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ARCHAEOLOGICAL RESEARCH
AS A BENEFIT FOR THE LOCAL
COMMUNITY. SOUTHERN JORDAN
IN THE PRELIMINARY SOCIO-
ARCHAEOLOGICAL STUDY

Abstract: Starting an archaeological research is not only the beginning of gathering new scientific data for academic analysis. The role of a scientist is not only to build the ‘tower of knowledge,’ but also to make it beneficial to people. Therefore, archaeological projects should also vastly contribute to the promotion of the heritage of the region and its modern value and to the development of tourism, education and local community activities. Understanding the local community and its view on the historical heritage, as well as on archaeological research seems to be a very important aspect of this type of activity. It will not only allow to identify potential risks and create a plan of regular research, excavations, as well as future maintenance. As a benefit of the sociological study, the future revitalization of the area will occur. This outcome may be an important extension of theoretical and practical principles of global heritage protection and may become a standard solution based on the belief that cultural heritage can be a factor of local community development and prosperity.

Keywords: public archaeology; heritage movement; cultural heritage management; Jordan; archaeological sites

Introduction

Academic value of archaeological sites is indisputable as the findings obtained there deliver solid knowledge about the region's past and the development of the local community's civilization. Contemporary archaeology is reaching towards the expectations of recipients and by delivering knowledge about the past, it influences the contemporariness and today's perception of the world. Due to its interdisciplinarity, it generates academic, social, and economic benefits. The multitasking nature of archaeology, as well as its commercial aspect provoke an interest in the discipline not only among specialists, but also all those who see room for deriving financial benefits from what is left of the years bygone.

Whether advantages of archaeology can be fully utilized depends on a number of factors, including the intensity of human settlement, volume of conducted excavation research or interest in the past manifested by the local population. Benefits can be derived from economic and social influences alike. Some use archaeology as a source of knowledge about the region while others exploit its potential in tourism. There are also some who hope the research will bring fame to their region both in their home country and abroad. The benefits of discovering the past are countless, with their implementation being conditional, among others, on the creativity of the researchers and the local community, who consciously draw on what archaeology offers (see e.g. Lipe 2002, Little 2002a, 2002b).

Public archaeology seems to be the answer to the above challenge, and the presented article belongs to this approach. Public archaeology is a subdiscipline of archaeology, defined in the 1970s (McGimsey 1972) and developed in the 1990s (Matsuda 2016, 41). Initially, the term was limited primarily to the protection of archaeological relics with the support of the local community (McGimsey 1972, 5-6, Schadla-Hall 1999; Merriman 2004, 3; Matsuda, Okamura 2011, 2). Nowadays, it is assumed that public archaeology has become a much broader concept, which can be seen as a hybrid consisting of numerous theoretical and practical elements (Moshenska 2017, 4)¹. Undeniably, a special place in public archaeology is dedicated to a dialogue between researchers and the community, in which archaeologists play the role of interpreters of the past, also transferring knowledge

¹ Gabriel Moshenska proposes a seven-part typology of public archaeology, which includes the following elements: 1) archaeologists working with the public, 2) archaeology by the public, 3) public sector archaeology, 4) archaeological education, 5) open archaeology, 6) popular archaeology, 7) academic public archaeology (Moshenska 2017, 5-11).

through educational and promotional activities. In addition, researchers try to engage members of a local community in archaeological research as well as in the public discussion of the heritage (Matsuda, Okamura 2011, 4) and the specificity of archaeological work (Merriman 2004, 5). This trend has been particularly prominent in the last 20 years, when archaeologists have more and more often been combining the results of their research with their impact on the local community (Atalay 2010; Matsuda and Okamura 2011; Matsuda 2016), involving local people in excavations, but also organizing activities aimed at development of these communities (Burtenshaw *et al.* 2019, 70).

Such activities focused on the local community can take place in two different ways. The first possibility is that community is encouraged to respond to the programs presented directly by experts, in this case, archaeologists (Greer *et al.* 2002, Smith 2004). The second option is based on an exchange of knowledge and experience of both the community and experts (Greer 2010, 46). The analyses presented below reflect the case in which the commitment of the local community to self-decide about their heritage is sought, and social surveys conducted with the use of the questionnaire method are only a way to gather a basic knowledge about the community. It should be emphasized that Polish archaeologists have only recently started to conduct archaeological research in the territory of southern Jordan, engaging in activities to protect and popularize cultural heritage, which is perceived in this country as a resource that drives tourism in times of relative social and political stabilization in the region.

It should be remembered that Jordan is a relatively small country, located between constantly conflicting neighbors, and is also undergoing rapid social changes. Young people (up to 25 years of age) clearly predominate in its demographic structure. In 2020, they accounted for over half of the Jordanian population (CIA World Factbook, 2020, <http://cia.gov>). Thanks to open access to education in Jordan, a significant percentage of them graduate from high school or university. On the other hand, despite its difficult location and numerous political and economic problems, Jordan has an unquestionable archaeological and historical potential with relics of the past overlapping in many forms, e.g., Paleolithic camps, Neolithic settlements, Roman cities, Byzantine chapels, and medieval fortresses (Radziwiłko 2019, 100). The initial projects addressed to the local community focused primarily on the main tourist attractions of Jordan, especially Petra, which is one of the most recognizable archaeological monuments in the country (Wójtowicz, Wójtowicz 2015, 59-60). Nowadays, both foreign and local archaeologists

undertake numerous activities that will make use of archaeology to generate benefits for the local community (Burtenshaw and Palmer 2014) such as the Winged Lions Temple project carried out in Petra. Its aim is to use academic research to activate the local population and encourage its members to acquire new skills. Thanks to the project, we can also witness an increase of employment among residents of neighboring villages (Tuttle 2013).

This model was also incorporated into the Sustainable Cultural Heritage Through Engagement of Local Communities Project, funded by international funds (USAID), which includes excavations to ensure local community development (Burtenshaw *et al.* 2019, 70). Another noteworthy project is The Deep Past as a Social Asset in the Levant (DEEPSAL), whose aim was to identify the needs of the local population and engage people in activities that are centered around archaeology. Therefore, the main goal was to contribute to the economic growth of the region and create new jobs (Burtenshaw *et al.* 2019, 73-75). Other examples of Public Archaeology include activities around excavations such as Tell Dhiban (Porter and Salazar 2005), Lot's Cave (Politis 2009), Wadi Ghwair (Simmons and Najjar 2013), Umm el-Jimal (De Vries 2013), Azraq (Damick and Lash 2013) or Gaddara (Bühlig, Andraschko 2018). The Polish archaeological team from the Jagiellonian University has been operating in southern Jordan since 2017 as part of the HLC project.

Context of the social survey

South Jordan is a relatively poor region, whose residents earn their living primarily by animal breeding and trade. Tourism is only prominent in a small number of towns, mainly in the Petra and Dana regions. The Petra Archaeological Park and the related tourism have boosted economic growth of this part of the country (Wójtowicz and Wójtowicz 2015, 50-54). Sadly, smaller archaeological sites are not duly adapted for or made accessible to tourists, which prevents their use as a source of financial benefits for local communities. The region's most important archaeological sites include the Shawbak crusader castle (Montreal), regularly examined by an Italian archaeological expedition, which is also conducting restoration projects, organizing marketing actions among the local people and preparing the site for visiting by tourists. Because of the intensive activity of the Italian expedition, the people of Shawbak and residents of neighboring areas have not been included in the pilot socio-archaeological survey carried out for the purpose of this study. Instead, the survey covered residents of two other

nearby villages located in an immediate vicinity of archaeological sites, i.e. the biblical Busayrah and Gharandal.

The present-day Busayrah is a village with a population of *c.* 10,000 (*c.* 20,000 in the whole region). The majority of its residents are employed in public administration or farming. The village's hallmarks include olive trees and a boy school established in 1934. Busayrah is situated in the At-Tafileh region, *c.* 180km south of Amman. The Busayrah archaeological site lies at the south-western edge of today's village, 23km south of the town of At-Tafileh. Situated *c.* 1100 meters above sea level and above Wadi el-Hamajida, it used to serve as the center of Edom's (Levant's) civilization, a fact confirmed by the biblical texts (Old Testament), i.e. the Book of Genesis (Gn. 36,33), the First Book of Chronicles (1 Chr. 1,44), the Book of Isaiah (Is. 34,6 and 63,1) and prophecies of Jeremiah (Jer. 49,13 and 22) (Biblia Tysiąclecia 2003, 370, 889, 915, 973, 1085). In Hebrew, Busayrah was called Bosra, meaning a fortress or town (Achteimeier 1999, 129). In written sources, it was mentioned as a strongly fortified town, with its palaces having been described in the Book of Amos (Am 1,12) (Biblia Tysiąclecia 2003, 55). Between 1971 and 1974, the Bosra (Busayrah) archaeological site was excavated by an expedition headed by C.-M. Bennett. What they uncovered was a town that flourished in the 7th and 6th centuries BC and lasted until the 4th century BC. Among other things, the excavations uncovered an Acropolis with administrative facilities and bathhouses (Bennett 1974; Bienkowski 1990, 91; Bienkowski 1992; Bienkowski 2002). Subsequent research of the early 21st century revealed what is most likely to have been elements of a Byzantine church and a water cistern.

Another place where the socio-archaeological survey was conducted was Gharandal, a village located in the immediate vicinity of Busayrah. They both made a complex of settlements only 15km away from At-Tafileh. Gharandal is currently a village with *c.* 10,000 inhabitants (mostly Jordan Arabs, employed in public institutions, the army, and agriculture or working with sheep herding) and primary schools for boys and girls. The ancient Gharandal was known as Arndell during the Roman period, Ardela under Byzantine rule, and Grandel in the Islamic times. The archaeological site is situated on a hill with strata dating back to the Nabataean period. In 1994, 1997 and 1998, the site was visited by archaeologists as part of a research project run by the Department of Antiquities in At-Tafileh in cooperation with the Australian University of Sydney. Their excavations revealed ruins of a Byzantine church as well as numerous mosaics with geometrical patterns (see e.g. Piccirillo 1997; Walmsley 2000; Walmsley and Grey 2001).

The work was resumed in 2010 and 2011 to record Roman strata, ruins of Roman bathhouses with graffiti on their walls and remains of a tower (see e.g. Darby *et al.* 2011).

Dana was another spot selected for our pilot survey. It is a small tourist village situated on the edge of Wadi Dana, in the near vicinity of At-Tafileh, with a breathtaking view of Wadi Arabah. Established *c.* 500 years ago, Dana continues to please the eyes with its numerous preserved buildings dating back to the early Ottoman period. Once inhabited by *c.* 300 families, the village was finally abandoned when its inhabitants, driven by economic crisis, moved to an area between Shawbak and At-Tafileh to establish a village which they named Qadissiya. Dana is the main center of the Nature Reserve in South Jordan. It was the first village restored for tourist purposes, with its inhabitants finding employment in the hotel and service sector. The Dana Nature Reserve stretches over 300 square kilometers and is Jordan's largest nature reserve. Established in 1989, it is a home to 800 plant species, a phenomenon unique on the scale of entire country. The choice of Dana for our survey was intentional, since the town serves as the research base of the Polish archaeological expedition from the Jagiellonian University that carries out excavations at nearby sites, e.g. in Faysaliyya and Munqata'a.

The last place where the socio-archaeological survey was conducted was At-Tafileh, South Jordan's biggest town with a population of 27,000. Situated 183km south of Amman, At-Tafileh is the heart of the region, known for having olive and fig trees and grape-vines. The present day town is organized into six districts, with people finding employment in state institutions, trade, and services. At-Tafileh was built as the Edomite city of Tophel. Its first ruler was king Edom. The town was mentioned in the Book of Deuteronomy (Deut. 1,1) (Biblia Tysiaclecia 2003, 175) in the context of the words Moses spoke to all Israel after they left Egypt. The first human presence in the region dates back to the Paleolithic, as evidenced by the prehistoric flint tools found at the site. As a result of historic transformations, the region was annexed to the Nabatean kingdom and came under Rome's authority following the Roman invasion. Finally, At-Tafileh came under Muslim rule.

Methodology of survey

The above observations inspired an attempt to conduct public consultation and assess the local community's interest in archaeology and the excavations carried out in the area. In 2017, acting in cooperation with the local Department for Antiquities (At-Tafileh branch), the HLC Project

conducted pilot socio-archaeological research. The task was carried out as part of research project financed by National Science Center (UMO-2016/22/E/HS3/00141) directed by Piotr Kołodziejczyk, and aimed to analyze the needs of the inhabitants and verify their awareness of the benefits offered by archaeology, proximity of archaeological sites, individual excavations being carried out and the presence of scientists among the local people. The overall project is devoted to archaeology; in particular, its aim is to search for and analyze human presence in the region during the Early Bronze Age on the background of earlier periods and environmental conditions. The level of the community's knowledge about the archaeological heritage was deemed to be an important component necessary to obtain effective social achievements. The results will be used in the future to select the most appropriate method to disseminate knowledge of the past (archaeology, history), involve local people in the efforts of protection of the heritage and use archaeological sites for tourism (Kołodziejczyk et al. 2017).

Social environment in the area of excavations does not regularly become a subject of interest of researchers, who tend to focus on analytical work and disregard the people context of their activity. Communication between archaeologists and the community introduces the researchers into the local structures and, most importantly, instills a desire to develop and protect the archaeological heritage among the locals (Shackel 2004, 1-16; Henson 2011, 219; Rychło 2013, 21).

Participants and their socio-demographic characteristics

The above-mentioned socio-archaeological survey was conducted among residents of four local towns and villages in south Jordan located in the vicinity of the excavations conducted by a team of archaeologists from the Jagiellonian University. The survey encompassed locations representing diversified archaeological sites (including sites of previous excavations, i.e. Gharandal and Buseyrah), the region's largest tourist resort (Dana) and the biggest town in the area (At-Tafileh). The language of the survey was Arabic.

Three groups of residents were surveyed. Group one consisted of residents of areas located in immediate vicinity of the archaeological sites (the biblical Busayrah and the nearby Gharandal). Some of its representatives remembered the excavations that had been conducted in the region until recently. In group two, there were people who had direct contact with archaeologists. This category included residents of Dana, the region's major tourist resort and base camp of the Polish excavation team.

The third group consisted of people who had little contact with archaeology (as per the respondents' own assessment). This group includes, in particular, respondents living in the At-Tafileh region.

The survey was conducted among 200 people: 25 respondents in Dana (including five women) and 25 in Gharandal (including six women), plus 50 residents of Busayrah (four women) and 100 residents of At-Tafileh (39 women). All-in, the survey was performed on 146 men aged 15-70 (73% of respondents) and 54 women aged 16-60 (27% of respondents). The small number of female respondents was due to a poor access to this group. It must be remembered that Jordan is a Muslim country, where men are much more easily encountered in public spaces than women, especially in small towns and in the countryside. Access to women was much easier in At-Tafileh, where they have jobs in local offices.

The majority of respondents had secondary education or higher education at the level of BA or Bsc equivalent (N=79, 39.5% and N=76, 38%, respectively), while higher education (at the MA/Msc level) was represented by 7.5% (N=15). It was also observed that 5.5% of the people polled had primary education (N=11), the majority of whom were men (N=10, 6.8% compared to N=1, 1.9% for women). One in every ten women (N=6, 11.1%) and about one in every twenty men (N=9, 6.2%) polled had a higher education degree. 16.6% (N=9) of women and 4.1% (N=6) of men reported to have different education than those mentioned above (Fig. 1).

		Education degree						Total
		Incomplete elementary education	Elementary education	Secondary school	Bachelor	Master	Other	
Female	N	1	1	15	22	6	9	54
	%	1.9%	1.9%	27.8%	40.7%	11.1%	16.6%	100.00%
Male	N	3	10	64	54	9	6	146
	%	2.1%	6.8%	43.8%	37.0%	6.2%	4.1%	100.00%
Total	N	4	11	79	76	15	15	200
	%	2.0%	5.5%	39.5%	38.00%	7.5%	7.5%	100.00%

Fig. 1. The respondents' education level according to gender (N=200, $p < 0.03$). Source: own analysis.

Technique and data collecting process

The study was based on a survey with closed-ended questions in Arabic. Benefits of this technique include standardization of the tools, obtaining data suitable for statistical analysis, potentially fast completion of the research task and low costs, while its major disadvantage is a *response bias* related to the presence of the researcher, whose particulars (e.g. looks or features showing his/her social status) may affect the respondent's answers. Another drawback of the technique comes from the necessity to standardize the tool, with the result that a complex phenomenon or problem needs to be reduced to the categories presented in the questionnaire. Obviously, this is not without impact on exploration of the subject.

The questionnaire used for this study consisted of three parts. The first one was devoted to archaeology and excavations carried out in the area of interest. The second part focused on issues related to archaeological tourism and the benefits for the local community which can arise thanks to this activity. The last part of the survey was a record containing demographic data of the respondents, i.e. gender, age, and education level.

The selection of respondents for the survey was intentional, while the choice of method was provoked by the accessibility of the community and the fact that the population structure was unknown. The survey was intended as a tentative attempt to be expanded in the future by in-depth analyses conducted with the use of dedicated instruments. The survey was conducted among respondents representing both sexes, aged 15-70, with different social, economic, and professional statuses. They were selected from among people encountered in the streets and in local public administration offices. Conducted by a foreigner and focused on archaeology-related issues, the study was a novelty in the region. Nonetheless, it was carried out in a positive atmosphere, as the pollsters were met with kindness and openness on the part of the respondents. Observations showed that respondents were satisfied that they could express their opinions on management of the local archaeological sites and benefits of archaeological research. None of them refused filling out the questionnaire. All were ensured full anonymity and an opportunity to consult ambiguities with an Arabic speaking pollster. Additionally, it was observed that the local community would eagerly comment problems related to management of the local heritage and admit the need for discussion in this area. A particularly positive attitude was manifested by senior residents, who remembered former archaeological excavations and found the dissemination of knowledge about them of vital importance. A large number of respondents stated it was necessary to adapt

the archaeological sites to tourist needs and expressed their hope that this would improve the region's economic and natural situation.

Results

Satisfaction with excavation projects

In the first part of the survey, the respondents were asked about their satisfaction (Fig. 2) with the archaeological projects conducted in their neighborhood. 40% (N=80) said they were satisfied that such projects were being carried out in their vicinity, while as many as 47.5% (N=95) were of opposite opinion. 12.5% (N=25) of respondents neither agreed nor disagreed (Pl. 1: 1). Observations showed that those living in towns and rural areas, such as Dana, Busayrah, and Gharandal, manifested a more positive attitude compared to residents of At-Tafileh, who were far less enthusiastic. It was also noted that men evaluated carrying out archaeological projects in their immediate environments more positively. The satisfaction and dissatisfaction was spread evenly across this group with 47.3% (N=69) of men being satisfied and 41.8% (N=61) being dissatisfied with archaeological undertakings. A different trend was found among women: only one in five expressed satisfaction with excavations (20.4%, N=11), compared to 63% (N=34) with a negative and 16.7% (N=9) with a neutral attitude.

The analysis of the results obtained in individual locations was as follows: 21 (84%) respondents from Dana said they were satisfied that archaeological projects were being conducted in their immediate vicinity compared to 2 (8%) who voiced their discontent and another 2 (8%) who had no opinion. It must be remembered that although there are no excavations pending in Dana, the residents have direct contact with archaeologists, as the Polish archaeological mission is accommodated in one of the local hotel complexes.

The situation was somewhat different in Busayrah, where 26 respondents (56.5%) were satisfied with the projects, while 15 (32.6%) had a negative attitude and another 5 (10.9%) had no opinion. As already mentioned, the village houses ruins of the biblical Bosra, excavated in the 70s. Senior residents still remember the archaeological works of the time. Observations showed that they tended to look more favorably on the works than the younger generation. It is also important to point out that the remains discovered during the aforementioned excavations are now surrounded with barbed wire and left to fall into ruin. Nonetheless, the state of the residents' knowledge about the potential of the place could not be established.

What was established, in turn, was that those living in Gharandal, a village bordering on Busayrah, were slightly less enthusiastic about the archaeological undertakings. The survey showed that only 12 (48%) respondents were satisfied that excavation projects were being carried out in their vicinity, compared to 10 (40%) with an opposing view and 2 (12%) with no opinion. Until 2011, the Gharandal archaeological site had been excavated by the archaeological staff of the University of Sydney. Situated on the edge of the village, the site is today suffering the same fate as the one in Busayrah, fenced by barbed wire and inaccessible to visitors.

The interest of At-Tafileh’s residents in the archaeological research conducted in the region looked different than that of respondents from the remaining three locations. Here, only 21 (21%) respondents were satisfied with the excavations, compared to 65 (65%) showing dissatisfaction and 14 (14%) having no opinion on the matter. Unlike other respondents, residents of At-Tafileh do not usually have contact with archaeological sites or archaeologists. There are no excavation projects conducted in the town, and even though its close vicinity abounds in archaeological sites, people are not directly confronted with archaeology. Interestingly, it was women who showed more pronounced aversion to these undertakings, with as many as 28 (71.8%) of them being dissatisfied that archaeological works were being conducted in the region (Fig. 2). Level of satisfaction of the respondents with the archaeological project conducted in their area, by place of residence and gender. (N=200; p<0.05). Source: own analysis.

Location			I am satisfied	I am not satisfied	I don't know	Total
Dana	Female	N	4	0	1	5
		%	80.00%	0.00%	20.00%	100.00%
	Male	N	17	2	1	20
	%	85.00%	10.00%	5.00%	100.00%	
	Total	N	21	2	2	25
	%	84.00%	8.00%	8.00%	100.00%	
Gharandal	Female	N	2	3	1	6
		%	33.30%	50.00%	16.70%	100.00%
	Male	N	10	7	2	19
	%	52.60%	36.80%	10.50%	100.00%	

	Total	N	12	10	3	25
		%	48.00%	40.00%	12.00%	100.00%
Buseyrah	Female	N	0	3	1	4
		%	0.00%	75.00%	25.00%	100.00%
	Male	N	26	15	5	46
		%	56.50%	32.60%	10.90%	100.00%
	Total	N	26	18	6	50
		%	52.00%	36.00%	12.00%	100.00%
At-Tafileh	Female	N	5	28	6	39
		%	12.80%	71.80%	15.40%	100.00%
	Male	N	16	37	8	61
	%	26.20%	60.70%	13.10%	100.00%	
	Total	N	21	65	14	100
		%	21.00%	65.00%	14.00%	100.00%
Total	Female	N	11	34	9	54
		%	20.40%	63.00%	16.70%	100.00%
	Male	N	69	61	16	146
	%	47.30%	41.80%	11.00%	100.00%	
	Total	N	80	95	25	200
		%	40.00%	47.50%	12.50%	100.00%

Fig. 2. Level of satisfaction of the respondents with the archaeological project conducted in their area, by place of residence and gender. (N=200; $p < 0.05$). Source: own analysis.

Archaeological excavations and a growing knowledge of residents about the history of their region

In part two of the survey, respondents were asked about the benefits they could avail of through the archaeological projects conducted in the area. They were asked whether the local excavations made them learn anything new about the history of their region. 87% (N=184) replied in the affirmative, with 10% (N=20) stating to the opposite, and further 3% (N=6) having no opinion (Pl. 1: 2). The biggest number of affirmative answers was received in Dana, where as many as 96% (N=24) of respondents confirmed that archaeology triggered growth of their knowledge about the region, while the remaining 4% (N=1) neither agreed nor disagreed. Similar results were obtained in Busayrah, where 92% (N=46) of those surveyed answered 'yes,' 6% (N=3) said 'no,' and 2% (N=1) stated they had no opinion. In addition, 100% of the female respondents agreed that archaeological projects resulted in an increase of their knowledge of the region's history, a view shared by

84% (N=21) of respondents in Gharandal. At the same time, 12% (N=3) answered that archaeological research did not raise their awareness, while 4% (N=1) had no opinion on the issue. A similar picture was also seen in At-Tafileh. Here, 83% (N=83) agreed that their historical knowledge concerning the region increased under the influence of the carried out excavations, 14% (N=14) did not agree, and 3% (N=3) had no opinion. No statistically significant relationship between the opinions voiced by respondents and their sex or education was observed in At-Tafileh.

Archaeological excavation and the inflow of tourists

As part of the survey, respondents were also asked whether they agreed that the conducted excavations contributed to the inflow of tourists. 90% (N=180) answered 'yes' to the above, 8% (N=16) replied 'no,' while 2% (N=4) voiced no opinion (Pl. 1: 3). It was observed that the answers were evenly distributed among all towns and villages, with only minor deviations. Nevertheless, no statistically significant correlations were found between the replies and gender or educational advancement of respondents. The most encouraging results were those obtained in Dana, with 100% (N=25) stating that the conducted excavations did favor the inflow of tourists. It must be remembered, though, that Dana is the most tourist-oriented town in the region. The answers given by respondents in Busayrah were less optimistic. Here, 92% (N=46) replied in the affirmative, 6% (N=3) replied in the negative, while 2% (N=1) said, 'I don't know.' In Gharandal, even fewer residents agreed that the excavations favored the inflow of tourists in the region (88%, N=22), while more people than elsewhere held the opposite view (8%, N=2). The percentage of residents who neither agreed nor disagreed (4%, N=1) was higher than in other places, too.

When it comes to the latter two villages, archaeological sites are located on their outskirts, making them hard to reach by tourists. Also, surrounded by barbed wire, they do not arouse sufficient interest. The tourists who manage to get here may still be unable to enter the site's area (especially in Gharandal). Finally, the promotion of excavations in tourist-guides or the media is far from satisfactory as it is the widely-popularized Petra that attracts all attention.

Analyses show that answers given by At-Tafileh residents were close to the opinions voiced by respondents from Gharandal. 87% (N=87) of them agreed that excavations favored the inflow of tourists into the area, 11% (N=11) stated the opposite, while the remaining 2% (N=2) refrained from voicing their opinions. Even though the replies obtained from respondents

in the latter two towns are similar, in the case of At-Tafileh it is still difficult to state whether the inflow of tourists was provoked by the excavations, as there are no pending archaeological projects in the town and the residents have no direct contact with archaeology.

Role of archaeological excavations in increasing employment rate among residents

Next, the respondents were asked whether the archaeological research conducted in their vicinity contributed to increasing employment among residents. The question was premature, as no archaeological projects are currently in progress in any of the towns where the survey was carried out. It must, however, be emphasized that the residents of Busayrah and Gharandal do remember the excavations that were conducted in the area until recently (in the first decade of the 21st century). In addition, the Polish archaeological mission is accommodated in one of Dana's hotel complexes, thus generating profits to be benefited by the local community. Analysis of all answers has led us to the conclusion that more than every second respondent (55%, N=110) believed that archaeological works did contribute to increasing employment among the local community, while 38% (N=76) denied it, and 7% (N=14) neither agreed nor disagreed with it (Pl. 2: 1). When analyzed more precisely by location, the statistics show that 60% (N=15) of respondents from Dana assessed the excavations and presence of archaeologists as conducive to the growth of employment. An opposite opinion was expressed by 32% (N=8), with the remaining 8% (N=2) stating no opinion. Moreover, the majority of women responded negatively to the suggestion of increasing employment (60%, N=3), compared to only 25% (N=5) of men. In Gharandal and Busayrah, more respondents replied in the affirmative (68%, N=17 and 70%, N=35 respectively), with 20% (N=5, Gharandal) and 26% (N=13, Busayrah) stating 'no,' whereas 12% (N=3, Gharandal) and 4% (N=2, Busayrah) answering neither 'yes' or 'no.' It was found, however, that the answers given by women differed from village to village. In Gharandal, they were distributed rather evenly, with 33.3% (N=2) of the female respondents agreeing, negating, and neither agreeing or disagreeing. When it comes to men, the vast majority did see a correlation between jobs and excavations (68%, N=17). An opposite opinion was expressed by 20% (N=5), with the remaining 12% (N=3) neither agreeing nor disagreeing. The situation was different in Busayrah, where 100% (N=4) of women agreed the excavations secured work places for the local residents, a view shared by 67.4% (N=31) of male respondents.

A still different picture was presented by respondents in At-Tafileh, with 50% (N=50) believing that the archaeological projects conducted in their vicinity did not improve local employment. Here, only 43% (N=43) replied in the affirmative, with 7% (N=7) having no opinion. It should be noted, however, that although there are no pending archaeological works there, the town's social structure has not been examined sufficiently to assess the contact of individual residents with archaeology. The correlations between the answers obtained in the town and the educational advancement of respondents were insignificant statistically. Persons who describe themselves as economically disadvantaged or earning middle income were seen to give affirmative answers more frequently than those regarding themselves as well-off.

Archaeological excavations and the inflow of people from different cultures

The final question asked to respondents was whether, in their opinion, there were more people from other countries, representing diverse cultures, in the streets owing to the archaeological projects. 90.5% (N=181) answered 'yes,' 6.5% (N=13) replied 'no,' while 3% (N=6) voiced no opinion (Pl. 2: 2). The percentages were comparable in all of the surveyed locations, with a greater number of negative responses reported among men in At-Tafileh. Additionally, it was observed that people regarding themselves as well-off were more likely to agree and that more men gave negative answers. In Dana 96% (N=24) agreed that thanks to the archaeological excavations they could encounter people of different nationalities in the streets, a viewpoint shared by 84% (N=21) of respondents in Gharandal, 92% (N=46) in Busayrah, and 90% (N=90) in At-Tafileh. An opposite opinion was voiced by 8% (N=2) of respondents in Gharandal, 6% (N=3) in Busayrah, and 8% (N=8) in At-Tafileh, while 4% (N=1) in Dana, 8% (N=2) in Gharandal, 2% (N=1) in Busayrah, and 2% (N=2) in At-Tafileh neither agreed nor disagreed.

The last question in this part focused on promotion of South Jordan in other parts of the country and abroad as a result of the excavations. Here, 76.5% (N=153) of the respondents said that the excavations did contribute to the dissemination of knowledge about South Jordan both domestically and abroad. An opposite opinion was expressed by 16.5% (N=33), with the remaining 7% (N=14) neither agreeing nor disagreeing (Pl. 2: 3).

The affirmative opinions were mainly obtained in Dana (96%, N=24) and Busayrah (92%, N=46). In Gharandal, only 76% (N=19) agreed to the suggestion. Negative answers were given by 20% (N=5) in Gharandal

and 8% (N=4) in Busayrah, while in Dana, not a single person replied 'no.' Both in Dana and in Gharandal, 4% (N=1) of all respondents neither agreed nor disagreed, the answer not reported in Busayrah at all. The situation in At-Tafileh was different, though. Here, 64% (N=64) answered 'yes,' 24% (N=24) replied 'no,' while 12% (N=12) voiced no opinion.

Conclusions²

Without doubt, southern Jordan is an area rich in archaeological sites of great historical value, as well as growing cultural and socio-economic potential. Appropriate management of the prehistorical and historical remains that have survived in the form of the ruins of ancient architecture can bring tangible social and economic benefits to the local community. However, in order to implement potential solutions effectively, it is necessary to establish a dialogue between archaeologists conducting their research and the local population, who is the heir of the heritage left by previous generations. It is important to underline that the local community should be not only allowed to listen, but also speak: indicate its expectations, hopes and fears resulting from the possibility of developing and proper use of the nearby archaeological space.

The social research conducted by the Polish archaeological expedition from the Jagiellonian University was the first attempt to analyze public opinion in the region of interest. The main aim was to collect necessary information from local people concerning their familiarity with the field of archaeology, expectations for the potential development of archaeological tourism based on historical remains, and related potential benefits which may come in the aftermath of proper heritage management.

Summing up the results of the above described analyzes, it can be concluded that mutual relations of researchers and the local community can bring far-reaching benefits to both sides. A necessary prerequisite for this seems to be an ongoing interest of the local population in their native heritage and research conducted in their vicinity. The analyzes showed also that these respondents who had already contact with archaeology and researchers had a much more positive attitude towards a future cooperation. This group of respondents were also able to see far-reaching opportunities

² Preliminary conclusions of above presented study were also possible owing to a research consultations with Prof. A. Bartetzky, PhD, during the visit at the Leibniz Institute for the History and Culture of Eastern Europe (GWZO), Leipzig, Germany, in the framework of the activity of the Department II (Culture and Imagination).

in archaeology and tourism based on the relics, e.g. raising the level of historical knowledge, as well as the possibility of using archaeology for economic ends and regional development. On the one hand, they saw an opportunity to improve their financial situation, however, on the other hand, they were quite skeptical about the possibility of increasing employment in the region as a result of the excavations.

The results of the study also showed discrepancies in the responses of the respondents, which depended on the community the research was conducted in. The greatest disproportions were observed between the respondents living in the city of At-Tafileh and the rest of the respondents, which may be the result of a different contact of the respondents with archaeology and its relics recently. However, it should be emphasized that the conducted study was only of a preliminary and exploratory nature, and therefore it should be repeated on a larger sample in the future. Despite the limited scope, the above analyzes provided a significant amount of information about the communities neighboring with the areas where Polish archaeological expedition conducts its archaeological projects. The results create also an opportunity and a solid base for undertaking efforts aimed at strengthening cooperation between researchers and the local community in order to jointly develop further activities with the aim of increasing historical knowledge and, more broadly, awakening cognitive curiosity of the inhabitants about their neighborhood and its values. It is also a good starting point for many combined activities aimed at protection of the heritage and integrated management of relics of the past. This gives us hope that it will be possible to achieve a situation in which the local community will intentionally utilize the results of the archaeological research in a social, educational, and economic perspective.

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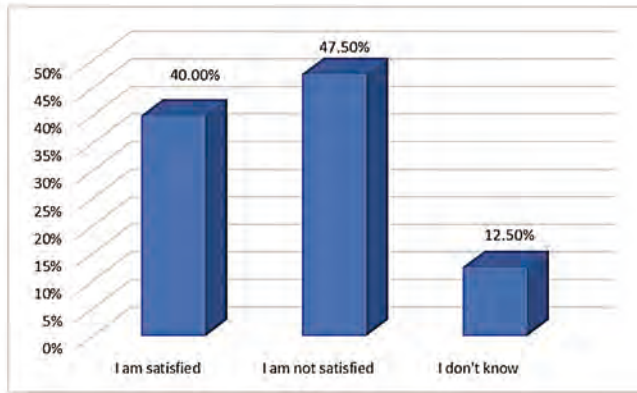
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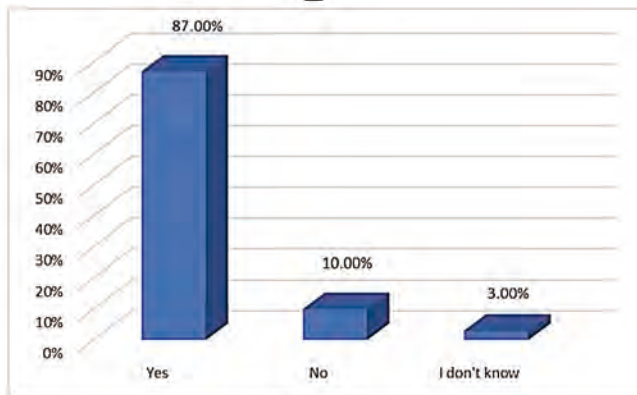
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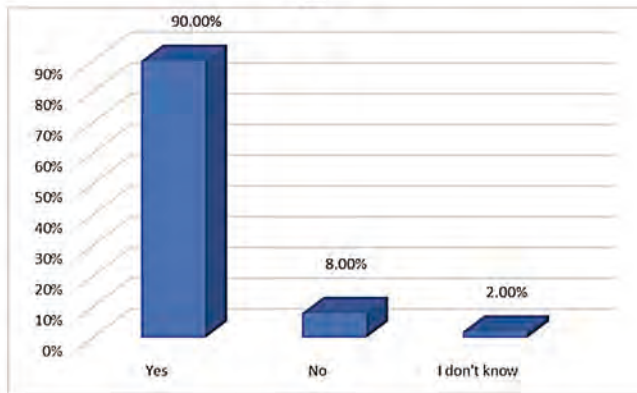
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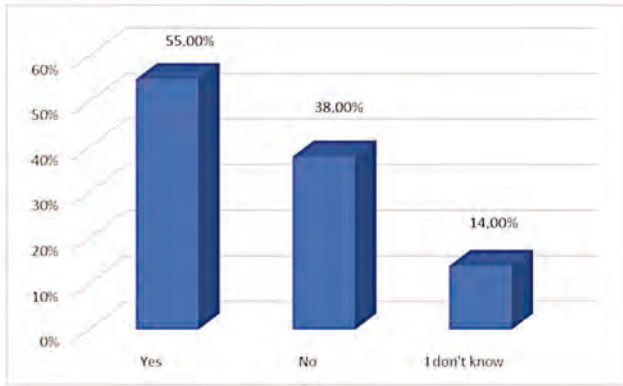


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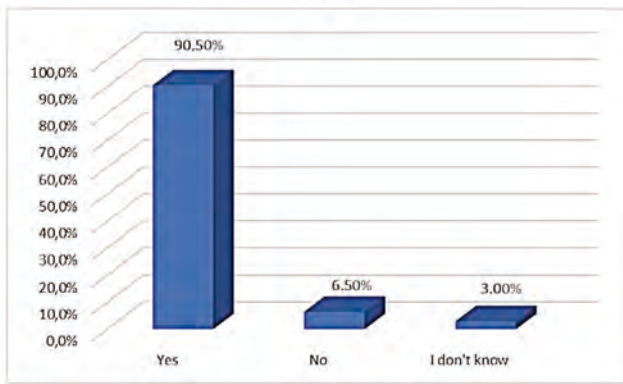
Pl. 1: 1. Level of satisfaction of the respondents with the archaeological project conducted in the area (N=200)

Pl. 1: 2. Opinion of respondents on whether they can learn about their history thanks to archaeological projects (N=200)

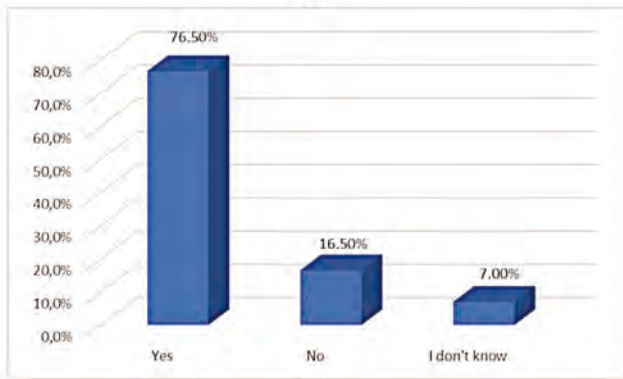
Pl. 1: 3. Opinion of the respondents on whether the number of tourists will grow up on this area thanks to the archaeological projects (N=200)



1



2



3

- Pl. 2: 1. Opinion of respondents on whether people may have jobs thanks to the archaeological projects carried out in the area (N=200)
- Pl. 2: 2. Opinion of the respondents on whether people from other countries and culture will appear in the area thanks to the conducted archaeological projects (N=200)
- Pl. 2: 3. Opinion of respondents on whether the conducted archaeological projects bring more fame to the area of southern Jordan domestically and internationally (N=200)