Road and Ribat:
Road Landscape in
Geographical/Historical
Context of Iran

Abstract
"Road and Ribat" a book written by late Karim Pirnia and Keramatollah Afsar was published in 1991 by the cultural heritage Organization and Armin Publication. In this book late Pirnia traditionally had an historical-cultural look to the appearance and development of roads and toll in the area of Iran. The book has divided Iranian toll process into two headings: Pre-Islamic and Post-Islamic. And under these headings, it has studied the history of road conditions. From a landscape perspective, this book contains valuable information about the road landscape of Iran, which creates a fairly accurate image the appearance and development of this landscape. According to this, there are two main factors identified in the appearance of the road landscape of Iran:
1. The cause for the appearance of road landscape; the reasons of locating main and secondary routes set in Iran, which has caused the selection of road landscape.
2. How the landscape structure formed; formation and development of components, equipment and facilities associated with the route and toll roads in Iran, leading to the formation of road landscape. In this part, landscape and multi-functional role of this component in the creation of a road landscape unique to Iran has been studied.
This article reviews the present book from the landscape view, based on the aforementioned two headings. Finally, to achieve a model for Iranian road landscape.

Keywords | Road and Ribat, Roads in Iran, Road Landscape, Geographical/Historical Context.

*A Review of the book “Road and Ribat” with the Landscape Approach
Arguing and Status of Formation of Natural-Cultural Landscape of Roads in Iran

Argument of road appearance: selection of landscape
In the first half of the book “Road and Ribat” the major reasons that have prompted appearance and location of the routes of roads in Iran are discussed. The importance of this section is for the definition of Iranian historical/geographical influential role in shaping mainlines of the ancient world. According to this, roads emerge in Iran mainly influenced by three main factors including:
1. Migration of Aryans.
2. Universal Achaemenid empire
3. Iran’s position in the link between two worlds—the world of the ancient East and the West.
The common point among these three is Geographic land-water structure of which created a single pattern with the aim of locating and developing road networks at all times. Over the centuries, changes applied to roads were limited.

Migration of Aryans; Compliance of the Road landscape with the Geographical Structure of the Iranian Plateau
At the beginning of the book, late Pirnia mentions two main reasons for the formation of the oldest roads in prehistoric times: The Great Sea and the migration of Aryans. By making a glancing mention of The Great Sea Theory, he points to a sea that existed in the current location of central deserts of Iran. Probably at the time in which the humidity of plateau was more than today, there where biological communities in the form of Villages formed around the desert; The remains of which are visible in the ancient hills today; including Hissar hill near Damghan, Cheshmeh-Ali in Rey, Sialk hill in Kashan, Gyan hill near Nahavand, and many other hills. There are hills along the main and secondary roads, approving the formation of the first roads around the civilizations affected by the Great Sea.
The second factor in the formation of roads in regular ways in prehistoric times, is routes of mass migration in the era, most notably the migration of Aryans. According to Avesta and Veda, Aryan scriptures, the Aryans have begun their historic migration about three thousand years BC, probably from plains of southern Siberia or northern Turkestan. Route passed from Siberia to the territory of Sughd, since the valley Balkāb (subsidiary of Oxus) and later the Balkh. In this area Aryans are plug. The main point is that, the path of Aryan migration in east of Iranian plateau has been adhered to the natural structure pattern of the plateau.

Achaemenid era, Organic Expansion of Roads
According to the book’s claim, major actions related to locating the roads began at the age of Darius the Great throne, and in two directions: Land roads and waterways.
Land roads; in this part, one main road and several feeder roads are mentioned. King’s Road joined the city of Sardis and territories of Asia Minor on the Aegean Sea to Susa, the capital of the Achaemenid. In addition, there were other roads connecting dependent states and countries to the Imperial different areas. In addition to the capital and major cities, the military expedition routes of both Cyrus the Younger and Alexander also defined paths and ways in the Achaemenid era. Waterways; before the Achaemenid era, water highways were centered on two rivers of Tigris and Euphrates as intermediaries between the East and the West. At the time of the Achaemenids, Iranians preferred over lands to the waterways; using the Euphrates River as a defense, they started construction of irrigation dams on it. As an alternative, they opened sea route to India and the Red Sea. The Red Sea and the West Sea (Mediterranean) were linked by digging a canal. Thus, ways were opened for the Indian commercial ships to reach to Mediterranean countries. City of Babylon, located along the former waterway Euphrates River, lost its importance in consequence of digging canal [Suez], although domestic trade still depended on the Euphrates and Persian gulf’s ports still maintained their business reputation.

Despite the influence and power of the Achaemenid Empire during the aforesaid period, road development mostly depended on physical model of Iran in both land and water ways, which means the location management strategies are properly conducted to minimize waste of time and energy.

To follow most of the models of the land caused minimal intervention of road landscape in the natural landscape. As a result, we can meet the most natural road landscapes of this period. Both objective and subjective elements were the most effective elements of nature, having roll in understanding road memory and forming road landscape. Development of ways in this period, especially the water link between Indian Ocean and the Mediterranean Sea by the Persian gulf, was an introduction to the mediatory role of Iran in the ancient world, which reached its peak in the Sassanid era and in the case of the Silk Road.

Parthian and Sassanid Era: Trade, New Factor in Formation of Roads
The importance of Iran’s intermediary role in trade between the West (Roman) and the East (China) in the terms of valuable goods particularly silk was the most significant event in the field of Persian roads after the Seleucids exit from Iran. At this time, Iran’s special geographical position as a link between the two poles of the ancient world was revealed. In the case of the formation of the Silk Road, the plateau large-scale deployment status was also raised, as well as the physical structure of the plateau in medium-scale. However, although the formation of the Silk Road –the part existed in the Iranian territory-followed through the plateau pattern as the previous routes, its exceptional importance and affluence belonged to the new position that was obtained through cross-universality of the Iranian plateau. The prosperity had its consequence on the
formation of road landscape. There were elements caused the emergence of a new landscape for roads: Concocting elements which belong to road, including caravanserais and support equipment; Proximity to villages which become more developed because of the proximity to the road; Thriving agricultural economy on the road due to the operation of transportation facilities; Production and even prosperity longevity of buildings through placement on busy routes.

Romans access to the lucrative China market seemed impossible without passing through Iranian territorial zone. The trade was monopolized by the Iranians in the Parthian and Sassanian era. At that time, both land roads of plateau and sea routes of the Persian Gulf and Red Sea were attached commercial significance in the world. In the meantime, Silk Road became an important commercial highway which started from China and crossed the plateau, and eventually reached the Mediterranean coast.

Role of the “Selection” in Formation of the Road Landscape

The book provides a picture of the course of development of roads, leading to define the nature of road landscape. Accordingly, road landscape in Iran is purely commercial in nature, which developed due to the strategic location of Iran plateau in the Old World. In the meantime, there were global macro economy and competitive aspects in addition to that, because some of lands have always been to bypass Iran. So high toll facilities commensurate with its nature is expected from such a massive displacement system with high economic value and turnover. In this context, both the economic and security aspects are notable.

Next, the book details Iranian facilities of toll landscape, analyzing its suitability to the nature of road landscape.

How to structure the Road Landscape: the Formation of Landscape

After explaining the reasons of the emergence and development of roads, in the second half of the book late Pirnia raises issues that gradually manage and form the road landscape in Iran. In this section, he detailed installations, construction and services offered in Iranian roads, which together represent designed road landscape in Iran.

Due to the commercial nature of Iran's road landscape, it is expected that the management method and design of landscape be commensurate with the nature. The commercial road landscape needs to provide welfare services, proper transportation and security cares to users at the same time. The content of the book indicates that road landscape formed in order to adapt the commercial nature of roads, and the development of distribution facilities and services helps to reach this goal.

Based on the information provided by the late Pirnia, there are three landscape models recognizable in relation to the formation of road landscape in Iran, which draw the final structure of Iranian road landscape in an interdependent series:

- Residential/welfare Landscape
- Directional Landscape
- Motion/security Landscape

Residential/Welfare Landscape

Caravanserais, Sabat, Ribat, Khan and cisterns are of the most important elements forming the residential/welfare landscape of roads of Iran. There are such Persian words related to toll and roads, used in cultures and languages of the world, which confirms the Iranian role in the evolution of the world’s toll system.

Formation of residential/welfare landscape of roads can be studied in three dimensions:

a. An organized, vast residential/welfare network in roads system seems necessary with regard to the identity and character of commercial routes and movement of multiple wealthy commercial caravans.

b. Geographic structure of Iran intensifies the necessity of the formation of residential/welfare landscape. There are reasons that Pirnia mentions as the need for appropriate roads with adequately equipped stations: Iran’s vast territory and the remoteness of cities and villages in Iran and neighboring countries.

C. In addition to the functional aspects of the residential landscape, the landscape can be analyzed in terms of design practices. Architectural pattern of residential and welfare facilities such as caravanserais, ribat and cistern, is not different from that of urban and rural architecture, but in the same direction. Common design pattern of ribats and caravanserais is based on pattern of a central courtyard with a pond in the middle of it, surrounding by residential areas and porches. This pattern has always been used in different types of architecture in Iran such as residential, cultural, religious places and shrines. It is also mentioned that Karbatha (pre-Islamic caravanserais) had ponds or ripples. Decorations and presentations used in these buildings also fit the style of prevalent architecture in the country in any period of construction of the buildings. Many of these buildings such as Sharaf ribat and Sepanj ribat are known as exquisite works of Iranians architecture.

The same thing also happened in the case of cisterns and their components are similar to urban and rural examples. This issue is very important and suggests that the difference in stay-welfare Landscape of roads with the urban and rural residential landscape is only functional. They all follow the same pattern of Iranian architecture and landscape in terms of aesthetics.
Directional Landscape

"If anyone twice passes the vast plains of Iran, specially blindway between Yazd and Tabbas, seeing the big hills quicksand that change place every day, understands that stating Minarets and towers beside the road has been more necessary even than ribats and caravanserais (Pirnia & Afsar, 1991: 144).

Directional landscape is formed by the elements which were established in the guidance and navigation of caravans and travelers, mainly in the intervals between residential landscapes. Towers and minarets used as directional buildings are the most prominent of these elements. These buildings located both on the side of highways and back roads in the desert and the forest. There is a report mentioned in the book, about the Marine's towers on the shores of the Persian Gulf.

Towers and minarets, as the medium-scale elements of road landscape, played the signal role of roads, and therefore had a significant role in creating identity of the road landscape. Directional Landscape of road can be examined from two other aspects in addition to the performance aspect:

a. Most of the guide towers change their performance to the shrine / tomb genre during the ages. As mentioned in the book, many of holy shrines especially on the southern coast of the Caspian Sea are exactly located in an area with an absolute need to the establishment of directional towers, for example the tomb of Imamzadeh Hashem in Rasht. However, according to late Pirnia, these two functions are not inconsistent with each other. The main issue is the significant importance and meaningful credibility of the directional towers gained in addition to their functional role over the time, upgraded from the objective function to the objective / subjective one. Perhaps the reason for these functional changes could be partly explained by matching the historical/religious pattern of “Locating holy places at altitude” on the functional nature of towers.

Anyway; an element such as tower, which had a completely functional role in road landscape, caused spiritual and mental aspects of the road landscape by adding semantic function; bring it out of sheer commercial aspects.

B. Like the residential landscape, architecture elements used in directional landscape also reflects the common style of Iranian architecture in its different periods. Here, too, the central plan design pattern of towers and minarets matches the common architecture of Iranian plateau. Pirnia in this book even repeats his famous theory based on the directional role of “four vaults” in the side of roads. Accepting this theory, adaption of design of directional architecture types and other Iranian architecture species will be re-confirmed. The decorations were also a reflection of the period of construction. Naderi tower for example, has a collection of decorations of Razi genre in itself, adapted to construction period.

Motion / Security Landscape

Motion / Security landscape in Iranian toll system can be investigated in three functional subsets, related together and with residential and directional landscapes:

1. Vehicles: With and without wheels, relying on livestock or humans, constituted an important part of the landscape and were effective on the formation of structure of residential elements.

2. Bridges and mountain roads: Although the oldest bridges of the Sassanid era have remained in place, some of them are likely to be made on the basis of the Achaemenid bridges. Basically Achaemenids were unlikely to be incapable of building bridges. The components play multi-functional role, as well as the components of directional and residential. Many bridges have a dual function of bridge and dam. They were also considered a part of local landscape in addition to the motion landscape. Many bridges were also built during the Safavid period, which sometimes had viewpoint/entertainment function in addition to their functional role. But the main function of bridges was still the development of motion landscape.

3. Barid and Chaparkhaneh: in addition to the facilities mentioned in the movement of caravans, the motion landscape of Iranian roads has a vast interconnected intelligence network which had different titles, but was generally known as Barid. The systematic network which primarily served as the post office in the structure of ancient world had facilities in roads according to its performance, known as Chaparkhaneh from the Safavid period. Chaparkhaneh was known as an architectural construction of road landscape. Beside the postman who beared the state news on horse, there were bodies so called Rahdar also played the role of security control of roads. Late Pirnia quoted this issue from Tavarniet.

Motion/Security landscape of roads contains a set of behaviors of people as well as compliance and harmony with traditional nature of roads, which is considered as a part of the cultural landscape. From Rahdar and Chapar to the so-called Allaf who sold goods required by passengers. In fact, public behavior has become complementary layer of motion landscape.
Conclusion | Landscape road in Iran has found the commercial / security nature under the influence of two factors: physical geography and political geography of country. Naturally, this landscape is expected to be distinct from pilgrimage or tourism Road landscape in objective and subjective terms, and also expected to have commercial individuation. Late Pirnia and Afsar arrange Iranian road landscape in three levels in book “Road and Ribats”:

a. On the first level, the “selection” of road landscape, actually the first step in developing the road landscape, is done correctly and based on geographical factors in two stages; first, the selection of path consistent with the roads of the Iranian plateau, and the second, the choose of the path due to the geographic location of Iran as the mediator between East and West, in this stage the development of path choose was evolved, and waterways along overland routes have been added to the system of Iranian road landscape. At this point the historical geography of Iran has had the most important role in the final selection and completing the landscape selection process by the Iranians. The choice is so correct and consistent with historical-geographical model of Iran that the roads have also been used with minimal changes after Islam and the occupation of Iran by Arabs 1. Iranian road landscape has fully found its business/security nature during the stage of choose of landscape.

b. At the second level, landscape formed under the influence of the commercial nature of land. Factors such as travel time and travel approach, geographical and climatic features, and the commercial value of passing convoys caused the creation of three landscape patterns in the development of Iran’s road landscape. The three models (residential /welfare, directional and motion/security landscape) achieved the objective point of road landscape with the commercial nature due to the functional aspects.

c. In the third level, the subjective aspect of road landscape is added under the influence of Iranian culture. Application of architecture and decorations in accordance with the style of Iranian architecture in the construction of toll facilities such as caravanserais or towers show the development of road landscape from the functional to the aesthetic and identity aspects of landscape. Changing the directional towers to the holy places and pilgrimages illustrates the significance of the subjective aspect of road landscape.

In fact, the road landscape that initially had only trade and international nature, gradually (by adding layers of meaning and aesthetic) has become part of the landscape identity and found native distinction. In fact, most of all, the differences between the urban landscape, the rural landscape and the road landscape of Iran have functional aspects, and the road landscape has found national dignity while having a meta-national rule. Although Iranian pattern of road landscape is close to commercial character of road in functional aspect, In the terms of aesthetic and cultural dimensions, it is associated with the subjective system of Iranian landscape, and has formed an integrated part of this landscape.

Endnotes

1. Late Pirnia defines the fate of Iranian roads after the advent of Islam as the "development and renovation after the first devastation":

"Shortly after the Arabs invaded Persia and destroyed affluent cities and beautiful pavilions taking the name of Islam (but not as asked by noble Prophet Muhammad); They had to apply all Iranian royal phenomena, products and tools in order to their global expansion and stability. Recovered Surviving belvederes, hospitals, schools, awnings and daskarehs through the gray mass of burnt villages, rebuilt by hands of children of who were died in oppressive massacre.... "

According to him, awnings, ribats and daskarehs resumed life with their former Iranian name and Iranian heralds began their work. The most important things are, two highways remained form ancient Iranian ages, means Khorasan and Fars highways, still stayed in the Islamic era keeping their highway function; there were only changes which are noteworthy in three paragraphs:

- Changing some stages; because of the destruction of some cities, crumbling bridges and destroying roads by water.
- Destination frequent changes; because of the successive changes in capitals; sometimes Ctesiphon and Hamedan and sometimes Maragheh and Sultanieh became destination.
- The temporary relocation of roads, according to political and economic expediency, insecurity, and seasonal requirements, then one road was used instead of another.

Reference List