

FOURTH & FIFTH
YEARS Vol. 4- 5
SUBARTU
SUMMER 2011



A Scientific Journal
Deals with Archaeology and Heritage
Issued by Kurdistan Archaeologists Syndicate

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Prehistoric Settlements of Little Zab River Basin in North West of Iran

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Abstract

The little Zab River rises in north western of Iran, from the mountains of northwest of Piranshahr and flows from northwest to southeast and west of Iran to join Iraq from Alan passage.

The basin of River had lots of ancient sites, and its lower area that is close to the Zab River had been the most interested place for Neolithic Age people. Increasing the population in Chalcolithic Age and the need to more places and ... caused geographic dispersion of settlements. These sites are located in the north of this basin, in a valley and a little plain, among mountains and the Zab Sub branches are more noticed.

Key words: North western of Iran, The Little Zab River, Archaeological survey, Neolithic, Chalcolithic

Introduction

The Zab River basin contains Piranshahr and Sardasht in West-Azarbayjan province and parts of Bane in Kurdistan province. The Zab River rises from northwest highlands of Piranshahr, after joining different branches to it and after passing from highlands of Alan in Iran entered to Iraq. The extension of this basin has drawn as a relatively vertical strip along the international border with Iran and Iraq and the little Zab River and its longitudinal and latitudinal expansion is northwest to southeast and western-eastern. (Khezri, 2000). The Zab basin is located in an

area with a cold and temperate mountainous climate and Mediterranean rainfall regime, with average annual temperatures between 11 / 7 to 13 / 3 and the annual rainfall is 700 ml.

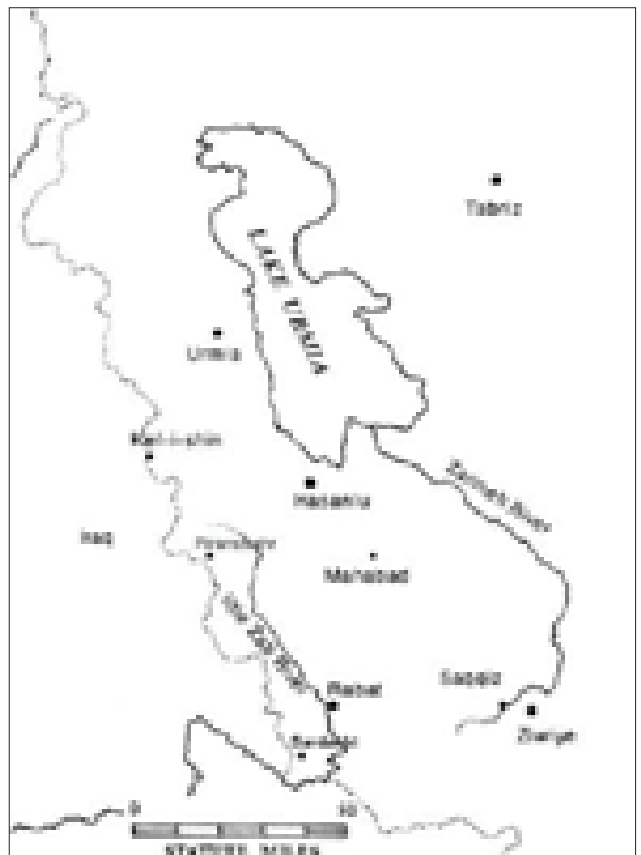


Fig1, Location of Zab basin in northwest of Iran

The Zab basin is facing rainy winds, its vegetation is sparse and dense forests, includes forests of oak, Ors and sometimes wild pistachio

(Qzvan), almonds and tamarisk. Density scales in some areas is more to the neighboring regions. Zab basin located in Geology area (zone) of Urmia - Sanandaj-Sirjan or so called Sanandaj-Sirjan, which geologically is located after the High Zagros in the northeast. In the northwestern parts of this zone in which the basin of Zab form part of it, the geology Laramie factors have created severe transformation (Nabavi, 1976).

Prehistoric Archeological studies in West Azerbaijan (Iran)

North West of Iran with its appropriate climate and neighborhood with Anatolia, Mesopotamia, and Naxjavan, had a particular importance in Archaeology of different prehistoric and historical periods. Country-specific geographic location North West and specially the West Azerbaijan province in ancient age, as the meeting place of past important cultures caused most scholars and archaeologists noticed to this area. In this regard Vande Berghe proposed this province as a crossroads for passing of nations and trading (Vande Berghe, 1959).

Since the beginning of Archaeological scientific and modern activities and Studies in the early decades of nineteenth century, this area had been studied and excavated by Iranian and foreign archaeologists.

Stein visits some prehistoric site (1940), Coon survey and excavated in Urmia area (1951), Italian group supervising by Pecorella and Salvini (1984), Solecki excavated in Sivan Tepe (1978). English board supervising by Burney in Haftvan (1972), and Swiny had studied a vast area in northwest (1975). The archeological studies in south of Urmia lake had started seriously by Hasanlu project by Dyson and his group in south of this province in Dalma (Hamlin, 1975), Hasanlu (Dyson, 1972), Haji-Firuz (Voigt, 1983), Pizdelli (Dyson & Yong, 1960). Brown in Goy Tepe (brown, 1984) and Lippert in Kord-Lar Tepe (Lippert, 1981) were excavated. In recent years Tepe Jolbar the Neolithic site near Urmia Lake was soundaged (Razaghi&Fahemi, 1996).

The Zab basin archeological study

Method of study

In collecting archeological data in survey various methods is usual which chooses any of them depending on regional conditions and practical and theoretical objectives in archaeological research (Alizadeh, 2001).

In survey of Zab basin, the basin area was divided in two parts northern and southern, and then survey of the area had started regularly from northern part and finally ended in the southern part.

In characteristic form of ancient sites, factors including local position of remaining objects on the map, kinds of remaining objects, its height from the sea level, environmental possibilities, neighboring structures and...had been regarded. For registering of remaining objects we firstly numbered sites regularly and in numbering we use a five letter code including three letters (Zab) which are representative of Zab River, the fifth and fourth letter are the sites number along our studies.

Recognized works and objects:

As a result of surveying prehistoric sites in Little Zab River basin, 22 sites were identified. In six site works belong to Neolithic period, and in sixteen site works belong to Chalcolithic period were identified.

Position of the Neolithic sites to water resources

Water is one of the main factors for life and settlement. Zab River basin with having permanent and seasonal multiple branches and high water springs had always been considered by man. As pointed above six sites which belongs to Neolithic period has identified. Two site located in northern part of the basin and four sites are located in southern part of the basin. In the center part which had more compressed branches, settlements belong to this period was not identified.

(Zab 42) site is located in the margin of the River and (Zab 47) near one of the sub branches

and faraway from the River is located. In south of the basin (Zab 38) located in eastern margin of the Zab River and (Zab 31) and (Zab 36) in regular located near the eastern and western branches relatively in a close distance to Zab River. (Zab 39) is located between one of the branches and Zab River.

Position of Neolithic sites to the height

Except Jaldian Tepe (Zab 47) which is in the height of 1500 meters above the sea level and located at the foot of the highlands, other sites are located in lower height. (Zab 42) located in a small plain among the Lajan Mountain, its height is 1150 from the sea level. The southern site of Zab basin is located in height from 800 to 1150 meters.) Zab 36) is located in the lowest parts of the basin between Sardasht and Rabat, near Zab River.

It seems that low lands of the basin because of nearness to the Zab River and its favorable conditions had been more attention by the Neolithic Age peoples. It is only (Zab 47) that is alone in a high area and other site having not been located in high area.

Position of Neolithic sites to forest cover

Forest cover of the Zab basin is divided into two completely distinct parts. The northern section, which includes more of the Piranshahr city, is almost bereft of forest. The southern part in Sardasht city has Forest covering, with different density in different sectors. Jaldian and Lavin site are very far from the forest. (Zab 36) and (Zab 31) are located in forest area with low density and Zab 38 is in area with average density. (Zab 39) is located in margin of forest with high density.

Position of Chalcolithic sites to water resources

As pointed above water is one of the main factors for life and settlement. Zab River basin with having permanent and seasonal multiple branches and high water springs had always been considered by man. Number of 16 site belonged to Chalcolithic period were identified. 8 sites in northern part of the basin, two sites in center and

six sites in southern part are situated. In northern part four sites is located in margin of Brkmran River, which is one of the main branch of the Zab River.

It seems that this part with its plains among mountain had been more attention in the Chalcolithic period. (Zab 15) and (Zab 17) are located beside one of the sub branches with seasonal water, and beside the high water springs and relatively in a distance far from the River. Khri-Qalatan (Zab 10) which is separated from the Zab River with a high rolling Hill range is in the southern margin of a Riverbed and surrounded by several springs. In the central part of basin (Zab 30) in the margin of Zab River and (Zab53) beside one of the Zab River branches are located. In the south basin only (Zab 38) is situated in the margin of the Zab and other Chalcolithic site of this part are located in the margin of sub branches and near to Zab.

It seems that this part with its plains among mountain had been more attention in the Chalcolithic period. (Zab 15) and (Zab 17) are located beside one of the sub branches with seasonal water, and beside the high water springs and relatively in a distance far from the River. Khri-Qalatan (Zab 10) which is separated from the Zab River with a high rolling Hill range is in the southern margin of a River bed and surrounded by several springs. In the central part of basin (Zab 30) in the margin of Zab River and (Zab53) beside one of the Zab River branches are located. In the south basin only (Zab 38) is situated in the margin of the Zab and other Chalcolithic site of this part are located in the margin of sub branches and near to Zab.

Position of Chalcolithic sites to the forest cover

The basin north sites are in non-forest areas and in principle in north of the basin there is not any forest.

In north of Basin, sites of (Zab30) and (Zab36) in a forest area with low cover, (Zab38) with average cover and (Zab52) with dense cover are located. Other sites are located in margin of the forest with low cover. Sites of (Zab4), (Zab6),



(Zab10) and (Zab23) are located in high margin with poor cover and other sites of this age are in no high areas.

Conclusion

The Basin of Zab River has potential for Paleolithic groups. Natural food resources in the forest, which include several species of fruit trees, wild animals that now in these forests, continue to exist, and water full valleys all could be ideal environment for hunter and food collector human. Also several caves with good condition was identified, but unfortunately despite many attempts in foot and around the cave, stone artifacts were not found, this can be due to high sediment into the cave and several collapsed of its roof.

Neolithic settlement: Based on the surface data, the oldest period identified in this study is related to the Neolithic period. As a result of survey in six sites, pottery works related to the Neolithic period were identified. Neolithic sites are located in the north and south of the basin. Now more Neolithic settlements are situated within the existing village or near them.

Shards of pottery which are collected from sites surface and belong to Neolithic period are in two simple and painted groups with red color tends to pale buff with a polished surface and pale and dense mud cover with vegetative grit, handmade and mostly cook incomplete. These potteries decorated with geometric designs that could be compared with Haji- Firuz pottery.

Dyson and Voigt known Haji-Firuz contemporary and in equivalent horizon with the Hasuna and representative of permanent settlement in the village, also they suggest its oldest settlement period the late of sixth millennium B.C. (Voigt, 1983).

Hamlin known Haji-Firuz representative and in equivalent horizon with Hasanlu X layer (Hamlin, 1975:120). Based on the surface findings in Zab basin no place during the early Neolithic period has not been inhabited and apparently like to Sulduz plain the oldest rural settlement is related to the new Neolithic period.

Although it seems that in terms of natural conditions, it is different from the Sulduz plain where Haji-Firuz Tepe is located in there. If the Sulduz plain and Haji-Firuz in that era (early Neolithic) had been a marshy plain. Unlike to it in Zab basin there had been favorable conditions for establishment. However, lack of site belong to this period is considerable. It seems that the low part of basin according to nearness to the Zab River and its favorable conditions had been more interested by the Neolithic period peoples on that region. It is only (Zab47) which is in a poor high area but other sites are not located in high area.

Neolithic peoples of Zab basin could be classified in rancher and farmer groups. People of Jaldian site according to its environment seems to be more rancher but Lavin site in opposite to it, is located in a small plain with very good agricultural potential. Some obsidian blade had found in this site (Lavin) that probably like other Neolithic sites in North West of Iran, the place of supplying them had been the Anatolian. Central part of the basin has narrow valleys and lacked adequate agricultural land and therefore had been less interest in this period.

In Chalcolithic period number of settlements reaches to 16 sites. In north of the basin, sites (Zab30) and (Zab36) are located in forest with low cover, (Zab38) in forest area with the average cover and (Zab52) in area with compressed cover, and other sites are in margin of forest with low cover. Sites (Zab4), (Zab6), (Zab10) and (Zab23) are located in margin of poor quality pasture and other sites in this period are in non-pasture areas. In this period we are faced with increasing population, the need for more space and access to resources has led to dispersion of establishments. This sites in north of the basin in small valleys and plains between the mountain, are more in linear shape and sub branches of Zab are more considered.

Animal-husbandry for some of these societies had been the major profession. The basin southern sites according to its natural condition are situated in margin of forest and they are almost as a colony. This shows that forest resources cannot be supplier of major food needs of society.

A few Chalcolithic sites had identified which have different kind of Dalma potteries. Dalma potteries are handmade with inadequate cooking and vegetative blended which are often in simple and applied forms and with thick mud glaze. Their vast and abnormal geographical dispersion in west of Iran had appropriate importance. These potteries cover districts of central and northern Zagros and had been seen with Halaf and Ubaid prominent pottery in Hamrin in east of Iraq. Solecki knew nomads the factor of these potteries dispersion (Hole, 2004: 101), that is of course considerable. Hamlin refers to wider connections and name Mesopotamia, Kermanshah region, and adjacent regions (Hamlin, 1975:110120-). In any case existence of rich Chalcolithic sites in Dalma period showed its relation with suburbs areas and Mesopotamia widely.

Halaf Culture had considerable impression and influence on its adjacent simultaneously cultures. This factor is well visible at Telki, of course Halaf influence could be traced to the Mediterranean coast also. Similarity in form and decoration of these two districts potteries is the traces of Mesopotamian cultures impression, especially Halaf and Ubaid cultures. Late Chalcolithic culture expansion and similarity in Goy Tepe M, Yanik, Gawra XI-IX, Arsalan Tepe VII and Tal-Barak is sensible (Helwing, 2004). Although many of the decorative elements can be seen in different regions but with a local authenticity.

Halaf and Ubaid cultures role should not be overlooked. Halaf culture impressed local and weaker cultures. We have not found evidence of Halaf culture influence in North West of Iran, but in east of Anatolia especially in Telki there are evidences of it. Despite the vastness of Halaf culture in Mesopotamia and adjacent regions, but in Sulduz plain it is not seen evidence of Halaf culture (Dyson & Young, 1960).

Also in Zab basin, at least based on the surface findings it is not seen evidence of Halaf culture.

When this subject became considerable that in the later periods we see impression of cultures in this basin that in Sulduz plain and south of Urmia Lake basin is not seen. Pisdeli culture influence at least in northern district of Zab basin is evident.

Up to now, in North West of Iran evidences of Ubaid cultural communication has been reported in Pisdeli. Pisdeli period belong to about 3200-3900 B.C and it is contemporary and in a horizon with Hasanlu VIII. In little distance from the Pisdeli Tepe at Goy Tepe near Urmia, M tranche and M and N phases at Goy Tepe are a little newer chronologically (Helwing, 2004). Continuation relation with Ubaid in 3000 B.C is visible in M layer of Goy Tepe. Also similar gray pottery obtained at the late Chalcolithic sites in northern Zagros.

Similar bowls and pitchers in Arsalan Tepe and also in Goy Tepe M are significant and visible. In Chalcolithic Layers of Arsalan Tepe (layer VII); there are potteries comparable with Goy Tepe, Yanik Tepe (Helwing, 2004) and Telki Tepe, which approximately its second layer (II layer) is related to late Chalcolithic.

Another considerable case is identifying Uruk kind pottery in three sites in south and one site in north basin, this kind of pottery is not observed in North West of Iran to yet and its presence in the higher regions of Hamadan is not reported. Potteries called beveled-rim bowl includes considerable number are, for these types of potteries based on their finding place had proposed various applications (Abdi, 2009). If consider these potteries belong to the late Uruk period that is late fourth millennium B.C, in this time we see social complexities that accelerated in the Middle East. In some areas this bowls are one of the beginning urbanization signs (Majedzadeh, 1989).

If we attitude the existence of beveled-rim bowl at late Chalcolithic period a sign for the beginning urbanization in this basin, then it has entered into urbanization before other regions in north west Iran and Urmia Lake basin. Chalcolithic cultures in North West Iran in the late fourth millennium B.C have been abandoned (Talaee, 2002). Urmia Lake basin after finishing late Chalcolithic is occupied by different beyond Caucasus gray monochrome pottery. Sometimes this type of pottery Called as Yanik culture. Yanik culture in the Godin Tepe in west of Iran is placed immediately on Uruk culture which perhaps be

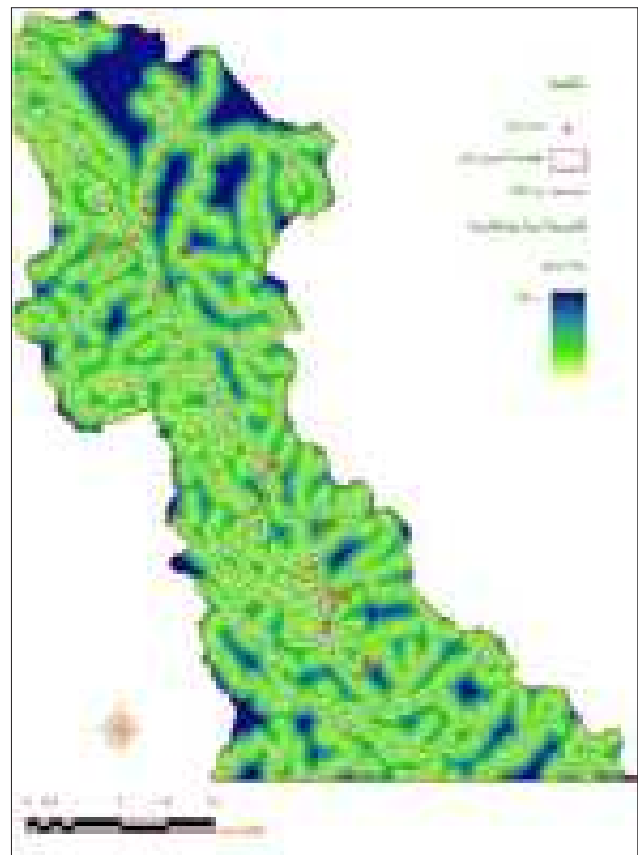
due to Yanik men expansion and pushing back (GodinV) merchants for controlling this region trade roads. Although Yanik culture in many parts of North West of Iran had prominent presence, but apparently, it has, pale presence in Sulduz plain and in the Zab basin is not seen at all. Apparently, in this time Zab basin had cultural-commercial relation more with Mesopotamia than the North West of Iran.

It seems that in the Zab basin evidences of all these cultures is exists and in chronology and cultural continuity terms it can fill existence gap in the north west of Iran or at least south of Urmia Lake basin. Although it should be noted that, some cases should not be considered completely due to the lack of a culture (for example Uruk culture) in Sulduz plain or suburbs, but perhaps it be due to lack of researches done in these areas. At least in one site (Lavin Tepe), traces of Dalma, Pisdeli and Uruk pottery (beveled-rim bowl) is seen together.

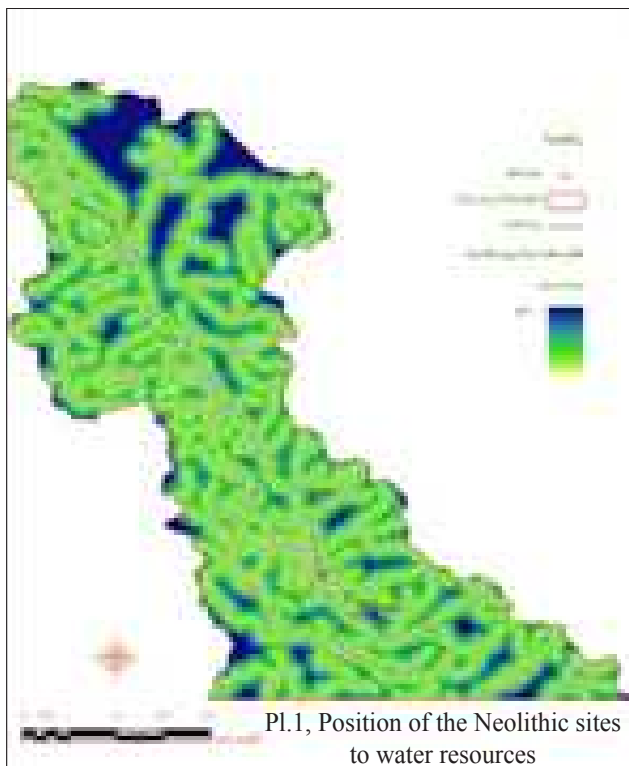
Now, if based on prehistoric chronology of Sulduz plain and the south of Urmia Lake basin we consider for Dalma Culture a history about 4000-5000- B.C (Hamlin,1975) and for Pisdeli 3200-3900- B.C (Doyson & Young), so the Uruk culture will situate after 3100 B.C.



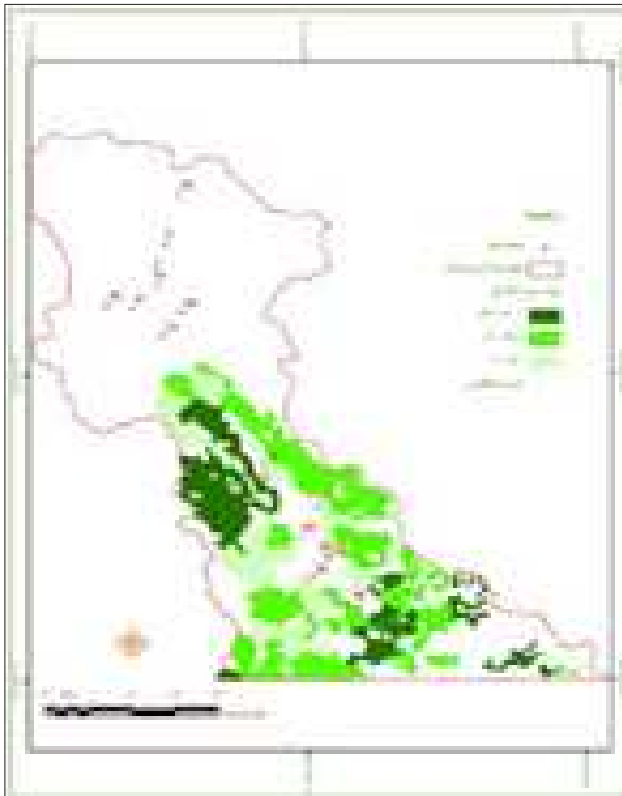
Pl.2 Position of the Neolithic sites to forest covers



Pl.3 Position of the Chalcolithic sites to water resources



Pl.1, Position of the Neolithic sites to water resources



Pl.4 Position of the Chalcolithic sites to the forest cover



Pl.5 Position of the Chalcolithic sites to the height

References

- Abdi, Kamyar. 1999. The Beveled – Rim Bowl: Function and Distribution, the Iranian world Essays on Iranian art and archaeology presented to Ezat O.Negahban
- Alizadeh, A., 2001. Methoda and Theories in Archaeology. Iranian Cultural Heritage organization Archaeological Reserch Center.
- Burney, C.A., 1972. The Fifth season of excavation at Haftavan Tappeh: Brief summary of principal Results IVth symposium IRAN
- Dyson R. H Jr, and T.Cuyler Young Jr., 1960, The Sulduz valley, IRAN: pisdeli Tepe, Antiquity XXXIV
- Dyson, R.H, .1972, Hasanlu proceedings of The 1st Annual Symposium of Archaeological Reserch in IRAN November 1972
- Hamlin, Carol. 1975."DALMA TEPE, IRAN, vol. X III
- Helwing, Barbara. 2004, The late chalcolotic period in the northern Zagros a reappraisal of the cueernt status of research, in: AZarnoush, M. (ed.), Proceedings of International Symposium on Iranian Archaeology:Nortwest Region.Tehran: Iranian Center for Archaeological Reserch
- Hole, F., 2003.The Archaeology of Western Iran
- Khezri, Saeid. 2000.Physical Geography of Moceryan Kurdistan,Tehran
- Majidzadeh, Y., 1989. Beginning of Urbanization in Iran, Tehran
- Malek Shamirzadi, S., 2003. Prihistoric of Iran., Iran from the earliest thmes to the dawn of urbanism, Tehran
- Nabavi, H., 1976.Geology of Iran, Tehran
- Talayi, H., 2002. The Bronze Age of Iran, Tehran
- Vande Berghe, L., 1959. Archeologie de l Iran ancien, Leiden
- Lippert, A., 1981. Digluthauben vom Kordlar Tepe (persisch-west Aserbeidschan), Iranica Antiquq, vol XVI
- Voigt.M., 1983. Haji- Firuz Tepe Iran: The Neolithic settlement, The University Museum University of Pennsylvania
- Razaghi Hosen & hamid fahemi. 1996. A preliminary report of Suondage at Tepe Jolbar, Archaeology and History, vol. 2
- Solecki, Ralph. 1999. An Archaeological Survey in Western Azarbijan, Iran, The Iranian world Essays on Iranian art and archaeology presented to Ezat O.Negahban
- Swiny, S., 1975. Survey in North-West Iran, 71, East and West 25: 7796-
- Pecorella, R, M. Salvini., M.1984. Tra lo Zagros E L>Urmia, Rome

Archaeology of the town under the citadel Erbil/Hawlér:

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The citadel (qalat) at Arbil, one of the most prominent archaeological monuments of North Mesopotamia and a symbol of Iraqi Kurdistan, provokes recently more and more intensive attention of the archaeological research teams. This positive development goes hand in hand with the preparation of complex revitalization of the heritage area: a temporal depopulation of the citadel was the first step of the restoration project and at the same time opened an unrepeatability opportunity for survey of the site, continuously inhabited for roughly six millenia.

The archaeological project realized in 2009–2010 has been focused in large measure on the problem of the Arbil's tell hinterland. From both historical records and travelogues of 18th–19th centuries is obvious that the citadel was only a part – albeit the most important – of a larger town and that the remains of the town in the plain were visible till the expansion of the modern building in 1960's and 1970's. We have found the way how to increase the knowledge about the disappeared lower town in comparison of all available sources: medieval documentary records, reports of the European travellers from 16th to 20th century, aerial and satellite imagery and results of fieldwork (survey, vertical sections

recording and sampling, geophysics, sondages).

By the analysis of written sources as well as of nearly thirty travelogues we have managed to pinpoint a list of 61 buildings and materialized institutions in the town from the Late Sasanian through Islamic ages (including 14 structures in the qalat), some of them enable an elementary spatial identification. In terms of aerial and satellite imagery, we have been fortunate enough to gain access to a series of historical aerial photos made before the year 1936, in 1938, 1947 and 1952 by the RAF of the United Kingdom. We also secured the CORONA satellite images from 1969, which could be effectively compared with Google Earth imagery.

Despite of total obliteration of the archaeological remains in the areas under the citadel, we registered several places with positive evidence of archaeological stratification. It is, for exemple, the case of the slightly elevated Khanaqa quarter southeast from citadel where an upper part of the Late Islamic stratification was recorded, or the case of the sections in the courtyard of the Sheykh Dawud Mosque near Qaysariyya. In the 9 m deep building pit of the Erbil shopping mall the most important

stratification was evaluated so far. The sequence consisted of Islamic funeral stratum on the top, underlied by a group of settlement and funeral layers, a sand-and-gravel layer, a 3,5 m thick loess stratum of perhaps pre-Neolithic date and a sand-and-gravel terrace bed. On its surface, the Middle Palaeolithic stone industry was found in two concentrations in the same stratigraphic position at approximately 220 m distance which signalizes a large hunter-gatherer site of the Mousterian cultural affiliation (Fig. 1). These and other examples show the high degree of preservation of archaeological stratifications in modern built environment of Arbil's city. These valuable situations require urgently both scholar attention and heritage protection.

The research in 2009/2010/ has confirmed earlier hypothesis of large, independently fortified lower town. Remote sensing has been used to lay bare traces of two fortification systems of ancient and medieval Urbilim (Fig. 2). System I consisted of a rampart body some 20 m thick, with outer sloping glacis and a moat in front of it. This construction finds parallels in rampart systems of Assyrian cities such as the western part of the Ashur city wall, or the fortification of Nineveh which is 45 m thick. The north part was excellently preserved in high relief till 1960's and then built-up even if slight relief traces of the rampart and moat are still visible in the micro-relief of several lanes and streets (Fig. 3). Other parts of the fortification heavily eroded (NW side) or are displayed on photographs as soil (crop) marks. System I once enclosed an irregularly round area of 3 km², and was probably linked directly to ramparts of the citadel in the way which left the East portion of the citadel mound open to the landscape. The north part of the fortification probably included a risallite gate in the close proximity of the pre-modern hollow way headed Ainkawa.

System II was represented by a mud-brick (?) wall accompanied by an outer ditch, and its later age is borne out by its superposition over the

ditch of the System I. In its south-eastern part, the outline of the wall features a series of lighter spots lying close to each other in regular distance, possibly to be interpreted as buttresses or turrets of the wall. System II may date from the Middle Islamic period. It seems that System II partly re-used the fortification lines of Assyrian age, partly enclosed a somewhat reduced area.

The aerial imagery brought forth evidence of other possible structures of the abandoned city. The fortification system I was extended on northeast so as to integrate a hill – apparently a tell – of perimeter ca. 130 m. The hill was interconnected with citadel by a qanat. A pattern of hollow ways radiating from the tell is distinctive element of the Early Bronze Age or later tells in North Jazira (Wilkinson 2003, 111–117). The parallel existence of the tell nearby the Arbil citadel, integrated in the town fortification, provokes considerations about another characteristic feature of the Assyrian residential towns – the secondary citadel. Two towers visible on its summit may be identified tentatively with the fortress mentioned in the first half of the 13th century by Ibn Khalikan. This important site has disappeared completely during the building of bus station near the cross of Barzani Namr and Safeen Streets.

A group of undated square structures have been identified on aerial imagery in the south outskirt area of the Lower Town. These might represent habitation structures as well as tombs.

Post-Assyrian Arbil retained the status of a regional capital. The analysis of the medieval sources shows high degree of physical continuity between Sassanid and medieval Arbil: some early Christian buildings clearly survived at least till 14th century AD. Sources of the 12th and 13th centuries AD also refer to the western part of the lower town as to the „old city“. It was there that the congregation mosque was built then, including so-called Choli minaret, the only still standing structure of Medieval Arbil. Soundings in its vicinity carried out in 1960 yielded materials of perhaps Umayyad and Early Abbasid dates. We

therefore proposed the hypothesis about early Arab urban settlement (misr) attached to the western perimeter of the Sassanid city nucleus, perhaps due to maintaining of exclusivity of the Muslim proselyte community. This misr and the earlier town nucleus might be gradually integrated into one organism, in the period of the town revival during the reign of Arbil Atabegs in 12th century at latest. Under Zayn ad-Dīn 'Ali-Kutchuk and his son Mudhaffar ad-Dīn Kōgburi the city underwent a restructuration or refoundation, including erection of the new city wall and of many communal buildings.

The results of the Czech – Kurdish project in 2009/2010/ confirmed the former suspicion that the citadel mount in Assyrian as well as in Islamic periods was only an iceberg's top, a part of much more complex city of admirable dimensions. Therefore, the town of Arbil can be fully compared by its size and structure with other Assyrian megalopoleis (Fig. 4). The round plan, less common among the Late Assyrian town foundations, might be a chronological phenomenon. The Assyrian fortifications became so stable element of the Arbil's urban plan that influenced all subsequent spatial configurations of the city. We see confirmation of all hypotheses and acquisition of further, more concrete data about the building form of the disappeared town in the plain as an imperative of the forthcoming research phase.

References:

Nováček, K., Chabr T., Filipský D., Janíček L., Pavelka K., Šída P., Trefný M. and Vařeka P. 2008: Research of the Arbil Citadel, Iraqi Kurdistan, First Season, *Památky archeologické* XCIX, 259–302 (reprinted in *Subartu* 3,2009/ 238–205).

Nováček, K. 2008: The architecture of Arbil citadel, A preliminary report on the 2nd season of the citadel survey in 2007, in: *Orientalia Antiqua Nova* 8, Proceedings from the conference hold in Plzen 2008, 260283-. (Czech with English summary).

Wilkinson, T. J. 2003: *Archaeological Landscapes of the Near East*. Tuscon.

List of figures:

Fig. 1: Erbil shopping mall building pit, south section, stratigraphical interpretation.

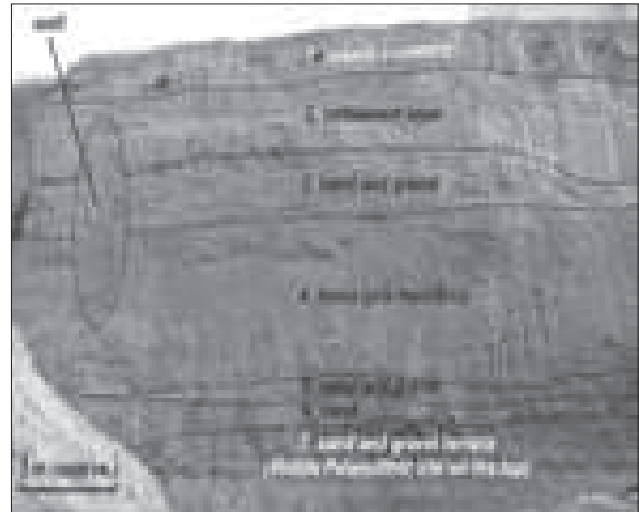


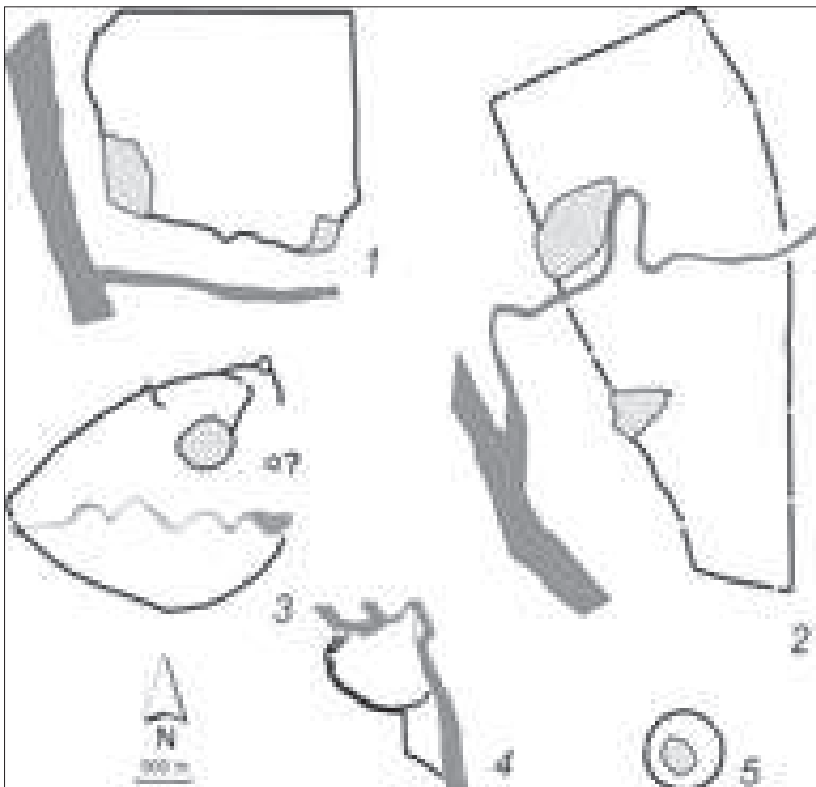
Fig. 2: Archaeological reconstruction map of Arbil according to satellite/aerial imagery and survey (light grey = tells, dark grey = wadis, hatched areas = Islamic cemeteries, triangles – pre-Islamic cemeteries, lines = hollow ways and other linear features, dashed lines = roads).



Fig. 3: Remains of the Late Assyrian fortification displayed in the micro-relief of the lane parallel with Tairawa Street (viewing north).



Fig. 4: Plan comparison of selected Late Assyrian town centers: 1 – Nimrud/Kalhu, 2 – Ninive, 3 – Urbilim/Arbela, 4 – Ashur, 5 – Sam'al/Zincirli (thick lines = fortification, hatched areas = citadels, grey = rivers, wadis and open canals) (photos and drawings by author).



1- A preliminary archaeological assessment of the citadel has been published (Nováček et al. 2008; Nováček 2008), the next archaeological projects (Italian, British, Czech, etc.) are ongoing or in preparation.

2- I would like to acknowledge Dr. Narmin A. M. Amin (Salahaddin University at Hawlér) for her generous support and cooperation during the project. This brief overview of the results is synopsis from the more comprehensive paper devoted to the Arbil's historical topography which is now prepared for publication. The research and the completing of this paper was supported by the Czech Science Foundation, project-no. 4040043/09/.

3- West section of the pit disturbed in this layer a small brick structure, probably a tomb (ca. 250 cm deep from the surface).

4- See the preliminary results of the German rescue excavation around the recently discovered Neo-Assyrian tomb in west vicinity of the citadel in 2009 (press communication of DAI, 2010, http://www.dainst.org/medien/de/PM_Arbil_20100112.pdf).

The Battle of Gaugamela

By Major General; Jamal Muhammad Mustafa (Rtd)

**Aristotle who conquered the world with his thought
As a teacher of? Alexander the Great who conquered the world with his sword**

Part one

Preface;

If we talk about a very great and decisive historical battle we must know something about the opponent of both sides and their backgrounds. We will do that briefly under the following headlines:-

1- Who is the Alexander the Great?

A- Alexander was born at Pella in July 556 B.C., his father was Philip of Macedon the real founder of the kingdom and a great military leader and a strategist, his mother was Olinpias princess of Epirus daughter of king (Neoptolmus).

Alexander inherited the military formation of the time from his father king Philip the Macedonian phalanx armed with Sarisses the fearful 5,5 meter long lances Alexander was strong, brave and handsome with a high ability of endurance .

B- He was only (12) years old when he tamed the beautiful horse (Bucephalus) that no one

could ride. His father was proud and said (O my son seek out a kingdom worthy of their self for Macedonia is too little).

C- After uniting the Greek sates under his rule they decided to send an army to conquer the Persian Empire but he was unable to do that because he was assassinated at 336 B.C. while Alexander was only (20) years old. And he was able to destroy all his enemies and started to invade to Persian Empire as it was agreed upon.

D- He conquered the greatest Empire in the world at that time and any other time Fighting (4) Major victorious battles, in addition of a number of cities and castle sieges and fighting the guerillas.

The major battles are:

Granicus 334 West-Anatolia
Issos 333 North Eastern Mediterranean sea
Gaugamela 331 Kurdistan-Iraq
Hydaspes 326 India

2- Character of Alexander

A. Brave and strong

Alexander was a super human hero and warrior; he exposed himself often to the extreme danger during battle. He could support pain, hunger, heat, desperation and great suffering with immense patience.

B. Self confidence:-

During the battle of (Gaugamela) he refused a proposal by his leaders to attack by night because of being outnumbered greatly by the enemy saying (I will not steal my victory and also sleeping in the morning of the same battle)

C. Imitating his father:-

1 - Naming the cities in his name like his father.

2- Philip reached the Danube Alexander crossed it.

3- Philip punished Thebes Alexander destroyed it.

4- Philip sent a vanguard across the Hellespont, Alexander

Passed it to Asia and conquered the Persian Empire. He

Also imitated Cyrus the Persian Empire founder by respecting the traditions and the religious of dominated nations.

F- Extraordinary ability of concentration and challenging impossible situations like his action during siege of Tyre and also during the siege of Rock Castle in Sogdiana.

D. Woman and drinking:

Alexander loved drinking and did not leave any opportunity to drink. Most of his unfair and wrong actions were due to the darkness and he always regretted his actions after that such as killing Cleitus. Drinking was really the invisible enemy to Alexander. As about women he did not bother himself about women. When they brought the most beautiful girl of Persian Empire with the prisoners of war in front of him, he said (take them away they hurt the eyes).

3- The Macedonian Army

A- The Hoblete:

An infantry soldier who was wearing a helmet

and carrying a shield and sarisses with two heads and was carried with both hands, holding it from the first third of it.

B- The phalanxes:-

The Hoblete soldier were the base of forming phalanxes which consisted of (4094) soldiers with (16) rows, each row of (256) men, the first three and last rows were Macedonian and the other (12) rows were Asians.

C- The Byltast (Light Infantry)

They were hobletes who were riding horses. Alexander organized them in regiments of (64) horsemen with armed bodies and wearing helmets and carrying shields swords and spears.

Then they found that all these equipments are too heavy. They turned to the principle of light infantry who were carrying shield, swords and spears only and riding bare horses.

E- The Archers.

4- Who is Darius III?

A- Darius was the last Emperor of the Achaemenid Persian era which began since the middle of the seventh century B.C when Cyrus – Korash took power from the Median Empire.

The Persian Empire consisted of (20) states (satrap) and was considered the largest Empire in the world till that time, the (20) states were:-

1- Egypt 2- Palestine 3- Syria 4- Phoenicia 5- Lydia 6- Phrygia 7- Aegina (The Greek cities and settlements in the west coast of Anatolia) 8- Cappadocia 9- Cilicia (The Eastern sides of Anatolia) 10- Armenia 11- Babylon and Assyria 12- Media 13- Persia 14- Caucasus 15- Afghanistan and Bactria 16- India 17- Sogdiana 18- Bactria 19- Massagetae 20- The State of central Asia.

B- Alexander transported to Ecbatana (the capital of media) 7290 ton of gold and silver on the back of (20000) mules and (5000) camels, Alexander: No longer in need to concern himself over money.



The Persian Era lasted until the period of Darius III (335 – 331) after losing the battle of Gaugamela when the Persian capitals opened their gates to Alexander.

5- The Persian Army

The organization of the Persian army was generally similar to the Macedonian army; in addition of different kinds of infantry and cavalry they had also (Chariots) (elephants) and Camels.

Battle of Gaugamela 331 B.C (Arbela)

1. Historical introduction

The Greeks were always used to defend themselves against the Persian. They turned later to attack the Persians and defeating them in their own homeland so the small defeated the great and the new defeated the old

This is a miniature example of comparison between Europe and Asia at that time.

A. Dariuse ordered the skeethian chariots to attack the right wing of Alexandra's army so Alexander sent Mindas Knights from the rear line to enforce his troops and then he sent on another force when he saw that they had more enforcement.

Although the Greek suffered a large number of casualties, but they hung to their positions firmly until the situation became better for them than for the Persians

B. Then Darius directed the Scythian chariots to the heart of Alexander's army. Accompanied by cavalry to seize the opportunity. But they were stopped by the infantry under the leadership of (Kratiros) as they wounded the horses which led to the destruction of the chariots by falling down when they made room for other chariots and drove them quickly to the rear of Greek, and they became useless.

C. At that moment Darius sent a big force to attack the right wing where Alexander himself was there, but they were defeated by the reserve forces all that happened but the fighting front

was still in good condition.

D. After that a great number of Dariuse groups attacked to help their colleagues leaving a gap in their front. Between the heart (center) and the left wing, Alexander seized the opportunity

And attacked with his own special guards. So the Persian flank was between two fires philos and Nector from the

West and Alexander from the east. Hammer and anvil tactics of the Macedonian army.

E. the 5 phalanx of Alexander attacked to the direction of Greek mercenaries and go through the Persian front which was penetrated and divided into three separate parts.

1. The right wing and part of the heart.

2. The left wing between Alexander and Nector.

The remain of the heart which was facing the Macedonian Phalanxes. While the Greek front was still intact

f. In this moment Daruis has lost his nerves and was disappointed he went down his Chariot and rode his fastest horse and fled toward east leaving the battle area while the battle was still in his favor in his right wing.

G. When Alexander advanced by his right flanks he left a gap between him and Barmino on the left flank.

In that time the Indians and the Persians Penetrated the gap until they got to the Administrative area and started looting

h. Barmino called for help so Alexander returned to help him meeting the Indians and Persians in their way back and there was a bloody fighting there, in which they were almost exterminated, he suffered a great number of casualties also.

I. Alexander started pursuing Darius but he was keen to spare his life, but Darius passed Arbella without stopping until he reached the shores of the Caspian Sea where he was killed by Basos (the Governor of Bacteria)

j. Alexander reached Arbella the next day capturing all Darius's treasures, and most the remaining of Darius army were killed while

crossing the Bridge upon the Great Zab River (Likos) and that's how the Battle of Arbela ended.

When he dead his empire was dived to;

1. Ptolemy: Egypt and Palestine.
2. Slocus: Mesopotamia and Syria.
3. Antigonus: Asia Minor.
4. Cassander: Macedonia and Greece
5. Lysima chus: Thrace

Appendix;

A description of the expedition as a Michael Wood in his book

(In The Footsteps of Alexander the greatest),

It was by common consent one of the greatest events in the history of the world. Opening up west and east for the first time, an extraordinary tale of bravery and cruelty, endurance and excess, chivalry and greed. Journey of (10) years and (22000) miles all told enough to circle the globe. Behind it like the rack of a receding tide. It has left strange and glittering debris lost cities, blue eyed Indian, exotic treasures, ancient manuscript and great harvest of amazing stories, songs, poem, myth and legends.

Cities and places related to Alexander

#	Old name	Current name	Country	Notes
1	Alexander	Alexander	Egypt	The first one
2	=	Sosia	Turkmenistan	
3	=	Margiana	=	
4	= profthasia	Farh	Afghanistan	
5	=	Kandahar	=	
6	=		=	
7	= Aria	Heart	=	
8	= Echate	Kokand	Uzbekistan	The furthest
9	Bukephala	Taxila	Pakistan	Name of his horse
10	Alexandria	Alexandria	=	
11	Alexandria Carmani	Alexandria	=	
12	Alexandria	=	Pershia	
13	=			
14	Miryandos	Iskandaron	Turkey	South of turkey
15	Al- Iskandaron	Al- Iskandaron	Libanon	
16	Iskanddaria	Iskanddaria	Iraq	South of Baghdad
17	Tal- Al- Iskander	Tat-Al- Iskander	Jordan	The hill of Alexander east of dead sea



Salahaddin Castle In lattakiay

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Saladin castle:

Saladin castle locate 24km north east of Latakia near Al-Haffa town, fig (1). Its strategic position goes back in history to the Phoenicians who controlled this site in the 1st Millennium BC, and were still holding it when Alexander the Great arrived in 333BC. In the 10th century ad, the Byzantines under emperor John Zimisces occupied it from the Aleppian Hamdanid dynasty and built the first of its defensive structures, It then fell in the hands of the crusaders at around the beginning of the 12th century.

Its mentioned that in 1119 it was owend by Robert of Saone who was given

Control of it by Roger, prince of Antioch. Most of what evident was built at this time.

In 1188 Salahad-din drew up a plan to attack the castle of Saone. His son Almalek Az-Zaher Ghazi, coming from the north of the lower western town meanwhile Salah-ad din, stationed on the eastern Plateau beyond the Fosse would divert the Franks attention by using four mangonels to bambard the eastern side.

He was succeeded in occupying it on July 29th 1188

From 1188 to 1272, the castle was controlled by the local family of Emir Naser ad-din Mankawars. In 1272 Baibars was given control of it by this family.

About the name (Sigon-Saon-Sehunna-Sala ad-din):



The Greek called it Sigon, in 1119AD. The crusaders called it Saone, in 1118 following its conquest, the name of the castle was arabised to Sehunna, in 1957, in memory of the conquest by Salahaddin, and the official name of the site became Qalaat Salah ad-din.

The castle, which is situated in the Syrian coastal mountains, is built on along triangular spur, orientated east-west and divided into two zones by an abrupt step in ground level. It's 400m above sea level and

lies between two ravines formed by seasonal streams that meet to the west of the site. The castle is 740m in length and ranges from 50 to 150 m in width, with a surface area of over 5 hectares. fig (2)

Its divided into a number of areas: from west to east the first Byzantine settlement known as the lower western town, the upper plateau on which most of the Arab construction, the great fosse, and a suburb outside the castle walls on the eastern Plateau, fig(3).

During the Byzantine period control a settlement developed in the lower western section of the site, fig (4). The settlement was protected by a fortress on the



high plateau, which served as the center of political and economic power. The Byzantine erected a defensive system consisting of a series of ramparts in the east and fortification in the north and south that followed the contours of the promontory.

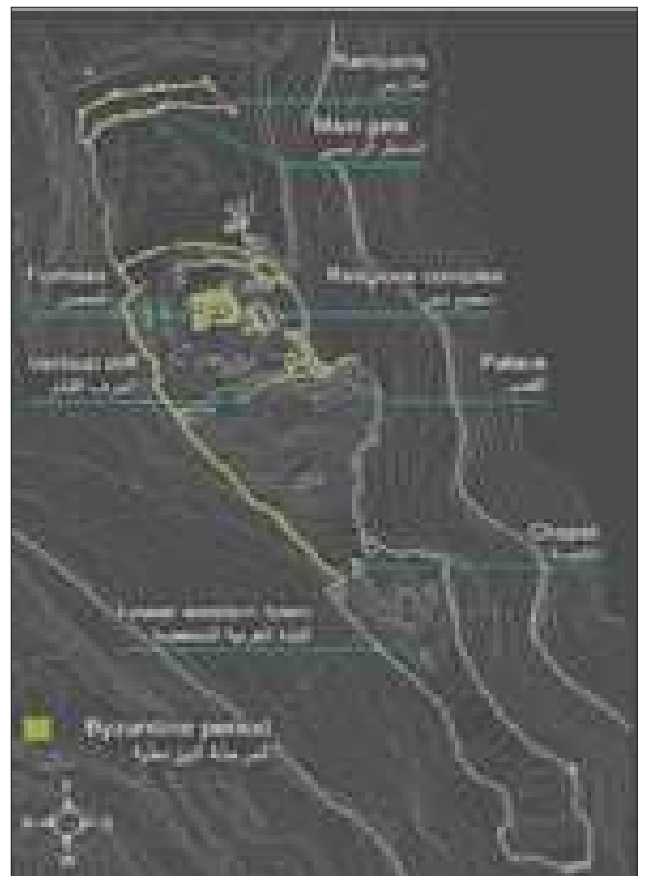
To the west a nearly vertical cliff was cut out from a natural rocky slope to provide better defense for the fortress and other buildings on the high plateau. Stone extracted from the cliff was used to build the lower western town.

Two posterns with wooden bridges on monolithic piers provided access to the lower western town.

The remains of two chapels confirm that the lower town was inhabited.

On the high plateau, south of the fortress, there was another religious complex with chapel and a large church. To the west of religious complex stood a two-level structure, probably once a palace but now in ruins.

The Franks made use of the entire site, and turned the Byzantine fortress at the summit in to a residence for nobles, fig (5). They initiated important fortification works, particularly on the eastern side, constructing large circular or quadrangular towers to the Byzantine fortification.





and 28 deep. When carving the gap out of the bed rock, the workers left a massive monolithic needle 28m high to support a movable bridge. The workers probably followed the foot print of the former Byzantine bridge support and down ward.fig(6)

At the same time using stone removed from the excavation, five circular towers were built on the purposefully carved contours of the rocky promontory. The final result is a new entrance built between two circular towers.fig (7)

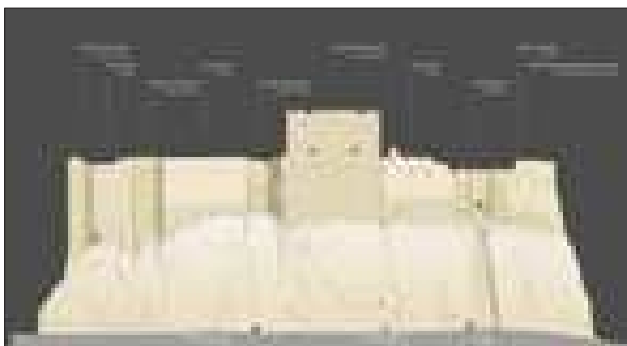
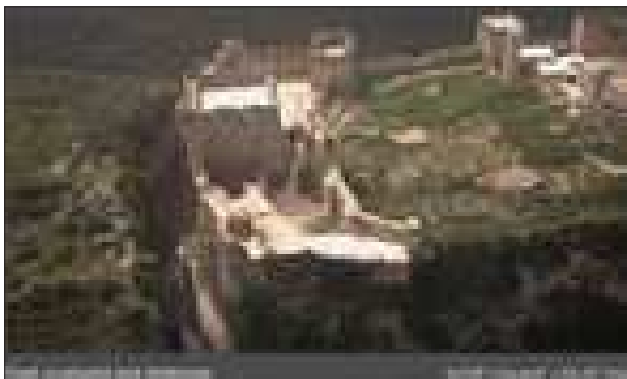
Much later, a magnificent master tower of large boss age stones was constructed at the location of the former Byzantine gate. It's the largest such tower in the region.

Under this tower, which rises around 6m above the current soil level, an opening in the rock accesses a corridor serving a large subterranean trapezoidal room. This space may have been use as a prison. Stables were installed in the moat, and the remains of mangers and water-troughs for animals are still visible.

The Franks restored the western town and fortified it with a tower gate and square tower while the lower town housed the soldiers families, no traces of domestic life have been found from this period, fig(5).

A cistern was built within the eastern side of the fortification, and suggests that the castles knights used the rectangular tower as a residence. Another vaulted cistern constructed in the north has a rectangular shape (32x10m) is much larger than the cistern on the eastern facade, fig (8)

After its conquest by Salah -ad-din in 1188. Its new occupiers under took numerous fortification projects and built the large Islamic complex. Throughout the



The spectacular eastern flank of the castle was the most strongly defended. Foss, probably begun during the Byzantine period, was chiseled down to the size of a chasm by Franks, and might also have been expanded during the Arab period.

Its final dimension reached 158m long, 1420-m wide



period of Arab occupation, both the fortress and lower western town were continuously inhabited.

One of the first acts of the new occupiers was to rebuild the part of the walls destroyed by Salahaddin's mangonels, fig (9). The southern gate-tower of the lower town was rebuilt along with two or three rectangular towers on the southern side.

The conquest of 1188AD. Demonstrated the weakness of the western flank of the high plateau, so it was refortified. Several significant alteration changed the character of the high plateau, a light industrial sectors was further developed with the construction of grain silos, a burgher oven and ware houses, reflecting the importance of agriculture in the region> economy.

The Islamic complex, built by the Ayyubids shortly after the conquest of 1188, and further developed in the Mamluk period post 1272AD is the most important Arab addition to the castle. It's comprised of a mosque with a minaret, in the north eastern corner. To the north of mosque is the palace with high entrance, it consists of a very large hall for reception and narrow aisle leads to large square yard where basin and water canals



carved in the rock.

General Mamluk hammam is located to the north of palace entrance south-east of the yard it was used by soldiers or people and this hammam was built by Sultan Qalaun. To the east of the Byzantine fortress another large hammam and residential complex was built. To the east, between the master tower and the cistern, stand the ruins of a large vaulted room. It was divided in to naves built in two phases and was used as both a ware house and stables, fig (9).

After that, during the Ottoman period the castle was largely forgotten: the lower western town was abandoned first, followed by the fortress at the beginning of the 16th century. Traces of various other Arab construction are today in ruins.

Sources

Arabic sources:

- الأغا خان، تقرير ترميم. 2008.
- سعادة، جبرائيل: تاريخ قلعة صلاح الدين، الحوليات الأثرية السورية، مج 17، 1967.
- عبد الغفور، أنور: قلاع وحصون من سورية. وزارة الثقافة، دمشق، 2003.
- قاجا، جمعة أحمد: موسوعة فن العمارة الإسلامية. دار الملتقى، بيروت، 2000.
- مولر- فينر، فولفغانغ: القلاع أيام الحروب الصليبية. تر: محمد وليد الجلاذ، دار الفكر، دمشق 1982.

Foreign sources:

- Burns, Ross: Monuments of Syria. I.B Tauris, London, New York, 1992.
- Joudalh, Fatima: Syria, Source of Civilization. Dar Al-Hassae, 2004.
- Sateh, Akram: Citadels and Castles in Syria, Dar Dimashq & Atlas, Damascus.

