

# From Masonry Design to Social Agency: Shifting Contemporary Urban Landscape of Postwar Iran

This project has been chosen for its innovative approach to environmental design, which limits urban development and promotes an awareness of conservation and nature amongst the urban population of Tehran. As a setting for outdoor recreational and cultural pursuits, the garden provides spaces for contemplation, family recreation and social interaction, and for the appreciation of local culture and entertainment. Imaginative use of materials, playful sculptures and indigenous landscaping draw on the best traditions of garden design in the region. In an age of global consumer culture, with the spread of stifling and homogeneous urban forms, this “nature-urban” public park constitutes a refreshing and welcome change.

—Aga Khan Architecture Award Jury Citation, 2001

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## OPENING

Stretched along the northern mountains of Tehran, Ferdowsi Garden represents a synchronized rendition of a “nature-urban” public garden at both the micro and macro scales. Recipient of a 2001 Aga Khan Architecture Award, Ferdowsi Garden is considered to be a successful environmental public space in contemporary Iran for its role in enhancing the urban environmental capital and restoring public green space in one of the largest cities of the Middle East, and its enduring impact in the design approach of urban landscapes.

Ferdowsi Garden is a notable contemporary designed landscape in Middle East due to its environmental role in enhancing the urban capital, and for restoring public green space in one of the largest and fastest growing cities of the world. Those worthy objectives were achieved, however, through creative masonry design—aspects of the design that the jury singled out as being “imaginary” and “playful.” These are design characteristics that could easily be overlooked; yet took on greater importance in enhancing the social and cultural life of Tehran’s inhabitants, and eventually promoting environmental and cultural consciousness. The design process was highly informed by sociocultural perspective of natural environments. The designers’ deliberate and thoughtful use of existing materials on the site—stone in particular—is perhaps one of the most remarkable

characteristics of the garden. These “epic stones” define the characteristics of the larger landscape. Thus, playful and imaginative use of the material culture—coupled with the thoughtful environmental, cultural and site-specific responses—make the garden’s design a unique contribution to the megalopolis of Tehran. Additionally, in terms of its site-context and site-object contingencies, it poses an alternative design-thinking avenue in a time of “spread of stifling and homogeneous urban forms.”<sup>1</sup>

This paper examines the underpinnings of design thinking and process associated with Ferdowsi Gardens through the following lenses: sociocultural, environmental, and material attributes. The study draws on field studies conducted by the author, existing literature, and most importantly, original drawings, notes, construction photographs, and interview with the project lead designer.

### A GARDEN TO COMBAT URBAN SPRAWL

Today’s megacity of Tehran is the result of the incorporation of several small villages and smaller towns that once spread between the Alborz Mountains to the north and the lower arid lands in the early 20th century, urban planning’s of the 50s-70s, and developments of the post-1980s. The environmental setting of the city comprises the transition between mountainous and desert landscapes, with valley-rivers connecting the two. These valley-rivers served as critical environmental corridors and provided oasis-like microclimates for earlier villages. Tehran today encompasses seven river-valleys—one of which is home to the Ferdowsi Garden.

Beginning in the 1950s, Tehran’s rapid population growth created greater pressure and demand for buildable lands. New urban planning proposals with the goal modernization of the capital, aimed at advancing transportation infrastructure and new developments. This trend resulted in the destruction of many of the public and private gardens that once graced the pre-modern city. After the Islamic revolution in 1979, the nation witnessed rapid immigration towards the capital and resulted in increase of urban density. In an effort to limit urban sprawl, the Tehran Municipality looked into strategies to protect the natural environment of the Capital’s northern perimeter, the Alborz Mountains. This effort was undertaken in several stages, limiting the buildable elevation of the city up to 1400, 1600, and most recently to 1800 meters. This is the context that sparked authorities in Tehran to convert some of the public lands in northern Tehran into a public mountain park instead of a typical, uninviting, green belt space. Thus was born Ferdowsi Garden.<sup>2</sup>

### DESIGN SETTING

The site of Ferdowsi Garden is as an extension to the existing popular Jamshidieh Stone Garden (c.1977-1979), and is located to the north and west of the Stone Garden.<sup>3</sup> The design for the new garden was commissioned to Baft-e Shahr Consulting Engineers in 1992 under the design leadership of architect Pasban Hazart—one of the lead designers who also worked on the Stone Garden almost 15 years earlier. The design of Ferdowsi Garden also followed, more or less, similar principles as the Stone Garden.<sup>3</sup>

In designing the Stone Garden, the designers were tasked to make use of local “materials” in a vernacular fashion—and with an emphasis on craftsmanship. Also, due to the highly planted and vegetated area, the team was not able to visually grasp the entirety of the orchard. The team traversed unfamiliar territory;



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Figure 1. Ferdowsi Garden Site Plan. Courtesy of Baft-e Shahr.

“there was no way that we could do the traditional design, meaning sitting in our office away from the site and make progress on design,” recalls Paseban Hazrat, the architect in charge: “It was my first experience working with stone ... in the sense of non plaques, non-clear cut blocks which we used in the building design. A local stone quarry just adjacent to the site supplied stone material, and craftsmen and artists were invited to work on the new construing of the park.”<sup>4</sup> At a micro scale, playful and artistic expressions through stonework masonry define the vocabulary of the design of the Stone Garden. The Garden was completed just before the Islamic revolution in 1979, and shortly after the revolution it was closed to the public until the 1990s. After its reopening the Garden soon became a popular public space destination; its novel and fresh design, coupled with its secluded natural setting not far from the center of Tehran, made it a refuge for the increasingly culturally and ethnically diverse new citizens of the capital.

With the addition of Ferdowsi Garden in 1995, the total area currently comprises 16 hectares (about 30 acres) and represents a blend of the natural environment of the Alborz Mountains, existing cultivated orchards, and the ingenuity of the design and craftsmanship.

#### **A SHIFTING CONTEXT**

Although there are similarities with the Stone Garden, the site of Ferdowsi Garden features some fundamental differences, socioculturally, to its predecessor. From a sociocultural perspective, Tehran was significantly different from that of two decades earlier. In postwar Iran, with its increasing population of youth and minimal public amenities and natural spaces, the northern mountain trails of the capital had become one of the most visited weekend destinations for hiking and relaxation. Located at major mountain trailhead, the site of Ferdowsi Garden was already a popular recreation passage for many. Additionally, with Tehran’s growing population the city had become more ethnically diverse after the revolution and the Iran-Iraq war. Public spaces and amenities responding to the needs of the ethnically diverse of the capital’s citizen were already over due. In this context Ferdowsi Garden was commissioned for an innovative approach to environmental design, which limits urban development and promotes an awareness of conservation and nature amongst the urban population of Tehran. As much as the design challenge seemed reminiscent of the past Stone Garden project, the intention behind it was very different. The new project, while encompassing important ecological reasons, also purposefully addressed sociocultural, and political aspects.

It was in this context that the Ferdowsi Garden commission came for an innovative approach to environmental design, to limit urban development and promote an awareness of conservation and nature amongst the urban population of Tehran. As much as the design seemed reminiscent of the past Stone Garden project, the intent was very different. The new project, while encompassing important ecological intentions, also purposefully addressed environmental, sociocultural, and political aspects.

#### **CONCEIVING A NEW GARDEN**

*Design in Nature:* The study and design process for Ferdowsi Garden began with commitment to environmental consciousness. As lead architect Hazrat recalls, “The biggest design challenge for Ferdowsi Garden was how to build on the mountain without destroying it.”<sup>5</sup> Hazrat indicates that “the main design

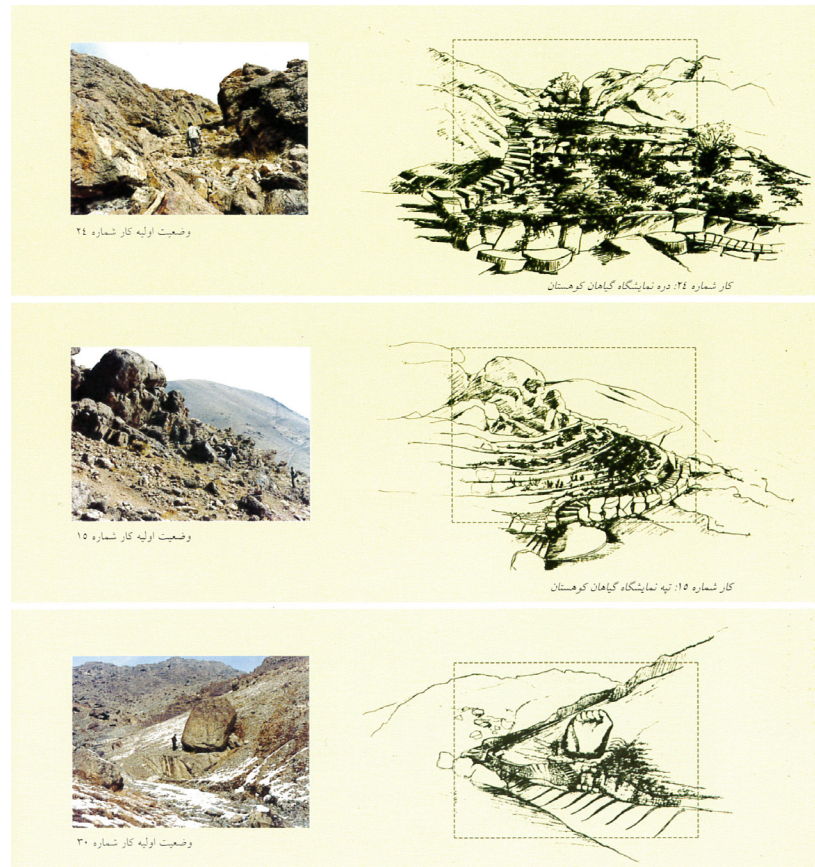
method was to work with the site, and 'design in nature,' which resulted in days and hours of exploring the site and making sketches in situ. Countless hours of sketching from the site, imagining design possibilities, and re-sketching became the main design process for the park."<sup>6</sup> The unusually large scale of the site, its natural setting, steep slopes, and the absence of any specific guidelines, required an in-depth understanding of the site. To examine the site's potential, the design team camped in the site for a month. This process provided the design team with "lived-experience insights" that proved to be invaluable. The primary design intervention is a series of stone-paved paths and steps that rise up the hill. These paths represent the optimal response to connecting the site's topography to an envisioned site experience. As Hazrat indicated: "One of our teachers was stone and the other was the trees."<sup>7</sup> These pathways are bordered by a variety of indigenous plants chosen for their environmental suitability, color, and form. Another essential goal for the design team was to "preserve the natural heritage," which is evident in mindful preservation and selection of native plants of the Albroz Mountains.

One obvious difference between the sites of the Stone Garden and Ferdowsi Garden is the availability of natural resources. The new site has few natural water features, and is far less vegetated. With little on-site source of water, the designers created water channels that lead from drinking fountains in the public spaces. The design embraced the notion of built landscape in close connectivity with the natural setting and maximum use of native vegetation of the region.

*Design with Culture:* The second major objective of the design was to embrace a cultural perspective. This was particularly important in the shifting sociocultural context of post-war Islamic revolution to make a mark with a national identity. Response to this objective is first seen through the choice of name selection. Ferdowsi (940 to c 1020) was a Persian epic poet and is known for his work in unifying Persian culture through his poems, especially at a time that Persian language and culture had been very much influenced by Arabic language and Arabo-Islamic culture. His magnum opus, *Shahnameh* (The Book of the Kings), not only revived epic stories in Persian culture and mythology, but also introduced a purified version of Persian language. Both in terms of the content of stories and the language, Ferdowsi portrayed a culture with no Arabo-Islamic presence. Due to his impact, he is regarded as a figure that unified diverse Persian ethnicities and brought a new life to Persian culture. Given that any celebration of any aspects of pre-Islamic Persian culture Ferdowsi was widely dismissed in the first decade of the Islamic Revolution, the choice of name can be considered as a significant move as a response to a fragmented society.

The new Garden embraces Ferdowsi both figuratively and as a theme. The entry point, connecting urban alleys to mountain trails, is a paved open space dominated by a statue of Ferdowsi, the epic poet after whom the park is named. In terms of a cultural theme, Ferdowsi Garden aimed at addressing collectiveness of contemporary Iranian society by featuring under represented sub-cultures and ethnic groups throughout the site's network of pathways, which explore a number of cultural and natural themes. Dotted along this network of paths are four "cultural houses" that serve as recreation and dining destinations, providing local ethnic food to visitors. These structures were also deliberately and thoughtfully constructed of traditional materials and forms that reflect the cultural heritage of the groups represented. For example, the "red stone" utilized in Azeri House was brought in from Azerbaijan. Additionally, attention to the arts, and in particular

sculpture in the design and execution of the Garden is also an important contributing cultural factor, given that the government at best was ambivalent to any forms of non-religious arts, and certainly the use of sculptures was a taboo in the Islamic conservative view.



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## DRAWING ON MOUNTAIN

The designers deliberately delved into in-situ operations and abandoned so called “contemporary design conventions”—relied on observing, photographing, and sketching—with the goal of enhancing a visitor’s experience with the unfolding of the mountainous landscape. This intense relationship with the site became the primary mode of investigating the site—a phenomenological method that embraced first-hand lived experience within its boundaries. The design team developed their unique approach for detailing the design; “with a general layout in mind, they would start by taking photos of visually interesting boulders and trees that were to be incorporated into the design. Using a transparency on top of the photo, they would then go back into the field and let the boulders and trees speak to them as they made perspective sketches of what was to be built.” This method of “overlaid” drawing entailed an iterative process and repeated group meetings to ensure a common ground with respect to sketches and design proposals. At a time when architects and engineers principally depend on orthographic projections to commence the study and design processes, the designers of Ferdowsi Garden returned to older, intuitive methods. They emphasized the “human experience,” in order to conceive the spaces through iterative and sequential perspective drawings as they imagined the potential and future of

Figure 2. *Overlaid Sketches*. Courtesy of Baft-e Shahr.



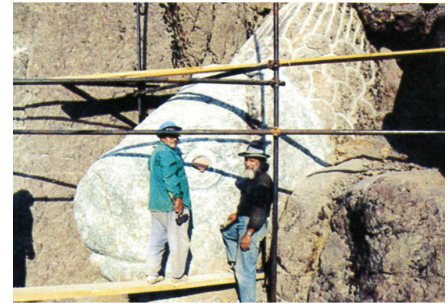
the site. Architecture discipline is often in favor of field drawings and sketches as means to learn from the built environment, however, unlike landscape discipline, when it comes to formulating a guiding design drawings, architects are seldom encouraged to trust their field drawings as means for construction process.

However, in designing this landscape, transformative sketching ultimately proved to be a much more powerful tool. The site and its nuances played a critical role in how to conceiving the new design into the existing context. The design process established an additional direct relationship between “site,” “sight,” and “representation”—one that could address the phenomenological nuances of the site and design at the same time effectively re-create cultural images throughout the landscape. The overlaid perspectival drawings uniquely contributed to craft a “cultural landscape” in the sense small visual, tectonic, and cultural motifs found they way into the designer’s sketches, and eventually realized in the landscape.

#### FROM DRAWING TO SCULPTING: A HANDCRAFTED URBAN LANDSCAPE

One could draw an analogy between the use of overlaid transparency drawings and the actual act of sculpting. Indeed, this is a specific mode of drawing a designer uses to most closely approximate a landscape and then render it as if one would carve, sculpt, or build it. As evidenced by the 2001 Aga Khan Award, Ferdowsi Garden is a work of craftsmanship in details, rather than a product of a major construction project. The intimate feeling that is conveyed as an artifact of insightful craftsmanship adds to the charm of the Garden. This was achieved through close negotiation between drawing and sculpting and making. Important to note is that in sculpting the Garden, the design team brought in over 60 highly skilled stonemasons from central of Iran (Hamadan) and from the Western part of the nation (Azerbaijan)—two regions in Iran known for traditional stonework craftsmanship. Moreover, several notable artists and sculptors in the design design and construction process. Such strong presence of artists and skilled traditional craftsmen in one single project was unprecedented, making Ferdowsi Garden the single largest contemporary project to have been almost completely handcrafted. Lastly, Ferdowsi Garden achieved a goal democratizing the design and construction processes by including craftsmen and artists as active participants in the design and construction.

In terms of the design process, the team would draw and re-draw sketches of promenades, seating walls, sculptured motifs, etc. on an overlay of photographs or in the field, which later became their “blueprints.” They would show the final overlaid drawings to the stonemasons and say: “This is what we are going to build.”<sup>7</sup> The final built work was indeed a negotiation between the envisioned drawing of the design team and the craftsmen’s contribution, a collective process reconciling “aesthetics” and “technics.” It is not clear whether every single realized design aspect had a reference drawing, or whether some of them were negotiated on site via the whimsical taste of a skilled master mason is not clear. What is clear is that in either of these scenarios, there is a “space” between the intended design and the construction in the sense the drawing did not serve as a transparent prescriptive document to be followed by masons. Rather, the opacity in the drawing created a gap, an in-between imaginative space, offered “negotiated territories” for a more inclusive and “democratic design process.” The quality hand-crafted stonework in Ferdowsi Garden also provides an unexpected, refreshing alternative to the dominant material culture of Tehran city parks, and imparts a sense of value and even luxury for the city of Tehran.



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Figure 3. Work process of artists working on *Sculptures in Ferdowsi Garden*. Courtesy of Baft-e Shahr.

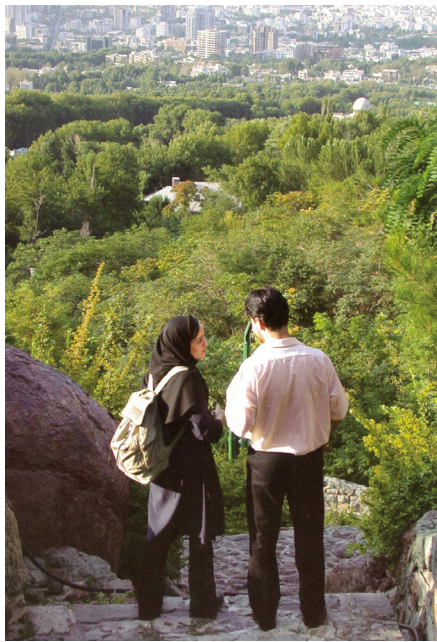


Figure 4. *Ferdowsi Garden*. Informal Encounter with the natural setting offered a fresh alternative to the public urban landscapes of Tehran. Courtesy of Baft-e Shahr.

## RESOURCEFUL MAKING

The primary material used in the landscape, rough-hewn stone, was amassed on site or quarried from higher up the mountain ridge and rolled into place, and no stone material, large or small, was removed from the site. Many of the larger boulders were chosen to be focal points for spaces along the pathways. For example, the Azerbaijan House was conceived nearby a large boulder, which now defines a central inhabitable location along the “cascade passage,” main walkway. Smaller stones were cut to order in the making of retaining walls, pathway paving patterns, seating walls, and other park features. This meticulous and imaginative use of stone throughout the park reinforced the inherent, and often overlooked, potential residing in local materials that can be incorporated into architecture and landscapes.

At a regional scale, the stonework of Ferdowsi Garden also connects with the vernacular architecture found in the hillsides of the Albroz Mountains. The vernacular architecture of the past century widely embraces stone as a building material and in the landscape architecture of the region. For example, many private residences and gardens feature turquoise-color stones from Darakeh, a canyon close to Jamshidieh, or red-hued stones from nearby Darabad Canyon. The selection of the stone material culture as well as the articulate craftsmanship of the stonework makes the Garden to intimately connect with the visitor—augmenting a sense of “belonging” amongst visitors.

## FROM MASONRY TO SOCIAL DESIGN

*Informal Garden:* Ferdowsi Garden not only established a successful precedent for urban landscapes in Tehran, but also for the entire nation. While the major achievement of Ferdowsi Garden owes to the idea of an organically driven design with minimal impact on the environment, the greater success of this urban public landscape owes to its evolving social circumstances. Socio-political context of postwar Iran as key player in the grand popularity of Ferdowsi Garden. The twenty-odd years of Islamic revolution, followed by eight years of torturing war, left a lasting impact on the society. The pre-Islamic “Persian” heritage was also suppressed, including many Zoroastrian-informed traditions that associated people with nature. The new mainstream definition of public spaces and parks propagandized by official channels included “Islamic” architecture, as well as postmodern interpretations of Islamic gardens with religious references or citations of the revolution Martyrs. The new landscape did not carry any of religious references that had already saturated the society. Unlike widespread Islamic Garden-inspired parks, often with formal geometry and low quality execution, Ferdowsi Garden offered an organic and “informal” encounter with the natural setting, one that runs deep in Persian culture, and was already popular in the mountain trails of northern Tehran. The Garden successfully re-introduced a form of interacting with nature which is inherent to Persian culture, one that is liberated from the so-called Islamic propaganda, and one that was already existed in the mountain trails of northern Tehran. This is a high form of integrating environmental and social issues together in one single project. The informal and attractive design of Ferdowsi Park offered what was missing in the society for over two decades.

Additionally, the newly established Islamic government promoted a religious conservative view, and required strict limitation on individuals’ appearances in (including prohibiting everyday male-female relationships) in public spaces.

“Social Police” became in charge of patrolling public spaces to enforce strict religious laws, particularly administering women’s clothing and male-female interactions. The majority of the society did not welcome such extreme acts. Ferdowsi Garden, due to its natural setting, simply provided a more secluded place on the threshold of the city for the youth away from the eye of social police, indeed. The Garden soon was regarded as an “officially” built landscape that allowed people to experience and enjoy what was “unofficial” and unendorsed for many years. In short, Ferdowsi Park was designed, in part, to bring together an increasingly segregated society in the same way that its namesake spoke to cultural unity nearly two centuries before.

*Unifying Mount:* Dominance of conservative religious view in immediate years after the Iranian Islamic Revolution (1979) prohibited formerly essential art forms from growing, much less thriving. This included sculpture, which had practically become taboo. The use of sculptors as well as sculpting the landscape re-established a human centered relationship with the landscape, as Land Art often attempts “to win back nature as space which allows sensory perception, space in which a relationship between man and the environment becomes at all possible again.”<sup>8</sup> Additionally, the entire landscape being a human artifice, transformed into an “open work” for further interactions with humans and natural processes.

It was in this sociopolitical context that Ferdowsi Garden, which following the 1977 re-opening of Jamshidieh Stone Garden, was created and became widely popular. The name choice for the new capital’s park was unexpected and hopeful. After all, Ferdowsi was a noted poet who had played a major role in sustaining the cultural significance of nature for Iranians. His epic stories encompassed landscapes and natural settings and are widely respected by all ethnicities in Iran. Thus, Ferdowsi was regarded by many as a symbol of the newly-restored Persian culture.

Additionally, the new Tehran had become more ethnically diverse compared to that of the pre-1980s. It became diversified society impatiently awaiting change—one that included and even embraced both Islamic and pre-Islamic values. Indeed, the courageous inclusion of four different underrepresented ethnic cultures as houses in the Garden, including ones celebrating the ethnic and religious minorities of Kurds and Turkmen, symbolizes unity by giving visibility to those in a single urban project. The younger generation embraced the visionary park whose pervasive use of sculptures re-legitimized the use of this art. Considering “ground” as “where human artifice and natural process commingle for the benefit of both,”<sup>9</sup> one could argue that a new “ground” was created.

## ENDNOTES

1. Aga Khan Report [http://www.akdn.org/akaa\\_award8\\_awards\\_detail7.asp](http://www.akdn.org/akaa_award8_awards_detail7.asp)
2. The Old Stone Garden was built on the site of an old orchard, which comprised of a series of orchard groves, one pool (water reservoir) on the upper side with a brick wall to stabilize the topography, and one humble residence on the lower side.
3. Due to the popularity of the original Jamshidieh Garden on the one hand, and urgent need to develop further public green spaces for Tehran, “in 1992 the municipality commissioned the park’s architects - Baft-e-Shahr Consulting Architects and Urban Planners - to prepare a wider study for the outlying areas north of Tehran. The first part of the study to be implemented was a 30-acre park, Bagh-e-Ferdowsi, set in a series of steep, south-facing gullies scattered with loose rocks and boulders.”
4. Courtesy of Pasban-Hazrat, Lead Designer.
5. Cyrus R. Sabri and Patrick A. Miller. “Epic Stones,” *Landscape Architecture Magazine* (2002). 88-95. p.90.
6. Pasban Hazrat, Golamreza. (2009). *Design in Nature: Ferdowsi Garden, Jamshidieh Garden, Environmental Design in Kolakchal Canyons*. Tehran, Ganji Honar Publishers.
7. *Epic Stones*, p.93.
8. Smuda, Manfred, ed. *LandSchaft*. Frankfurt am Main, 1986: 8.
9. Robin Dripps, *Groundworks in Site Matters; Design Concepts, Histories, and Strategies*, Carol J. Burns and Andrea Kahn (ed). (NY: Routledge, 2005, NY) 88.