HISTORY AND ARCHAEOLOGY OF THE GULF ARAB COUNTRIES IN THE LAST TWENTY YEARS. A MODEL: THE CASE OF SHARJAH (UAE)

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ABSTRACT
Archaeological excavations conducted in the Emirate of Sharjah, notably the middle area, during the last twenty years, have revealed unprecedented and important discoveries. Human migration, Bedouin style of life and the invention of underground water channels system “Falaj” are the most significant discoveries that dealt with in this article.

RESUMEN
Las excavaciones arqueológicas llevadas a cabo en el Emirato de Sharjah, especialmente en su área central durante los pasados veinte años, han proporcionado descubrimientos importante y sin precedente. Las emigraciones humanas, el estilo de vida beduíno y la invención del sistema de canales subterráneos, llamado falaj, son los hallazgos más significativos y que motiva este artículo.

KEY WORDS
Sharjah, Jebel Faya, Palaeolithic, Neolithic, Bedouins, Arabian Peninsula, Falaj.

PALABRAS CLAVE
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History is known to be the record of ancient man, or, the time that has passed. According to the renown Arab historian “Ibn Khaldun (1332-1406 CE), “the subject of history revolves around the man and his deeds that implicate reasons, justifications and results” (Muqaddimah, 1377).

However, if history narrates the stories of the ancient man and records events throughout time, archaeology has many far-reaching implications in dealing with human communities and documenting their achievements. Archaeology is, in fact, the core and the essence of human history and symbolises the past that is still living in the present.

This paper deals with three significant events that have taken place throughout human history over time. Of special interest is that these three discoveries have taken place in one geographical area; the central region of the Emirate of Sharjah (Fig. 1).

Fig. 1: Map of the United Arab Emirates showing the location of the sites in the study area.
We start first with the discovery which concerns human migration. The story unfolds where a limestone mountain called Jebel Faya lies (Fig. 2).

![Fig. 2: Ariel view showing the distribution of the three sites throughout the middle area of Sharjah.](image)

The archaeological site itself comprises a huge rock shelter located at the northeastern end of the Jebel, hence given the name “FAY-NE 1.” (Jasim et al. 2016) (Fig. 3a &b).

![Fig. 3a: The Rock-Shelter at Jebel Faya (FAY NE 01).](image)

![Fig. 3b: Plan showing the excavated parts of (FAY NE 01) and the surrounding area.](image)
Archaeological excavations that took place between 2009 and 2013 were undertaken by a joint team effort comprising the Sharjah Archaeology Authority and the University of Tubingen in Germany. A team of international scholars have also taken part in the course of the excavation. The campaign has revealed the presence of a deeply stratified sequence of archaeological levels, with deposits containing materials from the Iron, Bronze, Neolithic and Palaeolithic periods (Fig. 4).

No human fossils have yet found. However, Assemblage C contained artefacts dated by OSL to 125,000 years ago that were produced by anatomically modern humans (Armitage et al. 2011). These artefacts can be comparable with east and northeast African technology rather than the stone tools discovered across sites on the Arabian Peninsula. The stone tools found at Faya show that anatomically modern humans were living here and made tools from the flint they found available at Jebel Faya. These include large cutting tools such as hand axes (Fig. 5). A huge amount of debris resulting from flint is shaping or knapping found in the layers in front of the Jebel.

The result of environmental studies in this area has indicated that a humid climate has coincided with the occupation of this site at Jebel Faya.
Therefore, this site represents a station for human dispersal out of Africa; marching through the southern route and crossing the straits of Bab al-Mandab at the time when it was much shallower, progressing their way across the Arabian Peninsula on their journey to Asia and beyond. These early humans had stationed at Jebel Faya.

The second important event is dealing with the origins of Bedouin and nomadic way of life. It is a long-standing issue that has long received attention, discussion and argument.

Our point of view in this matter is based mainly on the results of archaeological excavations at two sites in the central area of Sharjah (Fig. 3); BHS 18 on the slope of Jebel al-Buhais (Fig. 6) (Jasim 2012) and FAY-NE 15 on the slope of Jebel Faya (Jasim et al. 2016) (Fig. 7). Both sites date to the 5th millennium BCE.

Excavation at the two sites has revealed important indications related to the Neolithic inhabitants and provides insights into their beliefs and burial practices, health conditions, social and economic status and the way of life that existed more than 7,000 years ago (Jasim et al. 2005). These finds constitute the base in discussing the prevailing hypothesis regarding the beginning of nomadism and urbanisation in this part of the Arabian Peninsula.

One of the most striking features of the site BHS 18, is the presence of an immense mass graveyard that has so far more than 600 human skeletons and yet more to be exposed. The skeletons packed within a small patch of land that does not exceed 30 meters in diameter (Fig. 8).
Two types of burials noticed; primary burials for those people who pass away during their stay at the site and were interred with their full personal adornments and fully articulated in a semi-flexed position (Figs. 9, 10).

The second type is “secondary graves” for people who died and were buried far away during nomadic migrations, and then their skeletal remains brought back in the form of bundles after decomposition to bury with their ancestors in the homeland cemetery (Fig. 11). Multiple burials noticed in both primary and secondary graves. In some cases, the deceased laid in remarkable care with no differentiation made between men, women and children.
Study of the human remains revealed that that the people buried her showed no signs of malnutrition and were relatively healthy (Kiesewetter 2006; Uerpmann and Schmitt 2006).

No remains of houses or permanent structures found at both sites. The people here lived in tents or shelters that did not leave any visible traces. However, the two sites had a good source of water springs attracting the Neolithic people to these particular places (Jasim et al. 2016) (Fig. 12).

Some arrangements of stones in rows or rings could interpret as the baselines of windbreaks or tents. Many hearths or fireplaces are also present in open-air living places. These used to grill the meat from the animals they kept or hunted, as evidenced by charred animal bones.

Analysis of animal bones from the site shows that the people kept sheep and goats and some cattle for milk and meat. Domesticated animals constitute about 90% of the bone
finds. Hunted animals provided only about 10%; these include wild ass, dromedaries, goat, oryx and gazelle (Uerpmann & Eurpmann 2008) (Fig. 13a & b).

Fig. 13 a & b): Animal Species and Samples of animal bone finds from BHS 18 at Jebel al-Buhais

The new evidence from BHS 18 has clearly shown that domesticated animals were major and important components of subsistence in the 5th millennium BCE.

No evidence of cultivating edible plants found. Plant product must have obtained from wild plants which were available in the area. It is evident that the site had been lived in regularly on a seasonal basis during nomadic movements between the cost and the Hajar mountain. It is possible that the people moved from one area to another in quest of pasture for their animals to feed.

We can now conclude based on the new finds just outlined, that the site had not been occupied permanently all year round. The lack of fixed structures indicates that those people had led a nomadic way of life.

The Bedouins of Jebel al-Buhais had reached a stage of self-sufficiency through the domestication of animals and the establishment of a pastoral economy in this part of the Arabian Peninsula. The economic achievements that have taken place on this site can, therefore, described as part of the Neolithic Revolution which many consider as one of the most significant achievements in the history of humanity.

On the light of the discoveries from both Jebel al-Buhais (BHS 18) and Faya (FAY-NE 15), the existing theories regarding the origin of the Bedouin in the area should reconsidered. The prevailing view which considers the Late Stone Age population of southeast Arabia as mere hunters and food gatherers is no longer valid.

The new finds indicate that there was a population of mobile shepherds in southeast Arabia well before the establishment of the first stable settlements in the region.

The third and last event in this presentation has taken place at the site of al-Thuqaibah. On the south-eastern edge of the al-Madam oasis, not far away from Jebel al-Buhais (Fig. 2). This site is a large and major settlement dating to the Iron Age in the 1st millennium BCE (De Cerro 2008; De Cerro & Cordoba 2018) (Fig. 14).
The Iron Age is characterised by two remarkable inventions that have a far-reaching impact on the development of human societies in the region. The first is the appearance of the “Falaj” system for dealing with underground water channels and irrigation networks. The second, equally important development is the domestication of the camel which made transportation and far-distance trade possible.

The invention of the Falaj has led to the expansion of the settlements and greatly facilitated oasis agriculture and populations increase. Although the Iron Age people credited with this vital invention, no clear evidence of the presence of ancient Falaj had yet to be found in their settlements. However, evidence of a Falaj has finally become available, with one unearthed at the site of Thuqaibah, where the Spanish team from the University of Autonoma led by Prof. Joaquin Gordoba, has successfully discovered it in 2005. Its excavation is continued up to the present (Fig. 15).

The excavated part of al-Thuqaibah falaj has revealed the presence of a sophisticated network of water channels for growing trees. The subterranean channel started at the base of the vertical well shaft, dug down to the groundwater level. Vertical shafts connecting the underground tunnel to the surface were dug at regular intervals to facilitate the removal of the gravel excavated from the tunnel.
At the point where the tunnel comes close to the surface, it is usually continued by an open channel to a location where the water collected in a reservoir for further distribution. Such open distribution channels were also revealed at Thuqaibah in a very interesting pattern (Fig. 16).

![Ariel view of water channel distribution at Thuqaibah](image)

**Fig. 16: An ariel view showing the distribution of water channel over the ground at the site of Thuqeibah.**

Marine mollusc from the outlet of the channel yielded a radiocarbon date of 1160-808 BCE. Pottery finds confirm an Iron Age II-III dating.

It is now beyond doubt that the Iron Age farmers of Thuaqibah have very well managed to utilise the availability of the underground water, thus enabling agriculture in the first village which existed in al-Madam in early Iron Age II.

To summarise, three major developments regarding the human immigration, the origin of Bedouin/nomadic lifestyle and Falaj invention happened to have taken place in the same geographical area; the central region of the Emirate of Sharjah. The occurrence of these important events has greatly enriched our knowledge regarding human history worldwide.

A word of thanks and appreciation is due to those archaeologists who have worked hard, exerting tremendous efforts and patience to bring to light such spectacular discoveries.

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