be located close to the entrance or across a nice vista such as widely grass or flowered areas or near the water elements or just inside of the silence green forest. In Karşıyaka Cemetery, next to the new mosque, a new cafeteria was opened in 2005. However the squares are lack of benches or praying places (Figure 34).



Figure 34: The square of Karşıyaka Cemetery, by Ertek, D.

Also there are four marble ateliers in Karşıyaka Cemetery with their old buildings and chaotic appearances (Figure 35).



Figure 35: The marble atelier in Karşıyaka Cemetery, by Ertek, D.

There are two mosques in cemetery site; however the mosque which is located in the second gate is not used now. There is one new administrative building near the new mosque. It includes a bigger washing place and parking place approximately for 2000 cars. However it is located upper part of the cemetery and very far away from the gates. Accessibility is very difficult to the new administrative building. The old administrative building is located next to the second gate and now used as a computer service. The toilets are not proper for the users and they are not clean. The users pointed out that The marble ateliers in the cemetery site remind them the death. Old buildings create very poor visual appearance and negative psychological effect on users.

• **Graves:** There are two types of grave in Turkey. The first one is the soil graves (in most of the rural cemeteries) and the second type is tomb graves with concrete structures (usually in urban cemeteries). In Karşıyaka Cemetery the graves are constructed as tomb structures with marble constructions and headstones (Figure 36). In Turkey the standards show variety due to their locations. The orientation is located to the Qible direction.



Figure 36: One of the tomb grave in Karşıyaka Cemetery, Ertek, D.

According to Cömertler (2001) there are three types of standard for an interment space: net interment area, gross interment area and overall interment area standards. Net interment area standards define the grave, crypte or niche area. Gross interment area includes a share for the circulation. Overall interment area defines the all circulation areas, open and green areas, administration or religious service areas in the cemetery. Uslu (1997) recommends 1.68m2 (80cm x 210cm) for net burial grave area and 4.64m2 (160cm x 290cm) for gross grave area (Figure 37). Also she considers 6m2 for overall grave area in total. On the other hand Özkan (1996) indicates that the net grave area should be at least 1.71m2 (80cm x 190cm), gross grave area should be 4m2 (160cm x 250cm) and overall area should be 6m2. Moreover cemetery registration in Turkey set 3.25m2 standards for the overall grave area.

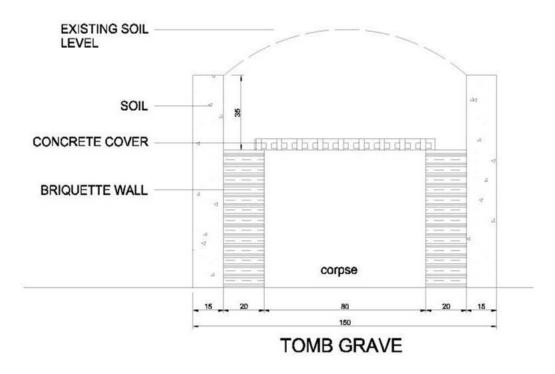


Figure 37: The measures of tomb and soil graves (Uslu, 1997).

Cömertler (2001) classified the grave standards as minimum, optimum, ideal and legal ordered typologically:

Minimum standards:

- Net/Gross grave area for adults: 1.6m2(80cmx200cm)/2.6m2 (120cmx24 cm)
- Net/Gross grave area for infant: 0.5m2(50cmx100 cm)/1.3m2 (90cmx140 cm)
- Net/Gross grave area for child: 1.1m2 (75cm x 150 cm) / 2.5 m2 (125cm x 200 cm)

Optimum standards:

- Net grave area for adults: 1.9m2-3m2 (90cmx210cm,120cm x 250 cm)
- Gross grave area for adult:4.5m2–8m2(160cmx280cm,230cmx350cm)
- Net grave area for infant: 0.6 m2 (60cm x100 cm)
- Gross grave area for infant: 2.2 m2 (130cm x170 cm)
- Net grave area child: 1.35 m2 (90cm x150 cm)
- Gross grave area for child: 3.5 m2 (160cm x 220 cm) Legal standards in Turkey:
- Net /Gross grave area for adults:1.6 m2(80cm x 200 cm)/4.5 m2(150cm x300 cm)
- Net /Gross grave area for infant-child:0.5m2(50cmx100cm)/1.5 m2(100cm x 150 cm)
- Overall grave area: 3.25 m2

The ideal burial place is conceived as having four facets: the deceased is: buried with near kin; among his/her community; close enough for ritual/customary practices to be carried out; in a place which meets aesthetic `standards' and levels of propriety judged appropriate (Francis, 2000).

In Karşıyaka Cemetery most of the deceased are Muslim and the site is in homogenous structure in respect to religion. %70 of the users is like their property and %30 of them dislike. Among the participants, the desire to be buried close to kin is the first criterion in deciding the place of burial, although maintenance levels and the appearance of the cemetery are also important. • **Maintenance:** Francis (2000) declares that "Good visiting experiences are often associated with well maintained cemeteries and can be supportive." In contrast, poorly maintained grounds are likely to discourage survivors from frequent and long-term visiting. Older graves become inaccessible due to the density of brambles and other invasive plants. The cemetery quickly becomes impassable, inhospitable, unvisited, threatening and finally vandalized. The aesthetically poor environment is worsened by a lack of maintenance and vegetation. Also, the cemetery furniture such as notification panels, sign boards, watering pots, benches, fountains, lighting and art works is not arranged with a design approach (Figure 38). Information boards in the gates and signs that show plot and block numbers. Furniture such as garbage, benches, flower containers and light settings are not sufficient in amount and not proper in location. Lighting elements are only located near the roads, however it is not enough for the all site. Big green containers are used to collect the garbage. Then the garbage truck collects them if there is no ceremony near the graves.



Figure 38: The square with warning board, garbage, fountain, sign board and light element, by Ertek, D.

Maps are only given by the gate officers. There is no map that shows the directions and site plans in the cemetery. Only one general map is located near the second gate and it is not enough fort he perception of the cemetery site (Figure 39).



Figure 39: The map board of the Karşıyaka cemetery near the second gate, Ertek, D.

In terms of my investigation, %90 of the users rate 7 (dislike (instead 7 mention the "dislike" as an outcome; give "7" in parentheses.) for the maintenance and %10 of them rate 5 (neutral). Also according to my interviews with the managers, there is no "Grave Care and Maintenance Unit" in Karşıyaka Cemetery now. Workers do flowering, planting, cleaning–up, watering, and trimming of the plants on the graves. 150 people are working in Cemetery now (60 people as Security guards, 8 people as Imam, 8 people as Computer Operators, 15 people as Administrative managers (officer), 1 person as System

manager, 10 people as Undertaker, 7 people as Driver of funeral vehicle, 2 people for fountain maintainer, 40 people in Clean company)

5.2. Ambience objectives of cemetery:

• Sacredness: Dictionary definitions give the word a range of meanings, from the 'holy' and 'consecrated', implying a spiritual element, through to 'protected from irreligious action' and the almost secular in tone 'worthy of or regarded with reverence, awe or respect' (Rugg, 2000). Rugg stated that cemeteries are for the most part considered sacred only in so far as the site is 'regarded with respect'. Much of this respect rests largely on the fact that the site acts as a context for grief and it is the bereaved that need to be protected from inappropriate activity. Thus, behaviour in cemeteries can be subject to a number of regulations, banning for example ball games or loud music. Also in Turkey, cemeteries are sacred and respectful areas. Both because of the Islamic belief that considers cemeteries as a respectful place and Turk legislation rules that prohibits to act in an inrespectful activity in cemetery limits. According to Islamic teaching graves should be respected. There are also some laws about the roads in Governmental Decision:

Paragraph 16: Principle prohibitions about cemeteries are as followings:

a) To step or climb on the walls, fence for other surrounding elements of the graves,

b) To step or sit on the walls, fence or other surrounding elements of he graves,

c)To walk around outside of the existing roads, to disturb the visitors in any way,

d)To damage the cemetery, to behave to the deceased disrespectfully (people, who behave like that, are removed from the cemetery) are prohibited.

It is prohibited that, entering the drunken people, beggars, "foot seller", children without parents, and people, who bring animals with herself/himself, to the cemetery. Vehicles can not enter the cemetery. Only service vehicles, which are required for the transportation of the dead and for constructional activities

within the cemetery, can enter inside in the direction of the rules set by the cemetery administration. Although the law says that it is prohibited to enter the children without parents, during my observation I took a photo of children which were playing and cycling in the site as well as recreational activity (Figure 40).



Figure 40: Playing children in cemetery site (Spring 2006), by Ertek, D.

In the Karşıyaka Cemetery, the site observations show that %90 of the users rate 4 (like) for the sacredness of the cemetery and %10 of them rate 5 (neutral). They pointed out that in the past the site was much more sacred than today with its less crowded plots. Over load appearance of the cemetery makes them feel unrelaxed and nervous. The managers said "There is a sound broadcasting of the prayers and their Turkish meanings for the sacredness of the site."

• **Pilgrimage And Visits:** Rugg (2000) also discusses the concepts of "*pilgrimage and permanence*". 'Pilgrimage' is a term that can be used to describe "visits to a burial site for the purpose of tending or viewing a particular grave." Three pilgrimage reasons can be ascribed to grave visits: the *private and personal visits*; *the overtly or inadvertently political visits* and *the recreational visits* (Francis, 2000).

Francis (2000), claims that grave visiting expresses many of the users visit graves of kin as an obligation. One of the visitors said: It's my duty to come. She was my best friend that I share anything with her. I could sit and talk about my problems." There is a public face to the emotional content of visiting and cultural expectations that the quality of the relationship be demonstrated: It's almost like a public show that you haven't forgotten them. People walk past the grave and see the flowers there and know someone is still coming. It is essential to see that the grave is cared for and decorated. In addition to social expectation, there is also a spiritual or religious underpinning. The idea helps to heal: still there' and that they can somehow hear or see the activities of the visitors. "It's not so final. Although they' re dead, they're here." Francis (2005) emphasizes that the "Good visiting experiences are often associated with well maintained cemeteries and can be supportive". Social and family expectations, community norms, personal pledges, religious beliefs and a cemetery culture all help to reinforce visiting behaviour. Such visits seem to offer psychological benefits to the mourner and the establishment of an on-going bond with the deceased, which can assist adjustment and acceptance of bereavement.

Computer operators, who are working on the gates, declare that 1000 people visit Karşıyaka Cemetery in one day. Bayrams, weekends, mother's day, father's day, memorizing days are the most crowded days for visiting. Also in the special dates, Memorial days of the national wrestlers, journalists, martyrs memorial ceremonies of the national deceased take place near the graves. There is no special place for those memorial ceremonies in Karşıyaka Cemetery. Visitors declare that they stay at the cemetery approximately 1 or 2 hours. They remember the deceased, to share with them family news, express

feelings and concerns and ask for their guidance, help and advice. One of the participants said: "By cemetery visiting I demonstrate my past. It is a place of remembering where I come from and who I am."

Activity pattern of the visitors in Karşıyaka Cemetery include: examining, washing, cleaning the memorial, tidying the space around the grave, saying prayers and performing the rituals.

• Healing role of the cemetery: Grief is the emotion and also a natural reaction to the loss of loved one. "Grief is also the name for the healing process that a person goes through after someone close has died." The grieving process takes time, and the healing usually happens gradually. The feelings such as sadness, worry, fear, shock, confusion, angry, cheated, relieved, guilty, exhausted, or emptiness (or mixed together) might be experienced in the grief process. However bereavement is a personal process and people are affected by grief experience in different ways. It depends on the situation (sudden death or prepared one) and relationship with the person who deceased.

Salisbury (2002) claims that grief affects us on a cognitive level, on an emotional level, and on a social level. Generally, in grief process some characteristic stages have been observed. One of the first reactions to death of deceased one is shock. With the rituals compatible with religion, culture, community or family traditions, individual gradually accept the death. After that stage, healing process finally begins with the desire to continue with life. According to therapists, participation in rituals, being with other people, expressing the emotions, joining a support group and creating a memorial or tribute, planting a tree or designing a garden might be the ways of coping with the mourning process. Thus, funerals occurred in the cemetery fulfils important emotional needs of mourners in healing process while dealing with grief situation. With the funeral in the cemetery the survivors face the reality of death which is the first step in overcoming grief and helping to a bereaved individuals adjusting to their loss. Salisbury (2000) discusses than in many cases it was seen that the cemetery has an important role in the recovery process by the way

of therapeutic effects of space. By advanced cemetery planning, well maintained cemeteries have an essential helping and healing role for mourners while coping with the grief (Uslu, 1997). Cemeteries which are designed with the concept of therapeutic environment help visitors to: accept the reality of the loss; express thoughts and feelings; gain support, reassurance and understanding from others in the same position; learn new roles of coping without the deceased; facilitate emotional re-location; find a time/place to grieve; provide a spatial, material/physical focus (Francis, 2000). Cemeteries or memorials establish a sanctuary of peace and quiet landscape and thus bereaved one gets the chance of showing his emotions and expressing devotion for the last time. In eco-cemeteries for the survivors, burying a loved one to a forest means, it is a kind of entrusting the corpse to the nature again. And the reminder of we're all part of a cycle. It is a relaxation point of view to death experience.

% 80 of the users does not feel healed in Karşıyaka Cemetery. Gardening, cleaning the grave, helps them to feel healed and relaxed. Trees and the water features make them feel healed. However, lack of maintenance and security make them feel unrelaxed. Because of unsafe conditions of the upper plots of the cemetery, one of the users couldn't visit the graves that locate there. Also accessibility of the upper plots is very difficult for her. The upper sections are ownerless.

Outcomes about Woodland Cemetery: A woodland cemetery is a burial ground where the body is returned to nature, in a biodegradable coffin or shroud, with a tree planted over or near the grave. By this way, woodland cemetery, establish a forest or a green zone (greenspace network) for the city which are ecological areas with its habitats, biological diversity and wildlife reserves (Salisbury, 2002). Also woodland cemeteries, with its well maintained landscape, have an essential helping role on healing of grief statement. By advance planning this kind of forestry cemeteries serve recreational spaces. %80 of the users prefers Woodland Cemetery and declares that this kind of cemetery design makes them feel relaxed. Administrator officers have positive

ideas about woodland cemetery. They said Forestry cemetery do not need maintenance, it is an advantage for them. However visitors may step on the graves, thus grave limits must be defined. Because of the concrete tomb structure, the trees can not be erected on the graves or near the graves in Karşıyaka Cemeteries. Trees on graves will be damage the concrete structure and concrete structure may be damage the roots of the trees. As a result the trees on graves (like in Woodland Cemeteries) can not be applied on Karşıyaka Cemetery. Trees can be erected on the top of the graves.

5.3. Conclusion:

I study the assessment of cemeteries from the eyes of users and explore the relationship between people perceptions and preferences for cemetery design principles in Karşıyaka Cemetery. I present the physical features, which I used in my interviews and analyse the gathered data about the relationship between the physical quality of cemetery and users. My case site, Karşıyaka Cemetery is a formal (with grid system plan), medium (26 hectares), within urban settlement, nonhistorical, municipal (managed by public authotorities), homogeneous religion population and traditional cemetery.

As a "physical feature", Rugg (2000) describes location as the most marked aspect that defines cemetery site. Cemeteries are normally built in a strategic place located at a prudent distance from the urban centre. It is necessary to select an easy accessible area for a cemetery. In Anatolian culture the cemeteries were generally located close to settlements or next to a mosque or turbes (Tuncer, 1996). In Ottoman period, graves were placed at the close proximity to the settlements centre and just next to the facilities such as mosque or turbe. Generally Old Ottoman cemeteries were located at the overlooking hillsides having townscape. In respect to cemetery location of cemeteries can also be classified basically in three groups: Cemeteries within an urban area, Cemeteries out of an urban area, Cemeteries located next to a city. In my case study, Karşıyaka Cemetery is located within an urban area of Ankara in Yenimahalle. For transportation dolmuş and buses are used by the visitors as a public transportation.

The *Boundary* is marked by a hedge or other planting or either a high wall or railings or a combination of the two. A secure boundary has a dual purpose: protecting the dead from disturbance and sequestering the dead from the living. At Karşıyaka Cemetery there are stone walls around the site which are in 2 meters height.

The cemetery also has an *entrance* that declares the meaning of the site either literally or symbolically. At Karşıyaka Cemetery, there are seven entrances and most of them are lack of maintenance. The Gates are not designed with a sensitive manner to its symbolic meaning in Karşıyaka Cemetery.

The site cemetery is divided by *roads and paths*. Karşıyaka Cemetery is a formal structured plan with the main roads. The main roads are both used by the visitors and the vehicles and they are made of asphalt. There are no side walks. The path ways that locate between the graves are informal, narrow and in various constructions (new ones are concrete, old ones are stone) in Karşıyaka Cemetery. The concrete ones cause drainage problems, however the new plots are still being made of concrete.

There are 2000 *fountains* in Karşıyaka Cemetery. However most of the fountains are out of order in the site. Only two officials responsible for the are maintenance of the fountain in cemetery site so it is not enough to keep them in order. Also other water facilities such as "sebil" or "şadırvan" are not used in Karşıyaka. Users pointed out that water features makes them feel relaxed.

Planting of the general cemetery is performed by the Municipal Service of Karşıyaka Cemetery. They plant near the roads by Pine trees every year. The management prefers pine species near the roads. Pine plants are suitable because of their strong roots. Fruit trees are not preferred. However, there is no open green area in Karşıyaka Cemetery because of the overcrowded situation of the site. Karşıyaka Cemetery have well amount of planting material. However they are not set in respect of planting design made considering seasonal

characteristics, plant requirements and users needs. Interment sections are planted by the relatives of the deceased unconsciously. Users said that gardening activity and the green appearance of the cemetery makes them feel relaxed and healed.

Facilities of the Karşıyaka Cemetery are public toilets, one mosque, a cafeteria, four marble atelier and administrative building. Old buildings of marble atelier create very poor visual appearance and negative psychological effect on users. Accessibility is very difficult to the new administrative building. It is located upper part of the cemetery and very far away from the gates.

The *graves* are located to the Qible direction in respect of Islamic teaching. In Karşıyaka Cemetery the graves are constructed as tomb structures with marble constructions and headstones. Their sizes are generally, 1.68m2 (80cm x 210cm) for net burial grave area and 4.64m2 (160cm x 290cm) for gross grave area.

The greatest problems are based on the maintenance issues. There is no "Grave Care and Maintenance Unit" in Karşıyaka Cemetery now. The workers do the flowering, planting, cleaning–up, watering, and trimming of the plants on the graves. Karşıyaka Cemetery furniture such as notification panels, sign boards, watering pots, benches, fountains, lighting and art works is not arranged with a design approach. Cleanness and lack of the monuments, utilities, path ways, furniture and plants brings about unorganized and inpeaceful spaces in the cemetery. The maintenance of the gates is also neglected. Furniture such as garbage, benches, flower containers and light settings are not sufficient in amount and not proper in location. Lighting elements are only located near the roads, however it is not enough for the all site. There is no map that shows the directions and site plans in the cemetery.

In Anatolian cemetery culture, cemeteries are sacred and respectful areas. Both because of the Islamic belief that considers cemeteries as a respectful place and the Turkish legislation that prohibits to act in an inrespectful activity in cemetery limits. However users think that in the past the site was

much more sacred than today with its less crowded plots. Over load appearance of the cemetery makes them feel unrelaxed and nervous.

Approximately 1000 people *visit* Karşıyaka cemetery in one day. Bayrams, weekends, mother's day, father's day, memorizing days are the most crowded days for visiting. Also in the special dates, Memorial days of the national wrestlers, journalists, martyrs memorial ceremonies of the national deceased take place near the graves. There is no special place for those memorial ceremonies in Karşıyaka Cemetery. Visitors declare that they stay at the cemetery approximately 1 or 2 hours. They remember the deceased, to share with them family news, express feelings and concerns and ask for their guidance, help and advice. One of the participants said: "By cemetery visiting I demonstrate my past. It is a place of remembering where I come from and who I am." Activity pattern of the visitors in Karşıyaka Cemetery include: examining, washing, cleaning the memorial, tidying the space around the grave, saying prayers and performing the rituals.

By advanced cemetery planning, well maintained cemeteries have an essential helping and *healing* role for mourners while coping with the grief (Uslu, 1997). % 80 of the users does not feel healed in Karşıyaka Cemetery. Gardening, cleaning the grave, helps them to feel healed and relaxed. Trees and the water features make them feel healed. However, lack of maintenance and security make them feel unrelaxed.

%80 of the users prefer Woodland Cemetery and declares that this kind of cemetery design makes them feel relaxed. Administrator officers have positive ideas about woodland cemetery. They said Forestry cemetery do not need maintenance, it is an advantage for them. However visitors may step on the graves, thus grave limits must be defined. Because of the concrete tomb structure, the trees can not be erected on the graves or near the graves in Karşıyaka Cemeteries. Trees can be erected on the top of the graves.

CHAPTER 6

CONCLUSION

The cemetery is a public place where people get the emotions together, rather than their thoughts. They are the important social areas filled with memorials, where the final ceremonies of death are observed. Ali Cengizkan (2003) determines cemeteries as an "unavoidable zones" of a city, because of two reasons. He explained that "the first reason when human beings, the "inevitable actors" of the city, complete their limited life on earth, "committing their bodies to the ground" with a deep for public health, is a must. The second reason is as much important and strong as the first, which is importance of Graves for the people who are left behind. The ones left behind remember the ones who passed away, the ones with whom they shared their togetherness on earth through natural cognition, love and friendship by the way of their graves which are the last signs of their bodies, the last evidence their presence on the places that people say good by to a loved one. It is a heart-breaking experience and cemetery must satisfy the needs of the mourners during the stages of grief.

Rugg (2000) defines cemeteries as "specifically demarcated sites of burial, with an ordered internal layout that is conducive both to families claiming control over their grave spaces and to the conducting of what might be deemed by the community as appropriate funeral ritual". Rugg (1998) criticised Bailey' assertion that cemeteries 'have no history, either social or religious, to speak of". According to her, the sites, which are able to carry multiple social and political meanings, serve the whole community due to the closely integration of community history.

With the rapid urbanization of metropolitan areas and the transformation of social, economic and demographic structure, cemeteries become inadequate to fulfil the community needs. Although the Anatolian society has a large cemetery culture, cemeteries today turn into urban problem areas, with the lack of space for burial and their insensitive design to accommodate its appropriate use. The problems may be summed up in the cemeteries in three groups: over densely usage, inadequacy of planting designs and management problems. Uslu (1997) states that the cemeteries are planned to provide maximum interment space thus they work as body disposal centres. Cemeteries resemble endless marble stores. Also Tanyeli (1999) argues that Turks gave great importance to the design of tombs throughout the history, but in Republican period except the second half of the thirties cemeteries planning and design have been considered as simply making geometric plotting plans. Cemeteries became overloaded and gecekondu graveyards have been emerged. Evice (1999) explains that pretended objectives emerged from hygienic, urbanisation and aesthetic anxieties. He argues these objectives as how a cemetery, in which additional interments have been not hold for a long period, may affect the public health, or how a densely planted cemetery area may break aesthetic appearance of the city. Essential problems are explained as land value.

The Western solution to the problems, which cemeteries have been encountering, focuses on the idea that contemporary cemetery should be developed in a park like style for both living and the deaths (Cömertler 2001). With the contemporary design approaches, cemeteries are not considered as places for the practice of burial and bereavement, but in a wider social context, which must be integrated and make a contribution to the wider landscape and the environment as a whole. Design is a consideration at this large scale and with the increasing lack of space and the mixed-use of cemeteries becomes more common in USA or Britain. It is argued that this type of cemeteries meet more effectively the public needs and they serve green areas for urban green network both people and ecology. This assigns secondary roles to cemeteries beside its basic intermitting purpose. Some secondary functions of modern cemeteries for the large communities include:

- Cemeteries establish a forest or a green zone (green space network) for the city which are ecological areas with its habitats, biological diversity and wildlife reserves (Uslu, 1997) (Salisbury, 2002) (Clayden and Woudstra, 2000).

- Cemeteries serve recreational spaces from the range of active recreational activities to passive (personal or meditation) contemplations (Uslu, 1997) (Salisbury, 2002) (Clayden and Woudstra, 2000).

- By advanced planning, well maintained cemeteries have an essential helping and healing role for mourners while coping with the grief (Uslu, 1997) (Salisbury, 2002).

- Burial sites create a cultural value and social identity with the historic tombstones, endless roads, sacred and spiritual landscapes (Salisbury, 2002).

However in Turkey, traditional cemeteries in today couldn't respond their secondary functions, thus they are insufficient to fulfil the community needs in social context. In my thesis, I intended to explore the socio-cultural meaning of cemeteries by looking at the relationship between cemetery design and rituals about confronting the death within the context of different religions. To support this, I used empirical consequences of a case study in Karşıyaka Cemetery in Ankara. I intended to investigate the symbolic and social meaning of cemeteries from the users' eyes and exploring the relationship between users' preference and perceived physical attributes. To retrieve the social meaning of the cemetery, I particularly focused on users' conception, preferences and used of Karşıyaka. In this project, I intended to examine how space in the cemetery is produced and how peoples' environmental experiences contribute to that phenomenon. I based my empirical study on data I gather from planning and managing officials of the Karsıyaka Cemetery and a field research with users. I also intended to use my assessment of the site as an urban designer with respect to the environmental quality of the cemetery.

According to my investigation, the needs of the users should be determined and the symbolic meaning of the cemeteries should be generated in

the cemetery planning. When preparing the design projects, the fundamental consideration should be to work respectful to the cultural and religious issues and provide functional and aesthetic arrangements. When designing a cemetery, symbolic role of the memorials and vegetation should be emphasized. Interment sections should be zoned into the sectors considering different forms of interment and other specific needs of the social groups. Grave areas should be zoned into the sectors as family sections, personal adult sections, child sections, homeless sections. Planting design should be prepared according to plants' structure (mature size, height- width), texture, rate of growth, smells, seasonal characteristics, root structure, foliage, flower (evergreen, deciduous, autumn colors), species characteristics and care requirements. Plants from the natural vegetation should be proffered in general and cultural plants should be used on the graves (Aktan, 2000). Planting the cemetery by using natural species, provides less maintain requirements. Thus, the aesthetic appearance of the cemetery enhance automatically, with less maintenance. A special concern for plant composition of certain places such as roads, open spaces, resting areas, entrances and gates, parking areas, boundaries, and active green areas Furniture, utilities and vegetation issues should be should be considered. evaluated. Benches should be located at the squares, entrances and front yards of the administrative and religious facilities, as well as between the interment blocks. Further other furniture such as waste containers, clay pots and lighting should be supplied and designed as a harmonic way with the cemeteries' spiritual ambience. Also, statues and other art works should be arranged within the cemetery in a respectful manner. Waste containers should be served in open spaces, squares, entrances, cemetery centre and green areas and certain locations within the interment sections. Lighting should be made for boundry, major roads, cemetery centre and entrances. Also, numbers of cemetery officials should be increased to care and to provide security. Actually, it is obvious that there is an urgent need to establish a more efficient management system for cemeteries.

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APPENDICES

APPENDIX 1: QUESTIONNAIRE FOR USERS

BACKGROUND INFORMATION

1. Date of visit: Day:..... Date: Time:..... Weather:

2. Visitor(s)' background?

Individuals	Male	Female	Age (young, elderly, middle- age)	How often do you visit? (daily, weekly, monthly, seasonal, yearly, holidays, other)
Lone visitor				
couple				
Friends				
Family group				
Family&friends				
Others				

3. Where do you live? Ankara or

4. Which mode of transportation have you used to come to this cemetery today?

Means of transportation	How long did it take?
On foot	
Private care	
Bus	
Dolmuş	
Other	

VISITOR'S EXPERIENCE IN SPACE

1. RELAXATION

- a. Do you feel relaxed here? Could you rate from 1 to 7 (1 indicating "no relaxation"; 7 indicating "very relaxed")?
 - i. If yes:
 - What makes you feel relaxed in this cemetery? (Design elements, conditions, other factors, etc.)
 - 2. What this place could have that would make you more relaxed?
 - ii. If no:
 - What makes you feel unrelaxed in this cemetery? (Design elements, conditions, other factors, etc.)
 - 2. What this place could have that would make you relaxed?

2. HEALING (SADNESS)

- a. Do you feel healed here? Could you rate from 1 to 7 (1 indicating "no sadness"; 7 indicating "healing")?
 - i. If yes:
 - What makes you feel healed in this cemetery? (Design elements, conditions, other factors, etc.)
 - 2. What this place could have that would make you more healed?
 - ii. If no:
 - 1. What makes you feel sad in this cemetery? (Design elements, conditions, other factors, etc.)

2. What this place could have that would make you less sad?

3. FEAR

- a. Do you feel scared here? Could you rate from 1 to 7 (1 indicating "peaceful"; 7 indicating "scared")?
 - i. If yes:
 - What makes you feel scared in this cemetery? (Design elements, conditions, other factors, etc.)
 - 2. What this place could have that would make you not scared?
 - ii. If no:
 - What makes you feel peaceful in this cemetery? (Design elements, conditions, other factors, etc.)
 - 2. What this place could have that would make you more peaceful?

4. OTHERS

- a. What other feelings do you have when you visit this cemetery
- b. Why? What makes you feel that way?
- 11. How long did you stay in this cemetery today?

Time arrived...... time left.....

12. What do you do and what do you think while you are here?

Activity	What makes you do this	What this should place
	activity? (Design	should have more for
	elements, environmental	you to do this activity?
	features, greenery,	(environmental
	environmental quality,	attributes)
	etc.)	
Gardening		
Talking with the		
deceased		
Praying		
Walking around		
Talking with other people		
Anything else		

13. How would you describe the cemetery landscape?

Preference test based on selected environmental attributes. (Rate from 1 to 7-1 indicating "liked"; 7 "indicating" dislike)

Entrance Plantings Open Green Space Path ways Sacredness Respectful to People Maintenance Your property In general

VISITORS' ASSESSMENT ON WOODLANDLIKE-DESIGNED CEMETERY

14. Is it a tree important feature for you, which is planted on/near the grave?

15. Would you wish to plant tree yourself, as a symbolic act for your family?

16. Is there any plant on the grave that you visit today?

17. Instead of a traditional grave, do you prefer a woodland burial?

18. How do you feel about this kind of cemetery?

19. How do you feel about this kind of ecological approach that planting more native species to attract birds and insects and to encourage wild life so as to establish a forest (lungs of a city)?

20. Do you think this kind of relationship between man and nature, as a recycle, has a place in the cemetery? Please explain...

Thank you very much for your help ©

APPENDIX 2: QUESTIONNARE FOR MANNAGERS

- 1. How many people are buried in this cemetery in one day?
- 2. How many people visit this cemetery in one day?
- 3. Which days are the most crowded ones?
- 4. Is there any "Grave Care and Maintenance Unit" in Karşıyaka Cemetery?
- 5. How many people working in here?

Average Numbers

Security guards Imam Computer Operators Administrative managers (officer) System manager Undertaker Driver of funeral vehicle

- 6. What kind of activities (behaviors) done by the cemetery visitors? (Sort them out from the mostly done to least done)
- 7. What do you do to increase and maintain the physical quality of cemetery?

Entrance Taps (fountains) Administrative buildings Monumental and lawn areas Plantings Open Green Space Path ways Sacredness/respectful behaviors for mourners Light Sound-Noise Barriers Trash cans Signboards Maps

- 8. What are the problems of this cemetery?
- 9. Which species are you prefer to plant in cemetery landscape?
- 10. Instead of a traditional grave, is it possible to design woodland cemetery? (Information must be presented about woodland burial style:

A woodland cemetery is a burial ground where the body is returned to nature, in a biodegradable coffin or shroud, with a tree planted over or near the grave. By this way, woodland cemetery, establish a forest or a green zone (greenspace network) for the city which are ecological areas with its habitats, biological diversity and wildlife reserves (Salisbury, 2002). Also woodland cemeteries, with its well maintained landscape, have an essential helping role on healing of grief statement. By advance planning this kind of forestry cemeteries serve recreational spaces (personal or meditational contemplations). Representative images of Stockholm Woodland Cemetery (Figure 41-42)



Figure 41: The Woodland Cemetery in Stockholm (Constant, 1994)



Figure 42: The Gate of Woodland Cemetery in Stockholm (Constant, 1994)

- a. Do you prefer this type of cemetery? Rate from 1 to 7 (1 indicating dislike; 7 indicating like)
- b. What makes you think that you like in the environment?
- c. What makes you think that you dislike in the environment?

APPENDIX 3: PLANT LIST (Uslu, 1997)

Bitki Adı	Familya	Boy (cm)
Acer palmatum "Disesctum Garnet"	Aceraceae	~ 200
Acer japonicum "Aconitifolium"	Aceraceae	~ 200
Acer palmatum "Atropurpureum"	Aceraceae	~ 200
Berberis buxifolia "Nana"	Berberidaceae	25-30
Berberis candidula	Berberidaceae	60
Berberis hookeri	Berberidaceae	70
Berberis thunbergii	Berberidaceae	100
Berberis thunbergii "Atropurpurea"	Berberidaceae	150
Berberis thunbergii "Atropurpurea Nana"	Berberidaceae	30
Buxus sempervirens var. arborescens	Buxaceae	-300
Buxus sempervirens "Suffruticosa"	Buxaceae	100
Chaenomeles japonica (syn. cydoma)	Rosaceae	100
Chaenomeles speciosa	Rosaceae	200
Corylopsis spicata	Hamamellidaceae	200
Corylopsis willmottiae	Hamamelidaceae	400
Cotoneaster sp.	Rosaceae	150-200
Foohergilla majtr	Hamamelidaceae	150
Genista lydia	Leguminosae	50
Hamamelis mollis	Hamamelidaceae	200
Hibiscus syriacus	Malvaceae	250-300
Hyrangea arborescens "Grandiflora"	Saxifragaceae	100-300

Bitki Adı	Familya	Boy (cm)
Hydrangea paniculata "Grandiflora"	Saxifragaceae	200-300
Ilex crenata	Aquifoliaceae	200-250
Kerria japonica	Rosaceae	150-200
Mahonia aquifolium	Berberidaceae	150-200
Malus floribunda	Rosaceae	200
Potentilla fruticosa var. tarreri	Rosaceae	70-100
Potentilla fruticosa "Gold Finger"	Rosaceae	90-100
Prunus laurocerasus	Rosaceae	150-200
Pyracantha coccinea	Rosaceae	200-300
Salix caprea "Pendula"	Salicaceae	300
Skimmia japonica	Rutaceae	70
Sorbus koehneana	Rosaceae	300-500
Syringa julianae	Oleaceae	200
Syringa tigerstedtii	Oleceae	200
Viburnum fragrans (syn. V. farreri)	Caprifollaceae	350
Viburnum davidii	Caprifoliaceae	50
Viburnum plicatum	Caprifoliaceae	50

Bitki Adı	Familya	Boy (cm)	Adet/m ²
Calluna vulgaris	Ericaceae	20-60	16-25
Cornus canadensis	Cornaceae	16-20	16-20
Cotoneaster adpressus	Rosaceae	25	9-16
Cotoneaster congestus	Rosaceae	50	16-20
Cotoneaster dammeri var. radicans	Rosaceae	10	16-20
Cotonester horizontalis	Rosaceae	50-75	4
Erica gracilis	Ericaceae	20	25-30
Euonymus fortunei "Minimus"	Celastraceae	10-15	25-30
Vinca minor	Apocynaceae	10-15	25-30
Hedera helix	Araliauae	-30	12-15
Potentilla früticosa	Rosaceae	-50	12-15
Hypericum calycinum	Guttiferae	20	20-25
Juniperus communis "Rependa"	Cupressaceae	20-30	12-15
Juniperus horizontalis "Glauca"	Cupressaceae	10-15	10-15
Juniperus sabina "Tamaricifollia"	Cupressaceae	30-40	5
Juniperus squamata "Blue Carpet"	Cupressaceae	30	5-12
Juniperus squamata "Blue Star"	Cupressaceae	30-40	9-12
Pachysandra terminalis	Buxaceae	30	25-30

Bitki Adı	Familya	Boyu ve Özellikleri
Berberis buxifolia "Pygmea"	Berberidaceae	Çok kısa boyu sürekli yeşil
Berberis x stenophylla "Gracilis Nana"	Berberidaceae	Çok kısa boylu
Berberis empetrifolia "Coralina Compacta"	Berberidaceae	15 cm
Berberis thunbergii "Atropurpurea Nana"	Berberidaceae	40-50 cm kırmızı yapraklı
Cotoneaster adpressus	Rosaceae	25 cm
Cotoneaster dammeri	Rosaceae	30 cm meyve ve kırmızı
Cotoneaster dammeri "Streibs Findling"	Rosaceae	15 cm
Cotaneaster dammeri "Sürth"	Rosaceae	30-40 cm sık yapılıdır
Cotoneaster dammeri "Jürgl"	Rosaceae	40 meyveleri açık pembe
Cotoneaster salicifolius "HerbstFeuer"	Rosaceae	20-30 cm kırmızı meyvelidir
Cotoneaster salicifolius "Parkteppich"	Rosaceae	20-30 cm yoğun meyveli
Cotoneaster horizontalis	Rosaceae	30-40 cm kırmızı meyveli
Euonymus fortunei "Emerald Gaiety"	Celastraceae	30 cm yaprakları sarı
Euonymus fortunei "Minimus"	Celastraceae	Kısa boylu, küçük yapraklı
Euonymus fortunei var. radicans	Celastraceae	(yerde) yayılıcı
Hedera helix "Conglomerata"	Araliaceae	30-40 cm ya da yayılıcı
Hedera helix "Goldheart"	Araliaceae	20-30 cm sarımsıyeşil yapraklı
Hedera helix "Minima"	Araliaceae	20-30 cm ya da yayılıcı
Spiraea japonica var. alpina	Rosaceae	20-30 cm pembe çiçekli
Spiraea decumbens	Rosaceae	20 cm beyaz çiçekli
Viburnum opulus "Nanum"	Caprifoliaceae	30 cm beyaza çiçekli

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Bitki Adı	Familya	Boy (cm)
Abies balsamea "Nana"	Pinaceae	70-100
Abies koreana	Pinaceae	100
Chamaecyparis lawsoniana "Minima Glauca"	Cupressaceae	100-160
Chamaecyparis obtusa "Nana Gracilis"	Cupressaceae	150
Chamaecyparis pisifera	Cupressaceae	150-200
Cryptomerla japonica "Cristata"	Taxodiaceae	200
Juniperus communis "Hibernica"	Cupressaceae	200-300
Juniperus communis "Hornibrookii"	Cupressaceae	40-50
Juniperus communis "Rependa"	Cupressaceae	30
Juniperus horizontalis "Glauca"	Cupressaceae	30
Juniperus sabina "Tamariscifolia"	Cupressaceae	50
Juniperus squamata "Blue Carpet"	Cupressaceae	40-50
Juniperus squamata "Meyeri"	Cupressaceae	200-300
Picea abies "Echiniformis"	Pinaceae	60-80
Picea abies "Inversa"	Pinaceae	200
Picea glauca "Echiniformis"	Pinaceae	60
Picea funguns "Glauca Globosa"	Pinaceae	200
Picea mariana "Nana"	Pinaceae	50-60
Pinus densiflora "Pumila"	Pinaceae	200-300
Pinus mugo	Pinaceae	120
Pinus mugo var. pumilio	Pinaceae	80 - 21 - 20 - 21 - 21 - 21 - 21 - 21 - 2
Pinus parviflora "Glauca"	Pinaceae	100
Pinus pumila "Glauca"	Pinaceae	150-200
Pinus sylvestris "Nana"	Pinaceae	120-150
Taxus baccata "Fastigiata"	Taxaceae	200-300
Thuja occidentalis "Recurva Nana"	Cupressaceae	70-80
Tsuga canadensis "Pendula"	Pinaceae	150-200

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Bitki Adı	Familya	Boy (cm) ve Özellikler
Alyssum saxatile "Compactum"	Cruciferae	15-20 sarı çiçekli
Alyssum saxatile "Citrinum"	Cruciferae	15.20 açık limon sarı çiçekli
Alyssum saxatile "Plenum"	Cruciferae	15-20 altın sarısı ve katmerli çiçekli
Androsace primuloides	Cruciferae	12-15 kırmızı çiçekli
Arabis albida	Cruciferae	12-15 beyaz çiçekli
Arabis albida Plena	Cruciferae	12-15 beyaz çiçekli
Arabis albida Variegata	Cruciferae	12-15 alaca yapraklı
Arabis albida "Rosea"	Cruciferae	12-15 pembe çiçekli
Arabis albida "Robabella"	Cruciferae	12-15 pembe çiçekli
Arabis albida "Monte Rosa"	Cruciferae	12-15 karmenimsi pembe çiçekli
Arabis albida "Schneehaube"	Cruciferae	12-15 beyaz çiçekli
Aubrieta deltoidea "Schloss Eckberg" Syn: Aubrieta x cultorum	Cruciferae	12-15 mavimsi menekşe çiçekli
Aubrieta deltoidea "Neuling"	Cruciferae	12-15 mavi çiçek rengi
Aubrieta deltoidea "Blue Emperor"	Cruciferae	12-15 mavi çiçek rengi
Aubrieta deltoidea Dr. Mules	Cruciferae	12-15 mavi çiçek rengi
Aubrieta deltoidea "Tauricola"	Cruciferae	12-15 kırmızı çiçek rengi
Aubrieta deltoidea "Bressingham Pink"	Cruciferae	12-15 pembe çiçekli
Aubrieta deltoidea "Rosen teppich"	Cruciferae	12-15 pembe çiçekli
Aubrieta deltoidea "Rosen garteni"	Cruciferae	12-15 pembe çiçekli
Aubrieta deltoidea "Feuervogel"	Cruciferae	12-15 kırmızı çiçekli
Aubrieta deltoidea "Vesuv"	Cruciferae	12-15 kırmızı yarı katmerli çiçek
Aubrieta deltoidea "Parkers Double"	Cruciferae	12-15 kırmızı ve katmerli çiçekli

Bitki Adı	Familya	Boy (cm) ve Özellikler
Bellis perennis "China Pink"	Compositae	12-20 kırmızı çiçekli
Bellis perennis "Brillant"	Compositae	15-20 Parlak kırmızı
Campanula carpatica "Blaue Clips"	Campanulaceae	12-15 mavi çiçekli
Campanula carpatica "Karpatenkrone"	Campanulaceae	12-15 gümüşimsi mavi çiçekli
Campanula carpatica "Weisse Clips"	Campanulaceae	12-15 beyaz çiçekli
Cerastium tomentosum	Caryophyllaceae	12-15 beyaz çiçekli
Dianthus deltoides "Brillant"	Caryophyllaceae	15-20 kırmızı çiçekli
Dianthus deltoides "Leucht Funk"	Caryophyllaceae	15-20 parlak kırmızı çiçekli
Dianthus plumarius	Caryophyllaceae	15-20 kırmızı çiçekli
Dianthus arenarius	Caryophyllaceae	15-20 kırmızı çiçekli
Iberis sempervirens "Schneeflocke"	Cruciferae	to the second second second second second second second second second second second second second second second
Iberis sempervirens "Findel"	Cruciferae	
Iberis sempervirens "Zwergschneeflocke"	Crucaferae	
Iris danfordiae	Iridaceae	10 erken, sarı çiçek açar
Iris winogradowi	Iridaceae	10 sarı çiçekli
Iris lacustris	Iridaceae	5-8 mavi çiçekli
Linum flavum "Compactum"	Linaceae	10 sarı çiçekli
Linum flavum "Goldzwerg"	Linaceae	10 sarı çiçekli
Minuartia laricifolia	Caryophyllaceae	10 beyaz çiçekli
Minuartia verna	Caryophyllaceae	10 beyaz çiçekli
Phlox subulata "Atropurpurea"	Palemoniaceae	20 erguvan rengi çiçekli
Phlox subulata "Betty"	Palemoniaceae	20 açık pembe çiçekli

MEZAR ÜSTÜ İÇİN UYGUN ÇİÇEKLER		
Bitki Adı	Familya	Boy (cm) ve Özellikler
Phlox subulata "Daisy Hill"	Palemoniaceae	20, pembemsi kırmızı çiçekli
Phlox subulata "Lindental"	Palemoniaceae	20, karmen kırmızı çiçekli
Phlox subulata "Rosette"	Palemoniaceae	20, koyu pembe çiçekli
Phlox subulata "Samson"	Palemoniaceae	20, pembe çiçekli
Phlox subulata "Temiscaming"	Palemoniaceae	20, parlak kırmızı çiçekli
Phlox subulata "Maischnee"	Palemoniaceae	20, beyaz çiçekli
Phlox subulata "White Delight"	Palemoniaceae	20, beyaz çiçekli
Sedum acre	Crassulaceae	8-10 sarı çiçekli
Sedum album	Crassulaceae	8-10 beyaz çiçekli
Sedum spurium "Roseum"	Crassulaceae	10-12 pembe çiçekli
Sedum spurium "Atropurpureum"	Crassulaceae	10-12 pembe çiçekli
Sempervivum tectorum "Atropurpureum"	Crassulaceae	10-12 kırmızı çiçekli