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Study of the settlement pattern in Alashtar Plain during Parthian Period

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Abstract

Alashtar is one of the prominent valley plains in central Zagros Mountain Range. The main focus of this study is based on the activities performed in this plain in 2006-2007 periods with the aim of identifying and studying the ancient relics as well as the studies conducted in 2010 to identify and analyze Parthian settlement patterns in this area. Archaeological survey in the area identified 72 historical sites and ancient monument. The current studies suggest that first settlements in this area date back to Copper and Stone Age and the most recent settled sites belong to the later centuries of the Islamic period. Among the historical relics found in Alashtar plain, 42 relics contained remnants of the Parthian. The overall perception of the settlement pattern in this plain during Parthian period reflects variation in population or distribution of settlement patterns compared to the former and later periods. The distribution pattern of the identified historical sites suggests that the settlements were mainly in the form of rural units with no evidence of urban centers. Overall, the distribution pattern of Parthian settlements has been strongly influenced by climatic characteristics, environmental capabilities and the special geographical position of the region. This paper attempts to study the Parthian settlement pattern in this plain; moreover, it seeks to examine these historical sites and interpret the settlement patterns in the Parthian period.

Keywords: Central Zagros, Lorestan, Alashtar Plain, Parthian Period, Settlement Pattern.

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Introduction

The geographical position of Alashtar Plain clearly shows the importance of this area in archaeological studies of central Zagros and Western Iran. The identification of settlement patterns can provide important information about regional and cross-regional communications in this area. Due to its exceptional position and the importance of its sites, this plain has been the subject of growing attention of ancient geographers and geologists. To date, in north and northwest of Lorestan province, none of the Parthian sites has been explored, though some of activities have been carried out regarding Parthian period in central Zagros (Stronatch, 1975; Kleiss, 1970; Azarnoush, 1976; Kambakhsh Fard, 1972, 1974, 1995(a); Haerinck, 1983; Mohammadifar, 2005; Shahbazi, 2002). The only activity related to the Parthian period in Alashtar Plain is the intensive archeological study of Davoud Davoudi in the last few years (Davoudi, 2006-2007).

Given the importance of the region, the ancient sites in this plain were studied in 2012 to identify and analyze the settlement and environmental patterns in the Parthian Period. Today, in their archeological studies and investigations, archeologists seek to introduce and register ancient sites, propose a possible chronology and determine the location of these historical sites on the map. Then, based on the data obtained, they analyze the settlement patterns, spatial distribution of the monuments, and the interrelations of different settlements and so on.

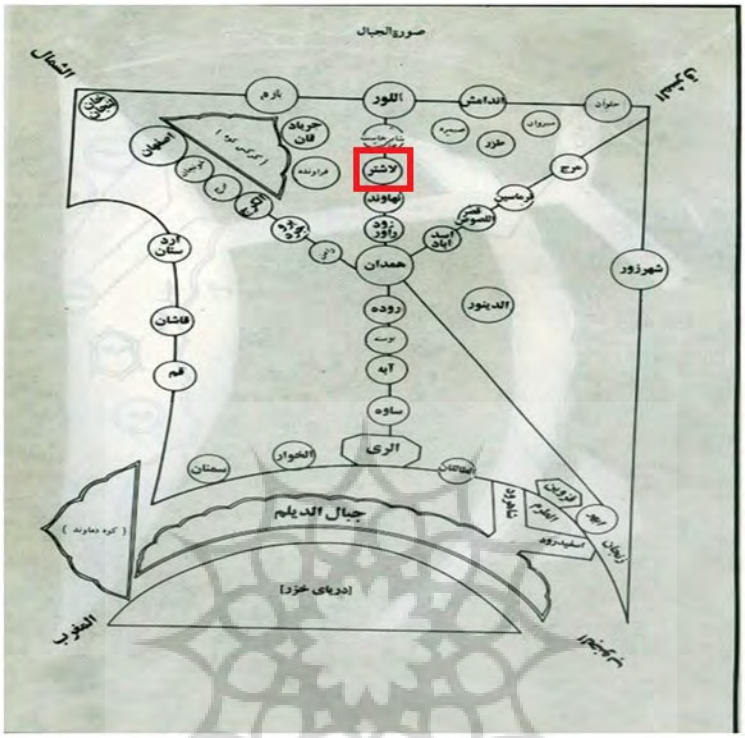
It should be noted that archeological studies of the land's surface have limited ability in terms of providing insights about ancient sites. Thus, despite the special position of these studies in investigating the dispersion pattern of the settlements and their relations, they do not have access to the deeper layers. As such, the results of these studies should be considered with caution until more comprehensive and systematic studies are carried out. Generally, the purpose of this study is to identify the characteristics of archeological sites in the region based on surface relics (especially pottery) and the impact of critical factors in development of these settlements as well as the analysis of their settlement patterns.

The research method was mainly library research to identify the sources and references. Besides that, the findings of pertinent literature, results of explorations, and archeological studies were used. Statistical methods and field studies were also employed to classify and analyze the data. This study aims at understanding the effects of various factors on the settlement patterns in Parthian period in Alashtar Plain, which was carried out as an intensive survey. The simple random sampling method was used to collect cultural material samples from the studied site, which included Clinky pottery (including simple, painted and engraved Clinky pottery), painted pottery, glazed pottery (including corroded green and blue glazes) and simple pottery from Parthian period(Fig 1 and Table 1).

Historical geography and the archaeological literature on Alashtar Plain

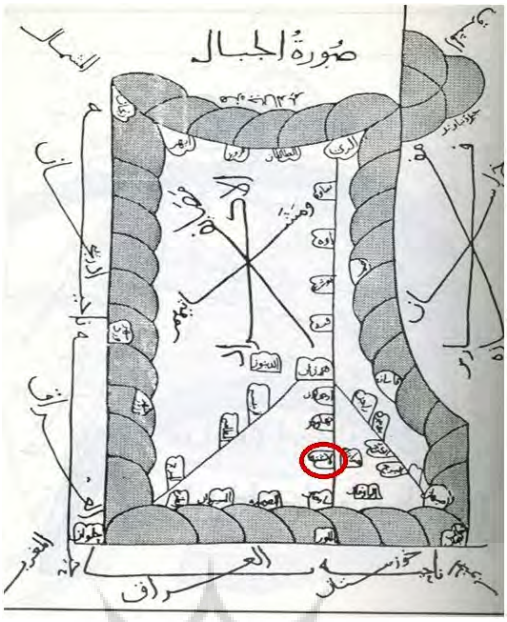
In the Parthian and Sassanid texts, there has been no reference to the city and plains of Alashtar, but the historians from the early centuries to the contemporary Islamic era have mentioned the name Alashtar in their books, referring to it with such titles as Lashtar (Istakhri, 1994: 203-208 ; Ibn

Hawqal, 1987 : 358), Lishtar (Mudjmal ut-tawārīkh va Alqisas, 1939 : 409 ; Hudud al-Alam, 1982 : 141 ; Ravandi, 1985 : 229), Alaashtr (Ibn Balkhi, 1984 : 63 and 116) Ashtar (Neishaboori, 1953: 56 - 55) and Alishter (Mustawfi, 1957: 127) (Maps 1 and 2).



Map 1- Mountain Land Map: Adapted from Al-Masālik wa'l-Mamālik

Furthermore, the historians point to a city belonging to pre-Islamic era in Alashtar, which had a temple called Aroukhsh (Mostofi, 1957: 107; Le strange 2005: 209; Pourdavoud 1977: 290). Generally, the heyday of Alashtar city in the Islamic era was also in the Seljuq period, when this city was one of the notable settlement centers for Barsoghian (a group of princes and rulers in the Seljuq dynasty) (Ravandi, 1985: 229). Iskandar Beg Munshi (968 - 1043 AD) also considers Alashtar as the minor Lur territory (Munshi, 1971: 469). Rawlinson who on his trip to Lorestan, crossed Alashtar Plain on his way from Khoramabad to Kermanshah, refers to Alashtar and Khaveh as Nisin area, where Alexander had visited on his trip from Susa to Hamadan, the area which was known for its special breed of horses (Rawlinson, 1839: 99-102).



Map 2- Ibn Hoqel Travelogue. The book Iran dar Ṣūrat al-'Arz,, mountain and road map

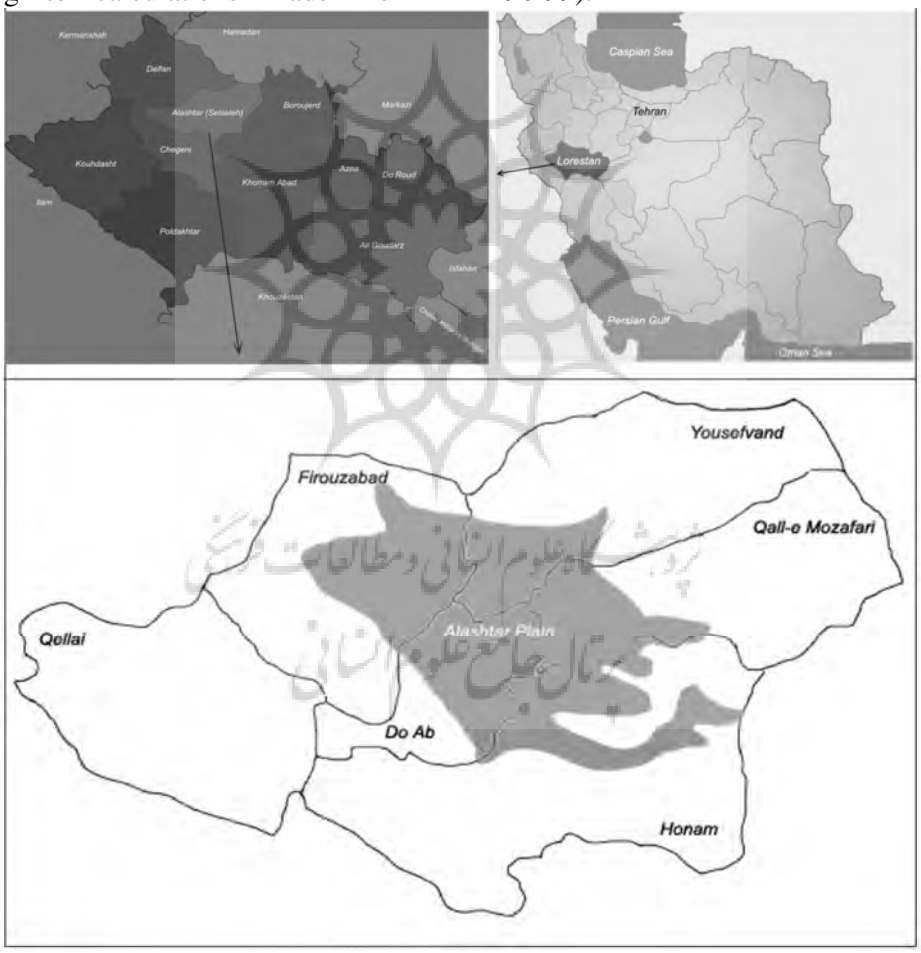
From an archeological point of view, in 1936, Sir Aurel Stein entered Alashtar with the aim of studying the settlement sites and the cemeteries introducing Lorestan bronze which were located across the Karkheh and Seymareh River: he then started examining Geriran and Betki Hills. (Stein, 1940: 280-300). Ernst Herzfeld was also among the researchers who investigated the bronzes in Lorestan and visited the relics and artifacts in Alashtar Plain (Herzfeld, 1941). In his studies during 1963 – 1967, Clare Goff visited some parts of Alashtar as well (Goff, 1968, 1971). In 1969 AH, Hamid Izadpanahi introduced a considerable number of ancient sites in the city of Lorestan and Alashtar (Izadpanah, 1984). In 1998, Ali Sajjadi, as the expert of the Lorestan Heritage Office, explored some parts of Alashtar region, enlisting some of its antiquities and ancient sites (Sajjadi, 1998). The historical monuments of this city were studied by Davoud Davoudi in two seasons (Davoudi, 2006 and 2007). In 2008, the historical settlements of Firoozabad were also studied (Hatami Nasari, 2009), with a western part of this area overlapping with Alashtar Plain. In 2010, a number of historical relics of this city were also studied (Khosravi, 2010). To sum up, it can be said that this area has not only been mentioned in the historical and geographical texts, but also approved by the archeological data confirming the presence of various human groups in the different eras, especially Parthian period, in this region.

Geographic location and the scope of the study

With an average altitude of 1580 m above sea level in Lorestan Pishkuh, Alashtar is one of the most important plains of Central Zagros which is located between Gareen and Sefīdkūh Mountains. Alashtar Township which is now referred to as Selseleh in political divisions, is located in the north of Lorestan, in the western part

of Iran. It shares border with Nahavand Township in Hamadan Province from north, Delfan Township from north and northwest, Khorramabad Township from south and southwest, Chegeni Township from the west and Boroojerd Township from northeast. Alashtar consists of two central divisions, Firoozabad and six villages including Ghale Mozaffari, Firoozabad, Yusofvand, Doab, Honam and Qalaee (Ismaili, 2000: 258).

Alashtar Plain is the only plain within the Territory of Alashtar Township which encompasses the current Alashtar city. According to calculations made from 1/25000 geographical maps and satellite images, Alashtar Plain covers an area of 142 m^2 which is engulfed among Mt. Gareen, Mt. Sefrah., Mt. Mahaw, Mt. Haft Kiyani, Mt. Sefid and Mt. Rimaleh. The communication between this plain and other mountainous areas is established through a series of passage routes (Map 3). The main rivers in Alashtar plains are Kahman and with plenty of natural springs in the area. In terms of geology, Alashtar plain is composed of Middle Cretaceous Formation, Kashkan and Bakhtiari conglomerates (Davoudi et al, 2010 -2011: 96-99).



Map 3: Location of Alashtar Plain and its surrounding areas

Parthian settlements

In general, 72 archaeological sites were identified in Alashtar plain which given the dispersion of the relics in the region (including pottery and surface material), 42 sites belonged to Parthian period. There is also the possibility that some areas have been destroyed or buried due to human factors (such as construction, agriculture, etc.) or natural phenomena (e.g., sedimentation, etc.). The areas related to the Parthian period in Alshtar plain are mainly situated in the plain or foothill which are divided into hills and sites. In this plain, the settlements are often built around water sources and agricultural fields. Compared to other periods, Parthian settlements are more dominant for such reasons as abundant water sources, fertile grounds, balanced distribution living resources including natural pastures and easy access to the mountain resources from different sides etc. Considering the increase in the settlements, it is quite probable that in the Parthian period, there has been a population growth (Figs. 2 & 3).

The ratio of environmental variables to the identified areas

As our main purpose was to identify the settlement pattern in the region, we shall concentrate on this aspect of the survey. We take settlement pattern to be the distribution of human activity in the context of the landscape and the relationship between such activities and the social environment (Schreiber, 1996: 636). Access to land, water-supply, coastal resources and minerals are clearly factors in the selection of sites (Dark, 1995: 134). Accordingly, recognizing the settlement patterns, the role of exiting natural resources in the area in connection with the sites, their intensity, identifying the communication paths and cultural exchanges with the neighboring regions as well as studying the geographic patterns of settlement and the archaeological sites in the area in relation to the trans-regional similarities are particularly important.

It is worth mentioning that during the study, we came across various archaeological sites including multi-period hills and cemeteries. In some cases, the exact function of the archaeological site could not be determined. Thus, the relative periodization and chronology indexes of the areas were prepared based on the study of pottery and surface material. Generally, the environmental parameters have played a significant role in the development of the settlements. In the study of Parthian settlements in Alashtar Plain, several environmental variables that appeared to have affected establishment of Parthian sites were assessed. These variables included factors like distance to water resources and agricultural lands, height above sea level, height above the surrounding land level, the extent and density of the sites, and their chronology and periodization sequence.

Location of ancient sites based on the height above sea level

Given its direct correlation with rainfall, climate variability, vegetation, animal species, and most importantly, the development of settlements, height above the sea level is highly important. According to GPS data, height above sea level in Parthian areas within Alashtar Plain varies between 1533 to 1750 m and the height above mean sea level is about 1630 m (Table 3). Alashtar Plain is a relatively high plateau that provides fertile lands to the extent that the favorable

ecological conditions have laid the ground for the development and continuity of the settlements, allowing the residents to engage in different fields of activities such as animal husbandry and farming. Finally, the highest Parthian site in the region is Pachya Hill which is located at an altitude of 1750 m above sea level, and the lowest areas belongs to the Zhir tag Hill of Doab which is at an altitude of 1533 m above sea level (Table 2& Fig 3).

Table 3: Location of ancient sites in terms of the height in Alashtar Plain

Heights above sea level (m)	Number of points	Percentage of Points
1500-1600	12	57/28
1600 - 1700	22	38/52
1700-1750	8	04/19
Total	**42**	**100**

Location of ancient sites in terms of distance from water source

Access to water resources is the main factor affecting the development of any settlement in a region. Considering that the studied area is located in the Central Zagros Mountains with an acceptable rate of precipitation, it enjoys abundant water resources thanks to Kahman and rivers and a host of natural springs. This feature has contributed to the development of settlements in different areas, acting as the main reason in formation of settlements during Parthian period. The location of historical sites in Alashtar Plain relative to the water network is such that there are 25 sites (accounting for 59.52% of the entire area) whose distances from water resources is less than 200 m; 12 sites (28.75% of the entire area) whose distances from water resources is between 200 and 500 m; 4 sites (9.52%of the entire area) whose distances from water resources is between 500 and 1000 m, and 2 sites (4.76% of the entire area) whose distances from water resources is more than one kilometer(Table 2 and Fig 4).

Location of ancient sites in terms of vegetation

Alashtar is a fertile plain with a high potential for agriculture. Most of the Parthian sites in this plain were located inside these fertile agricultural lands which have played a key role in the development of settlements in different eras in this plain, especially during the Parthian period (compared to other eras), though most of these sites have been destroyed today as a result of agricultural activities.

Generally, there is a diversity of flora and fauna in the plain with the surrounding mountains covered with forest trees and wild plants. In fact, the fertility of this plain has stimulated the cultivation of crops and vegetation in the area to the extent that today a variety of crops and trees can be seen in the area thanks to the climatic and ecological features. Walnut, apple, grape, willow, poplar, pear, elm, cherry, cranberry and sycamore are abundant in the area. Apart from forest trees, some non-edible plants such as paqzan, salsify, artichokes, oregano, mint as well as a variety of medicinal and aromatic plants such as borage, daphnia, thyme, basil flowers, violet, damask rose, rose, anemone, musk willow, tulips, licorice, lily, hibiscus flowers, narcissus, and mountain tea grow in this area. The basic conclusion that can be drawn here is that there has been no fundamental change in the environment and climate of Lorestan since Iron Age to date (Hole, 1987; Solecki & Solecki, 1983; Hubbard, 1990), and possibly, there has been no significant

variation in the vegetation, environment and climate of this area from the Parthian period onward as well. Thus, these factors are fairly comparable with the past.

The Position of the ancient sites in terms of breadth and height from the surrounding grounds

The assessment of the width of the area can be used as an index for analyzing the inside and outside settlements relationships. Evaluation of the sites expansion can be considered as an index to analyze the intra and inter-relations of the settlements. The essence of the archeological settlement pattern analyses to date has been to infer the functional importance significance from variability in site size and location (Wenke, 1987: 269). This index probably shows the functional extent of these sites. There seems to be a close relationship between the size of ancient sites and the degree of their complexity and economy. In this regard, it is argued that the larger the place, the greater the extent of administrative and social services provided. Thus, compared to the smaller sites, they have more complicated administrative and economic systems (Alizadeh, 2004: 197). The traditional way of establishing the importance of sites is to measure their sizes to see what sort of distribution they exhibit. Although the difficulties of establishing sizes of sites are considerable, the exercise of examining the distribution of sizes is not altogether fruitless because it gives us an opportunity to consider what the causes of any size differences might be (Hole, 1987: 89). The majority of Parthian sites in Alashtar plain are small in terms of size, which may be due to the fact that Parthians were farmers in this area.

In terms of breadth, the 42 sites containing the remnants of Parthian period in the region can be divided into five groups: 1 - sites with an area of less than one hectare (including 24 sites (57.14 %) s); 2 - sites with an area of one to two hectares (including 7 sites (16.66%); 3- Sites with an area of two to three hectares (including 5 sites (11.90%); 4 - Sites with an area of over three hectares (including 2 sites (4.76%), and 5- Sites whose area is difficult to estimate due to the establishment of today's villages in their area. This is true about 4 sites that cover 9.52% of the total sites. The total area of the Parthian-related sites (excluding the above 4 sites) is approximately 51 hectares with the minimum area belonging to Chia Khazineh with 80 m. In some sites, this low size is due to the manipulations and interventions of the peasants and farmers.

According to studies, the sites containing relics from Parthian period can be divided into three groups based on their height from the surrounding ground: 1 – Sites whose height is less than 5 meters from the surrounding grounds, which include 28 sites. 2 – Sites whose height is between 5 to 10 meters from the surrounding grounds which include10 sites. 3 – Sites whose height is more than 10 meters from the surrounding grounds, which include 4 sites. 4 - A number of sites which probably belonged to nomadic and husbandry societies, thus, lacking any specific height is worth mentioning (Table 2).

Parthian settlements in the process of evolution in the region

The overall classification of the sites in Alashtar Plain is based on the collected samples of surface pottery and stone tools. One of the widely used methods in the archaeological surface explorations has

been using the potteries of sites with proper stratigraphy for comparing with the collected assemblages of the exploration in order to date the surface assemblages. It which show the presence of settlement in the area (e.g. see Adams, 1962; Carter, 1971; Johnson 1973; Wright et al, 1979). In some areas, however, it is very difficult to determine the exact period because of the similarity between potteries found in different sites. It should be noted that the settlements of Parthian era in most Iranian regions is easily distinguishable from its prior eras due to the introduction of a type of pottery known as clinky (Young, 1966; Stronach, 1974; Haerinck, 1983) which is abundant in most Parthian sites in Alshtar Plain. When determining the date of clinky pottery, most researchers assert this type of pottery came into use from medieval Parthian era onward, when painted pottery was out of vogue (Haerinck, 1983: 100-106). As such, it can be argued that Parthians probably settled in this area approximately at the same time. Painted pottery is another type of pottery belonging to this period which according to Ernie Haerinck, has its origin in Achaemenid period. Haerinck believes that it is difficult to distinguish Achaemenid pottery from early Parthian period (Haerinck, 1998: 112). Designs colored in ochre, dark brown and dark on a buff-colored and cream-yellow background including sinuated designs, irregular geometric motifs, ladder-like and scorpion designs or simple braids designs are very common.

The crucial point is that Parthian settlements are relatively dense in Alashtar Plains, this density is also visible in other Western parts of Iran such as Khaveh Plain (Sabzi et al, 2013), Azna (Abdollahi and Sardari, 2006), Nahavand Plain (Talaei et al, 2006: 61), Chamchamal Plain (Mohammadifar and Sarraf, 2004: 120), susiana Plain (Wenke, 1987) and Kangavar Plain (Young, 1975).

In general, the Parthian sites in Alashtar Plain can be divided into three groups based on their periods: 1 – The sites in which the relics of Parthian period and former eras (chalcolithic, Bronze Age, Iron Age and Achaemenids period) can be found, including 9 sites (approximately 12.42 %); 2 - Sites in which the relics of Parthian periods along with later eras can be found (Sassanid and Islamic periods), including 22 sites, (52.38%) which suggest that a large number of sites in Alashtar Plain have been inhabited for the first time in the Parthian Period. 3. The sites in which the relics belonging to both pre and post Parthian eras can be found which include 11 sites (26.19%). These sites usually cover a chronology from chalcolithic period to Islamic era, including chalcolithic Period (6 sites), Bronze Age (6 sites), Iron Age (3 sites) and Islamic and Sassanid era (11 sites) which is no doubt due to the suitable conditions and special location of these sites. The only single-era site in Alashtar plain is Gar shahi Hill, though it is possible that some other single-era sites have been buried down in the sediments (Table 1). It should be noted that the potteries in the studied area during Parthian period were influenced by the known patterns common in the west of the country, where the increase of sites in the Parthian period represents an increase in population of this area during that period.

Distance and proximity to the modern settlements

This index is highly important due to factors such as strategic location, availability of resources, quick and easy

access to water and road networks, suitability of lands for irrigated agriculture and so on. When an ancient area or a site is blessed with these features, it should have been used in different eras, as the presence of villages in or around these historical sites confirms. According to this index, the historical sites of Alashtar Plain are located within or outside villages in the present time.

In general, the position of the sites in this plain in relation to modern villages is such that 16 sites (38.09 % of the total Parthian area) are inside or attached to village, 16 sites (38.09 % of the total sites) are in a distance less than 500 meters from the modern villages, and 10 sites (23.80% of the total sites) are in a distance more than one kilometer from the modern villages (Table 1).

Conclusion

Due to its fertile lands, plentiful water resources and surrounding mountainous areas covered with diverse vegetation, Alashtar Plain has prepared the grounds for various human activities such as agriculture and animal husbandry (because of its convenient access to foothills and mountainous areas). Generally, the distribution pattern of Parthian settlements in this plain has been strongly influenced by climatic features, environmental capabilities and geographical position of the region. Moreover, the proximity of this region to the important cultural centers in west and southwest of Iran explains the existence of numerous settlement evidences related to various eras, particularly Parthian Period in this region. Moreover, given its location in Zagros mountain range, Alashtar Plain has been able to accommodate greater population compared to the mountainous area, and its residents have probably been engaged in agriculture and animal husbandry besides other occupations because of its richness in terms of water – land resources.

It should be noted that the number of sites belonging to Parthian Period in this plain shows a significant increase compared to earlier and later eras, a fact which probably bears witness to a population rise in this region in Parthian Period, or maybe to the long ruling of Parthians (about 500 years) or the fertility and ease of access to resources in the region. That's why today, according to archeological data, the relics relevant to Parthian period can be found in most sites throughout this plain (approximately 58 % of the total sites). As such, it can be argued that Parthians were able to use the entire Alashtar Plain optimally.

On one hand, due to the richness of the region, settlements in this plain are more concentrated than other areas, and considering the significance and favorable position of the archaeological sites in this plain, even modern villages are developing around or inside the plain. The tendency toward rural settlements and nomadic life in Parthian period (contrary to the Sassanid era that developed a tendency to centralization) might explain the small sizes of Parthian settlements in the plain.

On the other hand, based on the surface evidence related to the Parthian period in the plain, it can be said that much similar to present situation (where this plain is one of the most densely populated rural areas in Lorestan), in the Parthian period, most sites in the plain were in form of small villages that had access to a central location with the only difference being that today Alashtar city is located inside the plain while in the Parthian period, probably Ghaleh Bibi - which today is

located 20 kilometers from the west of Alashtar city – was the central location. This area is the largest site related to the Parthian period in the West and Northwest of Lorestan (Alashtar and Nourabad). It is worth mentioning that the situation of this plain and its location on the way from Nahavand to Shapour Khast might have increased the number of settlements in this area.

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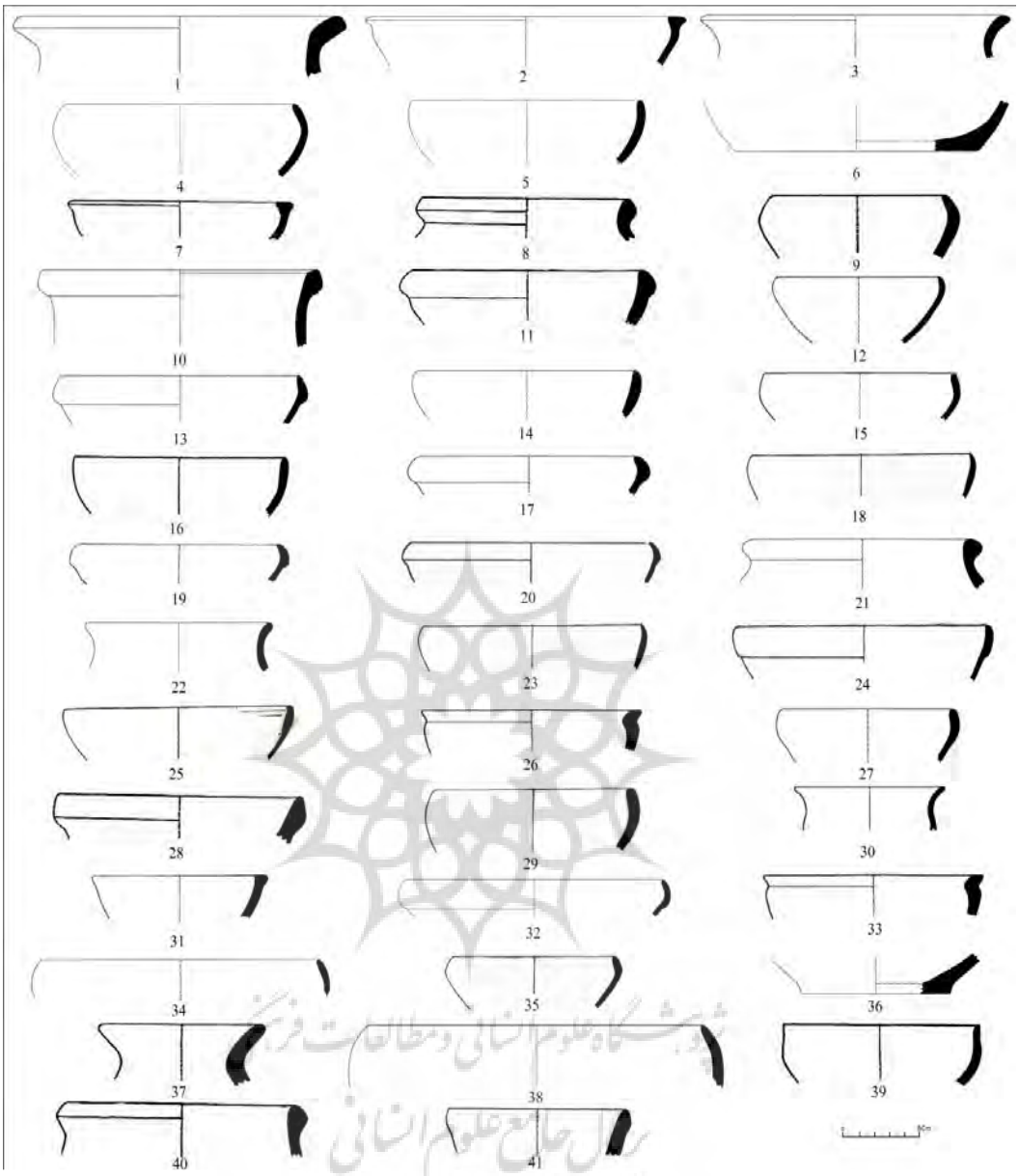

Fig 1. Sherds from the Parthian Sites in Alashtar plain

Table 1. Descriptions and Parallels Sherds from the Parthian Sites in Alashtar plain

Number	Site	Sherd type	Fabric Color			Temper	Manufacturing	Firing	Manufacturing quality	Refrence
			Core	Int	Ext					
1	Pa Chia Temeliah Tepe	Rim	Red	Red	Red	Mineral	Wheel	Well fired	Medium	Alibaigi 2010, fig 4:1
2	"	Rim	Buff	Cream	Buff	Mineral	Wheel	Well fired	Fine	Kleiss 2006, p 114, fig 13
3	"	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Keal & Keal, 1981, fig 29:4 Mohammadifar 2005, P 455, Table 26: 11
4	"	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Kleiss 2006, p 108&109, figs 5&6 Mohammadifar 2005, P 443, Table 14: 5
5	"	Rim	Buff	Buff	Buff	Mineral	Wheel	Well fired	Fine	Haerinck 1983, fig 19:10 Kleiss 1970, Abb 28:1&4 Alibaigi et al 2012, P1.3:4 Mohammadifar 2005, P 465, Table 36: 11
6	"	Base	Red	Red	Red	Mineral	Wheel	Well fired	Medium	Haerinck 1983, fig 19:1 Kleiss 2006, p 115&116, figs 21&22
7	Pa Chia Temeliah Site	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Kleiss 1967, Abb 15
8	"	Rim	Buff	Buff	Buff	Mineral	Wheel	Well fired	Medium	-
9	"	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Kleiss 2006, p 108&109, figs 5&6 Alibaigi 2010, fig 3:13

10	"	Rim	Red	Red	Red	Mineral	Wheel	Well fired	Fine	Keal & Keal 1981: fig 18: 6
11	"	Rim	Brown	Brown	Brown	Mineral	Wheel	Well fired	Medium	-
12	"	Rim	Orange	Orange	Orange	Mineral	Wheel	Well fired	Fine	Kleiss 1970, Abb 26:21 Rahbar & Alibaigi 2011, fig 4:10
13	Deh Agha Tepe	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Haerinck 1983, fig 15:10 Stronach 1969, p 17: No 14 Rahbar & Alibaigi 2011, fig 4:25
14	Gown Kawer Tepe	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Kleiss 2006, p 108, fig 5
15	Owlad Ali Tepe	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Alibaigi et al 2012, P1.3: 5
16	"	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Haerinck 1983, fig 19:10 Kleiss 1970, Abb 28:1&4 Rahbar & Alibaigi 2011, fig 4:10
17	Ghabrestan Gasem	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Haerinck 1983, fig 15:10 Stronach 1969, p 17: No 14 Rahbar & Alibaigi 2011, fig 4:9&23 Mohammadi far 2005, P 444, Table 15: 15
18	Gar Shahi Tepe	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Rahbar & Alibaigi 2011, fig 4:12

19	"	Rim	Buff	Buff	Buff	Mineral	Wheel	Well fired	Medium	Haerinck 1983, fig 15:10 Stronach 1969, p 17: No 14
20	"	Rim	Brown	Brown	Brown	Mineral	Wheel	Well fired	Medium	Kleiss 1973, Abb 22:8 Rahbar & Alibaigi 2011, fig 4:23
21	Ghaleh Changizi Tepe	Rim	Cream	Cream	Cream	Mineral	Wheel	Well fired	Fine	Keal & Keal, 1981, fig 8:12
22	"	Rim	Red	Red	Red	Mineral	Wheel	Well fired	Fine	Kleiss 1970, Abb 26:58 Alibaigi 2010, fig 1:31
23	"	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Rahbar & Alibaigi 2011, fig 4:12
24	Chok Shah keram	Rim	Buff	Buff	Buff	Mineral	Wheel	Well fired	Medium	Rahbar & Alibaigi 2011, fig 4:17
25	Kalek Pir Mohammad Shah Tepe	Rim	Orange	Orange	Orange	Mineral	Wheel	Well fired	Fine	Haerinck 1983, fig 5:1-2
26	"	Rim	Brown	Brown	Brown	Mineral	Wheel	Well fired	Fine	Alibaigi 2010, fig 13:30
27	Ghower Bacho Tepe	Rim	Gray	Orange	Orange	Mineral	Wheel	Well fired	Fine	Haerinck 1983, fig 15:3 Rahbar & Alibaigi 2011, fig 4:8&12 Mohammadi far 2005, P 465, Table 36: 15
28	Teimur Souri Olia Site	Rim	Buff	Brown	Buff	Mineral	Wheel	Well fired	Medium	-
29	"	Rim	Gray	Brown	Brown	Mineral	Wheel	Well fired	Fine	Kleiss 2006, p 108&109, figs 5&6
30	Pachia Roumeshtah	Rim	Red	Red	Red	Mineral	Wheel	Well fired	Fine	Mohammadi far 2005, P 449, Table 30: 14

31	Chia Derekah 1	Rim	Gray	Gray	Orange	Mineral	Wheel	Well fired	Medium	-
32	"	Rim	Buff	Buff	Buff	Mineral	Wheel	Well fired	Medium	Haerinck 1983, fig 15:8 Stronach 1969, p 17: No 14&15
33	"	Rim	Brown	Brown	Brown	Mineral	Wheel	Well fired	Fine	Alibaigi 2010, fig 13:30
34	Chia Derekah 2	Rim	Gray	Gray	Orange	Mineral	Wheel	Well fired	Fine	Kleiss 1970, Abb 28:1
35	"	Rim	Gray	Gray	Gray	Mineral	Wheel	Well fired	Fine	-
36	Jou Bahrami Tepe	Base	Gray	Gray	Cream	Mineral	Wheel	Well fired	Fine	Alibaigi 2010, fig 7:78
37	"	Rim	Buff	Brown	Buff	Mineral	Wheel	Well fired	Medium	Mohammadi far 2005, P 451, Table 22: 5
38	"	Rim	Cream	Cream	Cream	Mineral	Wheel	Well fired	Fine	Rahbar & Alibaigi 2011, fig 4:12
39	Momenabad Tepe	Rim	Gray	Gray	Cream	Mineral	Wheel	Well fired	Fine	Alibaigi 2010, fig 5:1
40	"	Rim	Buff	Buff	Buff	Mineral	Wheel	Well fired	Medium	Alibaigi 2010, fig 3:31
41	Zhir Tagh Doab Tepe	Rim	Cream	Cream	Cream	Mineral	Wheel	Well fired	Fine	-

Table 2. General information about the Parthian sites in Alashtar Plain

Site No.	Site name	Height Above Sea Level (M)	Area(M)	Height from the Surrounding Grounds(M)	Periodization	Distance from Water Sources(M)	Distance from today's settlements (m)
PA001	Gheyh Gar Hill	1712	6325	8	Bronze, Parthian and Afterwards	200	80
PA002	Karvansaraye Abas Ali	1691	2000	-	Parthian and Afterwards	1000	750
PA003	Geriran Hill	1659	75000	25	Chalcolithic, Bronze, Parthian and Afterwards	100	150
PA004	Khazineh Hill	1618	80	1	Parthian and Afterwards	800	200
PA005	Gol Zard 1 Hill	1618	4824	7	Parthian and Afterwards	50	15
PA006	Gol Zard 2 Hill	1615	1131	3	Parthian and Afterwards	50	80
PA007	Sepahsan Hill	1604	28236	2	Chalcolithic, Parthian and Afterwards	380	600
PA008	Kord Abad Sofla Cemetery	1600	8881	7.5	Parthian and Afterwards	60	200
PA009	Chia Safar Hill	1601	3027	2	Parthian and Afterwards	70	170
PA010	Kazem Abad Hill	1595	1156	1.5	Parthian and Afterwards	440	70
PA011	Amraei Hill	1629	3250	18	Chalcolithic, Bronze and Parthian	80	50
PA012	Bayer Hill	1615	5475	1	Parthian and Afterwards	50	70
PA013	Adl Abad Hill	1629	9494	1.5	Parthian and Afterwards	200	120
PA014	Chia Jijo	1610	3248	5	Parthian and Afterwards	150	250
PA015	Piri jed Cemetery	1627	11700	1	Parthian and Afterwards	80	500
PA016	Deh Agha Hill	1607	؟	-	Chalcolithic, Iron and Parthian	50	20
PA017	Gown Kawer Hill	1598	4758	1.5	Parthian and Afterwards	50	180
PA018	Rowa Hill	1607	5124	2	Iron and Parthian	450	600
PA019	Owlad Ali Hill	1616	15510	6	Bronze, Parthian and Afterwards	60	800

PA020	Ghabrestan Gasem Hill	1675	15836	5	Chalcolithic and Parthian	200	90
PA021	Gar Shahi Hill	1702	11530	1	Parthian	130	630
PA022	Ghaleh Changizi Hill	1703	20330	10	Parthian and Afterwards	300	750
PA023	Chok Shahkeram Hill	1677	3420	2.5	Chalcolithic and Parthian	130	150
PA024	Kalek Pir Mohammad Shah Hill	1718	6696	3	Chalcolithic, Parthian and Afterwards	100	40
PA025	Ghower Bacho Hill	1700	5000	3	Parthian and Afterwards	330	100
PA026	Derah Maran Hill	1686	38612	1	Chalcolithic, Bronze, Parthian and Afterwards	20	90
PA027	Pa Chia Temeliah Hill	1701	3750	20	Chalcolithic, Bronze, Parthian and Afterwards	80	750
PA028	Pa Chia Temeliah Site	1681	22912	1	Chalcolithic and Parthian	20	1000
PA029	Teimur Souri Olia Site	1630	6696	2.5	Chalcolithic and Parthian	200	20
PA030	Pachia Roumeshtah Hill	1750	1360	5	Bronze and Parthian	80	450
PA031	Chia Bal 2 Hill	1578	9775	2.5	Parthian and Afterwards	1000	350
PA032	Ali Veisi Hill	1578	4800	1	Parthian and Afterwards	1300	600
PA033	Shahsavar Hill	1558	13802	19	Bronze, Parthian and Afterwards	10	50
PA034	Derekah 1 Hill	1582	15193	10	Bronze, Iron, Parthian and Afterwards	450	350
PA035	Derekah 2 Hill	1579	21414	3	Iron, Parthian and Afterwards	300	250
PA036	Joubahrami Hill	1573	14520	5	Parthian and Afterwards	300	250
PA037	Momenabad Hill	1564	؟	-	Parthian and Afterwards	80	90
PA038	Ghowrbacho Ahangaran Hill	1557	؟	-	Parthian and Afterwards	80	10
PA039	Ahangaran Olia Site	1561	؟	-	Parthian and Afterwards	70	20
PA040	Zhir Tagh Doab Hill	1533	2080	3	Chalcolithic and Parthian	40	80
PA041	Deraw Bardbal Site	1550	7910	1	Parthian and Afterwards	500	800
PA042	Kahriz Site	1746	20350	1	Bronze and Parthian	60	150

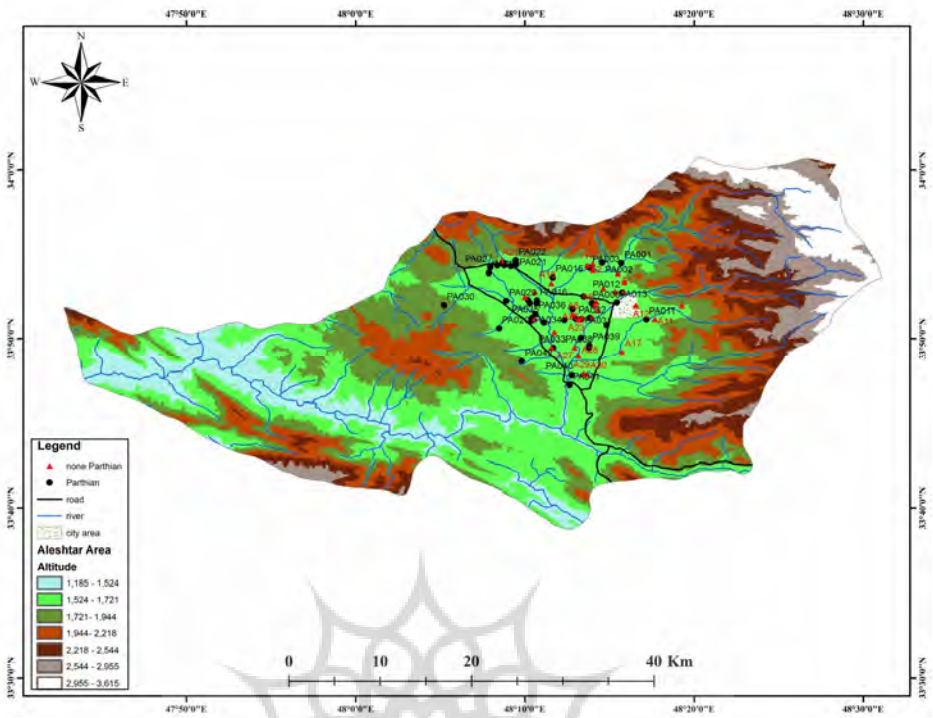

Fig 2. The general position of sites in Alshtar Plain

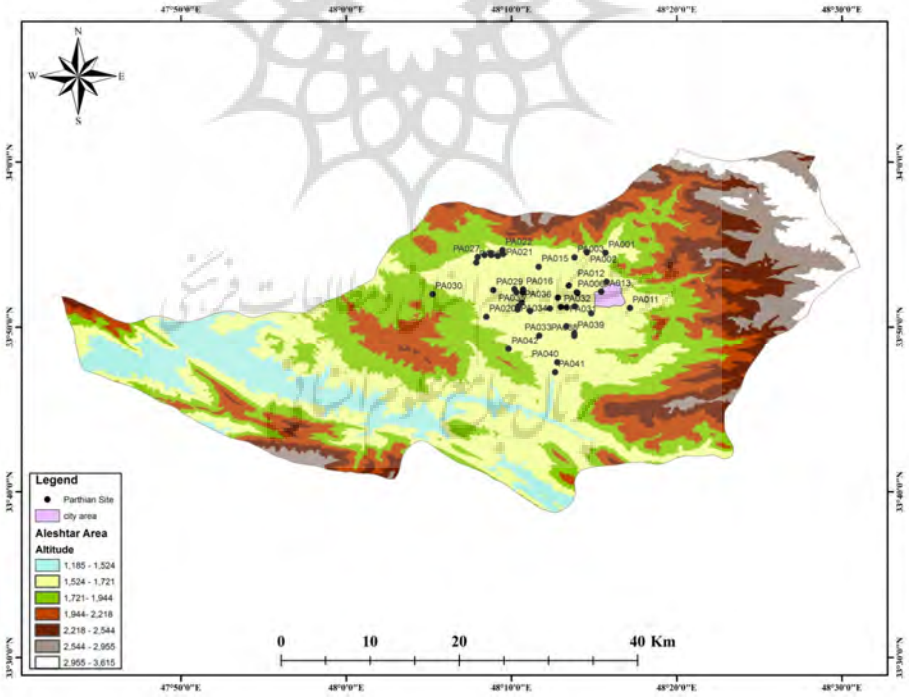

Fig 3. The position of Parthian sites in Alashtar plain

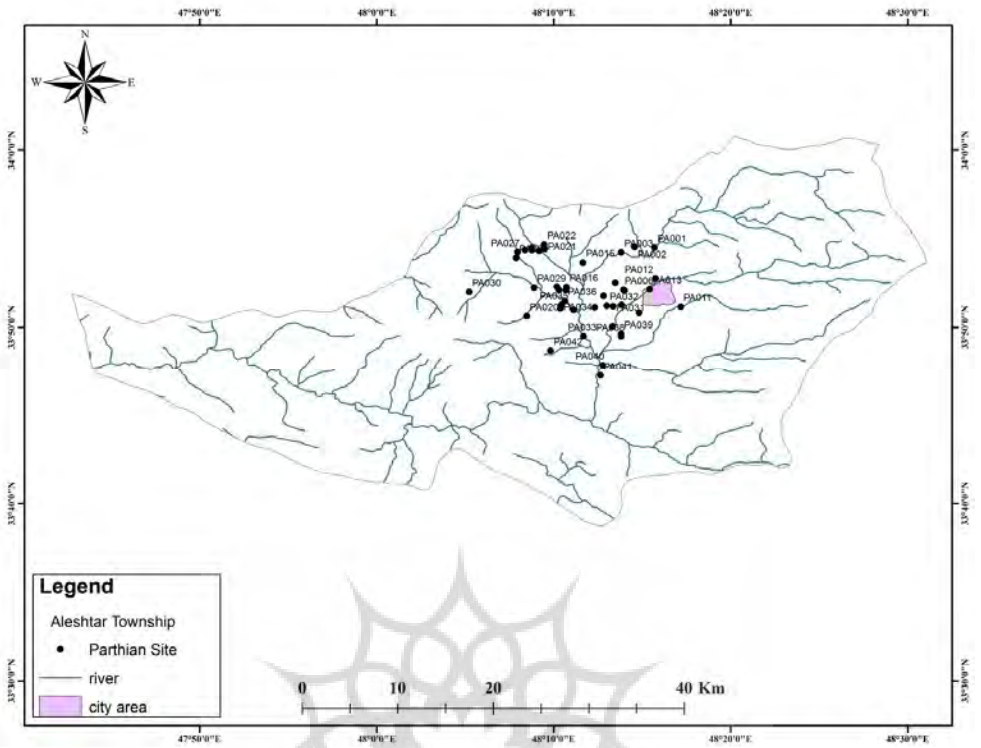

Fig 4. Distance of sites to the water system

بررسی و تحلیل الگوی استقراری دشت الشتر در دوره پارتیان

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دشت الشتر یکی از مهمترین دشت‌های میانکوهی زاگرس مرکزی به شمار می رود. مباحث مورد توجه در این مقاله عمدتاً بر اساس فعالیت‌هایی است که در طی سالهای ۱۳۸۵ - ۱۳۸٦ در این دشت به منظور بررسی و شناسایی آثار باستانی و در سال ۱۳۹۱ بخاطر شناسایی و تحلیل الگوهای استقراری دوره پارتیان در این منطقه صورت گرفته است. در نتیجه بررسی باستان‌شناسی صورت گرفته در این دشت تعداد ۷۲ محوطه و بنای باستانی شناسایی شده است. مطالعات کنونی نشان می‌دهد که آغاز استقرار در این دشت مربوط به دورهٔ مس و سنگ می‌باشد و جدیدترین محوطه نیز مربوط به قرون متاخر دورهٔ اسلامی است. از مجموعه آثار باستانی دشت الشتر تعداد ٤۲ اثر دارای بقایای مربوط به دوره پارت بوده‌اند. درک و دریافت کلی الگوی استقراری این دشت در دوره پارتیان نشانگر تغییرات جمعیتی یا تغییر الگوی پراکنش استقرارها نسبت به دوره‌های قبل و حتی بعد از این دوره است. سیمای پراکندگی محوطه‌های باستانی شناسایی شده نشانگر این موضوع است که بیشتر استقرارهای منطقه به شکل واحدهای روستایی بوده‌اند و شواهدی از مراکز شهری شناسایی نشد. بطور کلی الگوی پراکنش استقرارهای پارتی در این دشت بشدت متاثر از ویژگیهای اقلیمی، توانمندیهای زیست‌محیطی و موقعیت ویژه جغرافیایی منطقه است. در نگارش پیش رو سعی شده است تا الگوی استقرار پارتیان در این دشت میانکوهی مورد بررسی قرار گیرد و همچنین به مطالعه محوطه‌ها و تفسیر الگوهای استقرار دوره پارتیان در آن پرداخته شود.

واژگان کلیدی: زاگرس مرکزی، لرستان، دشت الشتر، دورهٔ پارتیان، الگوی استقرار.

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