Short Paper

Digital Archaeological Documentation of Iranian Monuments – DADIM

Recording and Monitoring Cultural Heritage

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This short paper was already presented at CHNT 25 2020 and has been supplemented here.

Introduction

The intentional destruction of well-known archaeological sites such as Palmyra in Syria or Hatra and Nimrud in Iraq has vividly shown the impotence of the modern world against ideological deception of extremists but at the same time made us also aware how vulnerable cultural monuments are in the Near East as elsewhere. In fact, archaeological monuments such as old settlements, monumental architectural buildings, sanctuaries and graves are not only largely destroyed by systematically organized illicit diggings or illegal building activities but also severely affected by climate impact and tourism especially when located far outside in vast unprotected but nevertheless easily accessible landscapes. Frequent touching of the objects, often only due to ignorance of the sensitivity of cultural monuments, but sometimes also due to deliberate chopping in order to get "precious" souvenirs of the unforgettable monuments, led to irreparable damages.

The poor state of preservation of the objects, caused by natural and human factors, often requires quick action to protect cultural heritage. The Digital Archaeological Documentation of Iranian Monuments – DADIM aims at digital recording of large and small monuments in Iran in order to secure them as digital copies that can serve both as basis for research purposes as well as for the cultural authorities for monitoring and preserving cultural heritage for posterity.

Digital Cultural Heritage: Mapping the past

The DADIM project was launched in 2015 as part of the Iranian-Austrian cooperation agreement in order to preserve the cultural heritage of Iranian monuments. The need to fulfill this endeavour on large scale is based on the experiences made in 2015 while documenting the Palace of Ardashir in Firouzabad (Figure 1), whose state of preservation is severely affected by climatic conditions. The restoration of the masonry is documented and strategies for maintenance of the building structures were developed in order to help local authorities to monitor and plan further reconstruction projects. Since then, the University of Innsbruck has been working in cooperation with the University of Sistan and Baluchistan on the photogrammetric documentation and data processing on-site of different monuments for monitoring, preservation and scientific research. The data were also used to contextualize the monuments in their spatial environment and historical landscape. The possibility of digital recording not only protects the preservation of the cultural monuments, but also opens up to opportunities for a detailed examination of the monumental cultural assets, which have to be prepared and elaborated as basis for a scientific and didactic reassessment of the individual cultural asset. The data collected of the cultural assets can be accessed digitally via a WebGIS database. Within the database, all digital records are combined with detailed iconographic, stylistic and historical analyses as well as associated bibliographic resources and a selection of historical images as well as (old) drawings of sites and monuments.
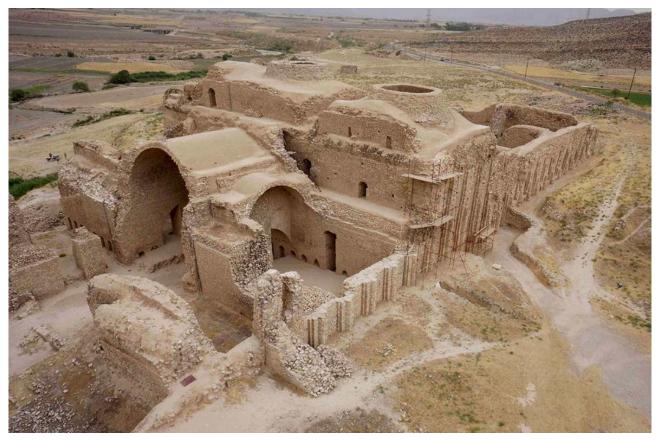

Fig. 1. Palace of Ardashir, Firouzabad (© L. Bezzi).

Overview 2015–2019

The DADIM Team has been conducted fieldwork since 2015; so far, we have been concentrated on the Sasanian period, covering the extensive area of Firouzabad in the province Fars. From 2015 until 2019, we extended the documentation areas over the provinces in South-, Northern and Western and Northwest-Iran. In this context, the Sasanian Rock Reliefs have been photogrammetrically documented (Figure 2). The detailed observations from the recording and data evaluation have provided new insights, which form the basis for future research in the field of digital cultural heritage as well as in history and archaeology.

Fig. 2. Documentation of Sasanian Rock Reliefs (© R. Gietl).

References

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