

Camel, Blockade and a Historical Memory Perspective: a Theme of Historical Memory Portrayed at Qatar National Museum

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Abstract. *Camels from ancient times as early as 1200 BC were used as military vehicle and have been associated with the Near East and the Arabian Peninsula. In modern times they remain an important element of Bedouin life and culture (animal protein, dairy products and raw materials, an effective desert vehicle of transport and an indication of wealth). As such, camels are an integral component of heritage and society, essential to the development of Bedouin economies in many regions in the Middle East, North Africa, and Asian regions. Here it is investigated the viability of addressing the topic of the impact on camels by the blockade that has affected Qatar since 5th June 2017 as a theme of historical memory in the Qatari heritage in the National Museum of Qatar (NMoQ). The topic addresses the value and significance of camels in the Qatar peninsula up until the 21st century, and the tragic impact of the blockade on camels and their owners and herders, particularly these which were herding camels across Qatar-Saudi borders. It provides another dimension of history, and archaeology, linked to heritage and society and discusses the way camels have been typically represented in museums in the region due to their cultural significance. Society interviews and media reports are used to support the discussion, which argues for the importance of documenting the historical and culture memory of camels in the new NMoQ.*

Rezumat. *Cămilele au fost folosite încă din 1200 î.Hr. pentru transportul militar și au fost asociate cu Orientul Apropiat și Peninsula Arabică. În timpurile moderne, ele rămân un element important al vieții și culturii beduinilor. Ca atare, cămilele sunt o componentă integrantă a patrimoniului și a societății, esențiale pentru dezvoltarea economiilor beduine în multe regiuni din Orientul Mijlociu, Africa de Nord și regiunile asiatice. Aici este investigată viabilitatea abordării subiectului legat de impactul asupra cămilelor, cauzat de blocada ce a afectat Qatarul în 5 iunie 2017, ca temă a memoriei istorice a patrimoniului qatarez din Muzeul Național al Qatarului (NMoQ). Subiectul abordează valoarea și semnificația cămilelor din Peninsula Qatar până în secolul 21 și impactul tragic al blocadei asupra cămilelor și a proprietarilor și păstorilor acestora, în special a celor care păstoreau cămile peste granițele Qatarului și ale Arabiei Saudite. Acesta oferă o altă dimensiune a istoriei și arheologiei, legată de patrimoniul și societate și discută modul în care cămilele au fost reprezentate în mod obișnuit în muzeele din regiune datorită semnificației lor culturale. Interviuurile sociale și rapoartele mass-media sunt folosite în sprijinul dezbaterii, care argumentează importanța documentării memoriei istorice și culturale a cămilelor în noul NMoQ.*

Keywords: heritage, society, Arabia, human, ancient, animals.

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1. Introduction

The occurrence of conflicts between neighboring countries, moreover and on a larger scale, modifies drastically the cultural heritage remains (tangible and intangible) and induces a traumatic impact on local societies. Heritage can be harnessed to both personal and political agendas. Sites and living entities of tradition and cultural heritage have been deliberately targeted as a means of inflicting pain and societal trauma. Re-construction of identities after conflict has even been a priority funded programme by European Union⁴, and post-conflict strategies embrace history, archaeology, museology, social sciences⁵.

The importance of dromedary camels in the middle east has a long history as inseparable belonging to the people of the region. The domestication of camels happened at the onset of the 3rd millennium BC in their natural habitats, for the dromedary in SE-Arabia and for the Bactrian camel in SW-Central Asia. Three steps of camel domestication and use are distinguished: for harvesting its body products, as transport animal (drafted, loaded, and ridden), as military animal⁶. Evidences of an early domestication in Egypt around the same time are debatable because based on findings possibly endowed of ritual meaning: a pottery camel's head and a terracotta tablet with men riding and leading camels, both from Predynastic Egypt, i.e. before 3150 BC; 3 clay camel heads and a limestone vessel in the form of a lying camel carrying an ointment pot, dated to the First Dynasty (3050–2890 BC); and several models of camels from the Fourth Dynasty (2613–2498 BC)⁷.

The dromedary did not have appreciable military impact until the Late Bronze age, when the introduction of the S-Arabian saddle (1200 BC) increased its maneuverability and promoted its military use. After then, camels have been extensively used in wars throughout Africa and the Middle East, as witnessed by historical accounts and archaeological objects.

We provide a brief historical overview of ancient history of camel and present contemporary connection to an instant event: the blockade of camels imposed by Saudi Arabia in 2017. The aim is to show up the traditional way associated to the camel from an ancient historical, societal and archaeological view. Triggered by the recent inappropriate treatment of the camel we present the continuous historical memory of camel in Qatari history — a correlation between ancient and live history, society, historical memory and heritage, culminated in the new Qatari museum.

⁴ <https://cordis.europa.eu/project/id/217411>.

⁵ NEWSON and YOUNG 2018.

⁶ SALA 2017.

⁷ FREE 1944; SABER 1998.

2. The use of camels in the ancient history of Arabia

For thousands of years camels have played a significant part in Arabian livelihoods, and by extension have become central to culture and traditions. For hundreds of years the domestication of the camel has been significant in the advancement of numerous economies and societies in the Middle East, North Africa, and some Asian regions⁸. Early evidence for domesticating the dromedary originates from south-eastern Arabia. The first domestication region of the dromedary (*Camelus dromedaries*), is the Southeast Arabian Peninsula; this is supported by a scientific research from the University of Veterinary Medicine, Research Institute of Wildlife Ecology at Vetmeduni Vienna team who analysed DNA samples of dromedary bones dated to 7000 years and compared it with other early samples from around the world. For over than 3000 years, it was used as transport animal for people and goods in North Africa and Asia⁹.

The appearance of the dromedary represented a turning point in the Arabian Peninsula, the Levant, northern Africa, and beyond. They can perfectly adapt with hot and dry environment. They can tolerate nearly one week with no water, also their hump can store approximately thirty five percent of fat. For this reason, they were ideal means of transportation in the desert of the Arabian Peninsula¹⁰. From the 7th century BC till the 2nd century AD dromedaries carried luxury goods as myrrh and frankincense through the incense trade route from South Arabia throughout the Arabian Peninsula¹¹.

The camel was additionally used to transport soldiers to battle and to allow the soldiers to make a fast escape in the case of defeat. These two perspectives appear on the reliefs from Ashurbanipal's royal residence at Nineveh in Iraq where the Arabs are portrayed with their camels, dating to 7th century BC (Figure 1)¹².

In Ancient Egypt in the Predynastic period, around 3600–4000 BC a drawing of a dromedary was found at El-Amra in Upper Egypt¹³. Another piece of evidence dates back to the First Dynasty (3200–2990 BC), an ointment pot in the shape of a sitting camel which was found in 1906 at Abusir-el Melek¹⁴. Other individual evidence comes from Abydos, where the British archaeologist William Matthew Flinders Petrie excavated a pottery camel head¹⁵.

⁸ RALPH 1993; JABBUR 1995.

⁹ ALMATHEN *et al.* 2016.

¹⁰ SCHMIDT-NIELSEN 1959.

¹¹ FRANCIS 2015; ORLANDO 2016; KHOSROWZADEH *et al.* 2017.

¹² See BIENKOWSKI and MILLARD 2000, 64.

¹³ CHILDE 1952.

¹⁴ MOLLER 1908.

¹⁵ PETRIE 1903.



Figure 1. Stone panel from the North palace of Ashurbanipal: Assyrian troops pursuing Arabs trying to escape on camels 645 BC (after Bienkowski and Millard, 2000)

There is a gap until the 19th Dynasty 1170–1090 BC where a pottery statuette showing dromedary carrying two jars was found in a tomb at Deir Rifeh, near Assuit. In addition, a dromedary figure was painted on water jars probably dating to the Ramesside age found at Benha¹⁶.

Therefore, it seems that although the dromedary camel was attested as early as Predynastic Period, it was not regularly used until much later. The first historical references to domesticated camel in Egypt are in connection with the Assyrian and Persian invasion of Egypt around 700–600 BC¹⁷. By the beginning of the Roman period, the dromedary was regularly used for desert transport¹⁸.

The camel species known in the Arabian Gulf is *Camelus dromedarius*, the dromedary, a camel with one hump, the same as occurred in ancient Egypt. Early evidence for camels in the Arabian Gulf comes from rock carvings (Figure 2/a,b). Dromedary camels are shown hunted by men in standing position holding spears in rock carvings in Oman¹⁹, which have been dated to 1st-millennium BC to the 2nd millennium AD.

¹⁶ LEFEBURE 1906.

¹⁷ CHILDE 1952.

¹⁸ BOESSNECK 1988; KUHRT 1999.

¹⁹ FOSSATI 2017, Fig. 16; BEDNARIK 2017, Fig. 6; GLANZMAN 2017.

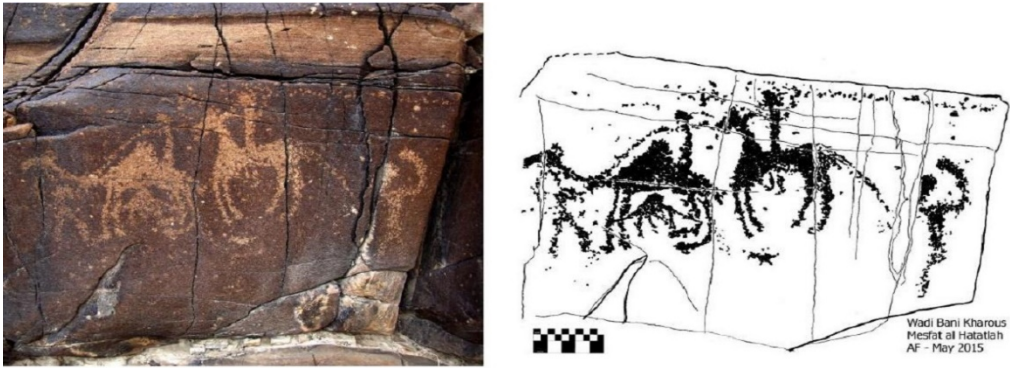


Figure 2/a-b. Photo (left) and tracing (right) of riders on horse and camels, Wadi Bani Kharous (after FOSSATI 2017, permit from MAA journal, www.maajournal.com by the Editor-in-Chief)

In the late 1950s and early 1960s, a Danish archaeological mission were working in Qatar²⁰, and in 1961, at the site of Al-Mazroaa, 23 kilometers south-west of Doha in Qatar, they discovered in grave 158.N remains of camel skeleton, in a good state of preservation, as well as human skeletons, pot sherds and fragments of bronze, iron and glass. The camel's position is as if he was resting on his knee, in a sitting position. It's neck is facing the northwestern part of the tomb wall, and the head lay with the bottom jaw up and the forehead laying on the left of the tomb²¹. Urepmann and Urepmann (2012) stated that its bones combined the strength of two-humped camel and the speediness of one-humped camel. Skeletons of camels were found in graves in the Arabian Peninsula at for example Mleihe, Sharjah, UAE dating between 1st century BC and the 1st century AD²². The camel was believed to have been led alive to the tomb to be buried next to his owner. The camel was placed alive in a seated position and its neck was pulled back until it died²³.

In more recent times, the camel was an essential element in the way of life of Bedouin. For the Arabs, they represented a strategic stock and provided self-sufficiency, as they drank its milk and produced butter; as an annual supplement. They consumed its meat and saved any remainder by drying it in the sun. They made clothing from its hair and manufactured tents, textiles and furnishings. It was also used as the main means of transportation and represented a source of wealth²⁴.

²⁰ DE CARDI 1978.

²¹ DE CARDI 1978; AL-KHOLAIFI 2000; HØJLUND 2017.

²² JASIM 1999; HØJLUND 2017.

²³ SARAUI 2011.

²⁴ ROBINSON 1936; SARAUI 2011.

Due to the centrality of camels to people's lives, they also became a source of entertainment, satisfaction and happiness for Bedouin Arabs societies who would enjoy accompanying them²⁵. Poetry celebrating the camel is well-known, with poets describing the different types of camels²⁶ and camel racing, as in antiquity²⁷, is an extremely popular sport in the Arabian Gulf today. There are even camel beauty contests, where attributes of the animal are celebrated and expensive prizes are on offer.

3. The 2017 Camel Blockade

On 5th June 2017, Saudi Arabia, the United Arab Emirates, Bahrain and Egypt cut diplomatic relations with Qatar. The event occurred in Ramadan. Saudi Arabia gave 14 days' notice to Qatari nationals who were in Saudi Arabia to leave the country and return to Qatar. Approximately 20,000 camels and 10,000 sheep and their Qatari herders, who were fasting, were stranded between Saudi Arabia and Qatar²⁸. The Saudi government claimed that Qataris were misusing the Saudi Arabian lands. Qataris traditionally kept their camels in Saudi Arabia near Al Ahsaa fertile area, which is 200 kilometers from the Qatari border. Members of the Gulf Cooperation Council (GCC) are generally allowed to graze their camels in any area in the Gulf provided that land, water, food and workers are available, which is what Qataris provides to Saudi Arabia. In June 2017 the camels and their herders were expelled out of the Kingdom of Saudi Arabia in temperatures reaching 48 degrees centigrade with no water supplies and a journey of 200 km to the border²⁹.

To keep them moving, the herders followed the camels with vehicles and beat them with sticks, resulting in distress and injury. Others died from thirst and starvation, while calves who required their mothers' milk lost their way and many died³⁰ (Figure 1).

Approximately, 10,000 camels arrived in Qatar on the 20th of June 2017. On the Qatari borders, Qatari government supplied water tanks and trucks carrying grass to feed the camels. Qatar's Ministry of Municipality and Environment (MME) had apportioned temporary shelter in South Kasarat Al Nakhash for approximately 8000 camels and 5000 goats and sheep.

²⁵ BRAUER 1993.

²⁶ SARAUI 2011.

²⁷ ORLANDO 2016.

²⁸ <http://www.newsweek.com/saudi-arabia-hump-qatar-bans-15000-its-camels-627797>;
<https://www.aljazeera.com/video/news/2017/06/gulf-crisis-camels-casualties-qatar-blockade-170621045411066.html>;
<http://www.newsweek.com/saudi-arabia-hump-qatar-bans-15000-its-camels-627797>.

²⁹ <http://www.newsweek.com/saudi-arabia-hump-qatar-bans-15000-its-camels-627797>;
<http://www.gulf-times.com/story/553941/Cruelty-to-camels>; <https://www.bbc.com/news/world-middle-east-40346329>.

³⁰ <http://www.gulf-times.com/story/553957/Camels-reunited-with-their-owners>.



Figure 1. Top: baby camels shown dead (top) (after *Al-sharq*);
Bottom: another dead camel (after *Daily mail Online*)

In celebrating the 7th Hamad Bin Khalifa symposium on Islamic Art titled: “Past, Present, and Future of Islamic Art”, Her Highness Mrs Sheikha Al Mayassa’s presentation (Figure 2) referred to the following³¹:

“This is another example of a like today’s topic, past, present, future will embrace our country’s history present and future ambition. In one visit those entering the museum will be able to understand our history, our present and our future goals through a multidisciplinary approach. It is a living museum and its narratives will be constantly updated depending on the events that take place around us. Now, one can’t ignore what is happening in our region today, so for example the political blockade imposed on us by our neighbours will now be included in this narrative, it is important part of our present life and with time it will be part of our history”.

4. The blockade and the social impact on the Qatari camels

Along with the above problem, measures to rectify this mishapening were taken. The authorities allotted groups of specialists and veterinarians to help the agriculturists³² (see also elsewhere³³).

In the short course of time, a second batch of around 6000 camels was deported via Kuwait, from where they were placed on ships back to Qatar where the Emir of Qatar, HH Sheikh Tamim guaranteed to pay for the herders’ transportation³⁴. Camels transported via the UAE were transported to Sohar, Oman from where they were transported to Qatar on ferries that can carry up to 50 head of camels. The trip was between 30 to 50 hours and camels were forced to sit down with their legs tied which resulted in their feet swelling so they could not walk³⁵. It is of interest to quote the reactions of people involved. Commentaries from camel herders are well documented³⁶.

³¹ He’s known for startling pieces, including rotting cows, sharks and sheep preserved in formaldehyde, and medicine cabinets full of different kinds of drugs (<http://www.theartstory.org/artist-hirst-damien.htm>).

³² Al-Rayya Newspaper, 12/06/2017; <https://thepeninsulaqatar.com/article/20/06/2017/Ministry-allocates-temporary-shelter-for-thousands-of-camels-and-sheep-returning-from-Saudi-Arabia>.

³³ <https://thepeninsulaqatar.com/article/06/07/2017/Camel-sheep-owners-praise-Ministry-for-help>; <http://www.aljazeera.net/news/arabic/2017/8/20/>).

³⁴ <http://gulfbusiness.com/qataris-ship-home-thousands-camels-stranded-saudi-via-kuwait/>.

³⁵ <http://www.newsweek.com/saudi-arabia-hump-qatar-bans-15000-its-camels-627797>.

³⁶ <https://www.telegraph.co.uk/news/2017/07/10/hundreds-abandoned-camels-die-saudi-arabias-diplomatic-row-qatar/>. Interview with Mr. Mohammed Salem Qatari camel herder. <http://www.dailymail.co.uk/news/article-4682076/Qatari-camels-die-kicked-farms-Saudi.html>. <https://www.albawaba.com/editorchoice/qatari-camels-bear-tragic-brunt-saudi-diplomatic-crisis-988930>.

https://www.hiiraan.com/news4/2017/July/143046/hundreds_of_camels_die_of_thirst_in_the_desert_qataris_kicked_off_farms_in_saudi_arabia_amid_rift_between_gulf_nations_are_unable_to_save_their_animals.aspx.

5. The recording of camels in regional museums

Due to the historical and cultural heritage significance of camels in the Arabian Gulf and its society, the early museums in the region including exhibits dedicated to them. The Kuwait National Museum, which opened in 1983, included displays on Bedouin life in the desert, as reported by the International Council of Museums (ICOM) on behalf of the United Nations Educational, Scientific and Cultural Organization (UNESCO) for the Kuwait National Museum. The report recommended that the attributes of the environment would appear in typical relationship as they might appear in ordinary life, incorporating a tent, furniture, dress, horse, camel, dress for man, lady and, utensils utilized for cooking and so on³⁷.

Similarly, Bahrain National Museum, which opened in 1988, includes dioramas of traditional Bedouin life, as does the Al Ain National Museum in the United Arab Emirates. In Dubai, Al Shindagha historical district, hosts the camel museum, the galleries display models of camels, and information and tools connected to camels' history highlighting their characteristics and qualities. The museum also displays their species, types, anatomy, methods for treating and caring for them, as well as their benefits such as meat, milk and wool³⁸. In Qatar, the Sheikh Faisal bin Qassim Al Thani Museum, a private museum located 40 minutes-drive from downtown Doha, displays a number of full-size wooden camel models with traditional saddles and harnesses, along with as display of an original Bedouin tent. The first Qatar National Museum, which opened in 1975, and closed in 2005 to allow for the development of the new National Museum designed by architect Pritzker Prize-winning Jean Nouvel, which opened in 2019, also included displays dedicated to Bedouin life. The museum was housed in the old Emiri palace, or Palace of Sheikh Abdullah bin Jassim, and consisted of the restored original nine palace buildings, a new 'Museum of the State' building, the Marine Museum and Aquarium and the Lagoon. The 'Museum of the State' building displayed a chronological narrative of Qatar's development, with displays of geology and archaeology, natural history, Islamic history, the pearling industry and the role of the ruling Al Thani family. In upper floor there were two rooms devoted to the oil industry and contemporary Qatar and its current projects. Between archaeology, cultural heritage and natural history was a substantial Bedouin display which included a large tent, simulated models of camels in traditional saddles, harnesses and camel bags (*mekla*), and, significantly, a display of camel "wusm" (brands that indicated which tribe owned the camel).

³⁷ Assessment of Technical Assistance and Plan of Action Report (1981), UNESCO, Paris.

³⁸ <http://www.dubaicity.com/camel-museum>.

The museum's aim to show the interaction between Bedouins' life and heritage through camel, their value, as well as, esteemed items considered an important part of their lives (e.g. the simplicity of life in the desert and the lack of transported materials due to the nature of Bedouin lives). Such life was highly dependent on movement and travel, so camels were a symbol of the tribe's moral and social standing, as well as a reflection of the tribe's identity. The display of camel 'wusm' that symbolizes each social tribe, was a sign of the clan's entity, prestige and pride.

The museum includes photos and videos about camels showing how Bedouins in the past relied on the camel in their daily lives and highlighting its importance in Qatari society. The displays included information sheet where it mentioned how people benefited from camels, the characteristics of camels and their age, and the history and importance of camels in the Arab society. The prevailing belief that the camel is a mean animal is false and untrue, the camel has a tempering mood in general³⁹. In fact, camels were given as a bride's dowry amongst the Bedouin tribes, the used in their weddings to carry the Hodge⁴⁰ to transport the bride, and have also been used to transport sick patients⁴¹.

6. Tradition, historical memories and expectations of camels in the national museum in Qatar

In order to explore how significant Qatari nationals thought the displays relating to camels in the old National Museum were, and how they expected camels to be presented in the new National Museum, two of the authors worked with students at Qatar University to implement a focussed survey with Qatari nationals who had visited the first National Museum. 89 Qatari nationals were interviewed, 43 males aged between 30 and 75, and 46 females aged between 30 and 67. In terms of levels of education, 35 were pre-university, 40 were at university level and 14 were post-university level. The survey asked two questions:

1. *How was the representation of camel /camel models in the old National Museum of Qatar?*
2. *Do you want to include the theme of the camel and blockade to be portrayed at the new National Museum of Qatar?*

In relation to the first question, the majority of the interviewees mentioned the displays of the camel models and Bait Al Shar (Bedouin tent). In the second question 92% (82 people) answered YES, whereas 8% (7 people) answered NO. Some interviews also gave reasons not to represent the camel and blockade in the new National Museum.

³⁹ AL-HAZMI 1991; AL-HAZMI and BRAIN 1993.

⁴⁰ It is a loader placed on the back of animals such as camels. It is like a small compartment with shaded seat that is usually completely closed.

⁴¹ SILLITOE 2017.

7. The value of the camel in the blockade gallery museum exhibit

The gallery “Ramadan Blockade” was opened in November 2019, it displayed social, economic and political consequences of the blockade over the people and government of Qatar. The display highlighted every aspect of the blockade, from its beginning to its effects on the Qatari political and social life. The gallery emphasised more in presenting the social impact. Interestingly, for the first time in a political conflict, animals are included to picture how animals were treated by the sieged countries. The museum narrates how camels mistreated and left to death deliberately as stated, ‘Camels in Saudi Arabia die after being cut off from Qatari owners’⁴². Furthermore, refers to how and why this death happened when ‘they did not let them cross the boundaries in the morning as usual, as they passed away in the afternoon, when the heat was unbearable for them’ (digital presentation at the NMoQ, November 2019, figure 6). The foreign conflicts that Qatar faces with its neighbours have become central to showcase the social value of cultural display.

Within this exhibition, Qatar addressed specific political statement showing the integration of social life into political practices. Thus, animal rights have become an ideology that is essential to the dialogue at the national museum. Apparently, this is in respond to the recent political conflict that touched every aspect of the Qatari life⁴³ dealing with the camels, the identity and contemporary significance, an inevitable interaction of heritage and society issues. At any rate, concerning the exhibit manner, there are various ways that this narrative could be presented in the museum to communicate the dynamic reality of the situation, and in contrast to the traditional static displays of the old Qatar National Museum. One idea is to use a technique like Culturama (3D or CAVEcam)⁴⁴, a 180 degree panoramic showcase that encompasses the audience and can be modified to different shapes, and offers a digital immersive showcase⁴⁵. Moreover, the Museum exhibit enhances cultural tourism in Qatar and such presentations of heritage culture includes tangible and intangible aspects and archaeological visits inhere historical and touristic motivation⁴⁶. Last, but not least the development of Museum exhibits of cultural heritage contains not only social but also sustainability aspects⁴⁷.

⁴² Camels are called Al Halal, the term is probably connected with requesting Halal earning.

⁴³ MESSAGE 2015.

⁴⁴ CHAMPION 2016; LIRITZIS *et al.*, 2016.

⁴⁵ <http://www.cultnat.org/Culturama>; <http://www.v-must.net/virtual-museums/vm/culturama>.

⁴⁶ EL-MENSHAWY 2017.

⁴⁷ LIRITZIS *et al.*, 2020; LIRITZIS and KORKA 2018.

8. Conclusion

Arabs have always been proud of the distinctive quality and numbers of camels they possess; camels were and still are central to Arab heritage and traditions, from ancient history to modern times, a trusted element of daily life and central to their economy. The impact of the 2017 blockade on the camels was significant for the Qatari community. Both, the exhibition regarding issues, stories, narratives that value the camel throughout Arabic history, and the interviews taken place and discussed are essential parts of Qataris heritage and society. Both support the idea of including narratives from members of Qatari society, regarding the new National Museum of Qatar, including the inappropriate treatment of camels, this domestic valuable animal with long historical memory and a heritage symbol.

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References

- AL-KHOLAIFI, M. 2000. *Archeological Sites - Architectural Heritage-Museums of Qatar* (in Arabic), QMA. Doha, Qatar.
- AL-HAZMI, M.A. 1991. Studies on the Social Behavior of the Dromedary Camel (*Camelus dromedaries*) in the Mid-western Region of Saudi Arabia. *Biological Sciences, Saudi Biological Society*, vol. I, 11-25. Riyadh.
- AL-HAZMI, M. and BRAIN, P. 1993. A Preliminary Study on the Behaviour of the Dromedary (*Camelus dromedaries*) in the Mid-western Region of Saudi Arabia. *J.K.A.U: Sci*, 5, 71-76.
- AL-SABONI, M.A. 2006. *Al Tafseer Al Wadeh Al Moyaser, Modern Library*. Beirut.
- ALMATHEN, F., et al. 2016. Ancient and modern DNA reveal dynamics of domestication and cross-continental dispersal of the dromedary. *Proc Natl Acad Sci USA*, 113, 6707-6712.ds.
- BEDNARIK, R. 2017. Scientific Investigations into Saudi Arabian Rock Art: A Review. *Mediterranean Archaeology and Archaeometry*, vol. 17, no. 4, 43-59.
- BIENKOWSKI, P. and MILLARD, A. 2000. *British Museum Dictionary of the Ancient Near East*. British Museum Press.
- BOESSNECK, J. 1988. *Die Tierwelt des Alten Ägypten*. München.
- BRAUER, R.W. 1993. The Camel and Its Role in Shaping Mideastern Nomad Societies. *Comparative Civilizations Review*, vol. 28, no. 28, Art. 7, 106-151.
- CHAMPION, E.M. 2016. A 3D pedagogical heritage tool using game technology. *Mediterranean Archaeology and Archaeometry*, vol. 16, no. 5, 63-72.
- CHILDE, G. 1952. *New light on the most Ancient East*. London.
- DE CARDI, B. 1978. *Qatar Archaeological Report Excavation*, Oxford, 1978.

- EL-MENSHAWY, S. 2017. Traveling within pharaonic Egypt for discovering the past, *Scientific Culture*, vol. 3, 1, 15–21.
- FOSSATI, A. 2017. Current Finds in Rock Art Research of Oman: A Review and Update, *Mediterranean Archaeology and Archaeometry*, vol. 17, no. 4, 75–88.
- FRANCIS, R.C. 2015. *Domesticated: Evolution in a Man-Made World*. New York.
- FREE, J.P. 1944. Abraham's Camels. *Journal of Near Eastern Studies*, 3, 187–193.
- GAUTHIER-PILTERS, H. and DAGG, A. 1983. *The Camel: Its Evolution, Ecology, Behavior, and Relationship to Man*. Chicago.
- GLANZMAN, W.D. 2017. Petroglyphs within the wādī raghwān, ma'rib governate, republic of Yemen: locations, peculiar iconography and interpretations. *Mediterranean Archaeology and Archaeometry*, vol. 17, no. 4, 19–31. DOI: 10.5281/zenodo.893188.
- HØJLUND, F. 2017. *Danish Archaeological Investigations in Qatar 1956-1974*. Jutland Archaeological Society Publications. Moesgaard Museum.
- INGHAM, B. 1990. Camel terminology among the Al Murrah bedouins, *Zeitschrift für Arabische Linguistik*, 22, 67–78.
- JABBUR, J.S. 1995. *The Bedouins and the Desert: Aspects of Nomadic Life in the Arab East*, translated by Lawrence Conrad. New York.
- JASIM, S.A. 1999. The excavation of a camel cemetery at Mleiha, Sharjah, UAE, *Arab Archeological Epigraphy*, 10, 69–101.
- KHALAF, S. 1999. Camel Racing in the Gulf. Notes on the Evolution of a Traditional Cultural Sport, *Anthropos*, Bd. 94 H.1/3, 85–106.
- KUHRT, A. 1999. *The Exploitation of Camel in the Neo-Assyrian Empire. Studies on Ancient Egypt in Honour of H.S. Smith*. London.
- KHOSROWZADEH, A., AARAB, A., BAHRAMINIA, M. 2017. New petroglyphs in Ziad Abad and Hassan Robot plains (Isfahan province, Iran). *Mediterranean Archaeology and Archaeometry*, vol. 17, no. 3, 215–224. DOI: 10.5281/zenodo.1005578.
- LEFEBURE, E. 1906. Le Chateau en Egypte, *Act. XIV Cong. Int. Orientalites Alger*. 1905.2 (sec. 7), 24–62.
- LIRITZIS, I., PAVLIDIS, G., VOSYNAKIS, S., KOUTSOUDIS, A., VOLONAKIS, P., PETROCHILOS, P., HOWLAND, M.D., LISS, B. & LEVY, T.E. 2016. Delphi4Delphi: first results of the digital archaeology initiative for ancient Delphi, Greece, *Antiquity*, 90, 354, e4, 1–6.
- LIRITZIS, I., LASKARIS, N., VAFIADOU, A., KARAPANAGIOTIS, I., VOLONAKIS, P., PAPAGEORGOPOULOU, C., BRATITSI, M. 2020. Archaeometry: an overview, *Scientific Culture*, vol. 6, no. 1, 49–98.
- LIRITZIS, I. & KORKA, E. 2019. Archaeometry's Role in Cultural Heritage Sustainability and Development, *Sustainability*, 11, 1972.
- MESSAGE, K. 2015. Contentious Politics and Museums as Contact Zone. In: A. Witcomb and K. Message (eds.), *The International Handbooks of Museum Studies, Museum Theory*, 253–281.
- MOLLER, G. 1906. Ausgrabung der Deutsch Orient-gesellschaft auf dem Vorgeschichtlichen Friedhofe bei Abusir-el-Meleqim Sommer, 1905, *Mitt. Deutsch. Orient. Ges. Berlin*, 30, 17 (22 pp.).
- NEWSON, P. and YOUNG, R. 2018. *Post-conflict archaeology and cultural heritage. Rebuilding knowledge, memory and community from war-damaged material culture*. Routledge, Taylor & Francies.
- ORLANDO, L. 2016. Back to the roots and routes of dromedary domestication. *Proceedings of the National Academy of Sciences of the United States of America*, vol. 113, no. 24, 6588–6590.
- PETRIE, W.M.F. 1903. *Abydos, Part II. Memoir of the Egypt Exploration Fund*. London.

- UREPMANN, M. and UREPANN, H.-P. 2012. Archaeology of camels in South-Eastern Arabia. In: E.-M. Knoll & P. Burger (eds.), *Camels in Asia and North Africa*, *Österreichische Akademie der Wissenschaften, Denkschriften*, Bd. 451, 109–122.
- ROBINSON, A.E. 1936. The Camel in Antiquity, *Sudan Notes and Records*, vol. 19, no. 1, 47–69.
- SALA, R. 2017. The Domestication of Camel in the Literary, Archaeological and Petroglyph Records. *Journal of Arid Land Studies*.
http://dx.doi.org/10.14976/jals.26.4_205.
- Annual Symposium of the Japanese Association for Arid Land Studies. Special Reports “Camel Husbandry in Central Asia”, *Journal of Arid Land Studies*.
http://dx.doi.org/10.14976/jals.26.4_205.
- SARAU, H. 2011. *al'iibil fi bilad alshrq al'adnaa alqadim washbh aljazirat alearabiat tarekhyan, athryan waa adabyan*. First Edition: National Book House. UAE.
- SCHMIST-NIELSEN, K. 1959. The physiology of the camel. *Scientific American*, 201, 140–151.
- SILLITOE, P. 2017. Sustainable Development. An Appraisal from the Gulf Region. New York–Oxford.
- SABER, A.S. 1998. *The camel in ancient Egypt. Proceedings of the Third Annual Meeting for Animal Production Under Arid Conditions*, 1, 208–215. UAE University.



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