SIRAF ARCHAEOLOGICAL REPORT

Sorna Khakzad*

East Carolina University (U.S.A) and University of Leuven (Belgium)



Sasanika Archaeology 5 2012

Historical sources inform us of the significance of maritime activity in the history of ancient Persia. Certain phases of the maritime history of ancient Persia are in particular highlighted in the sources at our disposal, for example the account of the Salamis wars between the Persia and the Greece in the Achaemenid period or the account of the sea trade between Persia and Far East in the Sasanian and early Islamic Periods (Casson 1971; Hasan 1928). We know that the Silk Road passed through the northern coast of the Persian Gulf (Casson 1991) and we know of several ancient ports on this route, such as Kong, Gonāweh, Lengeh, Qeshm, etc (Ra'in 1371). Nevertheless, our understanding of the maritime history of Iran is very limited and there are many gaps to be filled and many questions to be addressed by further archaeological investigations on this topic. In the July of 2002, a pilot archaeological project was conducted at Siraf, an ancient port of significant fame and importance. Tradition maintains that Siraf was destroyed and partly submerged in the tenth century following an earthquake and that its prosperous port and its buildings were lost beneath water and sand (Banaji 2007). As such, it is expected that an archaeological investigation of the remains of Siraf will shed light on the maritime history of Iran and on the cultural and archaeological significance of this ancient port.

History of Research

One of the first archaeological accounts on Siraf is composed by Sir Aurel Stein when he visited Iran in 1930s (Stein, Andrews, and Hobson 1937). Later, David Whitehouse, from the British Institute for Persian Studies, conducted seven seasons of joint excavation in Siraf, in cooperation with Iran Institute of Archaeology (Co-directed by Gholam-Reza Masoumi.) Extensive reports on these investigations have been published in English and Persian (Whitehouse, Whitcomb, and Wilkinson 2009). In 2005, the International Congress of Siraf Port was held in Bushehr and the proceeding was published. In 2009, Mohammad Esma'ili conducted further archaeological investigation at Siraf. British Museum also launched a project on the collection of pottery found at Siraf. Siraf has been one of the archaeological sites of national and international interest and different aspects of history and archaeology of Siraf have been studied and published. Counting on these sources as valuable studies and results,

^{*} sorna_serena@yahoo.com

¹ http://www.britishmuseum.org/research/projects/british museum siraf project.aspx

² For more bibliography on the studies on Siraf see:

however, no systematic study has been conducted on the shoreline and underwater remains of this ancient port.

Goals of Research

This year, the archaeological investigation at Siraf was carried out as a "Pilot project on identification, evaluation, and documentation of the archaeological remains of the ancient port of Siraf." The broader questions of the maritime archaeological investigation on the ancient port of Siraf, which include the 2012 pilot project, are outlined below:

- One of the goals of the research was to delineate the outline and the extent of the
 ancient port. The tradition maintains that the city was submerged after the earthquake,
 but, the southern edge of it has not been archaeologically traced. It is hoped that
 demarcating the edge of the city will contribute to answering other questions such as
 the extent of the ancient port and possible location of the old duck(s).
- As a well-known trading port, one can expect that Siraf was equipped with port facilities and shipyards. Finding possible remains of such facilities is another goal of this project.
- Before making conclusions about the ancient arrangement and features of the old port, the level of deterioration and obliteration of archaeological remains for reasons such as erosion by waves and sediment movements or biofauling (accumulation of microorganisms, plants, algae, or animals on wetted surfaces) needs to be determined. Therefore, another objective of the present research is to check the state of preservation of archaeological remains along the coast and under the water.
- In addition, it is hoped that this project could test the information found in the historical sources about the destruction of the city, and about the reasons for its submergence. We need to know if the port was destroyed and submerged as a result of earthquake or other possible factors such as subsidence (the motion of a surface--usually, the Earth's surface-- as it shifts downward relative to a datum such as sea-level), tsunami, gradual sea-level rise or coastal erosion played a role.

The results of this fieldwork project will contribute to the author's broader research on the maritime history of Iran, on the role of Siraf as a significant piece of this puzzle, and on the result of its destruction on the maritime trade through Persia. (Fig.1)

Report on the 2012 season

The pilot project was carried out from 16th to 30st July, 2012. This project was accomplished by personal funding. The Iranian Center for Archaeological Research supported the project by granting permit and facilitating the process of obtaining visa for foreign members of the team, and by offering accommodation for the team. The project was conducted by the author, Sorna Khakzad. Other members of the team were Dr. Athena Trakadas, Dr. Matthew Harpster, Ms. Nicole Wittig and Ms. Soheila Dejam-Shahabi. Given the increasing worldwide interest in underwater heritage and given the advancements in maritime archaeology, it is hoped that the maritime heritage of Iran will receive more attention. Several ancient coastal sites are endangered by natural and anthropogenic threats and we hope that more research will be

undertaken in this field. We particularly hope to sustain this project by receiving permission and financial support for future seasons.

Preliminary Results

During the two weeks of field work, the team evaluated the coastal remains and recorded the amount of erosion caused by the sea, in the last fifty years. For this study, the detailed maps of David Whitehouse and other excavations were used. The two main river lines were studied in order to see if the rivers played a role in the displacement of buildings' remains. The answer was negative. A sonar scanner was used to investigate an area of about half a kilometer by two kilometers in the sea, and to determine the location of the possible archaeological remains. The study was undertaken at maximum water-depth of eight meters. The water was warm and visibility was good. The plantation on the material is a very soft sea grass which can easily be removed by hand. We removed sand and plants, and documented some historical materials and artifacts. The results revealed the existence of ancient building material under water such as stone blocks for wall construction and stone slabs used for pavements. We also saw at least two stone anchors. Since a systematic study of stone anchors in Iran is lacking, it is hard to date these finds. All our observations have been recorded by GPS; Materials and distances were measures; And, photographed and drawings were made. Based on our observations and documentations, some of our questions have been answered. However, some of our hypotheses need more investigation, and more questions emerged to be pursued in our future investigations of this area.

^{*} Summarized, by Mehrnoush Soroush, from the original report in English

Cited Bibliography

- Banaji, Jairus. 2007. "Islam, the Mediterranean and the Rise of Capitalism." Historical Materialism 15 (1): 47–74.
- Casson, Lionel. 1971. Ships and Seamanship in the Ancient World. Princeton, N.J.: Princeton University Press.
- ———. 1991. The Ancient Mariners: Seafarers and Sea Fighters of the Mediterranean in Ancient Times. Princeton, N.J.: Princeton University Press.
- Hasan, Hadi. 1928. A History of Persian Navigation,. London: Methuen.
- Ra'in, Esma'il. 1371. Tarikh-i Daryanavardi-ye Iranian (History of Navigation in Iran). 1st ed. Tehran: Javidan.
- Stein, Aurel, Fred H Andrews, and R. L Hobson. 1937. Archaeological Reconnaissances in North-Western India and South-Eastern Iran. London: Macmillan.
- Whitehouse, David, Donald S Whitcomb, and Tony J. Wilkinson. 2009. Siraf: History,
 Topography and Environment. British Institute of Persian Studies Archaeological
 Monographs Series 1. Oxford: Oakville, CT: Oxbow Books; David Brown Book Co.



Fig. 1 Location of Siraf in the Persian Gulf (Photos: Google Earth)

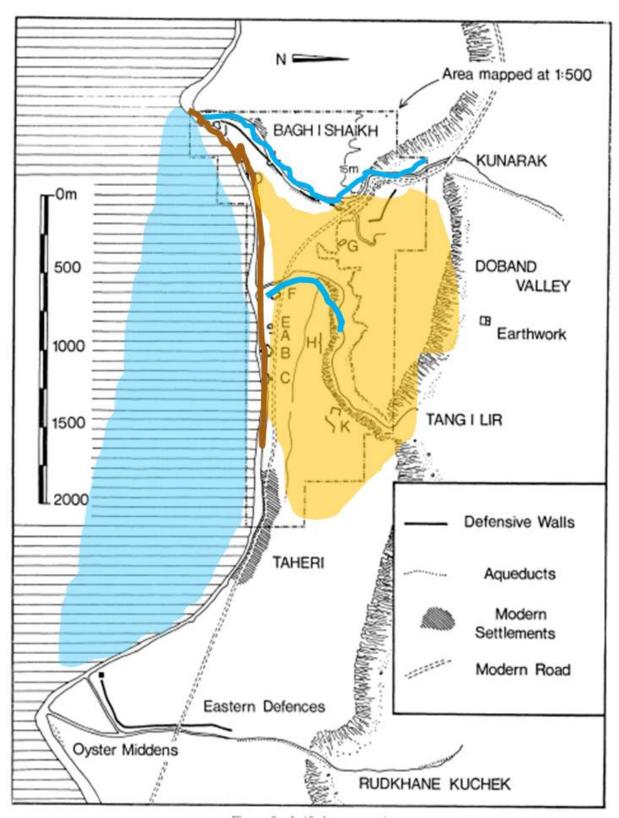


Fig. 2 Yellow: borders of surveyed area on the land. Blue lines: rivers. Brown line: the coastal wall with architectural remains. Blue: surveyed area in the sea.



Fig. 3 Athena Trakadas measuring the amount of erosion on the buildings



Fig. 4 Historical architectural remains along the shoreline of Siraf



Figure 2. Sorna Khakzad cleaning and documenting the materials underwater



Figure 3. Historical architectural remains along the cost, view from the sea.