

# Interpretive Narrative as Manifestation of a Historic Setting

Case Study: The Historic City of Bam in Iran

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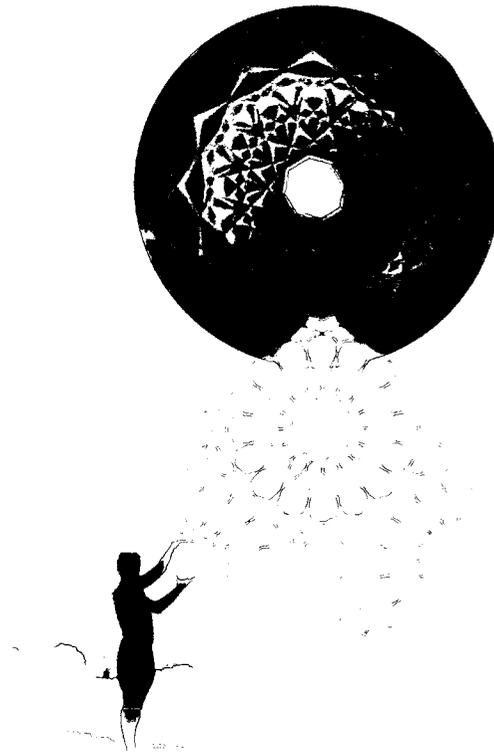
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# Frontispiece



## Acknowledgment

I would like to thank my advisor, Greg Andonian for his positive attitude and effective guidance. This thesis would not have been possible without his generous help and valuable criticism.

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Thank You

Mitsa Montaser Koohsari  
September 2010

## Abstract

This thesis emerged as a response to the earthquake, occurred in south-east Iran in 2003, which turned the ancient citadel of Bam (*Arg-e Bam*) into rubbles. The post disaster reconstruction attempts to replicate *Arg-e Bam's* original setting in order to regain its iconic past. It is argued that this form of revoking the memory of the city is inauthentic. The question of authenticity is addressed and the issue of continuity with the citadel's spiritual past is established by an alternative approach in retrieving the identity of the historic monument, avoiding a replication of its traditional forms. Rather, it explores the idea of the ruined historic urban remnants and argues for an effective architectural expression that can be attained in using an interpretive narrative, thereby determining whether the memory of a historic place can be *reconstructed* through poetic readings of a place. Here, the poetic understanding of a built setting is used to unravel the intangible ingredients that contribute to the characterization of a place, such as social and cultural attributes, cosmological beliefs, myths and rituals. The design portion of this thesis proposes an on-site memorial center that incorporates both the physical and metaphorical ideas of this ruined historical site. The literary sources, such as stories of *Shahnameh* (The Book of Kings) and *Haft Peykar* (The Seven Beauties), are used as metaphors to represent *Arg-e Bam's* symbolic essence. This thesis envisages whether a programmatic narrative embodied in an architectural design of a memorial building center could be contributing toward the revival of its story. What genuine role a reflective architecture can play in keeping the memory alive and bringing contemporary meaning to this destroyed fortress.

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## Introduction

The city of Bam in the south-east of Iran was struck by an earthquake in 2003. This disaster resulted in eighty percent destruction, which included the historic fortress known as *Arg-e Bam* (The Castle of Bam).<sup>1</sup> This ancient adobe complex was considered an iconic architectural feature of Bam and had significant heritage value among the Iranian society. Indeed, the loss of this historic place was considered a national tragedy. This city is currently dealing with a shift in perception and physical identity since it is under rapid changes due to insensitive reconstructive efforts.

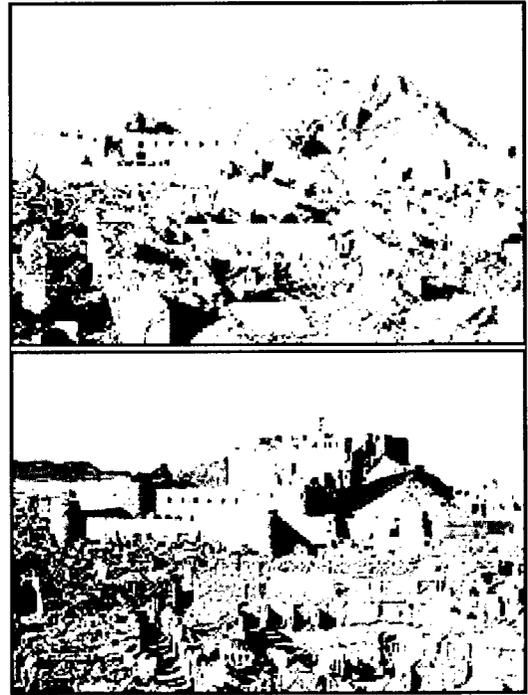


Figure 1. This image is a comparative photo of *Arg-e Bam* before and after the earthquake. This image testifies to the severity of the damages resulting from this natural disaster. [www.eartharchitecture.org]

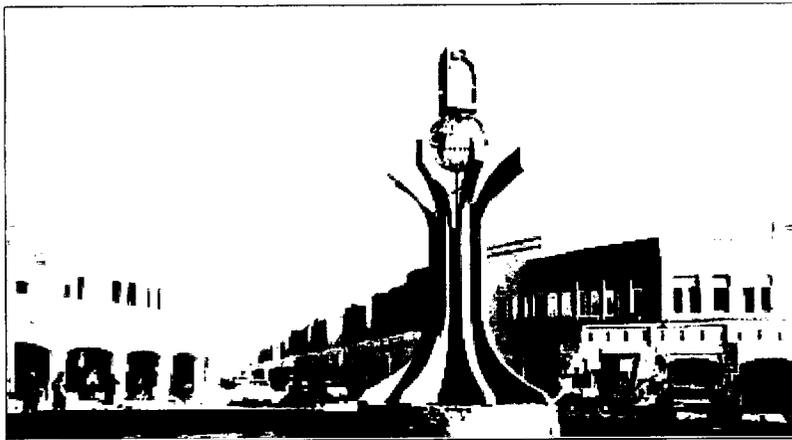
These new developments seem to be masking the disaster and have failed to celebrate and respect Bam's rich history. Traditional architecture is now being replaced with a neo-traditional configuration in which conventional functionality has become more significant than the historic content. This is contrary to satisfaction of the desire for an architecture that connects to this city's iconic identity. Figures 2, 3 and 4 are examples of redevelopments outside of the fortress.

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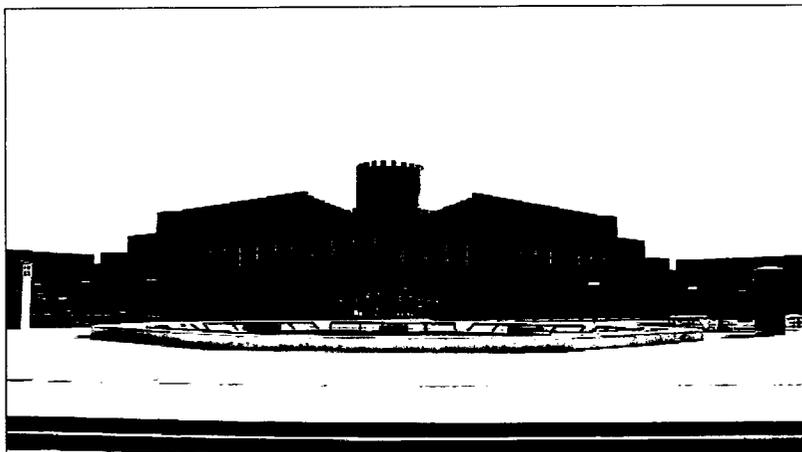
<sup>1</sup> *Arg* means castle in Persian language. Due to the distinctive and memorable look of the castle, which formed the highest point of the fortress, the entire citadel was referred to as *Arg-e Bam* (The Castle of Bam).



**Figure 2. Bam's New Bazaar**  
[www.payvand.com]



**Figure 3. Bam's New Bazaar**  
[www.payvand.com]



**Figure 4. Bam's New Government Complex**  
[www.payvand.com]

Based on this scenario, this thesis explores a process for retrieving the identity of ruined historic urban remnants without mimicking or replicating their traditional forms and settings. Rather, it explores whether the memory of a historic place can be *reconstructed* through a programmatic narrative and based on poetic readings of a place.

The poetic reading of the human environment may incorporate the identification of intangible ingredients that contribute to the way a certain place is conceptualized and eventually materialized in a built form. This process may begin with the understanding of how the poetic virtues of a collective mind, such as their social and cultural attributes, cosmological beliefs, myths and rituals are articulated in a particular built environment. The idea is to grasp and draw aspects that can establish continuity with *Arg-e Bam's* spiritual past and can open new channels of communication between past, present and future.

Therefore, this thesis examines the architectural settings from an anthropological lens and attempts to focus on the mutual relationship between the inhabitant's imagination and the character of the place. This idea challenges the instrumental reasoning in architecture and suggests that architecture can be a medium for expressing human emotions. Indeed, architecture can be defined as a narrative of, or a dialogue with, the making of a place where the architect attempts to unravel the various layers of history in order to revoke its memory.

This thesis is composed of three parts. Part one is dedicated to the poetic analysis of *Arg-e Bam* and speculates the influence of myths and cosmologies of *Zoroastrianism* and *Sufism* on its urban morphology.<sup>2</sup> This section also searches for a deeper metaphoric meaning of spaces within the citadel, such as the idea of ‘castles’ and ‘gardens’, in the tenth and twelfth century Persian literature masterpieces of *Shahnameh* (The Book of Kings) by *Ferdowsi* and *Haft Peykar* (The Seven Beauties) by *Nezami*.

Part two discusses the instrumental and allegorical capacities of architecture as a tool for story telling. This section focuses on architectural precedents executed by architects such as Le Corbusier, Carlo Scarpa and Daniel Libeskind and shows how each architect transcends architecture beyond its practical means in order to connect to one’s spiritual and nostalgic state of mind.

The final part of this thesis covers the design proposal for an on-site memorial center in tribute to Bam’s destroyed fortress. It attempts to celebrate and validate the history of *Arg-e Bam* by expressing the physical attributes of this historic citadel as an iconic space for Iranians, as well as the poetic virtues that influenced the formation of its setting.

Therefore, the design of the memorial building attempts to reflect the physical aspects of *Arg-e Bam* by drawing certain elements from its specific spatial characteristics, such as the *Sharistan* (common area), the *Quarkhaneh* (military section), and the *Arg* (castle). Moreover, the tale of *Haft Peykar* is employed as a metaphor to

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<sup>2</sup> Here ‘cosmology’ is defined as the study and understanding of the universe through religion and esotericism.

reflect the spiritual dimension of *Arg-e Bam*. This tale articulates metaphoric meanings of the prominent spaces within the citadel. They refer to the ideas of 'gardens' and 'castles', and reflect on the collective virtues of Bam's inhabitants, derived from *Zoroastrian* and *Sufi* cosmology. The design idea is to stimulate mnemonic senses in the visitors' mind by unfolding the different moments inspired by the seven tales of *Haft Peykar*.

# I

The Poetic Reading of a Place  
Case Study: *Arg-e Bam* (The Citadel of Bam)

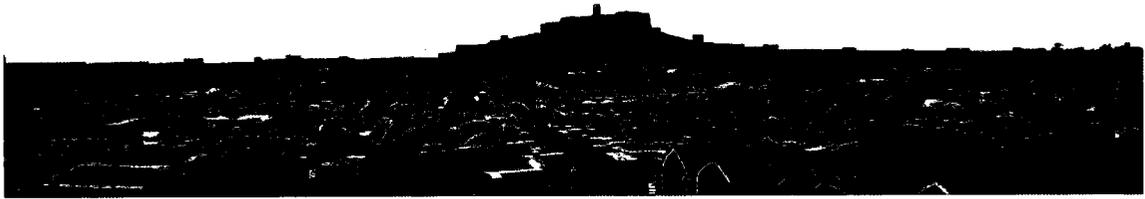


Figure 5. Panoramic view of *Arg-e Bam* prior to the earthquake.  
[[www.isaru.com](http://www.isaru.com)]

### 1.1 *Arg-e Bam* (The Citadel of Bam)

The most predominant architectural feature of the Province of Kerman in Iran was *Arg-e Bam* (The Citadel of Bam). This architectural monument was recognized as the world's largest Adobe complex,<sup>3</sup> had an area of approximately 180,000 square meters and was defined by a thick continuing wall that was 6-7 meters high and 1815 meters long. A ditch surrounded the entire fortress and a mobile bridge was its point of connection to the larger context.

One can argue that the physical presence of this fortress carried significant attributes. It displayed the imprints of continuous years of dramatic historical events from its foundation up until its abandonment, characterized all the aspects of traditional Persian cities and symbolized Iranian civilization and identity. One can say that the tectonics of *Arg-e Bam* expressed inner meanings of the Persian culture rooted in their myths, metaphors, and cosmologies. These aspects will be discussed in more detail throughout part one of this thesis.

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<sup>3</sup> Lucia Iglesias Kuntz. "UNESCO in action: culture Iran: Glimmers of hope in Bam" UNESCO [http://portal.unesco.org/en/ev.phpURL\\_ID=21184&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/en/ev.phpURL_ID=21184&URL_DO=DO_TOPIC&URL_SECTION=201.html) (accessed 15 April 2010).

### 1.1.1 Geographical Location of Bam

City of Bam is located in the south-east corner of the Province of Kerman, where the high central plateau resolves into the lower grounds of its neighbor province, Sistan and Baluchistan. Bam is surrounded by two major deserts of Lut and Namak, along with five other major cities named Kerman, Mahan, Abrik, Rayan and *Daarzin*. The remains of the historic citadel are located in the north-eastern part of the city. This city is bounded with extensive groves of pistachio and date palms, which produce Iran's most famous culinary nuts and fruits.



Figure 6. The larger dot locates the city of Bam on the map of Iran.



Figure 7. The box locates *Arg-e Bam* on the aerial photo of the city of Bam.

### 1.1.2 Historical Background

The earliest sources of Bam are based on the legendary stories. This thesis refers to the tale of *Bahman* and *Haftvad* from the *Shahnameh* (The Book of Kings), since they consist of the clearest sources in regards to Bam's history.<sup>4</sup> These fables describe historical figures such as *Bahman* (464-424 BC) who was an *Achamenid* King and *Ardeshir-e Papakan* (224-241 CE), the founder of *Sassanid* Empire.<sup>5</sup>

Based on *Shahnameh*, *Bahman* was the son of *Isfandiar*, the ruler of *Touran* (land of the Turks). *Isfandiar* is best known for his tragic combat with *Rostam*, the mightiest warrior in *Shahnameh* and the ruler of *Sistan* (currently known as the Province of *Sistan* and *Baluchistan*). After defeating *Isfandiar*, *Rostam* put *Bahman* under his care until he

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<sup>4</sup> *Haft* is a Persian term for number seven and *Vad* for son. The term *Haftvad* referred to whoever had seven sons in a row from one wife.

<sup>5</sup> The *Achaemenid* Empire was established by *Cyrus the Great*, who became the King of *Persia* in 559 BC. The *Sassanid* Empire was the last great pre-Islamic Persian Empire which ruled from (224 – 651 CE). The *Sassanid* period witnessed the high achievements of Persian civilization. However, the invasion of *Arabs* resulted in massive destruction of cities and gardens and also the academy of *Gundishapur* and its library.

himself was killed. *Bahman* returned home following this tragedy and took over the power in *Touran*. Then he decided to avenge his father's death by attacking *Sistan* and killing *Rostam's* son (*Faramarz*).

Eventually, the two great armies of *Faramarz* and *Bahman* met in a battle. However, a tornado swirled in the direction of *Faramarz's* battalions and led to the defeat of his army. Thus, *Bahman* ordered his men to hang *Faramarz*. The place where he was hanged founded the city of *Daarzin* and *Bahman* established the citadel of Bam after himself in order to commemorate his victory.<sup>6</sup> The city was under the control of *Daara* (*Bahman's* son) until the citadel was invaded by Alexander the Great's army. Alexander's Macedonian remnants established the *Seleucid* dynasty (312-247 BC), which ruled for more than one hundred years, in Persia's eastern plateau including Bam.

The other rulers of Kerman were unknown during the *Seleucid* and *Parthian* (247 BC– 226 CE) dynasties, except for *Belash-e Ashkani* (the last *Parthian* ruler) who was killed by *Ardeshir-e Papakan*. While *Ardeshir* was extending his authorities in India, he heard that the Province of Kerman was taken over by a rebel named *Haftvad*. Therefore, he decided to form an army to fight against him, but this resulted in failure.

*Haftvad* was originally a poor man with seven sons and one daughter. Besides farming, the source of income for families in this town came from women weaving outside of the city walls (Figure 8). The daughter of *Haftvad*, who was among the weavers, found a worm in an apple, which she took as a good omen and decided to keep it. From that moment, she was able to weave faster and make more money.

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<sup>6</sup> The word *Daarzin* is derived from the Persian term *Daar*, meaning the hanging pole that is used for execution and Bam is an abbreviation of the name *Bahman*.



Figure 8. 17<sup>th</sup> Century Persian miniature depicting the story of *Haftvad* from *Shahnameh*.  
[<http://www.persia.org/Images/Shahnameh/shahnameh.html>]

As a result of the good fortune that was brought by the worm, *Haftvad*'s family became rich and powerful to the point that they overthrew the ruler, took over the entire Province and rebelled against *Ardeshir*. Meanwhile, the daughter of the family cared for the worm until it grew into a dragon and became the main guardian of the citadel.

*Ardeshir*, who was unable to defeat *Haftvad* through a battle, decided to disguise himself as a merchant in order to infiltrate the fortress. Through this act of trickery, he was able to kill the rebel and the magical dragon. After his triumph, *Ardeshir* destroyed the fortress and built a fire temple instead,<sup>7</sup> which it is believed, was transformed into the main observation tower and the *Chaharfasl* area (the seat of the governor) in the Islamic period.

More precise references to the history of the city were available after the collapse of *Sassanid* Empire in the seventh century due to the invasion by Arab Muslims. The strategic location of Bam on the path of the Silk Road provided routes for the import and export of goods from Khurasan (a Province in north-east of Iran), Iraq and Egypt. This fact contributed to the advancement and prosperity of the city after the Arabs'

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<sup>7</sup> Fire temple is a place of worship for *Zoroastrians*.

conquest. Bam's glorious days are known to be from the seventh to eleventh centuries. Bam declined in importance following an invasion by Afghans in 1722, which was followed by other invaders from the region of Shiraz (a major city in the south of Iran) in 1810.

In the second half of the nineteenth century, the historic citadel was gradually evacuated and the city of Bam started to expand outside of the fortress. The citadel was used as a military camp until 1932, after which it was completely abandoned. Indeed, this historic site remained an outstanding and well preserved architectural monument until the 2003 earthquake.

## 1.2 A New Window onto the Built World

Pondering upon the epic stories that reflect both the historical and legendary origins of *Arg-e Bam*, opens a new window onto how one views the initiation and establishment of the built world. In the tale of *Bahman* and *Haftvad*, the establishment of cities is perceived as a way of commemorating important historical events as opposed to viewing it as a practical setting for human shelter and survival. For instance, *Daarzin* (*Daar* refers to the hanging pole) was established to commemorate the execution of *Faramarz* and Bam (an abbreviation for the name *Bahman*) refers to the celebration of the victory of *Bahman*. One can argue that creating citadels was an attempt to establish continuity, thereby providing the means of interpretation for the future generations.

Arguably, over the years, the significance of Bam's fortress grew beyond a memorial for *Bahman's* victory over *Faramarz*. It can be said that the physical presence of *Arg-e Bam* expressed cosmological and mythical perceptions of Bam's inhabitants. Therefore, this thesis speculates the role of cosmology in the conception of the citadel and its prominent spaces, such as the castle, and various places for worship and performances of ritualistic events. To better discuss the basis of this idea, brief descriptions of Bam's most practiced religions, such as *Zoroastrianism* and *Sufism* are provided in this thesis (Sections 1.2.1 and 1.2.2).

### 1.2.1 Zoroastrianism

*Zoroastrianism* is an ancient *Aryan* religion that was established by Prophet *Zoroaster* more than 2500 years ago in the north-east of Iran.<sup>8</sup> *Zoroastrianism* served as

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<sup>8</sup> Etymology of the word *Aryan* is derived from the *Sanskrit* word *Arya* and it refers to the Indo-Europeans who lived on the Persian plateau. Iran means the land of the *Aryans*.

the state religion in Iran for many centuries, more significantly during the *Sassanid* period before it was gradually marginalized by Islam starting in the seventh century.

According to *Zoroastrian* cosmology, the universe is based on two forces, including *Ahura Mazda* (good) that resides in the eternal light, and *Ahriman* (evil) that resides in the darkness. Earth, waters, sky, animals, plants, justice, honesty, peace, health, beauty, joy and wisdom belongs to the *Ahura Mazda* and all that threatens life and creates disorder belongs to *Ahriman*. *Zoroastrians* believe in the concept of the six archangels as the protectors of creation, which are unified by the light of *Ahura Mazda*.

The sextet archangels, along with *Ahura Mazda*, comprise the Seven Supreme Spiritual Beings.<sup>9</sup> Thus, in *Zoroastrian* cosmology, number seven is regarded as a symbolic number that not only represents the Seven Supreme Beings, but also refers to the idea of *Haft Keshvar* (The Seven Climes). *Zoroastrians* divided the universe into seven imaginary regions, with Persia in the middle, guided by the light of *Ahura Mazda* and surrounded by six other nations of India, Rum (land of the Greeks), *Kharizm* (land of the Arabs), *Maghreb* (land of the North Africans), *Saqaliba* (land of the Slavs) and China.

According to *Avesta* (*Zoroastrian's* Holy Book) the light of *Ahura Mazda* is reflected through the primordial elements of both fire and water.<sup>10</sup> Based on this doctrine, water is originated from fire and both elements are considered agents of purity. The concept of water as a metaphor for light existed among the Persians before the emergence of *Zoroastrianism*. This notion is rooted in the myth of *Anahita* (The Persian's Water

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<sup>9</sup> The six Supreme Beings are: 1. Vohu Manah (excellent thought) protects the animals, 2. Arta Vahishta (perfect existence) protects the fire, 3. Xshathra Varia (desirable reign) protects the metals, 4. Spenta Armaiti (image of wisdom) protects the earth, 5. Haaravatat (integrity) protects the water, 6. Ametrat (immortality) protects the plants. The Six Supreme Beings are unified by the seventh Supreme Spiritual being, *Ahura Mazda* (the God of wisdom).

<sup>10</sup> The *Avesta* is the primary collection of sacred texts of Zoroastrianism, composed in the *Avestan* language.

Goddess) who was worshiped by the Persians before converting to *Zoroastrianism*. *Anahita* is described as a strong woman who drives a chariot pulled by four horses, each representing wind, rain, cloud and sleet. She is regarded as “*the source of life, purifying the seed of all males and the wombs of all females, and cleansing the milk in the breasts of all mothers.*”<sup>11</sup>

The ancient Persian cities were generally built on traces of water wells where they first established a temple in the name of *Anahita*. This fact is also apparent in the case of *Arg-e Bam*, since the *Arg* (castle) is built over the water well (Section 1.3.3).<sup>12</sup> The idea that *Arg-e Bam* may have been initiated as a place of worship for *Anahita* and then gradually evolved into a grand fortress, reinforces the importance of human imagination on the conception of the built environment.

### 1.2.2 Sufism

The derivation of the word *Sufi* may have been inspired by the coarse garment of wool, known as *suf*, worn by the early Muslim ascetics. However, there are some among the *Sufis* who believe this word is too sublime to be derived from anything. Early approaches to Quranic verses led to the development of this movement through *tafsir* (analysis) and *ta'wil* (interpretations) of Islamic manuscripts from allegorical, esoteric and imaginative points of view. The underlying philosophy of this mystical tradition is to search for the obscure, hidden meaning of the Divine that cannot be merely understood through the logical and rational senses.<sup>13</sup>

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<sup>11</sup> Vesta Sarkhosh Curtis. *Persian Myths* (Bath: the Bath Press, 1993), 12.

<sup>12</sup> Rostam Mehdi-Pour. *The Arg (Castle) in Persian Art and Architecture*. (Master diss., Carleton University, 2004), 15.

<sup>13</sup> Peter J. Awn. *The Ethical Concerns of Classical Sufism*. *The Journal of Religious Ethics*, Vol. 11, No. 2 (Fall, 1983), 240-241.

The *Sufi* movement flourished in Iran in the tenth and eleventh centuries and led to formation of other schools of thoughts such as *Futtuwat* (Youth and Chivalry). This movement is based on virtues of generosity, modesty, trustworthiness, loyalty, mercifulness and piety. "*Derived from fata (young man), Futtuwat has become a symbol of rebellion against all evil and the endeavor for sincere servant hood to God.*"<sup>14</sup>

The concept of *Futtuwat* created a great social bond among the members of the Iranian society. This movement also had an immense impact on Persian philosophy, music, poetry, calligraphy, painting and architecture. In other words, art became an essential agent to transmit the *Sufi's* mystical concepts to the society.

In some instances, there is a sense of continuity between the two doctrines. For example, *Sufism* focuses on the conviction that man has been corrupted by evil. The two *Zoroastrian* cosmic forces of *Ahura Mazda* (good) and *Ahriman* (evil) reappear in the Quranic verses as angelic powers of God and Satanic powers of the lower soul. It is believed that the intimacy between the Divine and the souls of men is interrupted through the constant battle between God and the lower soul in the arena of the heart. Therefore, the goal of every Muslim mystic is to re-establish the loving union between God and man.

Furthermore, *Sufis* similar to *Zoroastrians*, regard number seven as their Divine number. There are twenty five references made to the number seven in the Quran that includes the *Mi'raj* (ascend) of the Prophet Mohammed into the seven heavens in 632 CE. This passage and experience granted Mohammed the confidence and the wisdom to

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<sup>14</sup> Gulen Fethullah. *Key concepts in the practice of Sufism: Emerald Hills of the Heart*, trans. Ali Unal. (New Jersey: Light, inc.), 81-84.

guide his followers. Due to the emphasis given to the number seven in the Quran, in Islam, this number is directly linked to the power of the Divine. One can argue that this notion is parallel to the *Zoroastrian* belief where number seven is directly associated with *Ahura Mazda*.

### 1.3 The Effect of Cosmology on the Urban Morphology of *Arg-e Bam*

It can be said that the configuration of Bam's citadel is inspired by *Zoroastrian* cosmology and the myth of *Jamshid*. *Zoroastrian* cosmology conceptualized cities to be built on the north-south axis and to be divided into three sections, including common people, military and clergy. This notion is also reflected in the legend of a mythical Persian King *Jamshid*, who ruled Persia for three hundred years under the *Pishdadian* dynasty (The Early Law Givers).<sup>15</sup> According to this myth, *Jamshid* received an order from *Ahura Mazda* to build an enclosed citadel in three sections, based on the mentioned social hierarchical manner.<sup>16</sup>

Both of these characteristics can be found in the physical arrangement of *Arg-e Bam*. The citadel was generally divided into three sections and each section was separated by the city's continuous inner walls. The arrangement of spaces within the citadel is based on a particular hierarchical order suited for three different classes of society, called the *Sharistan* (common area), the *Quarkhaneh* (military section); and the *Arg* (castle) and the *Chaharfasl* (seat of governor), which belonged to the royal family and clergy. The Castle, the major landmark of the citadel, was located on the north-south axis.

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<sup>15</sup> Based on *Zoroastrian's* scripts, the *Pishdadian* dynasty was the first kingdom established by the *Aryans* and *Jamshid* is described as having been its fourth and greatest king.

<sup>16</sup> Rostam Mehdi-Pour. *The Arg (Castle) in Persian Art and Architecture*. (Master diss., Carleton University, 2004), 31.

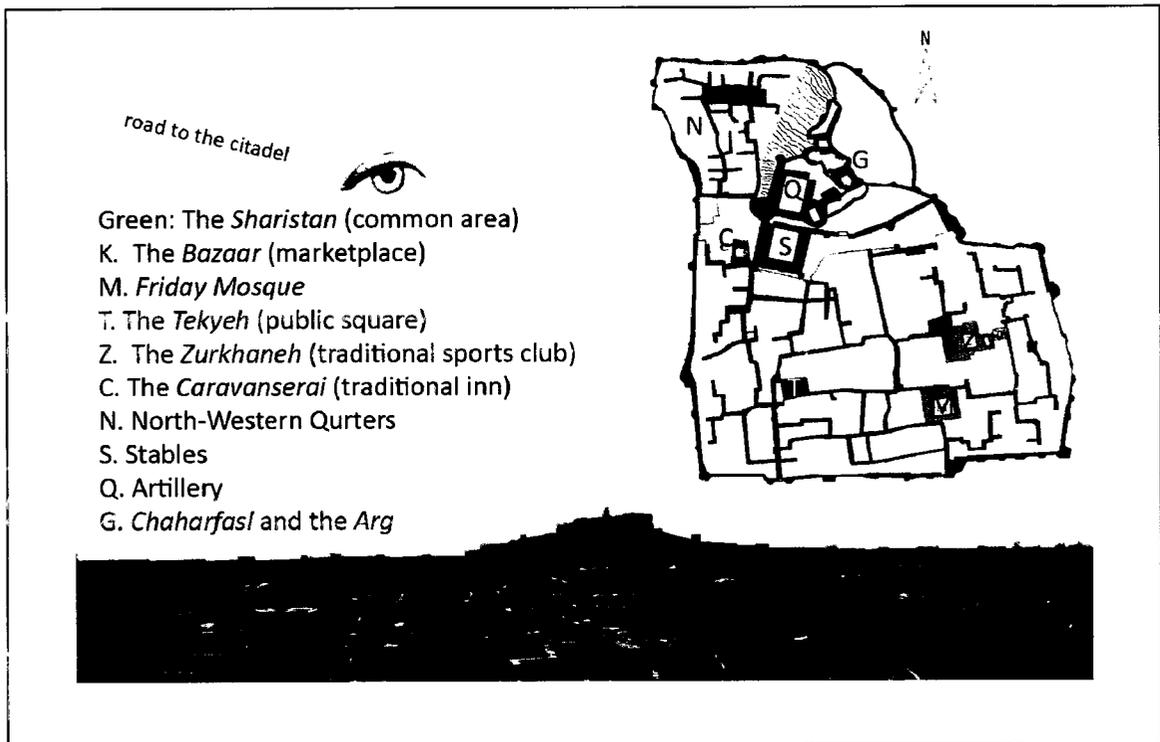


Figure 9. This image shows different sections of *Arg-e Bam* on the map of the citadel.



Figure 10. This image was taken after the earthquake by the IKONOS satellite on December 27, 2003.  
 [<http://dsr.nii.ac.jp/bam/satellite.html.en>]

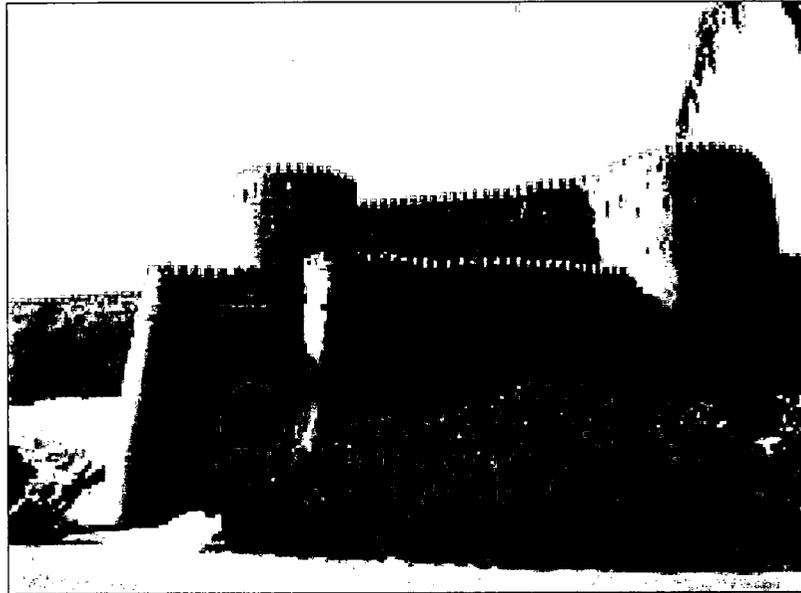


Figure 11. Pre- earthquake view of the main Gateway.  
[<http://archnet.org/library/images>]

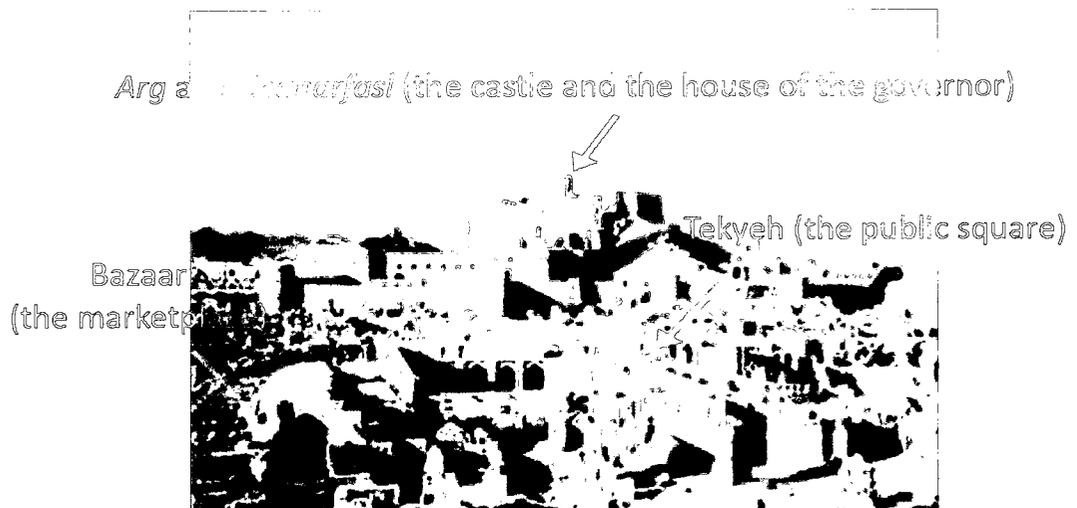


Figure 12. View of the citadel towards the north, prior to the earthquake.  
[<http://archnet.org/library/images>]

### 1.3.1 The *Sharistan* (Common Area)

The *Sharistan* (common area), located south of the Adobe complex, was the first area encountered after passing through the main gate of the citadel (Figure 11). This area consisted of both residential and important communal spaces, such as the main *Bazaar* (marketplace), the *Caravanserai* (traditional inn), the *Tekyeh* (public square), the *Zurkhane* (traditional sports club) and the Friday Mosque (Figure 9).<sup>17</sup>

The residential areas, belonging to the various social groups, was distinguishable based on the architectural evidence of the *Sharistan*. The more luxurious houses, which could have belonged to the wealthy members of society, were in the east of the citadel. These houses had multiple rooms, and two courtyards with a section for servants.

In some other residential sections of the citadel, there were houses with small rooms surrounding a single courtyard. Despite their modest configuration, these houses were still equipped with good facilities, such as *Badgir* (wind catchers) to fight the hot conditions of the desert. This area seemed to belong to members of the *Bazaar* and the trades' people.

The most humble residential area was in the north-western quarter of the citadel, separated from the rest of the common area with a wall. This area was comprised of small single room houses and narrow streets that reached an open space in the center. These houses were assumed to belong to the poor members of society.

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<sup>17</sup> Friday Mosques is a term applied to many mosques worldwide. Friday is the day for communal prayer for which all Muslims are called to pray communally for the noon time prayer.

The *Bazaar* was on the north side of the main gate. This part was characterized by shops with vaulted roofs and it is believed to have developed during the *Safavid* period (1501- 1732 CE). The *Bazaar* is considered the main artery of the Islamic cities for commerce. The *Caravanserais* were also located close to the *Bazaars* to provide accommodation and lodging for the foreign merchants. In this case, the *Caravanserai* is located in the north-western part of



Figure 13. View of the *Bazaar* (marketplace) prior to the earthquake. [<http://archnet.org/library/images>]

the *Sharistan*, next to the military area. This was possibly to have better control over the goods and supplies entering and leaving the city.

Some spaces within the citadel, such as the *Tekyeh* and the Friday Mosque, were developed in the Islamic era to fit with Islamic rituals. *Tekyeh* was the second public space from the main gate, located about 100 meters north of the main *Bazaar*. This was an open square which functioned as a gathering place for Muslims to perform their public rituals. The path from the *Tekyeh* towards the eastern direction led to the Friday Mosque. The mosque was established around the seventh century when the majority of people had converted to Islam.

The next public space was the *Zurkhaneh* on the north side of the Friday Mosque. *Zurkhaneh* (literally meaning the house of powers) is a traditional sports club which currently exists in Iran's more modern cities such as Tehran. In *Arg-e Bam*, this was originated in the pre-Islamic period and continued to evolve during the Islamic era. The interior spaces of these gymnasiums were typically a covered structure lit by a single

opening in the ceiling. At the center of the structure was the *quad* (a circular or octagonal pit). The main event and the champions' performances took place in this pit directly below the audience level (Figures 14 and 15). The walls and ceilings were typically decorated by frescos or pictures depicting epic stories of *Shahnameh*.

The members of this club are expected to maintain good moral and physical reputation. This gymnasium is a stage that unites the pre-Islamic physical training, such as wrestling, with the practice of *Sufi* moral virtues. The ethics of the *Zurkhaneh* are based on *Sufi* concepts such as bravery, brotherhood, and forbid any tricks that might belittle or

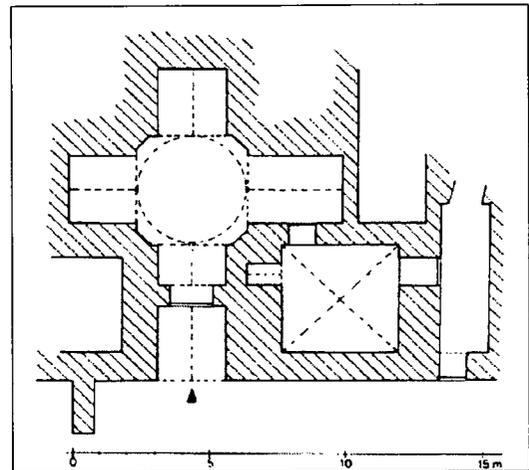


Figure 14. The plan of *Zurkhaneh* in *Arg-e Bam*. [Ahmad Noorbakhsh. *The documentation of Arg-e Bam by cultural heritage of Kerman*, 1993.]

humiliate an opponent before the audience. *Sufi* terms such as *murshed* (master), *pish kesvat* (leader), *taj* (crown) and *faqr* (poverty) are often heard in *Zurkhanehs*.

Moreover, the religious figures such as *Imam Ali* and national mythical heroes such as *Rostam* from *Shahnameh* (The Book of Kings) are considered role models for the members of this club.<sup>18</sup> The exercise and moves are carried out to the rhythm of the drum and a singer recites traditional verses inspired by the heroic tales of *Shahnameh* and *Imam Ali*.

<sup>18</sup> Shi'a Muslims regard *Imam Ali* as their first Imam (leader) and consider him and his descendants the rightful successors to Prophet Mohammed.



Figure 15. This image depicts the athletes performing their routine in a *Zurkhaneh* in the city of Yazd, Iran.  
[Unknown photographer]

### 1.3.2 The *Quarkhaneh* (Military Section)

The military section was located between the *Sharistan* (common area) and the *Arg* (castle). This area was separated from each section by continuing walls. The access to this area from the *Sharistan* was through a gate, flanked by two watch towers and featured with few rooms for the guards. The interior space of the



Figure 16. The view of *Quarkhaneh* looking south-west over the citadel. Stables (center), part of the armory (lower right), and the governor's residence (lower left). The *Caravanserai* can be seen to the right of the stable wall.  
[<http://archnet.org/library/images>]

*Quarkhaneh* characterized a generous open square with stables for animals. In the center there was a pool of water. The house of the military commander was built in the south-east area of this section. Another continuing inner wall used to start from the east side of this house, in order to separate the military area from the castle.

### 1.3.3 The *Arg* (Castle) and the *Chaharfasl* (Seat of the Governor)

The *Arg* (castle) was the most significant architectural feature of the fortress. The physical and metaphoric aspects of this area have been subject to interpretation by many Persian poets throughout history. This idea will be discussed in more detail in section 1.4 of this thesis. This area was built on the most secure place of the fortress, which was the highest elevation of a rocky hill. This part consisted of three sections: the seat of the governor known as the *Chaharfasl* (literally meaning the four seasons), the water well and watch tower.



Figure 17. The view of the watch tower in the *Arg* and *Chaharfasl* area prior to the earthquake. [<http://archnet.org/library/images>]

The residential quarters of the governor were located in a three story building. The first floor contained a few small, dark rooms. These rooms could have been used for either storage or prisons for political figures. The second floor consisted of a kitchen and room for servants, and the third floor, known as *Chaharfasl*, was the actual residence of the governor, where he received his guests.

There was evidence in the spatial arrangement in this area, which testifies that the seat of the governor and the castle were first built as a place of worship before the city was taken over by the Muslim army. For instance, the floor configuration of the seat of the governor was characterized by a square plan with four cornered rooms connected to each other by vaults (Figure 18). This plan is a typical floor arrangement of *Zoroastrian's* fire temples. Moreover, the presence of the water well in this area and the

fire altar at the top of the watch tower also reinforces the idea that the *Chaharfasl* was established as a religious temple before being transformed into the seat of the government in the Islamic era.<sup>19</sup>

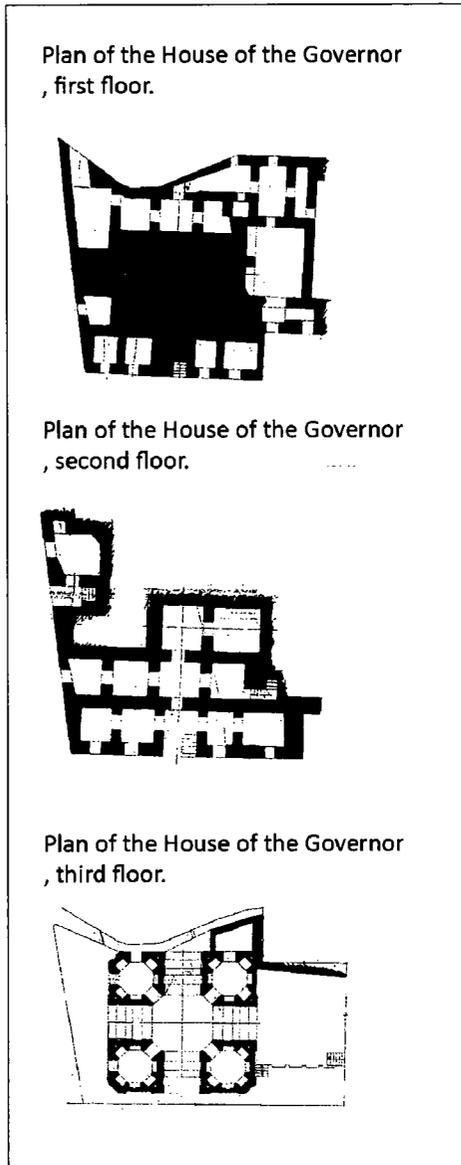


Figure 18. The floor plans of the House of the Governor in *Arg-e Bam*. The 3<sup>rd</sup> floor plan is a typical floor arrangement of *Zoroastrian's* fire temples.

[Ahmad Noorbakhsh. *The documentation of Arg-e Bam by cultural heritage of Kerman*, 1993.]

<sup>19</sup> Rostam Mehdi-Pour. *The Arg (Castle) in Persian Art and Architecture*. (Master diss., Carleton University, 2004), 37-39.

## 1.4 Metaphoric Meaning of *Arg-e Bam* in Persian Literature

Here, the idea is to understand how the symbolic notion of *Arg-e Bam* is manifested in the realm of Iranian's romantic epic stories of the tenth and twelfth centuries, such as *Shahnameh* (The Book of Kings) of *Ferdowsi* and *Nezami's Haft Peykar* (The Seven Beauties). These monumental pieces of literature are significant since they both attempt to describe the evolution of Iranian civilization, identity and culture. Furthermore, they cryptograph the allegorical meaning of important physical spaces, such as 'citadels', 'castles' and 'gardens' in Persian culture.<sup>20</sup>

*Shahnameh* focuses on *Zoroastrian* traditions and covers Persian history from the beginning, with the creation of the world, until the invasion of the Arabs. This book is *Ferdowsi's* effort to preserve the memory of Persia's golden days before it was conquered by the Arab army. On the other hand, in *Haft Peykar*, *Nezami* reflects on the traditions of the pre-Islamic and Islamic eras in the Persian culture. Despite the different theological aspects that each poet has integrated into their poetry, they both describe the idea of 'castles' as a sign of identity and trust for Iranians.

Moreover, in both works of poetry, the representation of the castle is mainly associated with the struggle between good and evil and a place where spiritual transformation takes place. Perhaps, this idea reveals the spiritual dimension of this architectural space (Section 1.4.2).

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<sup>20</sup> Here, the 'Citadel' is referred to the entire fortress and 'castles' (the seat of the governor in *Arg-e Bam*) and 'gardens' are considered spaces within *Arg-e Bam*. For more information on the critical reading of the concept of *Arg* based on Persian literary tradition and its architectural evidences refer to: Rostam Mehdi-Pour. *The Arg (Castle) in Persian Art and Architecture*. (Master diss., Carleton University, 2004).

#### 1.4.1 *Shahnameh* (The Book of Kings) by *Ferdowsi*

*Shahnameh* is completed with sixty thousand rhyming couplets and it is considered one of Iran's most important literary monuments. The last *Samanid* ruler emphasized pre-Islamic Persian culture and commissioned *Ferdowsi* to promote this idea through poetry.<sup>21</sup>

The poems in this book are composed in a heroic style and talk about the rise of great Kings, powerful heroes, battles, celebrations, rescues, romance, courtship, demons, dragons and the continuous struggle between right and wrong. In his work, this poet combines legends and historical facts relating to the four pre-Islamic dynasties, including *Pishdadian*, *Kayanian*, *Parthians*, and *Sasaninids*.

The Kings of the first two dynasties were legendary, beginning with *Gayumars* (the first King of the *Pishdadian* dynasty) who lived in the mountains and taught his subjects about the civilized arts. The third dynasty was a mixture of fact and fantasy, which began with the death of Alexander the Great (323 BC). *Shahnameh* ended with the Arab invasions and the death of the last *Sassanid* King (*Yazdigard III*) in 651 CE.

#### 1.4.2 The Concept of *Arg* (Castle) in *Shahnameh*

The story of *Haftvad* from *Shahnameh* was mentioned earlier (Section 1.1.4) in regards to the history of *Arg-e Bam*. But, the reference to castles in *Shahnameh* goes beyond this historical description. Indeed, through his poetry, *Ferdowsi* managed to demonstrate both the physical and symbolic dimensions of the castle in Persian culture.

*Ferdowsi* described the physical appearance of the citadels as majestic fortresses

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<sup>21</sup> The *Samanid* Empire (829–999 CE), was the first native dynasty established in Iran after the Muslim Arab conquest.

with beautiful gardens that were reminiscent of the Paradise, along with colorful houses and streets. As mentioned, the symbolic representation of 'castles' and 'citadels' is mainly associated with concepts such as the struggle between good and evil, man's spiritual transformation, national identity and nostalgia.

*Shahnameh's* castles were often referred to as *Dej-e Sepid* (the White Castle). Based on *Zoroastrian* cosmology, the color white symbolizes the pole star and the light of *Ahura Mazda*. In *Shahnameh*, the rulers were allocated to build a castle with fire temples to protect the light of *Ahura Mazda* (the Devine Spirit) on Earth.

There are tales in the *Shahnameh* where *Ferdowsi* talks about the idea of conquerors' spiritual transformation through a hero's journey in a fortress. This notion is embedded in the tales where the heroes are challenged to infiltrate the citadels and castles that are possessed by demons in order to establish peace and piety.<sup>22</sup> In other words, the heroes are challenged in the physical world of architecture and they gain wisdom and maturity through this process. Throughout these tales, the castle appears as a struggle between good and evil, and the citadel as a stage where a spiritual and inner transformation takes place.

Moreover, there are instances in *Shahnameh*, such as *The Story of Syavoosh*, where the poet describes the establishment of citadels to signify a sense of identity, peace, permanence and stability. *Syavoosh* was a prince whose stepmother (*Soudabeh*) falls in love with him. After being rejected by the prince, *Soudabeh* accused *Syavoosh* of raping her. The prince had to walk through fire unharmed to prove that he is innocent.<sup>23</sup>

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<sup>22</sup> Referring to the tales of '*Rostam*' and '*Rostam and Sohrab*' from *Shahnameh*.

<sup>23</sup> The ordeal of fire was determined by the *Zoroastrians* priests.

After passing through the fire unscathed, the Prince decided to join a military campaign against *Turan*, but he ended up as a refugee in the court of *Afrasyab* (the ruler of *Turan*). *Afrasyab* started to trust *Syavoosh* and provided him with land between Iran and *Turan* so he could reconstruct the image of his homeland rooted in his consciousness, while he was in exile. Thus, architecture is regarded as a nostalgic representation of one's homeland.



Figure 19. 15<sup>th</sup> century Persian miniature depicting the fire ordeal of Syavoosh.  
 [Norah M. Titley. *Persian Miniature Painting*. 70.]

### 1.4.3 The Five Books of *Nezami*

*Nezami's* tales are similar to *Ferdowsi's* mixed history and myths. He lived in Ganja during the *Saljuki* era (1140-1203 CE).<sup>24</sup> This was a period when *Sufism* started to flourish in Persia. The adaptation of *Sufi* traditions encouraged poets to become interested in developing an allegorical and esoteric language, which elevated Persian literature to a higher level of sophistication. For example, the idea of wine became a metaphor for happiness, an idol represented God's beauty, gates signified the gate of heaven, and the garden became an indication of Paradise.<sup>25</sup>

*Nezami's* five great romances and epics known as *Khamseh* (Quintet) were

<sup>24</sup>  
<sup>25</sup>

Ganja used to be part of Persia, but now is Azerbaijan's second-largest city.

These esoteric expressions have been used by various Persian poets, such as Hafiz, Rumi, Omar Khayam,

influenced by the *Sufi* movement and are known as the *Makhzan al-Asra* (Treasure House of Secrets), popular romances of *Khosrow and Shirin*, *Leila and Majnun*, *Iskandar Nameh* (Story of Alexander), and *Haft Paykar* (The Seven Beauties).

Part three of this thesis further analyzes the story of *Haft Peykar*. In this tale, *Nezami* not only cryptographs the idea of prominent Persian spaces such as ‘citadels’, ‘castles’ and ‘gardens’, but also includes complex layers of rhetorical meaning, which reconcile Iran’s both pre-Islamic (*Zoroastrian*) and Islamic (*Sufi*) traditions and virtues. Therefore, this thesis employs certain aspects of this tale to reconnect the cosmological and mythical dimension of *Arg-e Bam* with the design portion of this thesis.

# II

The Poetic Reading of Architecture

## 2.1 Architecture as an Allegorical Language

Part two sets out to investigate the relationship between the hidden characteristics of a collective mind in an architectural scale, as opposed to a larger built environment, such as *Arg-e Bam*. Therefore, this section takes the position that architecture is a legitimate language that expresses human emotions through allegory and representation. One can start by looking into *Sufi's* perception towards the concept of symbolism, since *Sufism* was one the most influential doctrines in Bam. The idea is to look for examples of architectural elements that express *Sufi* concepts, such as the idea of 'Center and the Circle', 'Vertical and Transcendent Dimension of Man', 'Breath of Compassion' and 'Earthy Paradise'. Each of these concepts will be explained in detail in section 2.3 of this thesis.

## 2.2 The Idea of Symbolism in *Sufism*

The concept of symbolism reveals an important aspect of *Sufism*. Based on *Sufi* doctrine, everything in creation is a symbol. In *Sufi: Expression of the Mystic Quest*, Laleh Bakhtiar describes *Sufism* thought in regards to this matter:

*"It is through symbols that one is awakened; it is through symbols that one is transformed; and it is through symbols that one expresses. Symbols are realities within the nature of things."*<sup>26</sup>

*"It is through seeing symbols that one continues to remember, to invoke. Each time one forgets, and is pulled back into the sea of the unconsciousness psychic forces, one must struggle again to remember; and it is only through an understanding of the*

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<sup>26</sup>

Laleh Bakhtiar. *Sufi: Expression of the Mystic Quest*, ed. Jill Purce, (London: Themes and Hudson, 1976), 25.

*symbolic that one can do so.”*<sup>27</sup>

For a better understanding of this concept, it is worth pondering upon *Sufi's* ideas regarding the 'Why' and 'How' of creation. *Sufis* believe that the drama of creation is manifested through the Divine's will to conceive possibilities within itself, and then bring them forth by expressing them through creation. According to this doctrine, the creation is the symbolic representation of the Divine. In other words, the creation is manifested in order to bring the Archetype (the original model that is reflected from the Absolute), from non- existence into existence through divine Knowledge.<sup>28</sup>

Therefore, the universe is a place of encounter between the Archetype and the phenomenal world of symbols<sup>29</sup>. And, the *Sufi* answer to the question of 'Why an Absolute and Infinite Reality expresses itself?' is 'for Knowledge of Self', or as mentioned, to explore the possibilities within itself. The 'How' of creation is justified in *Sufism* through a triplicity of 'Knower' (the Divine), 'Knowledge' (that which is possessed by the Divine), and 'Known' (the universe). This concept is explained through a simple diagram in (Figure 20).

One can argue that this triplicity is reflected in the idea of man and human creation. The Divine (the Knower) creates the world of symbols through Archetypes and man creates the built world of symbols through constructed material. The phenomenal world consists of extensions of Divine will and knowledge; and the built world is the extension of human will and imagination. The phenomenal world is a symbolic representation of the Archetype, while the built world symbolically represents human expression

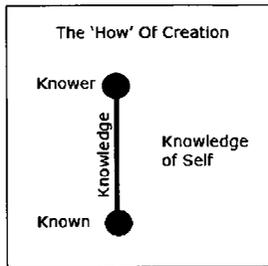
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<sup>27</sup> Laleh Bakhtiar. *Sufi: Expression of the Mystic Quest*, ed. Jill Purce, (London: Themes and Hudson, 1976), 25.

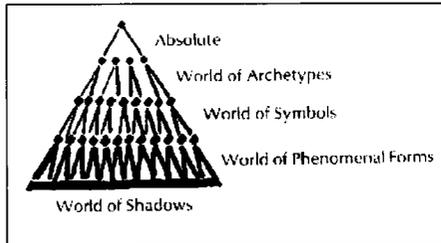
<sup>28</sup> In *Sufism* the Devine is known as the Absolute.

<sup>29</sup> In *Sufism* the phenomenal world is referred to physical world that is actually sensible. In other words, it can be grasped by the five outer senses of sight, hearing, smell, taste and touch.

including its cosmological concepts.



**Figure 20.** This diagram demonstrates the triplicity of 'Knower', 'Knowledge' and 'Known' in relation to Sufi's concept of the 'How of Creation'.  
[Laleh Bakhtiar. *Sufi: Expression of the Mystic Quest*, 12.]



**Figure 21.** According to Laleh Bakhtiar "The universe in *Sufi* terminology is often referred to as the shadow of the Absolute: something which has relative existence by virtue of being a sensible determination of an Archetype."  
[Laleh Bakhtiar. *Sufi: Expression of the Mystic Quest*, 14.]

### 2.3 *Sufi* Expressions of Metaphors in Architecture

The *Sufi* expressions in the built form created generic prototypes in various aspects of architecture and architectural ornamentation. Architectural elements, such as the dome, and the *minaret*, as well as ornamental patterns, including 'The Breath of Compassion' and the garden designs are examples of such prototypes.

In *Sufi* inspired architecture, the dome is referred to as the 'Divine Throne'. The *Sufi* concept of 'Center and the Circle' is conceptualized in the dome and is seen as the Divine Spirit which encompasses the universe. The circle provides an immediate expression for many other Quranic concepts. For example, it is seen as the first comprehensible form that symbolizes the ideas of 'unity' or 'Center and the Circumstance' (Figures 22 and 23).<sup>30</sup>

<sup>30</sup> Sammer Akkach. "Metaphysical Order" In *Cosmology and Architecture in Premodern Islam*. (Albany: State University of New York Press, 2005), 71.

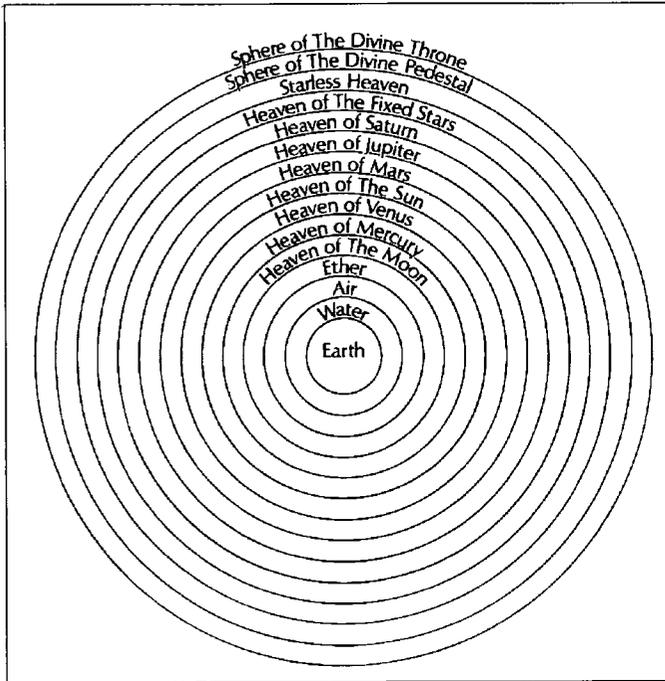


Figure 22. Diagram by Ibn Arabi (1165-1240 CE), a mystic and a philosopher from Andalusia. This diagram depicts the celestial spheres. According to this illustration the Divine throne encompasses the entire universe.  
 [Laleh Bakhtiar. *Sufi: Expression of the Mystic Quest*, 118.]

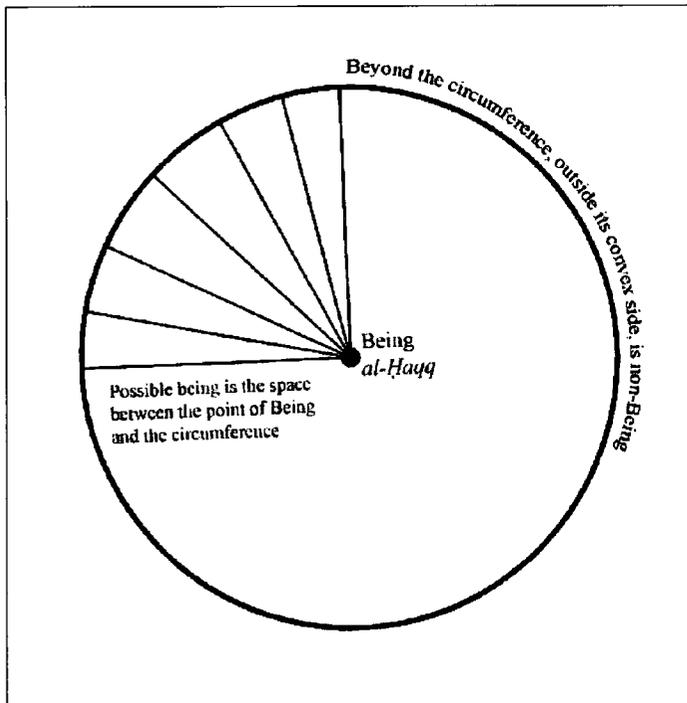


Figure 23. The Concept of 'Center and the Circumstance' refers to the Quran's verse (57:3), "he is the first and last, the outward and the inward." According to Ibn Arabi's interpretation of this verse: "the world is between the center and the circumstance: the center is the first and the circumstance is the last. He is the first of every possible being just as the point is the beginning of every line."  
 [Sammer Akkach. *Cosmology and Architecture in Premodern Islam.*, 70.]

The *minaret* reflects the vertical and transcendent dimensions of man as the only creation of God that stands upright and is eager to return to his origin. Moreover, the pair of *minaret*, which flank the dome, symbolizes the balance of creation (Figure 24).

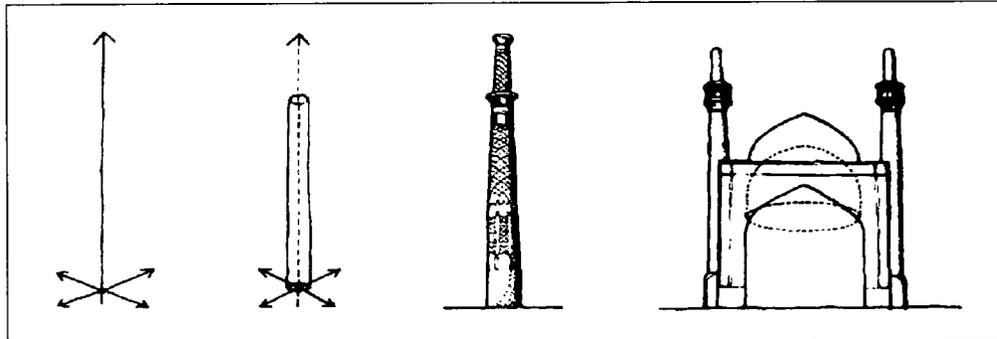


Figure 24. This diagram shows the relation between the dome and the minaret. The Dome represents the Divine throne and the *minaret* represents the man vertical and transcendental dimension. [Laleh Bakhtiar. *Sufi: Expression of the Mystic Quest*, 106.]

The 'Breath of Compassion' is a *Sufi* concept that has been expressed through architectural ornamentation. *Rahman* (Compassionate) is the highest name given for the Divine.<sup>31</sup> According to *Sufism*, the Absolute brings things into existence through exhaling upon the Archetypes. In other words, through compassion and by the means of the command 'Be!', the Absolute sends Archetypes into the phenomenal world. This idea is shown in a diagram in Figures 25, 26 and 27, which also demonstrates how this concept is expressed metaphorically in architectural ornamentation.

<sup>31</sup> Quran has 99 names for Allah (God) known as "The 99 Most Beautiful Names of God". Merciful (Ar Rahim), The King (Al Malik), Powerful (Al Gadir), and etc.

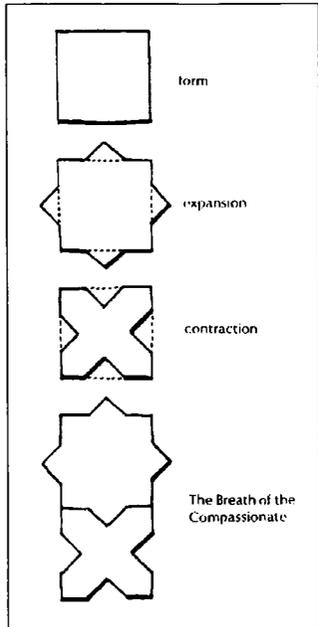


Figure 25. This diagram represents the idea of 'Breathe of Compassion' through form and geometry.  
 [Laleh Bakhtiar. *Sufi: Expression of the Mystic Quest*, 16.]

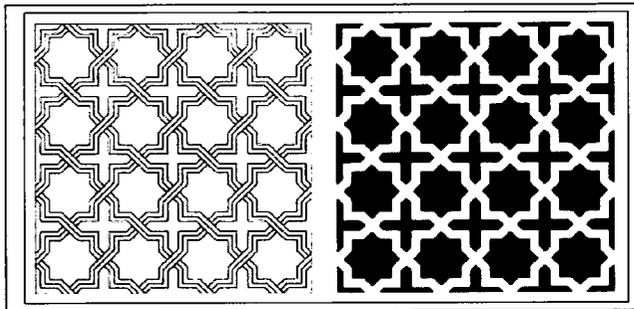


Figure 26. Popular Islamic pattern inspired by the concept of 'Breath of Compassion'.  
 [<http://www.moroccoboard.com>]

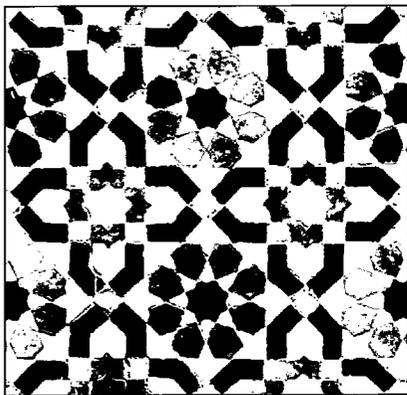


Figure 27. Popular Islamic pattern inspired by the concept of 'Breath of Compassion'.  
 [<http://www.moroccoboard.com>]

Islamic gardens are also another important architectural prototype, which expresses *Sufi* concepts, such as the idea of the 'Earthy Paradise' as a place for spiritual enlightenment. These gardens are typically conceptualized to represent the image of paradise on earth. However, this idea was established in the mind of the Persians long before the emergence of *Sufism*. The word *Ferdows* in the Persian language refers to the concepts of both paradise and garden. The fact that the Persian plateau is generally dry could have been the reason for giving gardens such a supreme value. Gardens are regarded as a symbol of life and vitality in this culture and have been greatly emphasized in its unique literature.

The classic cross plan that divides the space into four quarters with a pool in the center typically known as *Chaharbagh* (The Four Gardens) was crystallized during the Sassanid Period (Figure 28).<sup>32</sup> However, this plan became a prototype during the Islamic period as the image of an 'Earthy Paradise' representing the four spiritual gardens, which are described in the Quran (55:45-75) known as, The Garden of the Soul, The Garden of the Heart, The Garden of the Spirit, and The Garden of the Essence. These four gardens are metaphorically interpreted as the four spiritual journeys that the mystic must travel to reach the absolute truth.<sup>33</sup>

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<sup>32</sup> Donald Newton Wilber. *Persian Gardens and Garden Pavilions*. (Washington D.C: The Stinehour Press, 1979), 3.

<sup>33</sup> Laleh Bakhtiar. *Sufi: Expression of the Mystic Quest*, ed. Jill Purce, (London: Themes and Hudson, 1976), 27-30.

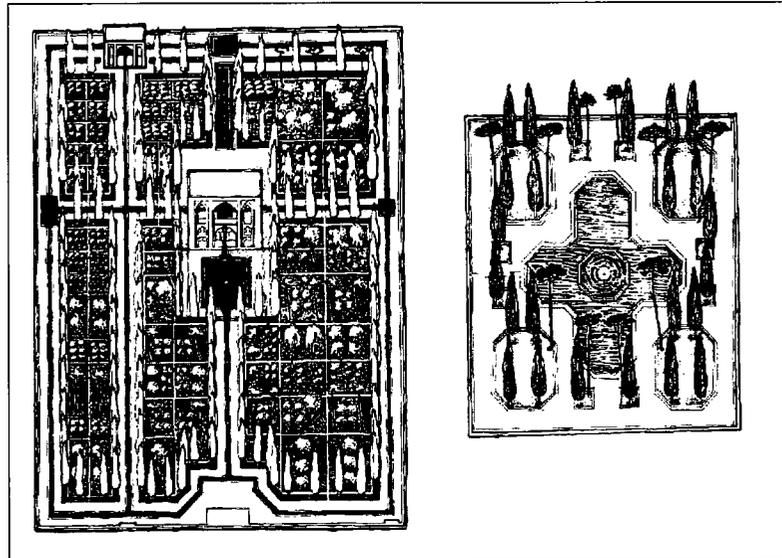


Figure 28. The classic *Chaharbagh* (The Four Gardens) Plan.  
 [Laleh Bakhtiar. *Sufi: Expression of the Mystic Quest*, 106.]

According to *Sufi* esoteric interpretations, when a mystic starts his inward journey, he encounters the gateway of the first garden (The Garden of the Soul) where he needs to gather all his inner senses in order to enter.<sup>34</sup> This is the garden where the mystic gains the *al Ilm al-yaqîn* (Knowledge of Certainty).<sup>35</sup> The next step for him is to enter the second garden (The Garden of the Heart), where he has to put all of his reasons behind. This is where he gains the *Ayn al-yaqîn* (Eye of Certainty) that directing reaches the Divine.<sup>36</sup>

After gaining the necessary tools (the Knowledge and the Eye of Certainty) the mystic moves inward into the third garden (The Garden of the Spirit). This is where he is on the verge of the union with the secret or the mystery within the Divine. However, the mystic should lose all aspects of individuality and become empty of self in order to enter the last garden to become one with the Divine. The last garden (The Garden of Essence)

<sup>34</sup> The inner senses consist of intelligence, common sense, memory and imagination.

<sup>35</sup> *Ilm al-yaqîn* (knowledge of certainty) means that Certainty of God's presence is the result of knowledge.

<sup>36</sup> *Ayn al-yaqîn* (Eye of Certainty) means Certainty is a consequence of contemplation and vision.

is where the mystic finds the water fountain, reaches his goal and finds the Truth. Water represents pure light and the knowledge of the Unity of Being.<sup>37</sup> The idea of *Chaharbagh* (The Four Gardens) is also reflected in other forms of *Sufi* artistic expression, such as carpet design (Figure 29), and Persian poetry by poets such as *Nezami*, *Hafiz* and *Rumi*.

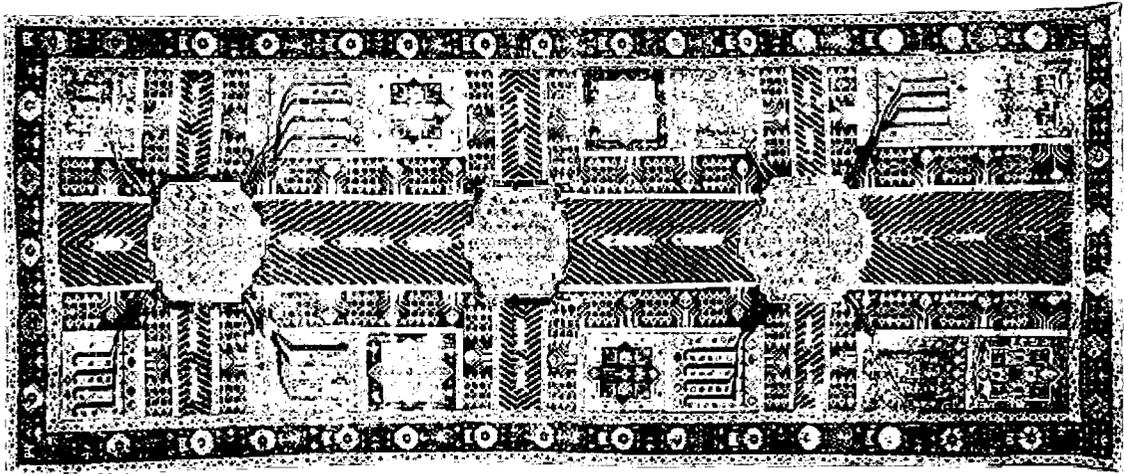


Figure 29. Persian Carpet. The design of this carpet represents the idea of *Chaharbagh* (The Four Gardens).  
[<http://www.gardenvisit.com>]

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<sup>37</sup> The notion of *Wahdat al-Wajud* (the Unity of Being) is derived from *Sufism* and emphasizes on the idea that there is no true existence except the Ultimate Truth (God). In other words, the only truth within the universe is God, and that all things exist within God only.

## **2.4 Contemporary Expressions of Metaphors in Architecture**

The study of the relationship between rhetorical meanings derived from mythical and theological concepts and the built form can also be seen in more recent architectural precedents. Hence, this thesis will continue its speculation in examples by Carlo Scarpa, Le Corbusier, and Daniel Libeskind. It is argued how each designer transcends architecture beyond its pragmatic aspects to the realms of metaphor, narrative and pedagogy.

This notion allows architecture to be seen as a perceptual device for an intellectual exercise that confronts both the architect and the person who experiences the particular spatial setup. Moreover, it adds a communicative dimension to architecture that is cinematic in its own right, since it engages the visitors on visual, mental and emotional levels. This concept reinforces the idea that the memory of Bam can be reconstructed through interpretive narrative expressed by the medium of architecture.

### **2.4.1 Le Corbusier: The Chapel at Ronchamp**

This part explores the link between Le Corbusier's interpretations of Christian concepts and his design for the chapel at Ronchamp in France. Here, the process by which Le Corbusier employed architecture to bring contemporary meaning to the traditional idea of a chapel will be examined. This aspect is significant since this thesis's intention is to create a contemporary architectural expression that reflects the cosmological virtues that influenced and governed *Bam's* inhabitants.

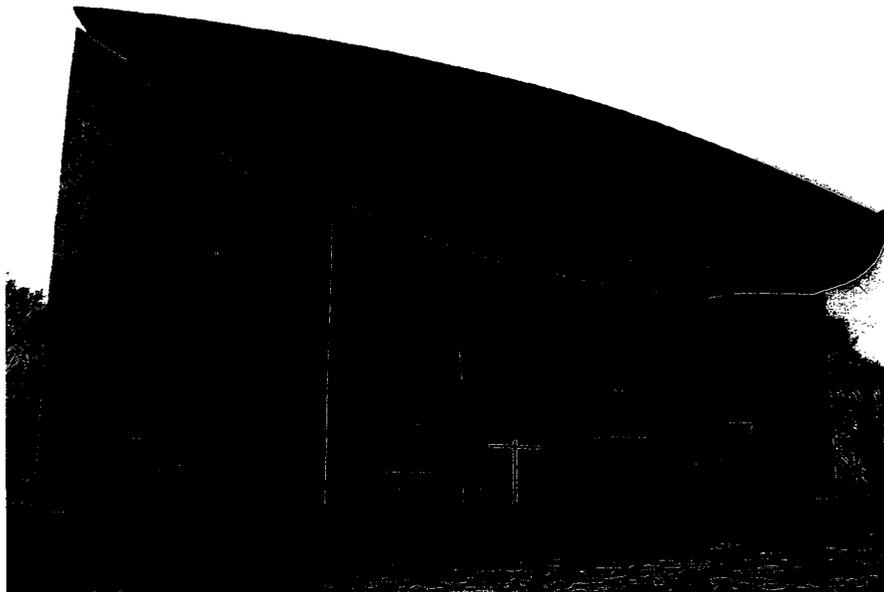


Figure 30. The Chapel at Ronchamp. South Facade.  
[Photographed by the Author]

It can be said that the design of this chapel reflects the interplay of Christian concepts and Le Corbusier's personal cosmological viewpoint. This notion is argued by Flora Samuel in her text entitled "*The Representation of Mary in the Architecture of Le Corbusier's Chapel at Ronchamp*".<sup>38</sup> Samuel states that, aside from the unorthodox form of the chapel, the building represents Le Corbusier's interpretation of the role of women in the twentieth century in relation to the iconic figure of the Virgin Mary. Indeed, Le Corbusier tried to stress the importance of 'feminine values' through the representation of Mary. Thus, the architecture draws a connection between biblical female figures and contemporary women, thereby viewing them as reenactments of the same ancient stories.

The chapel is characterized by three towers connected by a huge curved roof at the top of a hill. It can be argued that the three towers are reminiscent of three women,

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<sup>38</sup> Flora Samuel. *The Representation of Mary in the Architecture of Le Corbusier's Chapel at Ronchamp*: Church History, Vol. 68, No. 2 (Jun., 1999), 398-416.

whose hair is covered, similar to how the image of Mary is depicted in Christian iconography (Figure 31). Samuel asserts that the chapel expresses three sides of an eternal femininity simultaneously as a virgin, mother and lover. This idea is reinforced by referring to the personal associations that Le Corbusier brought to the towers by naming them after the Virgin Mary, his mother and his wife.

Furthermore, the author talks about how Le Corbusier treated the chapel as a vessel for spiritual transformation. Arguably, this idea is in line with *Nezami* and *Ferdowsi's* concept of architecture as a space for a hero's journey into spiritual

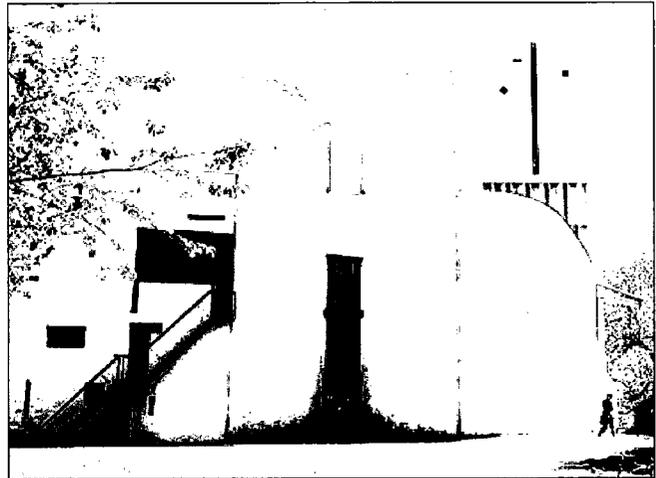


Figure 31. Chapel at Ronchamp. North Façade.  
[[www.galinsky.com/buildings/ronchamp/](http://www.galinsky.com/buildings/ronchamp/)]

transformation, which was brought up in first part of the thesis (section 1.4.2). According to Le Corbusier, "*Architecture is like a vase. It does not show off-it is from the interior that it lives. It is in the interior that the essential takes place.*"<sup>39</sup>

It is argued that the curved wall of the chapel suggests the form of a pregnant woman. In other words, the shape of the chapel is an abstracted figure of the Virgin Mary, reflecting the idea of "*Like Jesus we enter her womb, we participate in the divine, and we are transformed.*"<sup>40</sup> He also carried out his 'uterian imagery' by guiding the water off the roof, through a gargoyle that is formed like a pair of breasts and down into a womb-like cistern (Figures 32 and 34).

<sup>39</sup> Flora Samuel. *The Representation of Mary in the Architecture of Le Corbusier's Chapel at Ronchamp*: Church History, Vol. 68, No. 2 (Jun., 1999), 411.

<sup>40</sup> Flora Samuel. *Ibid*, 410.

Samuel described Le Corbusier's design as the physical translation of particular Christian textual descriptions. For example, she suggests that the mystical lighting of the chapel is inspired by the Teilhard term that draws a "*link between light, sound, erotic and spiritual revelation*" (Figure 33).<sup>41</sup>

Furthermore, she argues that the design of Ronchamp's chapel carries meanings associated with the medieval poetries inspired by *Gregory of Nyssa's* (a Christian Bishop and Saint) idea "*that Mary conceived Jesus on hearing the words of the angel*".<sup>42</sup> This idea, interpreted as "*the Virgin was impregnated through her ear*", is reflected in the ear-like shape of the tower on the west side.<sup>43</sup> Samuel interprets the openings between the towers on the north façade (Figure 31), as the ear and the vagina carrying both spiritual and erotic connotation, suggesting that "*God in the form of light enters Mary's body*".<sup>44</sup>

Based on this investigation, one can understand that the design of this chapel is the result of Le Corbusier's interpretation of different Christian cultural productions, such as iconography and literature. Le Corbusier has based his interpretations on the idea of the Virgin Mary and her representations in the Christian iconography in addition to the literary sources by Teilhard and the medieval poetries inspired by *Gregory of Nyssa*. Specific aspects derived from each of these sources are either translated into architectural forms or reflected in the spatial quality of this building, which attempts to create a visual and emotional bond between the visitors and the building.

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<sup>41</sup> Teilhard was a French philosopher who based on Flora Samuel's text "*The Representation of Mary in the Architecture of Le Corbusier's Chapel at Ronchamp*" was greatly admired by Le Corbusier.

<sup>42</sup> Flora Samuel. *The Representation of Mary in the Architecture of Le Corbusier's Chapel at Ronchamp: Church History*, Vol. 68, No. 2 (Jun., 1999), 412.

<sup>43</sup> Flora Samuel. *Ibid*, 412.

<sup>44</sup> Flora Samuel. *Ibid*, 412.

Le Corbusier's personal view point on the role of contemporary women in relation to the idea of the Virgin Mary was first expressed in his paintings, such as the "Icon" (Figure 35), and the "Acoustic Forms" (Figure 36). These paintings were eventually reflected in the plan of this chapel as an abstracted form of this iconic character and infused with the traditional layout of the chapel. One can argue that Le Corbusier's idea was to bring a contemporary meaning to the traditional character of this sacred place.

The iconographic imagery of the Virgin was also translated into architectural expressions through the emergence of the three towers of this chapel. The selected aspects from the literary sources were employed by this architect as metaphors for creating more forms with symbolic connotations (referring to the form of the north façade). The chapel's mystical lighting quality was also the result of Le Corbusier's interpretation from Teilhard's text, which arguably attempts to make a connection between the symbolic idea of light and one's spiritual enlightenment.



**Figure 32. The Chapel at Ronchamp. South Façade.**  
[Photographed by the Author]



Figure 33. The Chapel at Ronchamp. Interior view of the chapel.  
[Photographed by the Author]

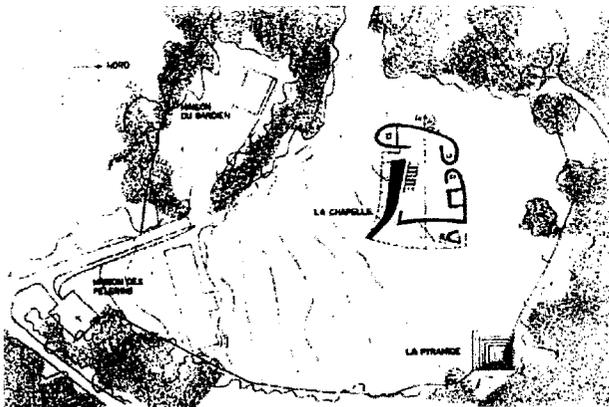


Figure 34. The Chapel at Ronchamp. Site Plan.

[Samuel, Flora. *The Representation of Mary in the Architecture of Le Corbusier's Chapel at Ronchamp*, 408.]



Figure 35. Painting by Le Corbusier entitled "Icon", depicting the abstract image of the Virgin Mary. According to Samuel, this painting seems to be reflected into the plan of the Chapel at Ronchamp.

[Samuel, Flora. *The Representation of Mary in the Architecture of Le Corbusier's Chapel at Ronchamp*, 406.]



Figure 36. Painting by Le Corbusier, entitled “Acoustic Forms”, depicting the abstract image of the Virgin Mary. According to Samuel, this painting is connected to the design of the Chapel at Ronchamp.

[Samuel, Flora. *The Representation of Mary in the Architecture of Le Corbusier's Chapel at Ronchamp*, 409.]

#### 2.4.2 Carlo Scarpa: The Brion-Vega Cemetery

This part is intended to take a closer look at Scarpa’s design for the Brion-Vega Cemetery in San Vito d’Altivole, Italy (1969). It can be said that similar to Le Corbusier, Scarpa insinuated an interpretive narrative in his architecture by virtue of metaphoric representations. Unlike Ronchamp’s Chapel, the burial does not focus on a specific religious figure or concept. But, in some instances, one discovers Scarpa’s allusions to mythical and traditional concepts in the design of this burial, such as the ideas of the *arcosolium*, *cavern*, *propylaeum* and labyrinthine.

Moreover, in Scarpa’s design, the architectural cryptography is delivered to the spectators not only through visual effects, but also by deliberate choreography of one’s movements in space. Arguably, both features can stimulate one’s inner senses of memory, emotions, as well as imagination. These observations can be clarified by examining the spatial arrangement of the cemetery.

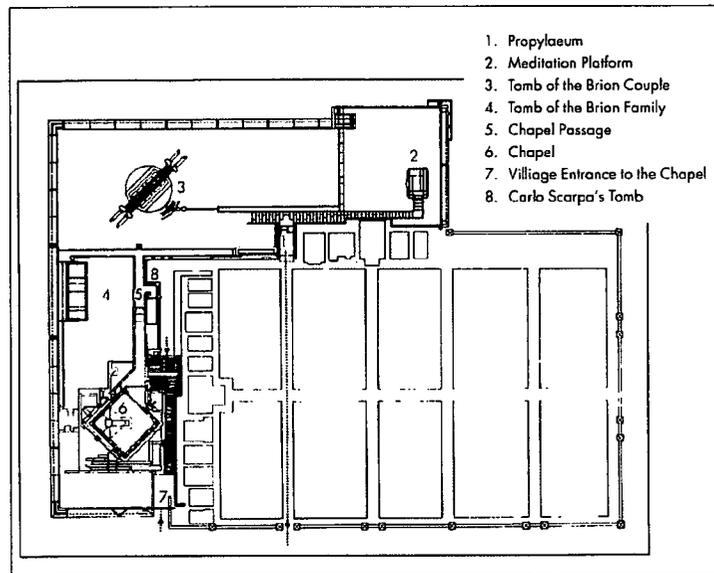


Figure 37. The area covered in green highlights the L shape plan of Brion-Vega Cemetery in San Vito d'Altivole. [[http://www.greatbuildings.com/buildings/Brion-Vega\\_Cemetery.html](http://www.greatbuildings.com/buildings/Brion-Vega_Cemetery.html)]

The plan of the Brion cemetery forms an L shape around two sides of the cemetery in San Vito d'Altivole (Figure 37). The plan includes a chapel (Figures 38 and 39), the “*arcosolium*” (the arch that covers the Brion couple’s burial) (Figure 42), and a pavilion on water (Figure 43).<sup>45</sup> A continuing wall, leaning inward, marks off the space (Figure 41). The wall seems to function as a slender line that separates the sky from the landscape. From the inside, the wall frames nothing but the sky, possibly commenting on its distant reaches. Arguably, this creates an emotional bond between the mind of the spectator and the cemetery.

There are two entrances to the Brion Cemetery, one directly from the town, and the other from the public part of the cemetery. Entering the chapel from the town, the visitors are immediately confronted with intense architectural details (Figure 39). It appears that the motifs and details of the design have established a form of optical

<sup>45</sup> *Arcosolium* is a Latin term for arch used by early Christians. In the catacombs, important personage or martyrs were buried in a more expensive manner under an arch which was referred to as “*arcosolium*”.

guide throughout space. Furthermore, they manifest themselves in the volumes where there is a need for the eye to be focused upon an allegorical fragment.

Inside the chapel there is a square-like structure, reminiscent of a cavern (Figure 38). This grotto is illuminated from above, through a narrow opening in the peak of its roof. In *Carlo Scarpa: Complete Works*, this structure is interpreted as a metaphorical representation of a cavern, thereby underlying ancient legends of western culture which suggest that “the ‘cavern’ is the mystical place from which Fountain of life springs.”<sup>46</sup>



Figure 39. The Brion Cemetery. The Chapel.  
[Photographed by the Author]

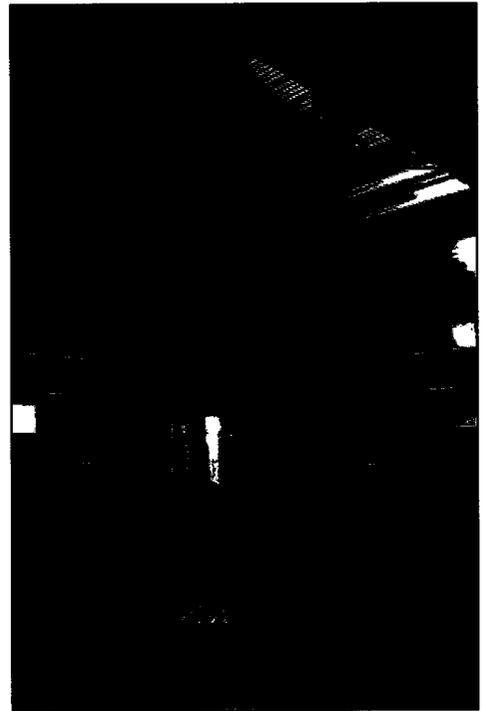


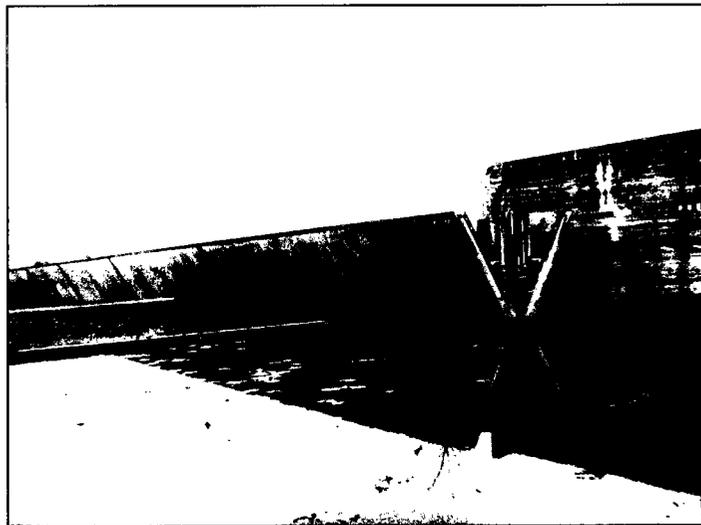
Figure 38. The Brion Cemetery. The Interior view of the chapel.  
[Photographed by the Author]

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<sup>46</sup> Francesco Dal co and Giu seppe Mazzariol. *Carlo Scarpa: The Complete works*. (New York: Rizzoli International Publication,inc, 1985), 66.



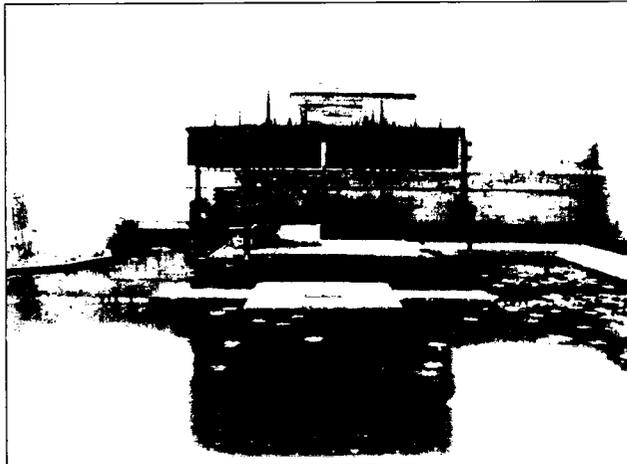
**Figure 40. The Brion Cemetery. The detailed door of the chapel, which allows access to the garden.**  
[Photographed by the Author]



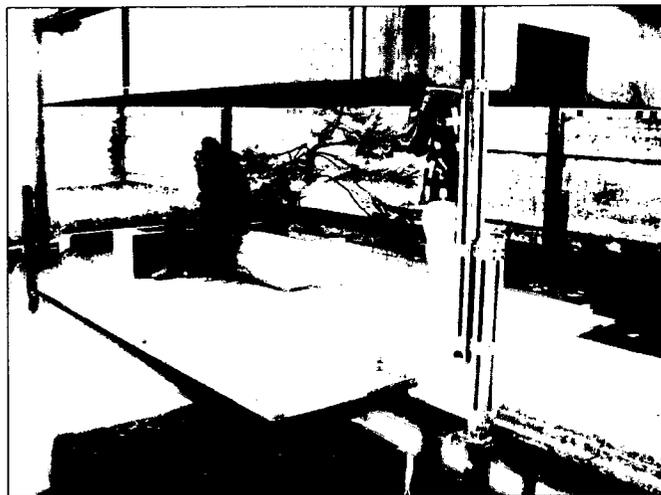
**Figure 41. The Brion Cemetery. The tilted wall of the garden.**  
[Photographed by the Author]



**Figure 42. The Brion Cemetery. The  
"arcosolium".  
[Photographed by the Author]**



**Figure 43 . The Brion Cemetery. The pavilion  
on water.  
[Photographed by the Author]**



**Figure 44. The Brion Cemetery. The  
pavilion on water.  
[Photographed by the Author]**

A highly ornamented door is set in a diagonal fashion to provide an exit from the chapel (Figure 40). This door leads out over a reflective pond and a bridge composed of slender concrete rectangular solids set half in the water. The water elements in the layout seem to unify the different architectural concepts of the cemetery.

Following the sunken path outside the chapel, one arrives at the corner of the site where the Brion couples are buried. Scarpa calls the tombs the "*arcosolium*", which refers to the catacombs where the important personages or martyrs were buried in a more expensive manner under a carved arch. *Arcosolium* meaning a "place of state" is a Latin term used by the early Christians.<sup>47</sup> Here, the arch has a metaphoric connotation, underlying the idea of "life and death" as the only two faces of a single change of state.

A gentle ramp leads up from the "*arcosolium*" to a threshold, which provides the second entrance to the private cemetery, characterized by two circles intersecting with a mosaic cornice (Figure 45). Scarpa refers to it as "*propylaeum*", thereby recalling Acropolis.<sup>48</sup> Entering from this threshold, one can see the garden.

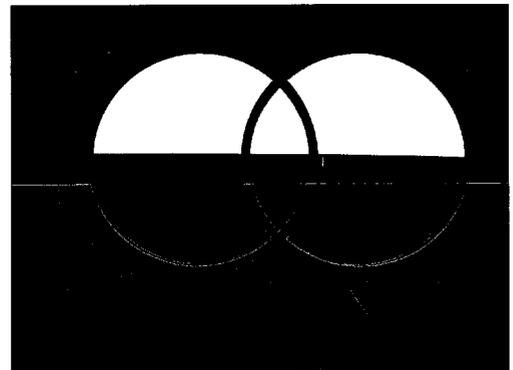


Figure 45. The Brion Cemetery. The "*propylaeum*".  
[Photographed by the Author]

<sup>47</sup> Serigo Polano . *Carlo Scarpa; An Architectural Guide*. (Venice: Arsenale editrice, 1995), 92.

<sup>48</sup> Propylaeum is any monumental gateway based on the original Propylaea that serves as the entrance to the Acropolis in Athens. The word propylaea (propylaeum is the Latin version) is the union of the prefix pro (before or in front of) plus the plural of the Greek pylon or pylaion (gate), meaning literally that which is before the gates, but the word has come to mean simply gate building.

From the "*propylaeum*", there is an unroofed catwalk that stretches into the pond with a meditation pavilion in the middle, which is made of varied materials (Figures 43 and 44). The rectangular wooden roof of the pavilion carries a slender vertical metal element that is lowered purposely to block one's view. This element forces one to sit down in order look at the view. Once one is seated, the pavilion offers an unbroken view of the burial places bounded by the long, sloping wall framing the sky. Here, the mystical quality of the setting allows one to connect once again with his inner feelings.

In the water, there is an element made of pieces of stone, which are cross shaped and seem to rest on the surface of the water. In *Carlo Scarpa: Complete Works*, this element is associated with a labyrinthine, as well as oriental art, possibly commenting on the mystery of life and death.

Through this investigation, one can argue that Scarpa incorporated an interpretive narrative in the design of the Brion Tomb to emphasis on the ideas of life and death, memory and mystery in life. These ideas are employed to articulate architectural forms derived from metaphoric meanings. They attempt to reference the design concepts based on the traditional and mythical notions, such as *arcosolium*, *cavern*, *propylaeum* and labyrinthine. The architect attempts to control the movements of the visitors to promote awareness of those metaphoric connotations.

The careful arrangement of spaces in the design of the Brion Tomb choreographs the physical engagement of the visitor in the building on an intimate level, and dictates reflective body movements. This concept can be associated to a pre-written script for the visitors to act out while wandering through the cemetery. This quality offers specific moments for the visitors to see, listen and feel certain qualities of space in order to

connect with messages that are embodied in the architecture.

### 2.4.3 Daniel Libeskind: The Berlin Jewish Museum

Daniel Libeskind's design of the Berlin Jewish Museum articulated the possibility of architecture to be materialized around the questions of narrative and metaphor. This building emerged to commemorate an event in history (the Holocaust), which had an enormous impact on the identity of the city of Berlin. This section speculates how Libeskind attempted to integrate the physical and spiritual meaning of the Holocaust into architecture.

The building is an addition to a Baroque-style Kollegienhaus (a former courthouse) built in the eighteenth century. The contemporary addition measures about 10,000 square feet and connects to the Baroque building through a criss-crossed underground channel.<sup>49</sup> The contradictory image of the old and the new building diffuses and binds together into the ground. This may contain a metaphoric meaning reflecting Libeskind's attempt to address the question of continuity from past to present.

Daniel Libeskind stated in his interview that, "*this museum should represent the future, not only the past; the beginning, not only the end.*" He also claimed that his design is a representation of emotions, which gives possibility to "*exhibit the past in the light of the future, and the future in the light of the past.*"<sup>50</sup>

The emotional dimension of the design is derived from such concepts as the distorted yellow star and the ideas of void and emptiness. According to Libeskind, the distorted star, insinuated in the plan of the museum, was the first aspect of the project

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<sup>49</sup> Daniel Libeskind. *Radix-Matrix*. (Munich ; New York : Prestel, 1997.), 34.

<sup>50</sup> Daniel Libeskind. *The Space of Encounter*. (New York: Universe Publishing, 2000), 25.

that contained two symbolic connotations (Figure 46). First, it commemorated the fact that the “Yellow Star” was frequently worn on this site, as well as being a symbolic representation of the relationship between the Germans and the Jews.<sup>51</sup>

The ideas of emptiness or void have been derived from Jewish cultural productions such as the opera of ‘Moses and Aeron’ by Arnold Schonberg and the Gedenbuch. Libeskind was emotionally moved by how Schonberg integrated the idea of the ‘absence of the words’ into his opera. In this particular piece, Moses stops singing at the end and, instead, he speaks ‘Oh word, thou word’. This reflects the idea that when there is no more singing, *“one can clearly understand the missing words uttered by Moses: the call for the words”*.<sup>52</sup>

The Gedenbuch consists of two large volumes that contain the name of the Berliners who were deported from this city, taken to the concentration camps and eventually murdered. This book is powerful in the sense that it only contains the names, birth dates, dates of deportation and presumed places where these people were murdered.

The concept of the void in the building comments upon both the absence of words in Schonberg's opera, in addition to the absence of the Jewish citizens of Berlin who were murdered during the Holocaust (Figures 48 and 49). This notion takes form in angled sequences throughout the building, arranged in a way to allow the visitor to encounter certain empty rooms that they can see, but cannot enter. In Libeskind's own words, the void is, *“a new type of organization which is organized around a center which is around what is not visible. And what is not visible is the richness of the Jewish heritage in Berlin,*

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<sup>51</sup> Daniel Libeskind, Mitchell Schwarzer, and James E. Young., *Daniel Libeskind and the Contemporary Jewish Museum: New Jewish Museum from Berlin to San Francisco*. (New York: Rizzoli ; Milan, Italy : Skira, 2008), 63.

<sup>52</sup> Daniel Libeskind. *Radix-Matrix*. (Munich ; New York : Prestel, 1997.), 34.

*which today reduced to archival and archeological material, since physically it has disappeared.*<sup>53</sup>

By reflective examination of the Berlin Jewish Museum, one senses that Libeskind attempts to insinuate the meaning of Holocaust in spatial disposition of the building through an interpretive narrative. The form of this building emerged from the idea of the distorted star was Libeskind's interpretation of the relationship between Jewish Community and the Germans. Other metaphorical concepts, such as notions of the void and emptiness, were carried out throughout the building as voids, which have derived from Jewish literary and musical sources, such as the 'Moses and Aeron' by Arnold Schonberg and the Gedenbuch. It is argued that these voids of the Jewish Museum can deeply stimulate one's emotional and nostalgic senses, attributing to the impact of the Holocaust.

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<sup>53</sup>

Daniel Libeskind. Radix-Matrix. (Munich ; New York : Prestel, 1997.), 34.

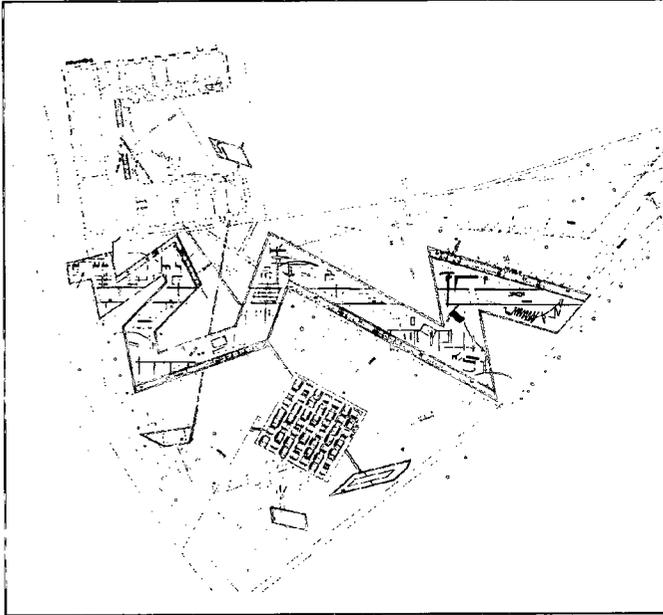


Figure 46. The Berlin Jewish Museum.  
Aerial View.  
[archiwork.net/deconstruction-style.html]

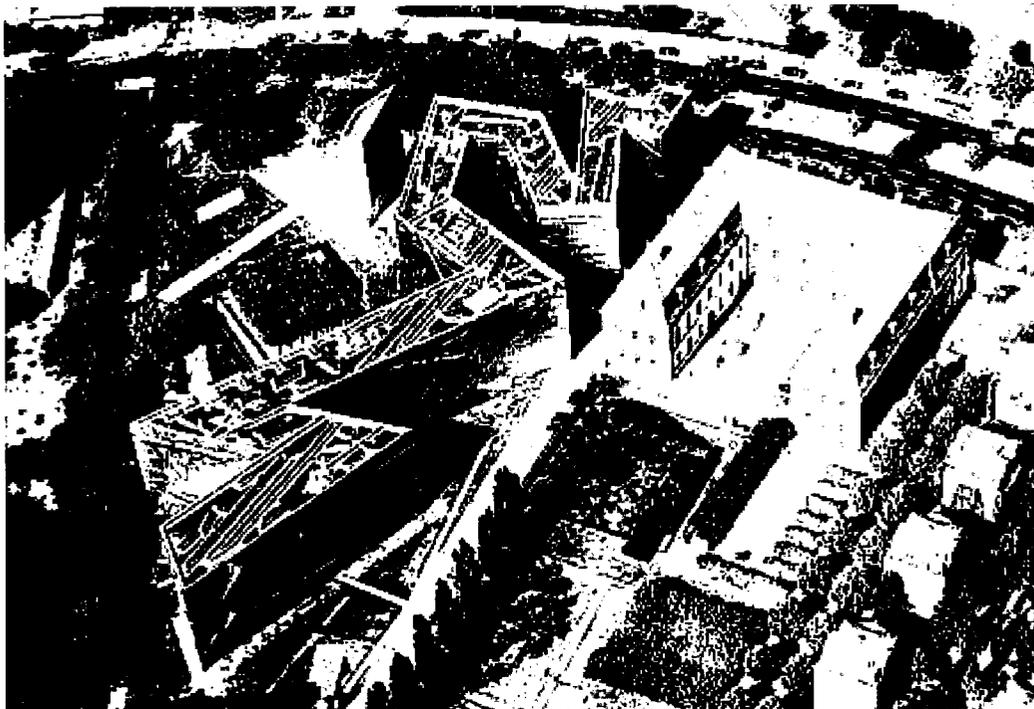


Figure 47. The Berlin Jewish Museum. Site Plan.  
[Daniel, Libeskind. *Radix-Matrix*,38.]



Figure 48. The Berlin Jewish Museum. Void Spaces.  
[www.michaelhoppengallery.com]



Figure 49. The Berlin Jewish Museum. Void Spaces.  
[www.michaelhoppengallery.com]

## **2.5 Architecture as a Passage for Spiritual Journey**

The Chapel at Ronchamp, the Brion Tomb and the Berlin Jewish Museum are each a reflection of the architect's interpretation of different emotional or cosmological subject matters, such as religion, life and death, or an event in history. However, one can argue that they all shared a unified goal, which was to connect to the spectator's inner dimension, in order to reconnect the past to the present through an insinuation of an interpretive narrative in architecture. In other words, they all used architecture as an allegorical language to impact one's emotional state by stimulating the viewer's sense of imagination and nostalgia. Therefore, the visitors often become an active participant in a meditative journey in the built setting, where the power of the architectural representation and the intensity of the experience can reach one's spiritual state.

# III

Interpretive Narrative as a Poetic Expression  
of a Historic Setting

### 3.1 Design Proposal and Discussion

As previously discussed, the premise of this thesis was to reconstruct the memory of the historic urban remnants of *Arg-e Bam* through a programmatic narrative and based on the poetic reading of its setting. Part one was an attempt to unravel the hidden expressions of the historic ruins of Bam rooted in its inhabitants' collective mind. The research ruled out pragmatic viewpoints towards the initiation and morphology of *Arg-e Bam*. Rather, it focused on the relation between mythology and cosmology and Bam's historical urban setting. This research encountered legends such as the myths of *Anahita*, *Bahman* and *Haftvad*, theologies like *Zoroastrianism* and *Sufism*, socio-cultural attributes including the idea of *Futtuwat* among the fundamental concepts of Bam's inhabitants.

Throughout this thesis, *Arg-e Bam* was seen as a place of worship or as a memorial to celebrate the victory of King *Bahman*, as opposed to an enclosed network for shelter and survival. It also focused on how *Arg-e Bam* was modified throughout history to accommodate the ritualistic traditions of the *Zoroastrians* (before the seventh century), and *Sufis* (from the seventh century onward).

Part one also searched for a symbolic representation of *Arg-e Bam* in Persia's eleventh and twelfth century literature. It seemed that the idea of 'castles' and 'citadels' were regarded as signs of identity, trust, peace, permanence, which evoked a sense of nostalgia in the minds of Persians. Moreover, in some tales of *Shahnameh*, the 'citadels' were metaphorically perceived as a vessel for a hero's spiritual transformation (Section 1.4.2).

Based on this investigation, one can realize how the physical presence of this historic

citadel continued to evolve from the date of its formation up until the earthquake, in order to reflect upon the mythical and cosmological perceptions of its inhabitants. The 2003 catastrophe not only created an irreversible damage to the urban fabric of the city, but also disturbed the city's normal and gradual process of evolution outside of the citadel.

The city of Bam is undergoing a renewal process and it seems that the reconstruction efforts attempts to reconnect to the original character of Bam, through the integration of traditional forms and patterns. It can be argued that mimicking the traditional forms in an attempt to retrieve the city's physical past is giving the city an inauthentic image that neither lives up to its pre-earthquake iconic character, nor represents the city's spiritual past.

In other words, the new developments in the city of Bam seem to be masking the disaster and have failed to celebrate and respect its poetic dimensions, which had a significant role in its formation and process of evolution. As a result, the traditional architecture is now being replaced with a neo-traditional configuration, in which new aesthetics and contemporary functionality have become more significant than historic content.

Thus, to establish continuity with Bam's spiritual past, this thesis suggests an alternative approach to express the memory of Bam without stealing and misusing any traditional forms. Rather, this can be accomplished through a contemporary architectural expression that speaks to the physical character of *Arg-e Bam*, and includes intangible ingredients such as myths, legends and theological aspects that were interwoven within its structure.

This thesis proposes a Site Memorial Center in tribute to Bam's destroyed fortress, which consists of a garden, a pavilion and an observatory tower. The building is intended to exhibit Bam's cultural productions and to house historical documents and books related to its art and architecture. The design not only makes reference to the physical arrangement of the citadel, but also expresses selective aspects from the story of *Haft Peykar* (The Seven Beauties) to address the legendary and spiritual dimensions of Bam.

The idea of a garden design is derived from the fact that gardens have a special meaning in the mind of Persians. As it was explained earlier in this thesis, gardens are defined as essential physical spaces with both symbolic and sentimental values among Iranians and they signify life, survival and continuity in the desert. Moreover, the images of Persian citadels have been described by both *Ferdowsi* and *Nezami* as majestic fortresses with gardens that evoke the image of paradise (Section 1.4.2). This notion is also reflected in the botanical quality that exists in the Persian miniature, depicting the image of *Arg-e Bam* (Figure 8).

Arguably, the tale of *Haft Peykar* can set a suitable model for this project for several reasons. *Nezami's* esoteric poetry reflects how the idea of 'castles' and 'gardens' as prominent spaces within the citadel were metaphorically viewed in the minds of Persians. Moreover, this tale contains aspects that reconcile both *Zoroastrians* and *Sufi* traditions, which are the two most important religions practiced in Bam.

### 3.2 *Haft Peykar* (The Seven Beauties)

*Nezami* described the *Mi'raj* of Prophet Mohammed prior to narrating the story of *Haft Peykar*, to draw a parallel between the spiritual enlightenment of the prophet Mohammed and the main character of the story *Bahram-e Gur*.<sup>54</sup> This tale frames the complex journey of this Sassanid ruler from birth to death, exile to kingship and most importantly from ignorance to wisdom, in seven stages. This thesis concentrates primarily on the areas of the story that gives emphasis to the allegorical gardens and castles.

The story begins with astrologers predicting that the only way for Prince *Bahram* to live and become

a ruler is to be raised outside of Persia. Therefore, he was sent to grow up in the court of the Arab King *Noman* of Yemen. *Noman* constructed the famous castle of *Kharang* for *Bahram* to reflect the image of his homeland. In this case, similar to the story of Prince *Syavoosh*, the architecture of *Arg* (castle) represents a sense of identity, nostalgia and security for the prince in exile (Section 1.4.2).



Figure 50. 16<sup>th</sup> century Persian miniature depicting the *Mi'raj* of Prophet Mohammed. In this experience the Gabriel escorted Mohammed from his humble quarters to the Dome of the Rock in Jerusalem where the Buraq (a steed with the body of a horse, the head of a woman and the wings of a bird) greeted him. The Buraq along with Gabriel raised Mohammed up to the cosmos to come into contact with the divine and also experience the seven heavens.

<sup>54</sup> *Mi'raj* is the journey that the Islamic prophet took through the seven heavens to reach spiritual enlightenment. Bahram (421–438 CE) was the son of *Yazdigird I* and the fourteenth *Sassanid* ruler. He had given a nick name "Gur" which means "Onager", on account of his love for hunting Onagers.

Living in the desert, *Bahram* became a skilled huntsman. One day after hunting, he wandered through the castle of *Kharang* and discovered a locked room containing the portraits of seven princesses from seven climes. Each princess was associated with one of the seven visible cosmic objects, and depicted in a color that represented her nationality (Figure 51).

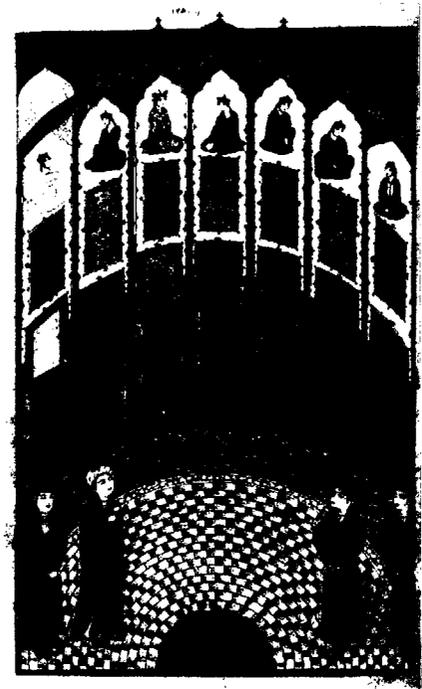


Figure 51. 14<sup>th</sup> century Persian miniature, Shiraz, *Bahram* visiting the room of the seven portraits.

The idea of the seven princesses from seven climes reflects the *Zoroastrian* concept of *Haft Keshvar* (The Seven Climes), explained in the section

1.2.1 of this thesis. *Bahram* immediately became fascinated with all seven princesses depicted in the portraits. This room is considered a metaphor for love, as the beautiful face of women reflects the beauty of god and, by entering this room; *Bahram* begins a journey to reach to divine light.

When *Bahrams's* father died, he returned to Persia to claim his throne from the pretenders. Eventually, he took power and became the King and rescued his people from poverty and starvation. Then, he set out in search of the seven princesses and won them as his brides. He ordered his architect, Shida, to construct a dome for each wife according to her associated color and governing planet. The princesses took up residence in the pavilions and the king visited each bride on her particular day of the week (Chart 1).

Seven Princesses	Cosmic Object → Day	Color
Indian	Saturn → Saturday	Black
Greek	Sun → Sunday	Yellow
Arabian	Moon → Monday	Green
Slavic	Mars → Tuesday	Red
Maghrebian	Mercury → Wednesday	Blue
Chinese	Jupiter → Thursday	Sandal
Persian	Venus → Friday	White

**Chart 1.** This chart presents the day, the governing planet and the color associated with each princess.

Each princess told the King a tale containing a moral lesson, such as patience, truth, faith, passion, serenity, fairness and devotion to God’s orders. The central theme of each story included the frustration and testing of desire and fulfillment of physical and earthy passions. Thus, *Bahram-e Gur* progressed from Saturday to Friday, from black to white, and from darkness to illumination.

*Bahram* eventually emerged from the White Dome of the Persian Princess and completed his journey to enlightenment. This event coincides with *Noruz* (a new day), the first day of spring and the beginning of the New Year for Iranians, which embodies the message of regeneration and newness.<sup>55</sup> Finally, having been led by these tales and coming to an understanding of the principles of the Divine Laws, *Bahram* renounced his seven brides and converted their Domes into fire-temples.

Three out of four of the tales told by the princesses (I, V and VII), dealt with the idea of allegorical gardens. Therefore, more specific details of these three stories are provided in sections 3.2.1, 3.2.2 and 3.2.3 of this thesis.

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<sup>55</sup> The Persian New Year is referred to as *Noruz* (a new day) and it marks the first day of spring. It also reflects the idea of renewal and rejuvenation of nature.

### 3.2.1 Black Dome of the Indian Princess

In the Black Dome, the Indian princess entertained the King *Bahram* with the story of a ruler who dressed in mourning for rest of his life. The princess described a benevolent King who had an insatiable desire to learn about the wonders of the world. Therefore, he greeted the visitors of his territory with hospitality and asked them about their homeland and adventures.

One day he met a man from a city called Bedazzled, whose inhabitants habitually dressed in mourning. The man did not reveal the secret behind the peculiar attire, so he decided to leave his kingdom and travel to the city of Bedazzled to satisfy his curious mind. After one year of unsuccessful attempts at solving the mystery of the Bedazzled citizens, he met a kind butcher who decided to reveal the secret to him.

At night, the butcher brought him to a ruin outside of the city. From there, the King was carried in a basket by a mythical bird and magically transported to a grassy plain. After a brief rest, he opened his eyes and found himself in a garden.

The garden was full of countless flowers and trees of every sort. The King wandered through it and rested beneath a cypress until the night falls. When the moon rose, innumerable maidens approached the garden. They were preparing for a feast and soon they were joined by a Fairy Queen, whose beauty outshone that of all the other maidens of the garden. The Queen met with the King, sat beside him and gave him food



Figure 52. 16th century Persian miniature, depicting *Bahram* in the Black Dome.

[[www.persia.org/Images/Miniature/miniature.html](http://www.persia.org/Images/Miniature/miniature.html)]

and wine, while the handmaidens entertained them with music and dance.

Intoxicated by wine and passion, the King started kissing the Queen. She returned his kisses, resisting anything more. The Queen encouraged the King to be content with the kisses and satisfy his passion with any of her handmaidens whom he may choose. For twenty nine days, the King slept during the day, and at night he feasted in the garden and took his pleasure with the maiden of his choice. However, the Queen seemed more and more endearing than the first night, as she continued to deny him during that time.

On the thirtieth night, when the moon disappeared from the sky and total blackness took over, the maidens left the King alone with the queen. Again, the beauty of her body and warmth of the wine enticed the King to embrace her. The Queen implored the King to be patient for one more night and she will bless him with her eternal love. But, her rejection only fueled his passion and it finally overwhelmed his patience. His hands were driven, by desires beyond his control, to undress the queen.

When the Queen realized that the King had given into temptation, she asked him to close his eyes so that she can undress herself. Enticed by her suggestion and anxious for pleasure, he closed his eyes. When he was asked to open his eyes, the Queen, maids, and garden had all disappeared, and he was once more in the basket in the ruins. The King thus decided to wear black to mourn the lost ideal, which was an ideal lost in search of a naive hope.

### 3.2.2 The Blue Dome of the *Maghrebian Princess*

The *Maghrebian Princess* told *Bahram* the story of a beautiful Egyptian youth by the name of Mahan. This tale was concerned with Mahan's journey in the desert, where he encountered false guides (demons in human form) leading him into further deception throughout this tale.

The story began when Mahan, drunk at a party one night, was enticed into the desert by a demon, disguised as a trusted friend, with promises of great profits in trade. As they traveled through the desert,



Figure 53. 16th century Persian miniature, depicting *Bahram* in the Blue Dome. [www.scholarsresource.com]

the demon revealed his true essence. After being tormented by the demon along with a seven-headed dragon, he found himself lonely at sunrise in a desert that stretched to infinity.

Traversing the desert until night time, Mahan descended into a pit and fell asleep. When he woke up, he saw a bright light breaking through a crack in the wall of the pit. By enlarging the crack in the wall, he eventually entered a beautiful garden. As Mahan helped himself to the fruits of the garden, an old man (the gardener and the owner) approached and accused him of being a thief. When Mahan mentioned his misfortunes, the old man expressed how fortunate he had been to escape the demons of the desert.

That night, the old man announced his intention to adopt Mahan as his son. He promised the young man that he will share the garden's blessings with him, as well as the vast riches he possessed, and promised to wed him to the most beautiful maiden.

Leading Mahan to a great sandalwood tree in front of great palace, the old man asked him to climb the tree and wait for his return, without descending or speaking to anyone until he made the necessary preparations. But not long after the old man disappeared, Mahan saw seven beautiful maidens approaching the tree. Their charm was revealed to Mahan as they feasted and amused themselves in the garden.

The maidens sensed Mahan's presence in the garden and enticed him to descend from the tree. Mahan's youthful impulsiveness made him forget his agreement with the old man as he joined the feast. One of the maidens allowed him to make love to her, but when he embraced her, he was horrified to find that she had turned into a dreadful and repellant monster that mocked and tormented him, demanding his kisses. With the sunrise, the monster disappeared, and Mahan fainted in front of the palace gate. He woke up in full daylight and found himself once more in the wasteland as the garden had evaporated into a mist.

Mahan, remorseful, found clear water, performed the *ghosl* and prayed to God for help in his distress.<sup>56</sup> Raising his head, he saw the prophet *Khezr* before him,<sup>57</sup> who demonstrated a link between the desert and the garden, and embodied the lesson of both the deceptive nature of the senses, and the need for guidance in order to avoid being misled by them.

*Khezr* took Mahan into the garden where he was originally led into falsehood. There he saw his friends dressed in blue robes of mourning for him since they had thought he was dead. So Mahan dressed in blue to become unified with his friends. Here, the color

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<sup>56</sup>

*Ghosl* is an Islamic ritual performed with water to purify the body and the soul.

<sup>57</sup>

Prophet *Khezr* is known by Muslims as a spiritual guide.

blue is regarded as a symbol of his refusal to be led by the false guides of the senses into deception.

### 3.2.3 The White Dome of the Persian Princess

This tale was told in the White Dome by the Princess of the Seventh Clime (Persia). This story took place in a garden belonging to a young master and, like the previous gardens, was filled with flowers, trees, fruits, streams, and birds. The master visited the garden every Friday (Muslims' day of rest). However, one time, he found, upon his arrival, the gate shut, the gardener asleep, and sounds of music issuing from within. After entering the garden, he encountered beautiful maidens, bathing naked in the stream. Initially, two of the maidens beat and seized the young man, accusing him of being a thief, but released him upon realizing his identity.

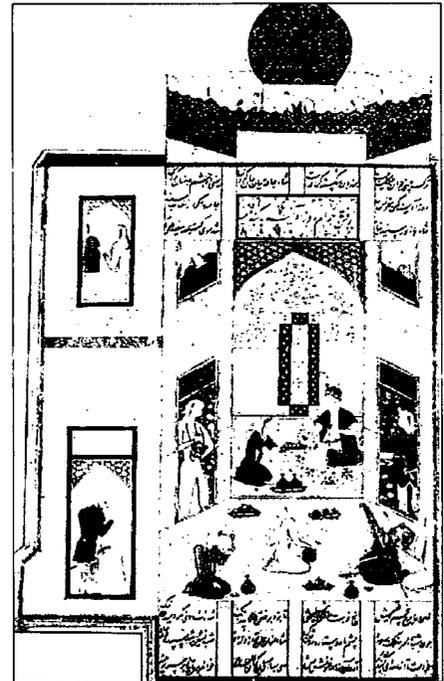


Figure 54. 16th century Persian miniature, depicting *Bahram* in the Blue Dome.

[[www.scholarsresource.com](http://www.scholarsresource.com)]

the young man, accusing him of being a thief, but released him upon realizing his identity.

In reparation for their abuse, they promised to bring him whichever maiden he chose, in order to pleasure himself. The master requested the maiden named *Bakht* (Fortune), who was more beautiful than the rest. But when he embraced her, the unstable chamber collapsed, and they were forced to flee from the rubble.

The couple reunited in a quiet corner of the garden, but again they were rudely disturbed by a cat in pursuit of a mouse. When they decided to sit in a grassy spot beneath a tree, their embraces were shattered when a rat, chewing through a rope by

which some gourds were suspended, releases them with a noisy clatter. After this, couched on a bed of jasmine in a cave, they were interrupted by a wolf chasing some foxes who had taken refuge there, causing the couple to exit in great panic.

After this constant interruption was repeated several times and spoiled the lovers' desire to unite, the master decided to leave the garden as quickly as possible. The maidens blamed *Bakht* for deceiving him and wanted to punish her for her uncommitted crime. But, the master stopped the maidens from punishing *Bakht* and he placed the blame on himself, announcing that it was his illicit and incontinent passion that brought these misfortunes. In other words, the intrusive events that harassed the lovers in this story are allegories of man's animal soul, which tempts him into disobeying the law. Divine laws allow man to control his passions and guide them into legitimate channels.

So he decided to take the lady as his lawful wife and, at dawn, returned to the town to carry out his purpose since he came across a clear stream (a symbol of illumination and light). This water is associated with the Water of Life and represents the progression from the blackness of spiritual ignorance to the white light of spiritual illumination. Unlike the episodes in the previous gardens, which characters ended up in the garments of mourning, this tale ends in the garment of wedding, expressing of man's triumph over the temptations of the senses as a result of his devotion to God's orders.

### 3.3 The Programmatic Narrative: The Site Memorial Center

The Site Memorial Center is designed between the historical ruins and the desert on the north side of the citadel, where there are still some historical remains standing on the ground. The historical remnants in this area are possibly the remains of the watchtowers outside of the fortress (Figure 56). The design idea is to create a dialogue between the historical ruins of *Arg-e Bam* and its contemporary memorial center.

As mentioned, the design attempts to refer to both physical and symbolic idea of *Arg-e Bam* and the selected aspects from the tale of *Haft Peykar* are incorporated to connect to the mythical and cosmological aspects of Bam's inhabitants. In this tale, architecture in the form of a dome and a castle becomes a metaphor for the King's spiritual transformation. The King moves through time and space, and gains spiritual enlightenment in seven stages. Based on this understanding, the visitors are choreographed in the building to encounter specific spatial moments with metaphoric connotations derived from the tales told by the seven princesses. The intention is to offer the visitors specific moments to observe, think and interpret as they continue their journey throughout the building.

In the story of *Haft Peykar*, the process of spiritual transformation happens through discourse and intimacy between a man (*Bahram-e Gur*) and women (the seven princesses). Therefore, the form of the building was developed as a gesture in the landscape and as an expression of two forms colliding and intersecting into one another. One form is curved and it refers to the female figure as the other one is rectangular and rigid as it represents the male figure (Figure 55).

The curved areas of the building houses two separate gardens. As discussed in

section 2.3 of this thesis, the idea of 'gardens' are metaphorically understood in the Islamic culture, as a mediator and a passage that a person takes to reach the Divine. This idea can be linked to the role of women that is presented in the story of *Haft Peykar* as a mediator for men's spiritual enlightenment.

Moreover, the entire building is covered by six arches. Each arch represents a dome described in *Haft Peykar*. Based on this tale, King *Bahram* completes his journey to enlightenment in seventh dome (the White Dome); therefore, the last dome is emerged in the form of an observatory tower, referring to the end of the journey and the moment of revelation and enlightenment (Figures 60 and 61).

The building is characterized by three floors with an observatory tower. The spatial arrangement is intended to correspond with the physical configuration of *Arg-e Bam*. As previously mentioned, the citadel was divided into three areas, including the common area, the military section and the castle that housed the seat of governor and the main observatory of the fortress.

The main floor and the underground of the building relate to the common area of the citadel by housing the communal and social activities. This area consists of two separate gardens, an exhibition space, and a restaurant that is located on the underground level. The second floor includes a conference room and a library. It also refers to the military section of the citadel as the programme becomes more restricted and controlled. The observatory tower in the building serves as a meditation space in the building and represents the castle of Bam that, at one point in time, was regarded as a place of worship. From here the visitors are exposed to the full view of the historic ruins of *Arg-e Bam*.

The seven *Sufi* moral values presented in *Haft Peykar* are translated in the building as seven architectural virtues. The three tales, told by the Indian, *Maghrebian* and Persian Princesses, which deal with allegorical gardens, are employed to create metaphorical moments into the spatial disposition of the building. The four other moral stories derived from the four tales of the Greek, Arabian, Slavic and Chinese Princesses are translated as navigational and compositional principles that connect one architectural moment to another.

## The Process

- In the story of Haft Peykar, the process of spiritual transformation happens through discourse and intimacy between a man (Bahram-e Gur) and woman (the seven princesses). Therefore, the form of the building was developed as a gesture in the landscape and as an expression of two forms colliding and intersecting into one another.

-The building also programmatically refers to different sections of the citadel such as the common area, the military section and the castle.

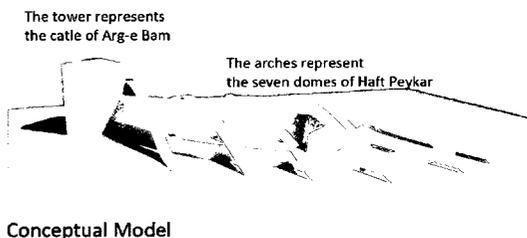
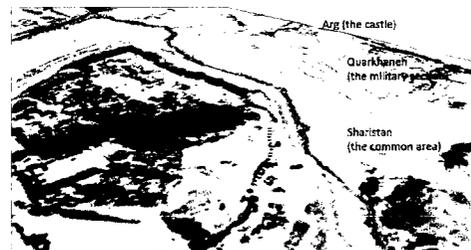
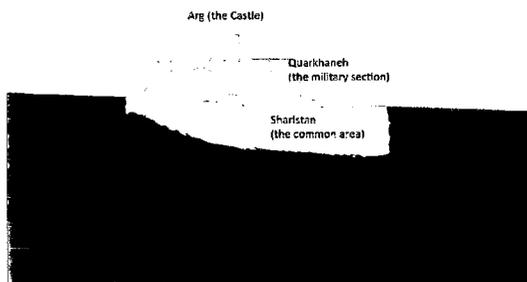
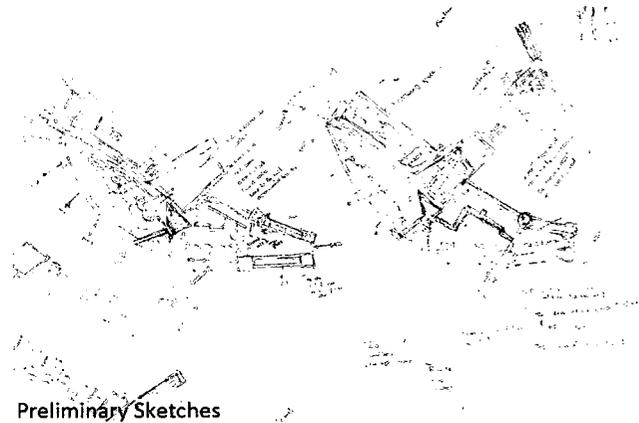


Figure 55. Arg-e Bam Site Memorial. Process Work.

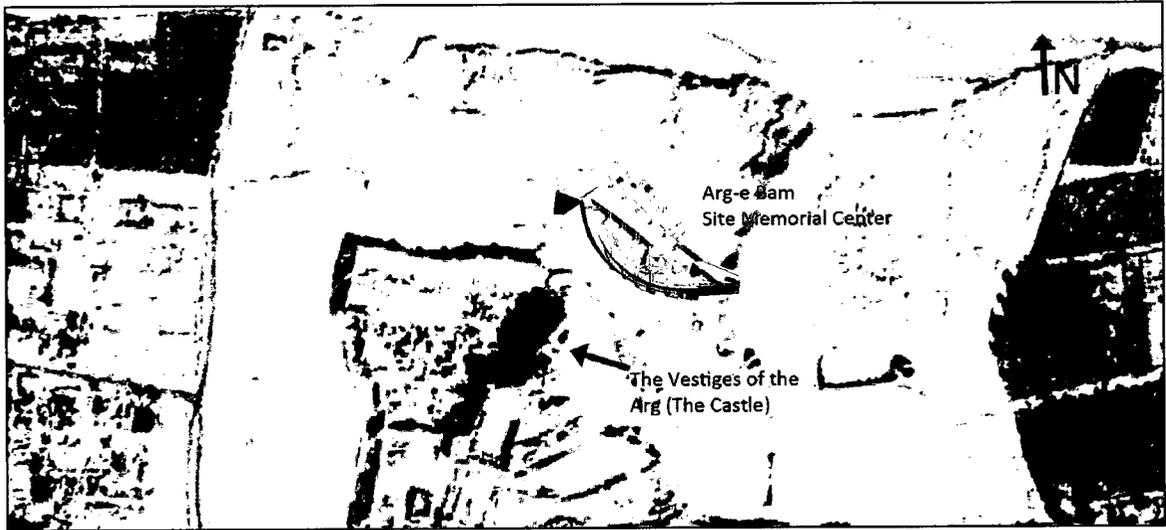


Figure 56. *Arg-e Bam* Site Memorial Center. Site Plan. The building is located between the historical ruins of *Arg-e Bam* and the desert landscape.

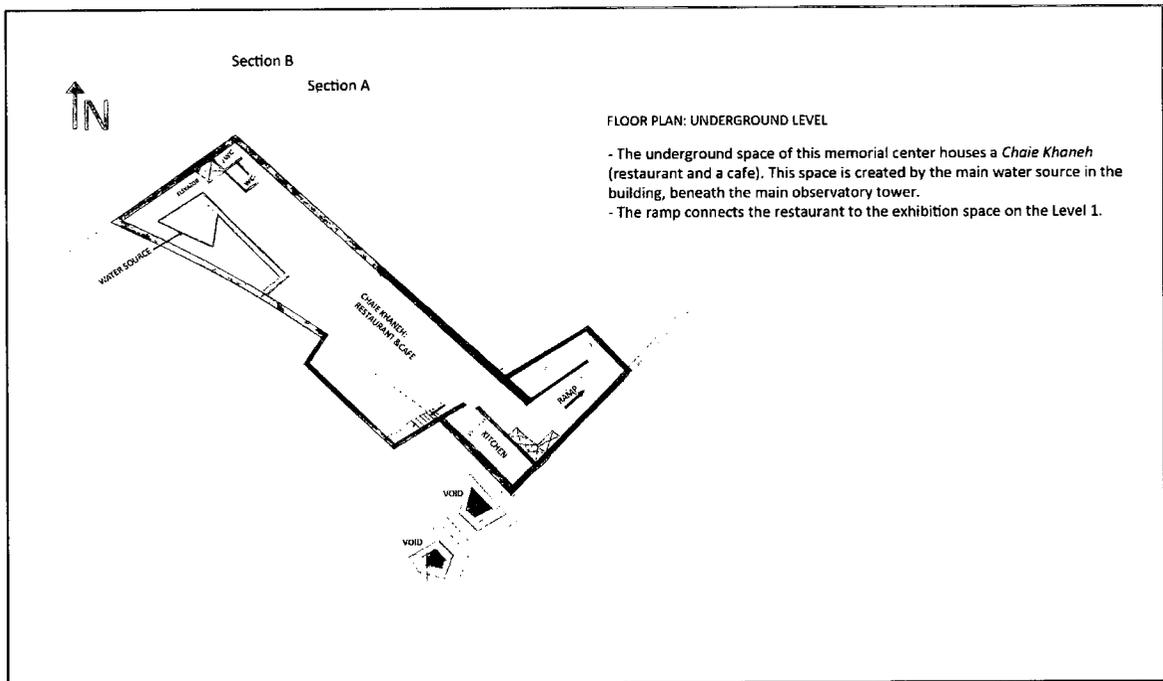


Figure 57. *Arg-e Bam* Site Memorial Center. Floor Plan, Underground Level.

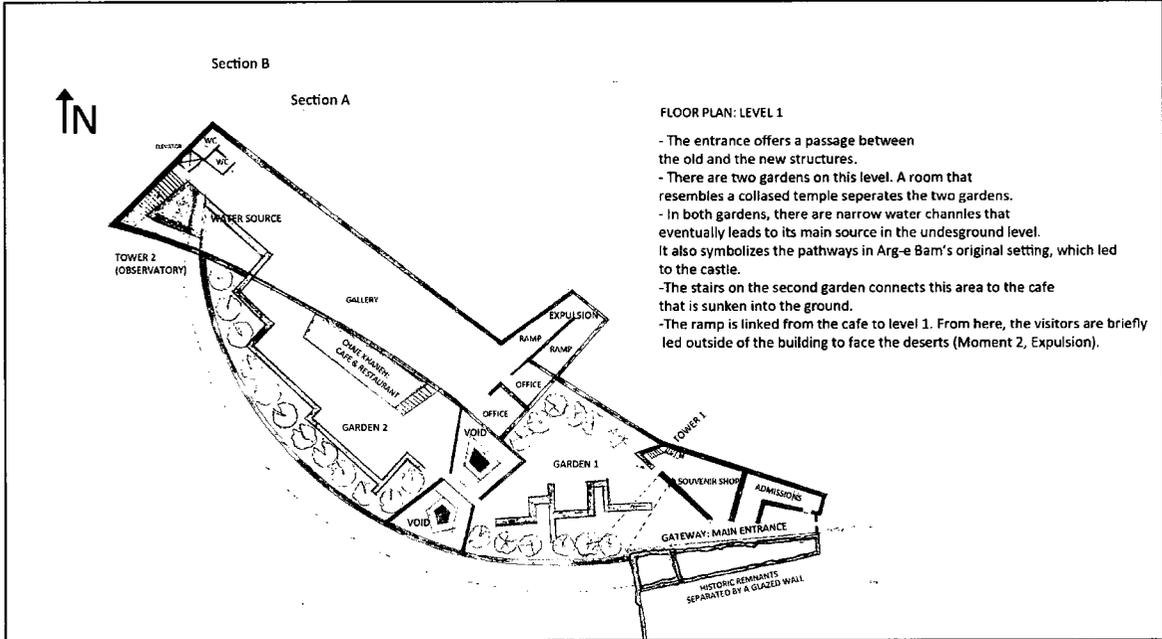


Figure 58. Arg-e Bam Site Memorial Center. Floor Plan, Level 1.

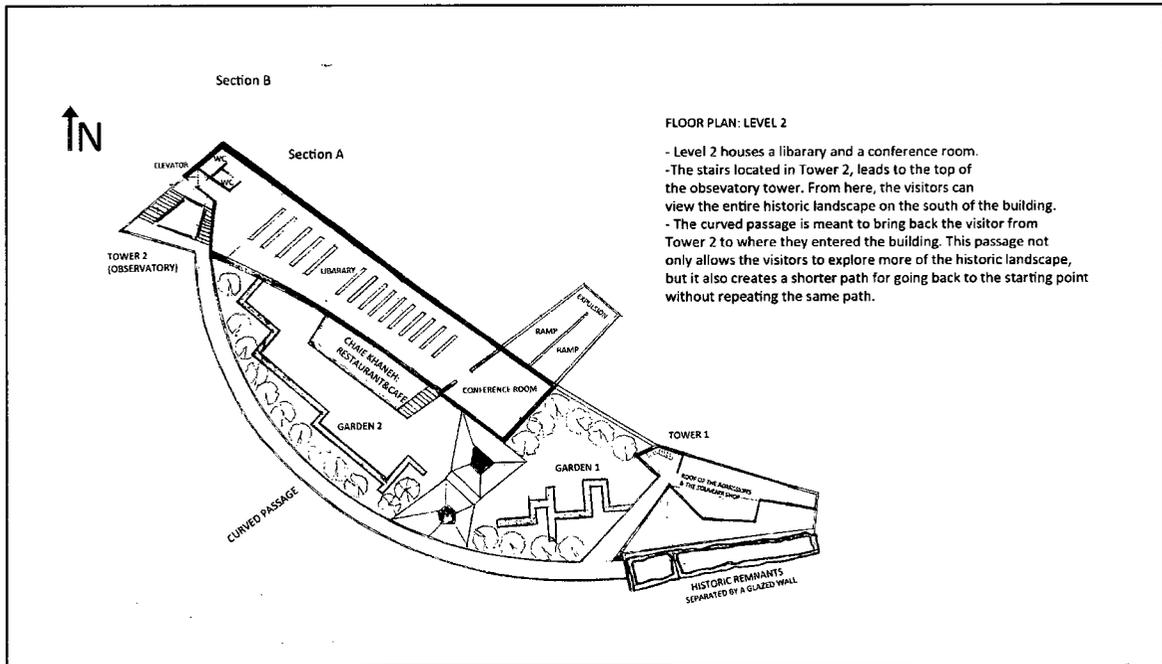


Figure 59. Arg-e Bam Site Memorial Center. Floor Plan, Level 2.

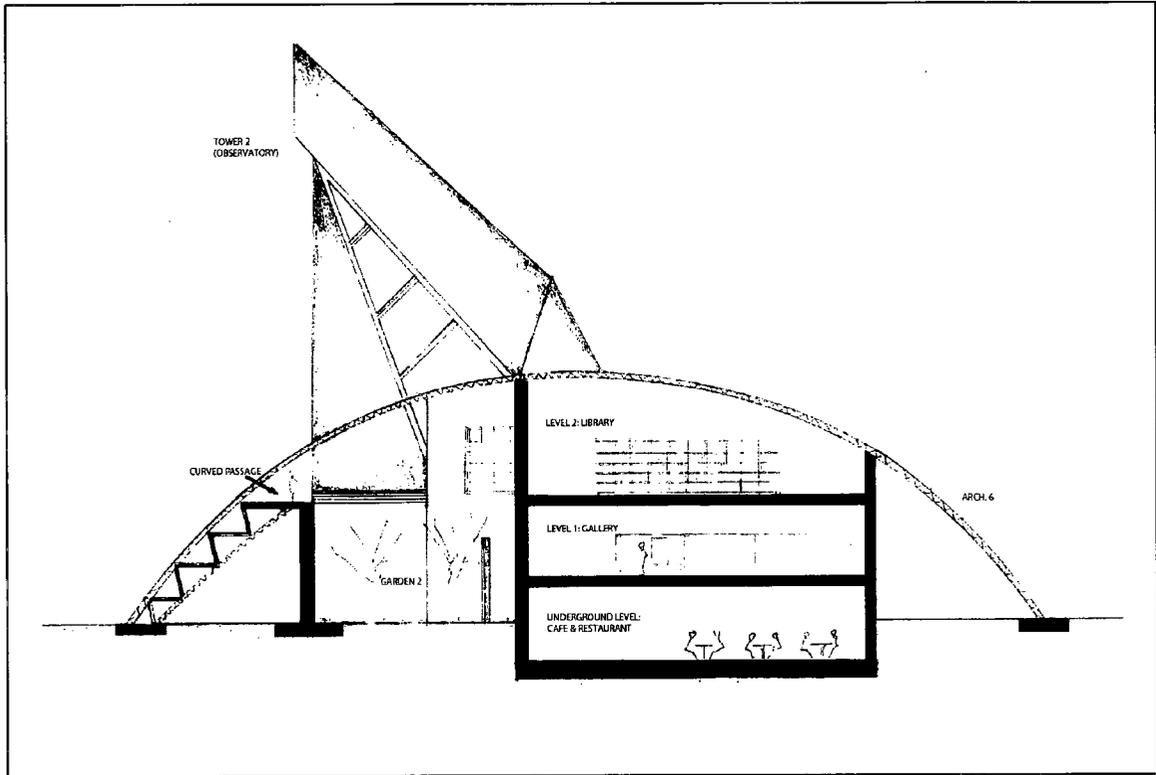


Figure 60. Arg-e Bam Site Memorial Center. Section A.

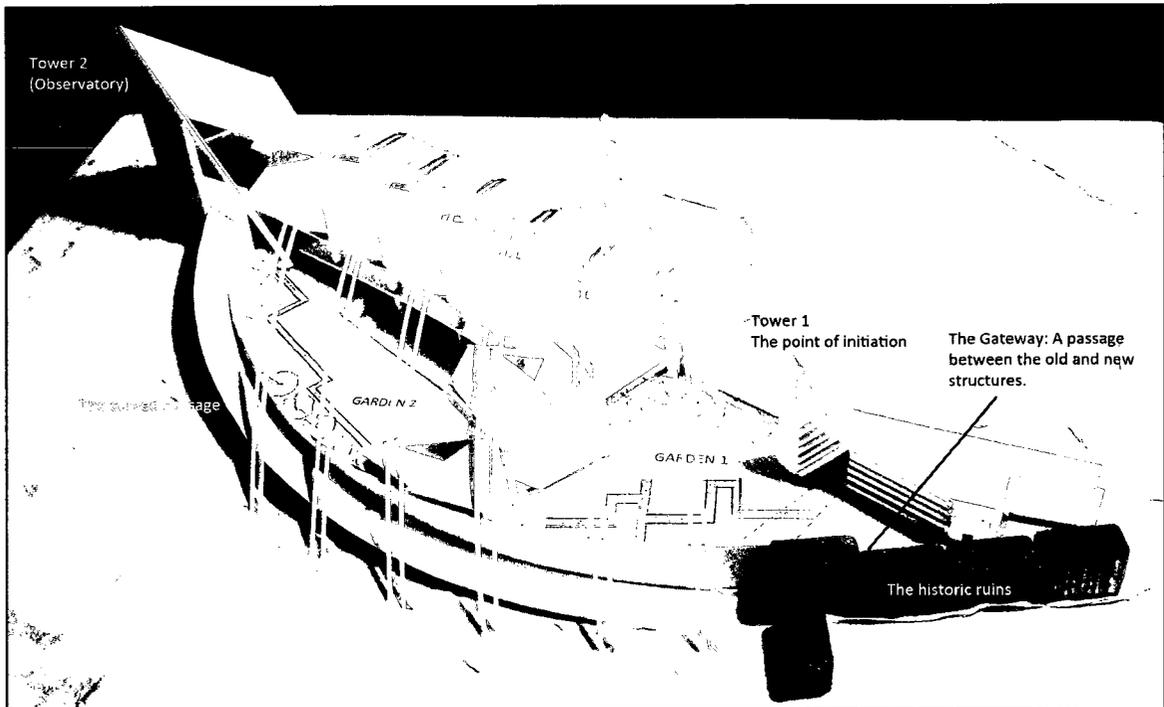


Figure 61. Arg-e Bam Site Memorial Center. Physical Model.

### 3.3.1 The Architectural Moments

The building includes a gateway as the starting point, which also operates as an admission area. This space offers a passage between the old and the new structures, as the visitors' experience the historical remains on one side and the new structures on the other, while traveling through the main entry (Figure 61).

As described, Prince *Bahram* started his journey to enlightenment by entering the secret room in the *Kharang* castle where he first saw the portraits of the seven princesses of the seven climes. In order to make a parallel connection to this experience, after passing through the admission area, one encounters a smaller tower that is a representation of the secret room in the *Kharang* castle. From here, one can see the top of the small tower as well as the main observatory tower, making a connection between the point of initiation (small tower) and where the journey will end (the observatory tower) (Figure 61).

In the story of the Indian Princess of the Black Dome, the main character of the story failed to learn the lesson of contentment and patience, and ended up wearing the dress of mourning (black) as a symbol of losing his happiness and wealth in the pursuit of a false hope (Section 3.2.3). This aspect brings to mind the idea of void spaces manifested by Daniel Libeskind in the Berlin Jewish Museum (Section 2.4.3).

In this scenario, this aspect can be interpreted as the concept of void, which the visitors will encounter when passing the room that divides the garden on the main floor into two sections. It can also serve as a threshold from one garden to another. The form of this room portrays an image of a collapsed temple, which refers to the ruined world of ideals. Entering the room (the collapsed temple), the visitors have to pass through a

catwalk flanked by two void spaces (Figure 62). The void spaces are extended to the skies from above by an opening in the ceiling, and they continue into infinity from the ground through a black channel in the ground. However, these empty spaces attempt to accentuate other senses, such as smell and hearing by limiting the visuals. The voids are intended to contain the scent of rosewater and to reflect sounds. The scent of the rosewater is a familiar smell for the Iranians, since it is an important ingredient that is traditionally used for religious and culinary purposes. The reflection of sound is an indication of the idea that one's good or bad deed reflects inevitable results.

In the second garden of the *Maghrebian* princess of the Blue Dome, the main character (Mahan) found that those delights themselves can be deceptive and illusory. Therefore, Mahan was expelled temporarily from the garden of delight and faced the desert. This idea can be interpreted as the concept of expulsion in the building. The visitors are guided to exit the building for a brief moment when traveling the ramp up to go from the underground restaurant to the main floor (the exhibition space). Here, the walls that extrude out to the landscape frame the desert landscape, commenting on its remoteness, referring to Mahan's experience (Figure 63).

The story of the Persian princess of the White Dome aligns the renewal of the garden with Bahram's spiritual rebirth. The garden is a representation of the cosmic world as a place, where man completes his journey to enlightenment. The White Dome represents the light of *Ahura Mazda*. This idea is metaphorically insinuated in the building as the observatory tower that brings natural light into the building and the water source that is beneath and in dialogue with the tower. The visitors' journey will be complete when they finally arrive at the observatory tower, where they can view the

vast historical landscape on its south side of the memorial (Figure 64).

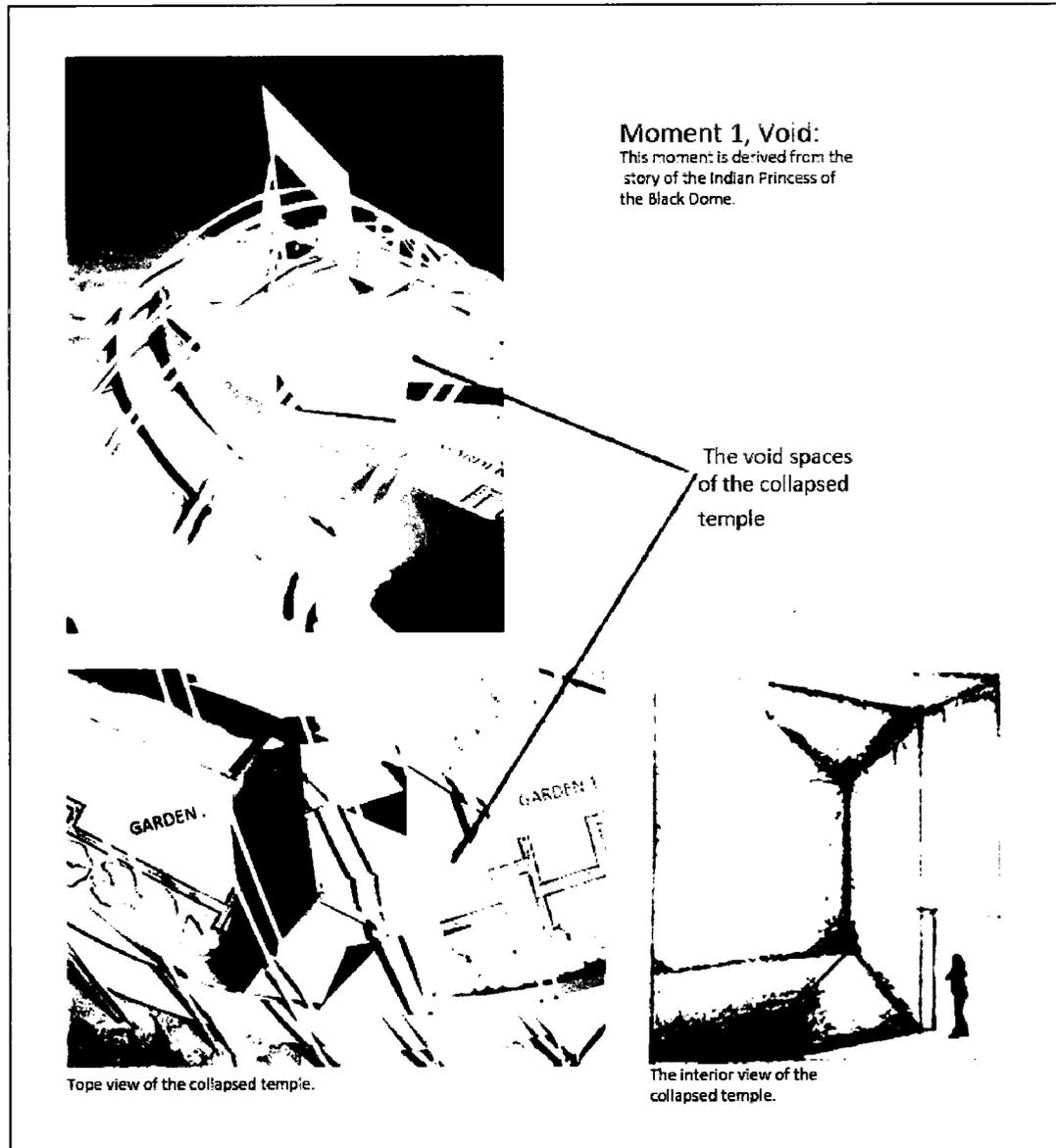


Figure 62. Arg-e Bam Site Memorial Center. Moment 1.

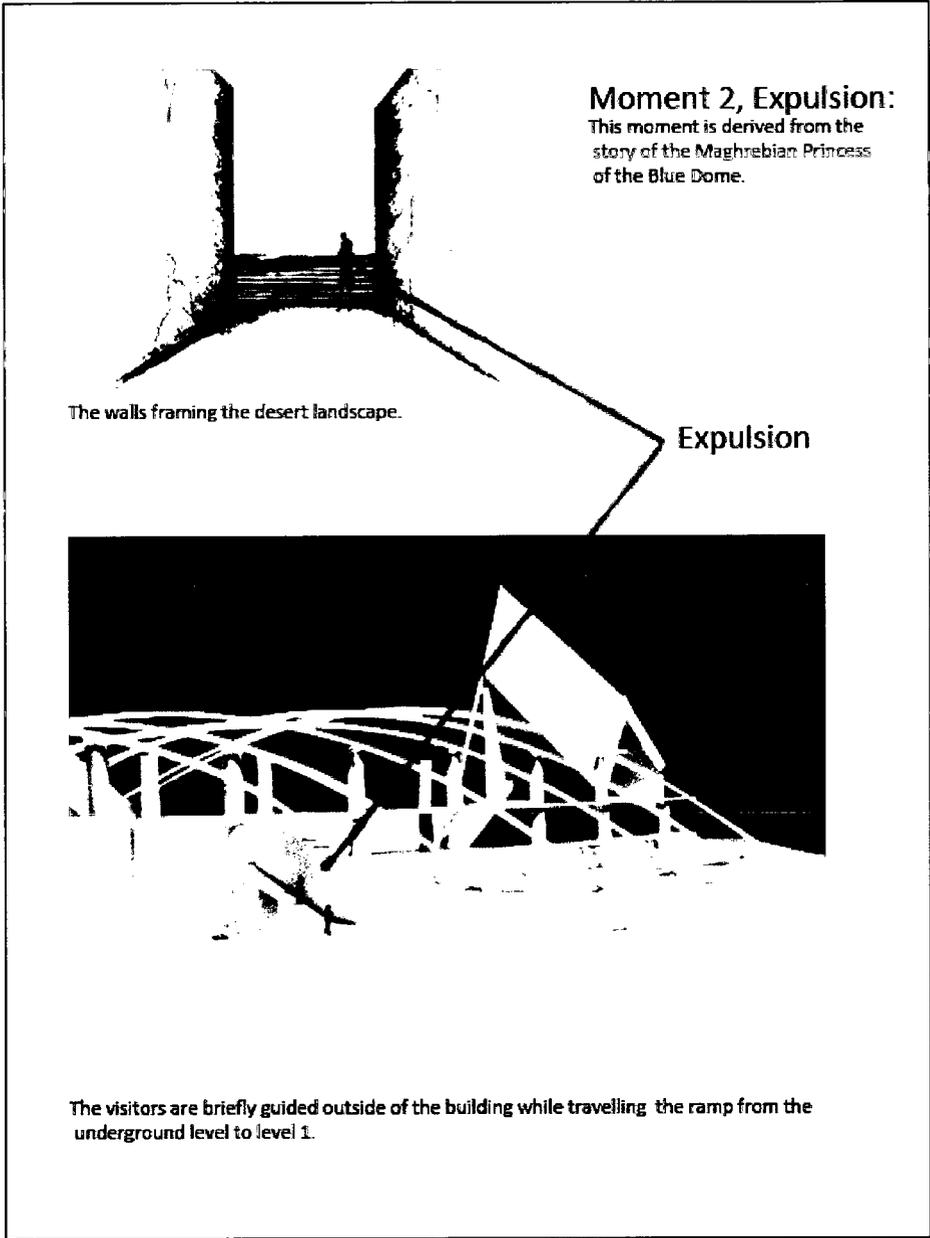


Figure 63. Arg-e Bam Site Memorial Center. Moment 2.

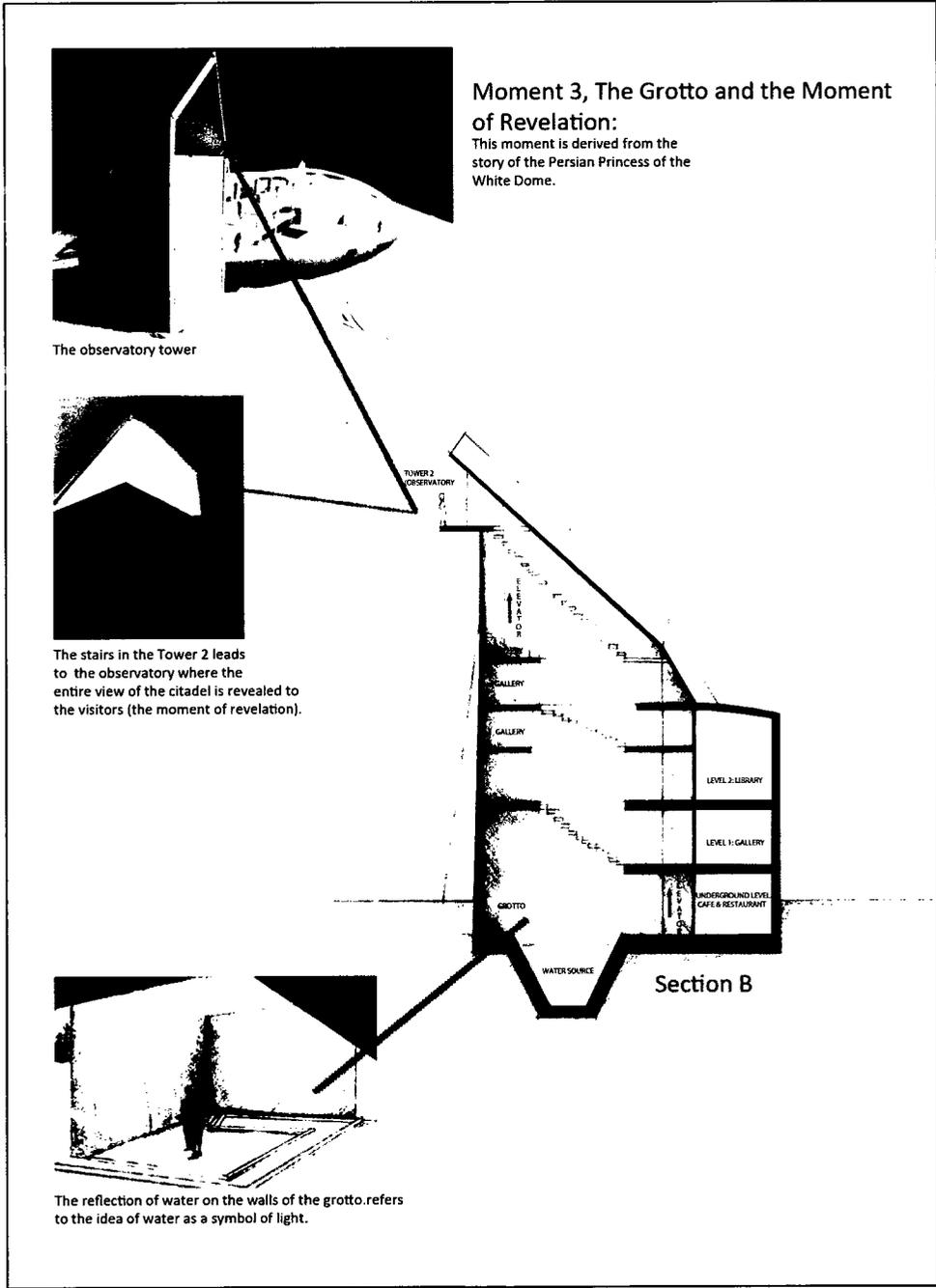


Figure 64. Arg-e Bam Site Memorial Center. Moment 3.

### 3.3.2 The Architectural Principle

The first design principle for this project is based on the story told by the Greek Princess that conveys the message of truth and honesty. Water symbolically represents the light of God. Moreover, the clarity and transparency of water can be interpreted as the idea that truth is always apparent in the light of God. Based on this understanding, the water is used as the guiding principle within the building. The visitors are intended to be guided by the water channels throughout the building to eventually arrive at its main source, which metaphorically represent the idea of light and truth.

The tale of the Slavic Princess describes how one has to passionately pass through challenges and solve mysteries in life to finally become united with his beloved. This idea describes the second principle in the design of this garden as the labyrinth. The attempt is to provoke one's sense of curiosity to continue on a meditative journey into the building, savor its moments and eventually arrive at the observatory tower, which is the moment of revelation.

The story told by the Chinese Princess is related to the idea of Karma and how human actions guided by the forces of good and evil can lead to good and bad consequences. This tale corresponds to the *Zoroastrian* cosmic forces of *Ahura Mazda* (good) that resides in the light and *Ahriman* (evil), which resides in the darkness. Therefore, the third design principle is characterized by the control of light and shadow in the building, which creates various moments and sequences in the building. This idea is also manifested in void spaces in the room where all voices are reflected in the space.

The fourth and the final architectural principle in this project emerged from the tale of the Arabian Princess. This story conveys the message that with faith and pure

intentions, one can achieve goals that may seem unattainable in life. The idea of faith can be understood as the principle of hope and intentionality in architecture. This project was initiated and evolved with the hope and the purpose that it will be a significant contribution toward reviving the ruined historic citadel of Bam.

## Conclusion

As discussed, the content of this thesis emerged as a response to the 2003 earthquake that turned the city of Bam and its ancient citadel, known as *Arg-e Bam*, into rubble. It was argued that the post-disaster constructions attempt to retrieve the identity and character of this historic city through mimicking or replicating its original forms and settings. Here, it was taken the position that this method of revoking the memory of the city is inauthentic and the new constructions are unsatisfactory in portraying Bam's iconic identity.

Therefore, this thesis investigated a process for reconstructing the memory of this particular historic site through a contemporary architectural expression of a site memorial and based on poetic reading of its setting. In the context of this thesis, the poetic reading of place was defined as understanding the intangible ingredients that contributes to the characterization of a built setting, such as myths, cosmological beliefs and socio-cultural attributes.

The ideas articulated in this thesis were discussed in three parts. The first part was dedicated to the poetic analysis of *Arg-e Bam* and it set out to make a link between human imagination and the artifact. This part focused on the history of this citadel and brought to attention the importance of myth in the initiation and formation of this historic place. It was argued that this citadel was first initiated as a place of worship or as a memorial for important events in history. Through this investigation, it can be argued that architecture can create channels of communication between past, present and future by virtues of expression, representation and interpretation.

This section also focused on the two cosmologies of *Zoroastrianism* and *Sufism* to

understand the effect of each theology on the growth and development of this city. This study was carried out through by analyzing the different sections of the city, such as the *Sharistan* (The Common Area), *Quarkhaneh* (The Military Section) and the *Arg* (The castle). This investigation led to identification of the important spaces within this fortress, such as various places of worship and the castle that were products of cosmological perceptions that governed Bam's inhabitants throughout its history.

Part one, also searched for the metaphoric meanings of 'castles' and 'gardens' as the prominent spaces within this historic setting and also in Persian culture. This research was based on the tenth and twelfth century Persian literature, such *Shahnameh* (The Book of Kings) and *Haft Peykar* (The Seven Beauties). This exploration led to the discovery that the establishment of cities and 'castles' was connected to the idea of identity, trust and nostalgia and was seen as symbol of struggle between good and bad among the Persians. Moreover, the idea of a 'castles' and 'gardens' was seen as a place for one's spiritual enlightenment.

Phase two, investigated how symbolic meanings manifest itself through form. This section studied the idea of symbolism from *Sufi* perspective, since Sufism was one of the main philosophies practiced among Bam's inhabitants. Based on *Sufi* doctrine, everything in creation is the symbolic representation of God and this idea was linked to the idea of man and the making. It was argued that the built word is the extension of the human will and imagination as the phenomenal world (the universe) is the extension of Divine's will and knowledge. This idea was further explored in the Islamic architectural prototypes, such as domes, minarets, 'The Breath of Compassion' (famous Islamic patten) and the garden design. Indeed, through these studies, one realizes that

the built environment expresses cultural meanings.

Part two of this thesis, also focused on three architectural precedents such as Le Corbusier's Chapel at Ronchamp, Carlo Scarpa's Brion-Vega Cemetery and Daniel Libeskind's Berlin Jewish Museum. The idea was to understand, how each architect incorporated an interpretive narrative into their designs based on different cultural productions, such as literature and music. It was argued that in all examples, the language of allegory in architecture was used to stimulate one's inner senses in relation to subjects, such as religion, life and death and events in history.

The final part was dedicated to the design portion of this thesis. It proposed a Site Memorial Center that constitutes itself as a sign of Bam's destroyed fortress and its inhabitant's collective values. The design was based on both the physical and the metaphorical essence of this historic site. Moreover, the seven tales of *Haft Peykar* was used to incorporate the spiritual and metaphoric dimension of this fortress in the design of this memorial building.

The outcome of this thesis can be looked at from two different viewpoints, concerning the instrumental capacity of architecture as a tool for story telling, and the effectiveness of this process for creating continuity between past, present and future. It attempted to conserve the heritage of Bam's historic setting.

Pondering on the first two phases of this thesis, led to an understanding that architecture on its own may not be an adequate language for expressing cultural meanings. All the examples that were examined in this thesis were conceptualized based on the pre-existing sources and can not be properly understood without referring to their supported textual descriptions. It can be said that architecture and text are

complimentary to one another, each serve to manifest cultural meanings within their limitations. However, they both establish continuity by providing means of interpretation for the future generation.

In conclusion, this thesis advances the idea of continuity established by the revival of the memory of *Arg-e Bam*, through withdrawal and interpretation of its hidden characteristics. Its inhabitant's collective mind articulated in the form of text and established a dialogue in the form of a contemporary architectural expression. The design idea attempts to reconcile the lost fortress of *Arg-e Bam* with stories of *Haft Peykar*. This thesis project can be contribute to the creation of an active condition among the possible visitors through bringing attention and heightened awareness to the lost historic landscape and the poetry of *Nezami*, as oppose to the present scenario of the city of Bam evolving in an ambiguous realm of passivity and detachment.

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## Appendix A: Glossary of Terms

### A

#### **Achaemenid Empire:**

Persian Empire established by Cyrus the Great in 559 BC.

**Afrasyiab:** A character from the Shahnameh. He was the ruler of Touran (land the of Turks) and the father of Isfandiar.

**Ahriman:** Based on Zoroastrian cosmology Ahriman represents the evil forces of the universe and it resides in the darkness.

**Ahura Mazda:** Based on Zoroastrian cosmology Ahura Mazda represents the good forces of the universe and regarded as the God of Wisdom.

**Anahita:** Persian Water Goddess, worship by the Persian's before the emergence of Zoroastrianism.

**Arcosolium:** Latin term for 'arch' used by the early christens. In the catacombs, important personage or martyrs were buried in a more expensive manner under and arch which was referred to as "*arcosolium*".

**Ardeshir-e Papakan**

(224—241 CE): The founder of Sassanid Empire.

**Arg:** Persian term for 'castle'.

**Arg-e Bam:** Due to the distinctive and memorable look of the castle of Bam, which formed the highest point of the fortress, the entire citadel was referred to as Arg e- Bam (the castle of Bam).

**Aryan:** Etymology of the word Aryan is derived from the Sanskrit word Arya and is referred to the Indo-Europeans who lived on the Persian plateau. Iran means the land of Aryans.

**Ayn al-yaqīn (Eye of Certainty):** meaning that the certainty of the presence of God is a consequence of contemplation and vision.

**Avesta:** The primary collection of sacred texts of Zoroastrianism, composed in the Avestan language.

### B

**Badgir (wind catchers):** A traditional Persian architectural device used for many centuries to create natural ventilation in buildings.

**Bahman:** (464-424 BC): An

Achamanenid King. In the tales of Shahnameh he is known as the son of Afrasyab. Bam is an abbreviation of the name Bahman.

**Bahram-e Gur (421–438 CE):** Fourteenth Sassanid ruler and the main character of the tale of Haft Peykar (The Seven Beauties). Bahram was given a nick name "Gur" which means "Onager", on account of his love for hunting Onagers.

**Bakht:** Persian term for fortune.

**Bazaar:** Persian term for 'marketplace'. Bazaar is considered the main artery of the Islamic cities for commerce

**Belash-e Ashkani:** The last Parthian ruler who was killed by Ardashir-e Papakan (the pioneer of the Sassanid Empire).

### C

**Caravanserai:** Persian term for a traditional inn.

**Chaharbagh (The Four Gardens):** The classic cross plan that divides the space into four quarters with a pool in the center and was crystallized during Sassanid Period.

**Chaharfasl (The Four Seasons):** The seat of

governor in Arg-e Bam.

## D

**Daar:** Persian term for the hanging pole used for execution.

**Daara:** The ruler of Bam until the citadel was invaded by Alexander the Great's army in 330 BC. Daara is also a Persian term for wealth.

**Daarzin:** Name of a city in the Province of Kerman, south-east of Iran. Based on Shahnameh (The Book of Kings), this city of historically initiated as a place where Faramarz (the son of Rostam) was executed.

**Dej-e Sepid** (The White Castle): Shahnameh's (The Book of Kings) castles are often referred to as Dej-e Sepid reflecting the light of Ahuran Mazda (Zoroastrian's God of Wisdom).

## F

**Faqr:** Persian term for poverty.

**Ferdowsi:** A 10<sup>th</sup> century Persian poet. He is known for his monumental piece of literature entitled 'Shahnameh' (the book of Kings).

**Ferdows:** Persian term that refers to both paradise and garden.

**Faramarz:** The son of Rostam the mightiest hero in Shahnameh (The Book of Kings) and the ruler of Sistan (a province in south-east of Iran).

**Futtuwat** (Youth and Chivalry): A Sufi movement and it is based on virtues of generosity, modesty, trustworthiness, loyalty, mercifulness and piety.

## G

**Gundishapour:** The intellectual center of the Sassanid Empire during late antiquity. This academy was destroyed during Arabs invasion.

**Gayumars:** According to Zoroastrian's manuscripts Gayumars is the first king of Pishdadian dynasty (Persian mythical dynasty), who lived in the mountains and thought his subjects the civilized arts. Based on Zoroastrian's scripts Pishdadian dynasty (The Early Law Givers) was the first kingdom established by the Aryans.

**Gregory of Nyssa** (335 – after 394 CE): A Christian bishop and saint.

## H

**Haft Keshvar** (The Seven Climes): Zoroastrians divided the universe into seven imaginary regions, with Persia in the middle,

guided by the light of Ahura Mazda and surrounded by six other nations of Indian, Rum (land of the Greeks), Kharizm (land of the Arabs), Maghrib (land of the North Africans), Saqaliba (land of the Slavs) and China.

**Haft Peykar** (The Seven Beauties): Is the title of a Persian literature master piece by Nezami Ganjavi, 12<sup>th</sup> century.

**Haftvad:** A story from the Shahnameh (The Book of Kings), concerning the history of Arg-e Bam. 'Haft' is a Persian term for number seven and 'Vad' for son. The term 'Haftvad' was referred to whoever had seven sons in a row from one wife.

## I

**Ilm al-yaqîn:** knowledge of certainty meaning that the certainty of God's presence is the result of knowledge.

**Imam Ali:** Shi'a Muslims regard Imam Ali as their first Imam (leader) and consider him and his descendants the rightful successors to Prophet Muhammad.

**Isfandiar:** Name of a character from the tales of Shahnameh. He was the ruler of Touran (land of

the Turks). He is best known for his tragic combat with Rostam, the mightiest hero in Shahnameh.

## J

**Jamshid:** A mythical Persian King who ruled Persia for three hundred years under Pishdadian dynasty (The Early Law Givers dynasty). Based on Zoroastrian's scripts Pishdadian dynasty (The Early Law Givers) was the first kingdom established by the Aryans.

## K

**Kayanian:** The second mythological dynasty established in Persia. The Kayanian kings are the heroes of the Avesta, the sacred texts of Zoroastrianism and of the Shahnameh.

**Kharang:** The name of a castle that was built by Noman, the king of Yaman, for Bahram-e Gur to remind him of his homeland while he was in exile.

## M

**Maghreb:** Land of the North Africans.

**Minaret:** Distinctive architectural features of Islamic mosques—generally tall spires with onion-shaped or conical crowns, usually either free standing or taller than any

associated support structure.

**Mi'raj:** This is the journey that the Islamic prophet took in (632 CE), through the seven heavens. This passage and experience granted Mohammed the confidence and the wisdom to guide his followers.

**Murshed:** Persian term for master.

## N

**Nezami Ganjavi:** A 10<sup>th</sup> century Persian poet. Nezami's five great romances and epics known as Khamseh (Quintet) were influenced by Sufi movement. Nezami's five books are known as Makhzan al-Asra (Treasure House of Secrets), popular romances of Khosrow and Shirin, Laila and Majnun, Iskandar Nameh (Story of Alexander), and Haft Paykar (The Seven Beauties).

**Noruz:** The Persian New Year is referred to as Noruz (a new day), marks the first day of spring. It reflects the idea of renewal and rejuvenation of nature.

## P

**Parthian Dynasty (247 BC– 226 CE):** A Kingdom

that emerged in Persia from the Parni tribe of the coastal areas, east of the Caspian Sea.

**Pishdadian dynasty (The Early Law Givers):** Based on Zoroastrian's scripts Pishdadian dynasty was the first mythical kingdom established by the Aryans.

**Pish Kesvat:** Persian term for leader.

**Propylaeum:** Any monumental gateway based on the original Propylaea that serves as the entrance to the Acropolis in Athens. The word *propylaea* (*propylaeum* is the Latin version) is the union of the prefix *pro* (before or in front of) plus the plural of the Greek *pylon* or *pylaion* (gate), meaning literally that which is before the gates, but the word has come to mean simply *gate building*.

## Q

**Quarkhaneh:** The military section of Arg-e Bam.

## R

**Rahman (Compassionate):** One of the Quran's 99 names for the God, known as "The 99 Most Beautiful Names of God". Merciful (Ar Rahim), The King (Al Malik), Powerful (Al qadir), and etc.

## S

**Saljuki Dynasty:** (1140-1203 CE): Turk-Persian, Sunni Muslim dynasty, that ruled parts of Central Asia and the Middle East from.

**Samanid Empire** (812–999 CE): The first native dynasty established in Iran after the Muslim Arab conquest.

**Sassanid Empire** (224 – 651 CE): The last great Pre-Islamic Persian Empire. Sassanid period witnessed high achievements of Persian civilization.

**Seleucid Dynasty** (312-247 BC): Alexander's Macedonian remnants who ruled in the Persian's eastern plateau for more than hundred years.

**Shahnameh** (The Book of Kings): Is the title of a literature master piece by Ferdowsi, 10<sup>th</sup> century.

**Sharistan:** The common area of Arg-e Bam.

**Sistan:** Name of a province in south-east of Iran and adjacent to Bam.

**Soudabeh:** Step mother of the prince Syavoosh in the tale of 'The Prince Syavoosh' from Shahnameh (The book of

Kings).

**Sufism:** Early approaches to Quranic verses led to the development of the Sufi movement. The underlying philosophy of this mystical tradition is to search for the obscure, hidden meaning of the Divine Word that can not be merely understood through logical and rational senses.

**Syavoosh:** A Persian prince from the tales of Shahnameh (The book of Kings), whose step mother (Soudabeh) falls in love with him.

**T**

**Tafsir:** Arabic term for analysis.

**Taj:** Persian term for crown.

**Takyeh:** Persian term for an open square which functions as a gathering place for Muslims to perform their public rituals.

**Ta'wil:** Arabic term for interpretation.

**W**

**Wahdat al-Wajud** (the Unity of Being): A Sufi philosophy indicating that 'there is no true existence except the Ultimate Truth

(God)'. Or in other words, the only truth within the universe is God, and that all things exist within God only.

**Y**

**Yazdigard I:** The thirteenth Sassanid King and the father of Bahram-e Gur.

**Yazdigard III:** The last Sassanid King (death 651 CE).

**Z**

**Zoroastrianism:** an ancient Aryan religion that was established by Prophet Zoroaster more than 2500 years ago in north-east of Iran. Zoroastrianism served as the state religion in Iran for many centuries, more significantly during Sassanid period before it was gradually marginalized by Islam from the seventh century onwards.

**Zurkhaneh** (the house of powers): A traditional sports club which still exists in even Iran's more modern cities such as Tehran. In Arg-e Bam, this was originated in the pre-Islamic period and continued to evolve during the Islamic era.

## Appendix B: Chronology of Persian History

<b>Chronology of Persian History</b>	
Prophet Zoroaster	688-551 BC (Some sources put the date back to 2200 BC)
The ACHAEMENID DYNASTY	559-330 BC
Death of Cyrus the Great, the founder of the Achaemenians	530 BC
Alexander, the Macedonian, conquers Persia	323 BC
THE SELEUCID DYNASTY	312-247 BC
THE PARTHIAN DYNASTY	247 BC- 226 CE
THE SASSANID DYNASTY	224-651
Rule of Ardeshir, the founder of the Sassanid Empire	224—241
Sassanid invasion of Byzantine Empire	603
Sassanid conquest of Alexandria	619
Arab conquest of Persia	637-651
Death of the last Sassanid King, Yazdegird III	651
Period of the rule of the Umayyad caliphate over Persia	642- 750
Death of the first Shi-ite Imam and fourth Sunni caliph, Ali ebn Abu Taleb	661
The Abbasid caliphate	750- 1258
THE TAHIRID DYNASTY	821-873
THE SAFFARID DYNASTY	867-1163
THE SAMANID DYNASTY	829-999
THE BUYID DYNASTY	945-1055
THE GHAZNAVID DYNASTY	977-1186
THE SALJUKI DYNASTY	1140-1203
The IL-KHANID DYNASTY	1256-1336
Death of the Sufi poet Jalal al-Din Rumi	1273
Death of the Sufi poet Hafez	1389
THE TIMURIDS DYNASTY	1405-1501
THE SAFAVID DYNASTY	1501-1722
Afghan invasion	1722-1732
THE AFSHAR DYNASTY	1736-1747
THE ZAND DYNASTY	1747-1787
THE QAJAR DYNASTY	1787-1925
THE PAHLAVI DYNASTY	1925
Beginning of rule of Mohammad Reza Shah Pahlavi Aryamehr	1941
The Islamic Revolution and the end of the Pahlavi Dynasty	1979
Death of Ayyatullah Khomeyni founder of Islamic Republic of Iran	1989

[<http://www.farsinet.com/iranbibl/chronolg.html>]