

Sustainable Development for Heritage and Nature Protection: A Workshop Report

Transfer and Communication of Cultural and Natural Heritage for Children and Young Adults in Gadara/Umm Qays (Jordan)

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Fig. 1 Gadara/Umm Qays. Aerial View, settlement hill with the Hellenistic fortress and the so-called upper village *hara foqa* from the end of the 19th/beginning of the 20th century, view from southwest (© G. Schauerte)

Over the course of the last 30 years, numerous scientific archaeological excavations have been conducted by the Orient Department of the German Archaeological Institute in the Hellenistic-Roman city of Gadara, present-day Umm Qays¹ (Fig. 1). The city is situated in northern Jordan, close to the border of Israel and Syria in a very fertile region. The intention of research was and still is to determine the processes in the change from a closed, representative and strate-

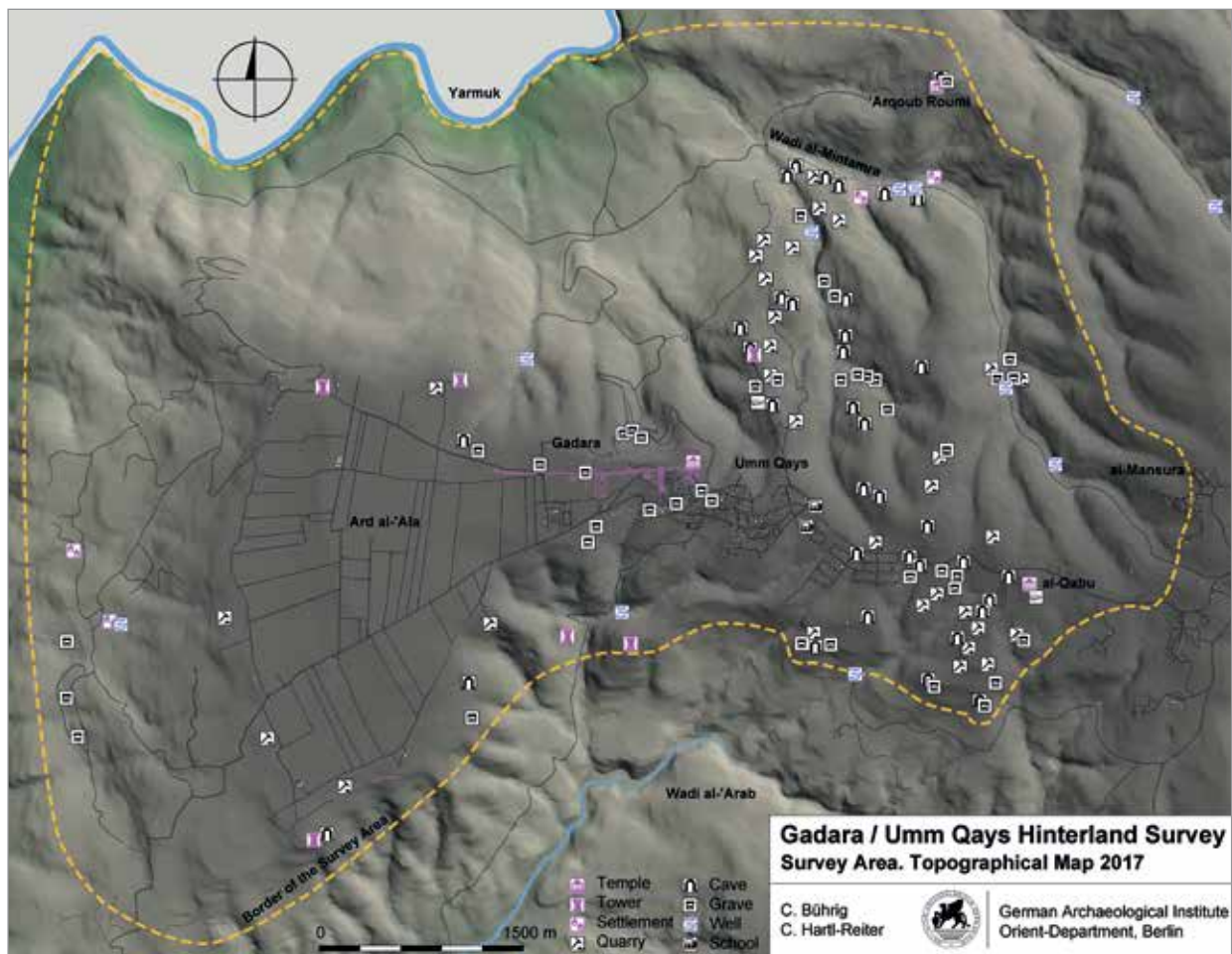


Fig. 2 Topographical Map of the region. Mapping of the archaeological find spots in the hinterland of Gadara/Umm Qays and in the Yarmouk Forrest Reserve (© DAI Orient-Abteilung, C. Bührig – C. Hartl-Reiter)

gically important Seleucid fortress to an open, expansive Roman-Byzantine city. To investigate the former internal urban structure of settlement activity, new excavations will start in 2018 inside the Hellenistic fortress and in the area around the early Roman Northern Theatre.²

Since 2010 these excavations have been extended by yearly archaeological surveys in the environs of the city with special lines of inquiry based on landscape and environmental archaeology.³ Research activity in Gadara and also in the surrounding region focuses on the settlement development in fertile north-eastern Jordan. The research area extends from the Yarmouk valley in the North, to the modern

village of al-Mansura in the East, to the slopes of Wadi al-Arab in the South, and finally joining the high plateau of the Ard al-Ala in the West (Fig. 2). This survey area covers around 34 square kilometers. The difference in height ranges between 0 m and 410 m above sea level (asl).

Research is increasingly directed towards the surrounding region with the Gadara/Umm Qays Hinterland-Survey,⁴ more concretely on investigating the interrelation between the city and the hinterland as well as between settlement and climate development from the Stone Age until today (Fig. 2).

Apart from these scientific activities, particular emphasis is placed on addressing questions concerning the preservation of the ancient remains and their presentation for local visitors. This includes the sustainable development of cultural tourism.⁵

Furthermore, the German Archaeological Institute is engaged in work in the region of the ancient city and its surroundings, not only in the scientific field but also with wide-ranging initiatives for cultural and nature mediation in very close cooperation with the local community of Umm Qays.⁶

A number of questions resulted from the scientific projects of the last years, namely: How can researchers' knowledge of the city and its surroundings be transmitted to the public? How can this cultural heritage be protected and how can people's awareness of it be fostered in the future? How can the local population benefit from the monuments, the natural environment and the cultural landscape around ancient Gadara? In order to find solutions to these questions, various activities have been started in this area for the local institutions, community and guides in Gadara in 2011 by the authors.

The German activities in Umm Qays are based on three pillars:

- 1st Archaeological research
- 2nd Experimental archaeology
- 3rd Cultural mediation work



Fig. 3 Yarmouk Forrest Reserve. Outside workshop together with representatives from DoA, nature conservatist (RSCN) and members of the local community, 2012 (© DAI Orient-Abteilung, C. Bührig)

The aim is – on one hand – to develop a sustainable protection for the archaeological site and the environment – and on the other hand – to promote sustainable cultural and nature education and tourism⁷ (Fig. 3).

An unprecedented imparting and communicative program has been developed, which connects nature conservation and monument protection in Gadara. The major target audience of these projects are children and young adults as multipliers. By learning about their region's history and techniques, it is hoped that they will become more sensitized to their own cultural and natural heritage and its future.

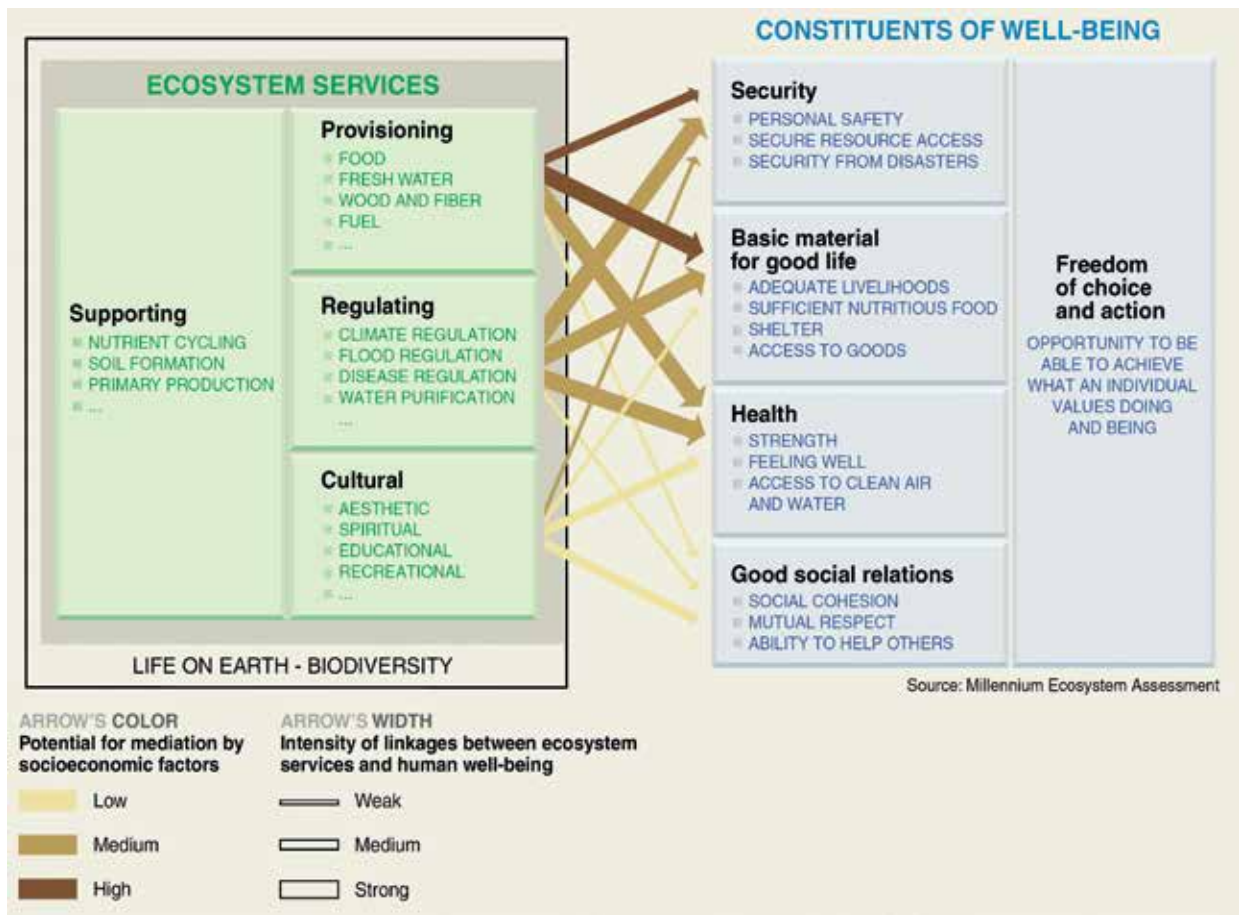


Fig. 4 Graphic. Ecosystem services as defined by the Millenium Ecosystem Assessment, including culture (© Ecosystem 2005, page V SYNTHESIS)
<https://www.millenniumassessment.org/documents/document.356.aspx.pdf>
 and http://old.grida.no/graphicslib/detail/linkages-between-ecosystem-services-and-human-well-being_83bb
 (viewed on 05.02.2018). Link to website: <http://www.millenniumassessment.org/en/GraphicResources.aspx>

Archaeological relics are part of the history of the culture and landscape, and thus of the ecosystems as well; humankind benefits in a multitude of ways from ecosystems.⁸ Collectively, these benefits are becoming known as ecosystem services (Fig. 4) The Millennium Ecosystem Assessment grouped ecosystem services into four broad categories: one of them is cultural, such as spiritual and recreational benefits. To help inform decision-makers, many ecosystem services are being assigned economic values.⁹

In the Gadara case study, the interdependence of nature and culture is very strongly shown in the archaeology of the cultural landscape.

Each cultural landscape has unique qualities and tells its own story. This contributes to the quality of life in a cultural landscape and has significant impact upon the region's image.¹⁰ Nevertheless, the potential of the landscapes for the formation of regional identities has not yet been fully exploited.

Capacity Building and Experimental Archaeology

In demand now are innovative concepts that demonstrate how landscape quality and identity-landscape history can be used in a systematic and credible way for the image and self-image of a region. This integrative approach is to be implemented and further developed in practice in Gadara/Umm Qays and its hinterland in the Yarmouk region (see Fig. 2 and 3). The area is currently being investigated as part of the scientific project presented here. The work in Gadara/Umm Qays can benefit from a German transdisciplinary research project "REGIOBRANDING – Branding von Stadt-Land-Regionen durch Kulturlandschaftscharakteristika" on sustainable land management, financed by the Bundesministerium für Bildung und Forschung (BMBF) since 2014.¹¹ Here the term transdisciplinary means that in the project, from the very beginning, research institutes as well as partners like district administrations and local stakeholders work together directly on site.

The aim of the Regiobranding project is to create a basis for intensifying and consolidating the identification of people with the region and its cultural landscape. The aim is to increase the commitment to preserve the qualities of the landscape and thus to make the external image of the region more attractive. REGIOBRANDING is more than traditional marketing. Branding of regions, so-called 'place branding', not only includes physical aspects of the landscape, but also economic, social and cultural qualities. In this way, branding helps regions to take new developmental paths and make organizational changes, thereby building a regional identity. So far, however, little research has been carried out on how cultural landscape qualities can be used systematically and credibly for place branding.

Ecotourism

Ecotourism is now defined as “responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education”.¹² Education is in our sense part of ecotourism and is important for staff and guests. More specifically in this context, Wild Jordan’s eco-tourism operations provide the following benefits for nature conservation of Jordan’s Royal Society for the Conservation of Nature (RSCN):

“The Nature Business. The collective impact of RSCN’s business initiatives (and the general adoption of business approaches) has been to revolutionize nature conservation strategies in Jordan. No longer are protected areas seen as the preserves of the elite, of little relevance to the social and economic needs of ‘ordinary’ Jordanians; they are now being recognized as engines of rural development, able to offer alternative and sustainable livelihoods for some of the communities in the Kingdom. Such environmental entrepreneurship, combined with a people-centred philosophy, has also enabled RSCN to generate more popular support for conservation, minimize its need for government financial support, and become a national and regional leader in sustainable development.

Under its socioeconomic development program, RSCN dedicated itself to creating nature-based businesses that improve the livelihoods of local communities living in and around Jordan’s nature reserves by reducing their reliance on natural resources.”¹³

The involvement of the local population plays a special role in these processes. To achieve this, the second pillar besides scientific research has been chosen: experimental and applied archaeology. Much of our interpreting work and didactic concept is also based on the results of experimental archaeology. Experimental archaeology employs a number of different methods, techniques, analyses, and approaches in order to generate and test hypotheses, based upon archaeological source material, like ancient structures or artifacts.¹⁴

A range of comprehensive investigations, in cooperation with scientists, have resulted in the rediscovery of old, nearly forgotten tech-

nologies, so that the process can be preserved (Fig. 5). A very important goal that we are pursuing is the preservation of intangible cultural heritage as practical knowledge of the people. The way is the communication of this knowledge in schools and museums, for tourists and other people.¹⁵

Coming back to Gadara, which is a lighthouse/flagship project of the practical experience gained here and in other projects, the mediation concept of different archaeological studies will be summarized. This work and practise is based on more than 30 years' experience in the planning, implementing and operating of archaeological parks, as well as their educational and cultural tourism concepts in the field of awareness and capacity building made by AGIL (Institute of Applied Archaeology).¹⁶ It is also based on the involved scientists' long-term research experience in archaeological, architectural history, building construction history and cultural preservation by the German Archaeological Institute.¹⁷ At the heart of this will be a report of our workshops on archaeology and conservation.



Fig. 5 Archaeology in experiment: Casting of arrowheads in clay mould (© AGIL/H. Fricke)

Cultural and Natural Heritage Mediation Work

Workshops on Cultural and Natural Heritage in Umm Qays (since 2011)

As has already been pointed out, the authors have started training programs and workshops for the local community, guides on Gadara/Umm Qays and its surroundings, for example in the new “Yarmouk Forest Reserve”.¹⁸ In close cooperation with the colleagues of the local branch of the Royal Society for the Conservation of Nature (RSCN), training workshops were held in Umm Qays in 2012 and 2013, which were supported by the Ministry of Tourism and of Agriculture, the Jordanian Department of Antiquities (DoA), and representatives from the local authorities¹⁹ (Fig. 6, see also Fig. 3).



Fig. 6 Workshops on Cultural and Natural Heritage in Umm Qays with the German scientists' and the nature conservatist (RSCN), 2011 (© DAI Orient-Department, C. Bührig)



Fig. 7 Children's Workshop on Cultural and Natural Heritage in Umm Qays (April 2015). Impressions from the beads production (© DAI Orient-Department, L. Berger)

Children's Workshop on Cultural and Natural Heritage in Umm Qays (April 2015)

In close participation with local partners, the *Gadara 'Umm Qays' Cultural Forum*, the primary school in Umm Qays, natural conservationists from the Royal Society for the Conservation of Nature and representatives of the Department of Antiquities, a week-long 'Children's Workshop on Cultural and Natural Heritage in Umm Qays' took place on site in April 2015.²⁰ More than 220 children participated in this event. For the first time in Jordan, archaeologists, building researchers and natural conservationists collectively imparted the history of mankind, technology and the environment to children.²¹ The brochure 'Children's Guide to Gadara. What are those archaeologists doing?' was developed to accompany the hands-on exhibition meant to mediate the cultural and natural heritage in Jordan to



Fig. 8 Children's Workshop on Cultural and Natural Heritage in Umm Qays (April 2015). Working in tandems – Jordanian and German experts (© DAI Orient-Department, L. Berger)

school children in Umm Qays.²² Against this background, the children could experience fire-making, hunting, and bead production with hands-on modules in natural surroundings (Fig. 7). They used the opportunity to see how archaeologists live and work.

In tandems – one Jordanian and one German colleague – the above-mentioned questions and topics were discussed or were taught hands-on and introduced to the children. In concrete terms, this means that a representative of the local partners (teachers, tourist guides, nature conservationists) as a 'local expert', together with an archaeologist or building researcher as an 'external expert', supervised a group of children and had discussions with them (Fig. 8). In these tandems, knowledge was exchanged in both directions. The aim of these tandems is also to enable Jordanian colleagues to continue such cultural and nature education programs locally in the

medium term.²³ The results are already in evidence: In the new ‘Train the Trainers’ program, which began in 2016, Jordanian and Syrian colleagues are now taking on the role of cultural mediators for children (see below).

As one main adventure, the children explored the ancient water tunnel in the underground of the city. Guided by archaeologists, they gained some insight into Roman water supply. They received information about the typical archaeological finds. Finally, the archaeologists and their local partners also informed them about the history of the ancient city of Gadara, of the courtyard houses from late Ottoman times and the village Umm Qays in general. This is the place where their grandparents and parents grew up; and so it provides intensive insights into everyday life.

Activities in 2016 and 2017

Due to the extremely positive experiences, educational programs to impart knowledge about the rich cultural and natural heritage of the entire region of Jordan and Syria for the years ahead were developed and implemented by the authors:²⁴ *Cultural mediation programs for children. TRAIN THE TRAINERS*. At the same time, it is important to ensure preservation of the monuments in general and specifically in the ancient city. For this purpose, Claudia Bührig developed a second program, in which traditional stonemasonry techniques are taught (*Training and Capacity Building Project CAPACITY BUILDING. STONEMASON APPRENTICESHIP*). The aim is to cautiously build up a pool of knowledge and practical experience which can be used for the planned protection of the historic monuments on site. Right now, the various activities at the site can only be realized thanks to means generously provided by the German Federal Foreign Office out of the special refuge and migration fund, ‘Stunde Null’.²⁵

Cultural mediation programs for children. TRAIN THE TRAINERS

The first educational program is the continuation of our Children’s Workshop in 2015. The aim of the *TRAIN THE TRAINERS* program is to raise awareness of the rich cultural heritage of the entire region and to educate multipliers who can then pass on this sustainable



Fig. 9 Cultural mediation programs for children. TRAIN THE TRAINERS. Hands-on activities with the children's 2017 (© DAI Orient-Department, L. Berger)

knowledge in schools, museums or parks in the region. The trained participants should also be able to develop their capacities as cultural landscape guides for Gadara and ‘Yarmouk Nature Reserve’.

The program started with four courses in 2016 and 2017. It addressed 25 Jordanian and Syrian participants, who became specialized in working with children and cultural tourism. Selected employees (40% male and 60% female) of the Department of Antiquities, from the local community, students, teachers from the surrounding villages and Syrian refugees have actively participated in the training course (Fig. 9). The participants received training in hands-on activities of old traditional craftsmanship such as working with clay or flint, or early food production.

On different day trips, visits to the great exhibition of the Jordan National Museum and the Children’s Museum of Amman, to other capacity building projects and archaeological sites – like Umm el Jimal, Abila – were on the program. In both museums they were given guided tours by local experts. Together with the ‘trainers’ several hands-on workshops in Umm Qays and Amman or public presentations of the project in Irbid (European Day) and in the Children’s Museum in Amman were organized and carried out.

The big premiere of these special events took place on October 9, 2016, in the Irbid Archaeological Museum Dar Al-Saraya, where the participants, in close cooperation with the Jordanian museum management, independently supervised Syrian refugee children from Mafraq, located directly on the border with Syria, and a Jordanian girls’ class. On further days of action, more than one hundred other schoolchildren from Harta, a village near Umm Qays, were introduced to the concept of archaeology for the ‘head, heart and hands’.

In 2017, the second year of the program, the old village became more and more the focus of interest. During the following workshops, not only was much learned about the prehistory and history of ancient Gadara: interest increasingly focused on the old village of Umm Qays, its houses, its interior design and life in the place. In remembrance of this life the exhibition *hara foqa* ‘UMM QAYS – OLD TALES’ was dedicated and presented from the 12th to the 14th of October 2017



Fig. 10 Exhibition *hara foqa* UMM QAYS – OLD TALES in the old courtyard houses in the so-called upper village *hara foqa* in October 2017, impressions (© DAI Orient-Department, C. Bührig)

(Fig. 10). The team collected private historical photographs of the village, which were exhibited here for the first time. On more than a dozen exhibition posters, various aspects of earlier village life were

explained in Arabic and English; guided tours of the exhibition and the ancient city were offered to visitors from Irbid and Amman. A collection of historical household objects on loan from a student could be visited; local food was tasted, and stories about the old village were told. In the experimental archaeological hands-on program children from the surrounding villages and also invited school classes from the SOS children's village in Irbid learned the practical handling of wool, clay, fire, bow and arrow and learn about life in ancient times, which they cannot learn when using mobiles and computers. The exhibition team was delighted to welcome over 700 visitors.

Training and Capacity Building Project Capacity Building. Stonemason Apprenticeship

Preservation of the monuments – for this purpose the second training program *STONEMASON APPRENTICESHIP* for local craftsmen and young adults was developed and implemented by two six to seven-week long courses a year. Traditional stonemasonry techniques and economic working methods are mediated by and practiced with German experts (Fig. 11). The aim is to gradually build up a pool of knowledge and practical experience, which can be used for the planned protection and conservation of the historic monuments in Gadara as well as for building programs and repair measures in general, elsewhere in the region.²⁶

Selected employees from the local community, Syrian refugees and employees of the Department of Antiquities (four) actively participated twice a year. The courses were conducted by André Gravert (master-stonemason/conservator) and Tobias Horn (stonemason/building researcher) and aimed at Jordanian and Syrian participants, who will become specialized in working with natural stone in monument preservation on their apprenticeship. On the one hand, this program will produce expert stonemasons. And on the other hand – and this is more important – strengthening the local cultural heritage in general will ultimately prove beneficial to the tangible and intangible heritage as well.²⁷



Fig. 11 Training und CAPACITY BUILDING PROJECT CAPACITY BUILDING. STONEMASON APPRENTICESHIP. The stonemason trainees at work, 2016 (©DAI Orient-Department, L. Berger)



Fig. 12 Training und Capacity Building Project CAPACITY BUILDING. STONEMASON APPRENTICESHIP. Stonemasons and their results/workpieces, 2017
(©DAI Orient-Department, C. Hartl-Reiter)

The aim of the training: the participants become skilled to work in restoration and reconstruction projects – step by step (Fig. 12, see also Fig. 11):

1. The trainees learn about historical and present-day tools (hammer, flat chisel and pointed iron), their function and their handling
2. Learn about local materials (limestone and basalt)
3. Shape the boulders to rough blocks, by hand, not with the use of a saw
4. To level off the final surface – to form an ashlar

5. Create a profile – for example, for a cornice or a column
6. Work with a new material: basalt
7. Attain a sense for the right dimensions and angles
8. And also economical working methods, such as cutting the stones by machine, using technology.

All steps of the *STONEMASON APPRENTICESHIP* in Umm Qays (2016 to 2017) are well documented in an illustrated report.²⁸ The idea of this kind of *STONEMASON APPRENTICESHIP* has been taken up and will be continued in Jordan: In the fall of 2017 a stonemason training course in Mafraq²⁹ began, sponsored by the Wold Monument Fund, and a similar project was launched in Petra,³⁰ also sponsored by the Wold Monument Fund.

Coming to the end: Both training programs – *Cultural mediation programs for children*. *TRAIN THE TRAINERS* and *Capacity Building. Stonemason Apprenticeship* – are mostly about preserving the local intangible cultural heritage, such as basket weaving, the technique and tools of stonemasonry, and daily life in *hara foqa*. In a second step this kind of preservation or strengthening will finally prove beneficial to tangible cultural heritage as well. However, the programs do not just aim at the mediation of cultural and natural heritage and the strengthening and encouraging of the local people and children (Fig. 13). The programs are indeed aimed at local capacity building, but they also go beyond this, since Syrian refugees are part of the ongoing projects. The idea is to enable the refugees to gain both practical skills and academic knowledge in order for them to hopefully play an active role in a future rebuilding and try to integrate them in the local community.

Implementation of the last two programs, which have been outlined above, has been possible due to special funding from the ‘refuge and migration’ budget of the German Foreign Office. These programs are aimed mainly at local capacity building and the local communities of Jordan, but they exceed this because Syrian refugees are an integral part of the programs.

It is, however, the aim to extend these projects as well and, if possible, to guarantee their sustainability by making them a fixed feature in cooperation with local partners.

In this case for the first time in this area, an integrated, gentle kind of education and tourism, focusing on archaeology and nature conservation, is to be developed here as an important part of sustainability.

The long-term goal in this project and also at Umm Qays is an extensive regional development concept and its realization with the involvement of the local communities to save and preserve this fascinating ecosystem in its historic-archaeological context. It may be said that archaeological heritage management, with respect to the available personnel and within the current financial framework, is most successful where it contributes directly to the preservation of regional identity.



Fig. 13 Training und Capacity Building Project CAPACITY BUILDING. STONEMASON APPRENTICESHIP. Stonemasons and their visitors. School children practice stonemasonry, 2017 (© DAI Orient-Department, C. Bührig)

Future prospects

For the future, Umm Qays has something very special to offer: the *hara foqa*, the ‘old upper village’, located on the site of the former Hellenistic fortress (see Fig. 1). It is the only village structure from the late 19th century that still exists in this complexity in Jordan. The former inhabitants’ knowledge of this time period, which is still present in Jordan today, is at risk of being lost before long. Therefore, it is an equally important national heritage, which needs to be saved and protected. And yet, the decay of this unique ensemble is proceeding inexorably. Many of the farm facilities that were still intact and in use in the 1980s have almost completely vanished today. Only a few restored farmyards still convey an image of the once closed village structure.

This is where the new concept continuation begins. In close contact with the village inhabitants, tourism representatives and Jordanian archaeologists, the revitalization of the facilities with the already existing institutions as a so-called ‘Eco museum’ with an integrated development and business plan is striven for. This implies a sustainable ecological orientation of the product range, involving preservation projects for regionally cultivated plants and domestic animal breeds, also including traditional craftsmanship using renewable regional raw materials.

As these examples show, the archaeological and nature conservation interests can be incorporated in sustainable education and tourism concepts. The same is indicated by examples of the potential of archaeology in education and the social sector. Often, conservation and preservation with their protective intentions lead to controversies, usually caused by the current legislation. With the example of the archaeological site of Gadara/Umm Qays and ‘Yarmouk Forest Reserve’ (see Fig. 2), we are able to show that numerous overlaps of interests are present and in close cooperation important synergy effects can be achieved, which are transferable to other projects.

Abstract

Researchers from the German Archaeological Institute in Berlin, in cooperation with AGIL, Institute of Applied Archaeology, have started several activities in the area of cultural mediation for the local community as well as for the promotion of sustainable cultural and nature tourism. Building researchers and experimental archaeologists developed an unprecedented imparting program which connects nature conservation and monument protection in Gadara, present-day Umm Qays.

The major local target audience of the project are children and young adults. By learning about their region's history, they become sensitized to their own cultural and natural heritage. The projects were realized in very close cooperation with many local partners from Umm Qays.

Due to the exceedingly positive experiences, in the years ahead an education program to impart knowledge about the rich cultural heritage of the entire region of Jordan and Syria will be developed from this under German direction in very close collaboration with Jordanian partners and international organizations. It is to be provided in Jordanian communities as well as for Syrian refugees. At the same time, it is also planned to ensure preservation of the considerable monument substance of the over 2,000 year old Hellenistic-Roman city layout. For this purpose, a training program for local craftsmen and young adults is being established, in which techniques in traditional stonemasonry are conveyed by and practiced with German experts. The aim is to cautiously build up a pool of knowledge and practical experience, which can be used for the planned protection and conservation of the culturally and historically important Theater Temple Area in Gadara.

All of these measures not only encompass mediation and training aspects, but will also be incorporated in setting up ecotourism offers. Our main plan is to see the area of Gadara/Umm Qays as a model region for a sustainable development, especially taking into account the cultural heritage and nature protection in this unique, history-charged cultural landscape. The project also includes the de-

velopment of new branding and marketing instruments for the international tourism market.

This paper summarizes activities in the field of communication and preservation of the rich cultural and natural heritage of the region. The idea is: Strengthening the local intangible cultural heritage, for example stonemasonry, will ultimately prove beneficial to the tangible cultural heritage as well.

Notes

- 1 The projects of the German Archaeological Institute (DAI) in Gadara/Umm Qays until 2011 in cooperation with the National Museums in Berlin (Staatliche Museen zu Berlin) were first under the direction of Adolf Hoffmann and since 2002 under the direction of Claudia Bührig, DAI Orient Department, Damascus Branch. For an overview of the scientific activities see Hoffmann 2002, 98–124; Bührig 2009, 162–207; Bührig 2012, 243–264; Hoffmann – Bührig 2013; Bührig 2016c, 83–100. The key focus of this project is a comprehensive analysis of the settlement's development in general.
- 2 For the so-called Theatre Temple Area around the Northern Theater, see Bührig 2009, 162–207. New excavations were started in 2015 inside the fortress, on the western site of the German dig house Bait Melkawi, see Bührig – Berger – Andraschko 2017, 368.
- 3 Wagstaff 1987; Goudie 2013.
- 4 The current 'Gadara/Umm Qays Hinterland-Survey' provides new insight into the transformation process of Gadara and especially its hinterland. Work has involved a combination of archaeological and architectural research. The survey is conducted by the Orient Department of the German Archaeological Institute Berlin, in cooperation with the Archaeological Institute of the University of Hamburg and in 2012 also with the Lab for Geomatics, HafenCity University Hamburg. We are especially grateful to our colleagues in the Department of Antiquities of Jordan (DoA), namely Eimad Obeidat, and the Royal Society for the Conservation of Nature (RSCN), namely Mohamed Melkawi, in Umm Qays for their support. So far field-walking surveys have taken place between 2010 and 2012, in 2015 and in 2017. See Bührig 2016a, 167–184; 2016b, 101–116; Bührig 2015, 36–41.
- 5 These activities were started 2011 by the authors.
- 6 The core research team consists of building researchers (Claudia Bührig), prehistoric and experimental archaeologists (Frank Andraschko), archaeologists (Lisa Berger; Anja Prust), master stonemasons (André Gravert and Tobias Horn) and Ahmed al Omari, Eimad al Omari and Khaled Saiyah from Umm Qays local community. The archaeological site of Gadara is presented as a small case study. Here three important aspects come together: 1st a famous ancient city, 2nd a nature reserve, and 3rd a modern community as an

example of awareness and capacity building based on the history of and changes in the cultural landscape. In this context the cultural sector in connection with nature of ecosystems is important.

- 7 See Recker – Kleefeld – Burggraaff 2017.
- 8 See Ecosystems 2005.
- 9 Grunewald – Bastian 2013.
- 10 Schröder *et. al.* 2017, 18–19.
- 11 REGIOBRANDING 2018; see also www.regiobranding.de (viewed on 05.02.2018). The REGIOBRANDING project has been working for five years with eighteen partners under the direction of the Institut für Umweltplanung of Leibniz University in Hanover, and focusses on sustainable rural land management.
- 12 See the “International Ecotourism Society” (The International Ecotourism Society [TIES] 2015) <https://www.ecotourism.org/what-is-ecotourism> (viewed on 05.02.2018).
- 13 See <http://www.wildjordan.com/content/wild-jordan-overview> (viewed on 05.02.2018).
- 14 Andraschko 1990, 71–74; Coles 2010.
- 15 Andraschko – Link – Schmitz 1992, 6–32; Kelm 2007.
- 16 AGIL is an association of archaeologists, craftspeople, educators, biologists, conservators, media experts and others who have been exploring experimental archaeology and living history in the widest sense for more than 20 years. See <http://www.agil-online.de> (viewed on 07.02.2018). See also Andraschko 1990, 71–74.
- 17 Bührig – Riedel 2015, 45–54.
- 18 See <http://www.rscn.org.jo/content/yarmouk-nature-reserve-0> (viewed on 07.02.2018).
- 19 In the first workshops in Umm Qays different institutions (Royal Society for the Conservation of Nature [RSCN]; Ministry of Tourism of Jordan [MoT]; Department of Antiquities of Jordan [DoA]; Ministry of Agriculture of Jordan; Integrated Ecosystem Management in the Jordan Rift Valley Project) and local stakeholders (*Gadara ‘Umm Qays’ Cultural Forum*; local schools; government/municipality; private persons) were involved. See http://www.dainst.org/ergebnis/-/asset_publisher/NZrOgZ37QcYu/content/deutsche-bauforscher-und-archaologen-leiten-umweltfortbildung-in-jordanien (viewed on 01.02.2018).
- 20 The project was funded by the Cultural Preservation Program of the German Federal Foreign Office. The project idea, concept and its im-

- plementation were the responsibility of the authors.
- 21 Bührig (forthcoming). See also some articles about the event https://www.dainst.org/ergebnis/-/asset_publisher/NZrOgZ37QcYu/content/archaeologie-als-bildungsprojekt?_p_p_auth=Dxph2Gfo&_101_INSTANCE_NZrOgZ37QcYu_returnToFullPageURL=http%3A%2F%2Fwww.dainst.org%2Fergebnis%2F-%2Fasset_publisher%2FNZrOgZ37QcYu%2Fcontent%2Fdeutsche-bauforscher-und-archaologen-leiten-umweltfortbildung-in-jordanien&redirect=http%3A%2F%2Fwww.dainst.org%2Fsuchen%3Fp_p_id%3D3%26p_p_lifecycle%3D0%26p_p_state%3Dmaximized%26p_p_mode%3Dview%26_3_entryClassName%3D%26_3_assetCategoryTitles%3D%26_3_keyword (viewed on 01.02.2018) and http://www.amman.diplo.de/Vertretung/amman/de/06-ku-bildg/archaeologie/umm_20quais_20children_20workshop_20april_202015.html (viewed on 01.02.2018).
 - 22 Bührig – Andraschko 2015.
 - 23 Bührig (forthcoming).
 - 24 In very close collaboration with Jordanian partners/organizations (Department of Antiquities of Jordan [DoA], Ministry of Tourism of Jordan [MoT], Royal Society for the Conservation of Nature [RSCN] and representatives from the local community (Gadara ‘Umm Qays Cultural Forum’, local schools and municipality) both programs were provided for the Jordanian communities as well as for Syrian refugees. Right now, the various activities at the site can only be realized thanks to means generously provided by the German Federal Foreign Office out of the special refuge and migration fund, “Stunde Null”, see <https://www.dainst.org/projekt/-/project-display/1869856> (viewed on 02.03.2018). The projects are part of the Archaeological Heritage Network (ArchHerNet) initiative, see <http://www.archernet.org> (viewed on 02.03.2018).
See also https://fallback.dainst.org/projekt/-/project-display/1869856?_projectdisplay_WAR_daiportlet_resetCur=false&_projectdisplay_WAR_daiportlet_deltaMembers=15&_projectdisplay_WAR_daiportlet_keywords=&_projectdisplay_WAR_daiportlet_advancedSearch=false&_projectdisplay_WAR_daiportlet_andOperator=true&_projectdisplay_WAR_daiportlet_delta= (viewed 02.03.2018).
 - 25 In very close collaboration with Jordanian partners/organizations (Department of Antiquities of Jordan [DoA], Ministry of Tourism of

Jordan [MoT], Royal Society for the Conservation of Nature [RSCN] and representatives from the local community (Gadara 'Umm Qays Cultural Forum', local schools and municipality) both programs were provided for the Jordanian communities as well as for Syrian refugees. Right now, the various activities at the site can only be realized thanks to means generously provided by the German Federal Foreign Office out of the special refuge and migration fund, "Stunde Null", see <https://www.dainst.org/projekt/-/project-display/1869856> (viewed on 02.03.2018). The projects are part of the Archaeological Heritage Network (ArchHerNet) initiative, see <http://www.archernet.org> (viewed on 02.03.2018).

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- 26 The core team are Claudia Bührig, André Gravert, Tobias Horn, Elgin von Gaisberg and Axel Seemann.
- 27 See the UNESCO "Survey report Intangible Cultural Heritage of Displaced Syrians" at <https://ich.unesco.org/doc/src/38275-EN.pdf> (viewed on 02.02.2018).
- 28 C. Bührig – T. Horn, Training and Capacity Building. Stonemason Apprenticeship. Report 2016-2017 (unpublished report 2018).
- 29 See <https://www.wmf.org/blog/journey-mafraq-beginnings-refugee-training-jordan> (viewed on 08.02.2018).
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- 30 See <http://www.petrationaltrust.org> (viewed on 08.02.2018).

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