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Digitizing Heritage as an Integrated Sustainable Tool for Informative Interpretation of the past: The Case of Umm Qais Heritage in Jordan

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Abstract:

Umm Qais is an urban community in Northern Jordan with a distinctive archaeological and architectural heritage developed over 2400 years of settlement. This paper interrogates the role of digital heritage in documenting and preserving the local community everyday living memories associated with the architectural and socio-cultural heritage of Umm Qais. Its significance steers from the need to re-establish the link between their cultural heritage and the multiple complex layers of urban and architectural traditions, which influences their local identity. We implemented a qualitative methodology to build a digital record on understanding the relationships between the archaeological and the socio-cultural aspects of Umm Qais and the interconnected layers of heritage. Whilst considerable debates in the context of digital heritage look at how the general public could engage with digital practices of remembering, cultural heritage institutions are progressively employing digital platforms to connect individuals with their history.

Introduction

> *"Cultural Heritage site refers to a locality, natural landscape, settlement area, architectural complex, archaeological site, or standing structure that is recognized and often legally protected as a place of historical and cultural significance"*
> *ICOMOS, 2007*

The ICOMOS Charter states that Cultural Heritage is a valuable asset that should be protected and preserved. Of equal importance to such tangible heritage, intangible heritage has become a significant asset for several societies, cultures and communities, especially those whose cultural traditions and practices are in severe decline or on the verge of extinction. While the physical heritage can be recorded and preserved based on its virtues of existence, intangible traditions are more challenging to represent in the grand scheme of heritage preservation and development in Jordan. Whilst considerable effort is devoted to developing historical sites' archaeological preservation, they remained disconnected from societies, local communities and groups who primarily benefit from their protection, development and socio-economic rewards.

Much of the limitation of international efforts on heritage protection is the disconnect between local communities, their socio-economic and the tourism-led international interest in preserving archaeological and ancient artefacts, with less if any investment going into local community's shared stakes into them. The UNESCO's early ethos and interest, as stated by Lynn Meskell, in what they termed "world archaeology" was characterised by colonial hegemony on the decision making and investment by Western countries, alienating developing countries and reducing them to be the sole recipient of funding with limited, if any, chances to voice their community interests and priorities in

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heritage preservation[1]. The duality of Umm Qais heritage site is a classic example of such neglect of local community needs. Not only was investment directed towards the ancient Roman site of Gadara, but more critically, the local village residents and landowners were displaced to different parts of the Umm Qais village, cutting their links to their two-century's heritage and ancestors' history.

On the other hand, understanding the assessment of value underlying decision-making processes in heritage is critical to effective heritage conservation. The evaluation of the value of cultural heritage (expressed as cultural significance) significantly shapes the level of resource dedicated to its protection, conservation, study and promotion. Yet, the practice of heritage assessment, research and conservation has been dominated by a rationalistic and positivistic paradigm, which while being highly evidence-based, also embeds hierarchies of epistemological authority that exclude wider stakeholders from the decision-making process. The resultant bias ascribes higher cultural significance to the physical fabric of more distant urban heritage whilst undervaluing intangible heritage, traditions and plurality of meaning that provide the richness and diversity of cultural identity for local communities.

Post-modernism's postcolonial and critical theory offer potential to construct an understanding of the value of heritage that incorporates the plurality of sociocultural viewpoints of wider communities of stakeholders whilst also being a conduit to empower local communities and improve social justice. Over the past decades, two main interrelated developments have arisen in the cultural heritage sector, profoundly impacting digital heritage and humanities fields. Initially, the museum sectors have questioned their expert-centric approaches to seek more effective and operational participation from local communities, with a growing focus on displaced or marginalised communities[2]. In most cases, communities are a prominent stakeholder to be engaged in these attempts, provided the prominence of culture and heritage as means of their social inclusion.

The advancement of digital technologies has enhanced the opportunities to promote community engagement in professionally led cultural settings. On the other hand, cultural institutions are losing their unique role in providing 'official' cultural heritage narrative. As a result, the arena of digital heritage tools has provided prompt methods to adjust and even transform their practices by taking advantage of technological means for documentation, interpretation, and communication[3]. In parallel, research on interactive technology design has also shifted its approach from deploying digital ways of recording and delivering digital content to providing dialogue and community engagement around heritage[4].

This paper presents insights on a funded project by the Arts and Humanities Research Council titled 'The Living Museum of Umm Qais' (2019 - 21). Umm Qais and the remains of ancient Gadara were registered on the UNESCO World Heritage Tentative List in 2001. The site is a key tourist destination in the region for both domestic and international visitors which adds significant income to the local economy. However, recent conflicts in nearby Syria have led to a severe reduction in tourism and continues to limit the site's socio-economic potential. In addition, a policy by the Ministry of Tourism & Antiquities in the 1980s aimed at protecting the ancient remains resulted in displacement and relocation of the community breaking their connections to the traditional practices of architecture, economy and urban space. The site is now at risk of physical deterioration and loss of local knowledge and expertise in heritage protection.

This qualitative research is conducted in response to the continual disconnection between the displaced local community and their Ottoman village, cutting their heritage and socio-cultural interest. We aim to determine how a cultural heritage site, like Umm Qais, has great potential of using digital interfaces and multimodal platforms to position its community as more active and participatory producers of meaning in the construction of collective memory. We have set out a strategy for the digital recording and documentation of the site and its history to integrate such continual links of

habitation and traditions that linked the ancient to the medieval to today's realities. The central argument is that digital technologies and the cultural heritage industry is experiencing substantial changes to enable the public to actively produce material for heritage collections through digital platforms to reconfigure memory practices in a digital context. Besides, this research's primary conceptualization is that it is essential to study the potential benefits of recording digital practices that multimodal participatory media provide to understand how collective memory is constructed in a digital landscape. More precisely, how are we changing the way we collectively remember by participating in digital content co-creation, social documentation and remediation? Hence, we ask the questions: how are digital platforms reshaping cultural heritage and its usages? What implications do such platforms and practices have on memory construction in a digital landscape?

The Past is Changing

Heritage sites are becoming an increasingly critical part of the nation's memory as much more than physical imprints of the distant past; they represent a living reality of how the past continues to be relevant to many communities and is integrated into the everyday lives of many people. The heritage continues to inform the way of living today and tomorrow, as it manifests the material traces of how our way of life and culture emerged and evolved. Hence, efforts to preserve Gadara without re-linking local stakeholders, communities, and young professionals will be mostly short-term, with limited potentials for success in the long term. In addition, heritage, our inherited associations with the past, arises from our personal and collective connections, experience, ideas and empathy with the physical geographies around us. Our perceptions of heritage and our management of the built environment are, therefore, intrinsically linked. The preservation and dissemination of heritage to wider audiences is intrinsically a judgement of relative value based on this complex ontological and epistemological interrelationship.

Until recently, understanding heritage and assessing its value has been dominated by the development of scientific rationalism and positivistic paradigms, which emphasise the singularity of meaning and value of heritage. Rationalism focus on provable truths through quantifiable observation, therefore, invests authority in a top-down system of expertise resulting in "authorised heritage discourse". The assessment of heritage value relies on interpretive skills and knowledge, which are assumed to exclusively lie with experts exclusively[5]. The primacy of authorised heritage discourse has been particularly entrenched in the Middle East. It built upon the earlier foundation of orientalism which falsely portrayed the region as exotic, irrational and traditional. This view contrasts the rational, intellectual and modern/industrial Europe and underpinned justifications for imperialism[6], exploitation and control by the Middle East's mandate powers in the 19th and early 20th century[7].

For the past decades, the dominance of positivism, rationalism, colonial and neo-imperial attitudes has established self-referential systems of heritage knowledge creation. Expertise becomes the basis of decision making and therefore sets up a knowledge imbalance that marginalises local communities' voices and devalues the accumulated meaning and lived experience that forms their local heritage traditions. Disempowerment distances local communities from their heritage and undermines the associative links between their physical environments and social identity, and weakens local heritage conservation and protection incentives. Conservation becomes reliant on extrinsic motivations such as heritage protection laws, regulatory frameworks and international charters, limiting access to designated specialists, further undermining community engagement with preservation and protection.

The scope of external expert interpretation and state regulatory institutions is generally not configured to reflect the pluralistic perspectives and multiple individual meanings of heritage at a local

site level. Therefore, they tend to reinforce an orthodox interpretation, narrowing heritage to fixed interpretations subordinate to broader national heritage narratives. Regulatory frameworks for heritage protection primarily focus on quantifiable protections for defined heritage sites and their physical fabric in less-resourced environments. Such inadequate frameworks and policies lead to more inadequate protection for local communities' intangible heritage traditions losing the richness and complexity of its meaning cultural heritage at a local level.

In the late 20th Century, the influence of post-modernism in other related areas led to a critique of positivism and scientific rationalism within history, archaeology, anthropology and heritage to identify a singular truth about the past. The argument was based on human societies' complexity precluded singular truths, and that reality was a constructed experience where truth is defined through negotiated consensus. The constructivist paradigm led to calls for the conservation and the assessment of cultural heritage value to consider a greater range of sociocultural perspectives through wider stakeholder engagement with heritage. On the other hand, constructivist approaches aim to empower communities through broader stakeholder engagement, valuing all heritage perspectives as equally valid truths. By doing so, they have the potential to inform a more comprehensive determination of cultural significance and thus recognise a wider range of both tangible and intangible heritage[8]. Besides, the related theories of postcolonialism and critical theory emphasise the social construction of experience[9] and highlight the potential heritage engagement of local communities to promote social justice and address the inequalities imposed by the extant systems and the geopolitical exploitation of heritage and identity in the recent past[10].

Whilst the theoretical benefits of a constructivist approach that promotes social justice, founded on intellectual egalitarianism, are acknowledged as beneficial and appealing, yet the complexity of implementing a decision-making process where conflicting views are equally valued is problematic and has limited their application. Such participation outcomes are sensitive to simplification because the pluralistic complexity of heritage value and meaning expressed by participants is often difficult to encapsulate and therefore becomes narrowed through the selective presentation as a group consensus that tends to reinforce a normative discourse.[11] For some scholars, the relativistic extremes of this approach represent a "philosophical nihilism", highlighting the potential for heritage to be subordinated in support of nationalistic or extremist causes.[12] Therefore, cultural heritage assessment in practice remains dominated by the established structures that, supported by legal frameworks and regulation, can demonstrate clear aims and methods in decision-making in contrast to constructivist paradigms' relativism.[13]

Cultural Heritage Conservation at Umm Qais exemplifies these changes in approach to heritage value. Since its 'discovery' by Seetzen in 1806, most investigations carried out at the site has focused on the tangible heritage defined by its cultural significance, e.g. Classical, early Christian and biblical associations.[14] This preservation also disregarded its Islamic and Ottoman cultural influences and the contemporary community's rural and urban traditions. The postcolonial construction of geopolitical and geo-cultural identities to support the formation of the newly created nations in the region, including Jordan, intentionally excluded its Ottoman associations favouring the more temporally distant links to the ancient history could form the basis of revised national narratives. Doing so maintained the 19th Century framing of cultural significance at Umm Qais in reference to classical and early Christian phases and has severely distorted our understanding of the decline or adaptation of the urban fabric of the city from the early Islamic period and its evolution into the current village and community of Umm Qais.

More recently, a shift towards participatory projects such as that outlined below, reflect an approach that bridges between rational positivism and more constructivist paradigms, utilising the

benefits of wider stakeholder engagement and more holistic and constructed views of heritage experience to reform and compliment the established mechanisms to provide a practical and pragmatic approach to cultural heritage assessment.[15] In doing so they are empowering the community to participate in knowledge making and value assessment, thus addressing the historic imbalances in the narrative of the site. In turn, this led to a greater recognition of the significance of forms of cultural expression previously undervalued by orthodox approaches and ensuring that such intangible heritage is preserved.

Gadara/Umm Qais: A Historical Background

The historic site of Gadara is approximately 120km to the north of Amman and had a unique significance amongst other Roman Decapolis cities on their Eastern Mediterranean. The Decapolis cities were designed and built following Hellenistic cultural models and influence when the Jordan River Valley was included as part of the Alexander the Great's empire. Before the rise of Christianity in the region, Gadara, similar to the other Decapolis, represented the Roman and Greek cultural and religious practices as part of the city's daily life. The name "Gadara" is not Macedonian Greek, but rather a Hellenised Semitic name meaning "fortification", suggesting that the military colony took over a pre-existing stronghold/settlement securing this area of the land route between southern Syria and the ports on the north Palestine coast. The ancient site has a large vicinity that includes the old village of Umm Qais built on top of the acropolis hill's earlier archaeological layers and expands to the visual access to the Yarmouk River and Lake Tiberius. The village has a complex topography and a wide overview of the region, giving the site a unique significance. The sites overseas the lands across the borders in Syria, Palestine and Israel, creating a regional node within a harsh topography. (Fig.1 and 2)

Gadara was significant for its influence on Greco-Roman culture, being home to schools of philosophy, literature and poetry, and through its association with the biblical story of the Gadarene Swine where Jesus exorcised "Legion" demons from a man into a herd of pigs. In the Late Roman and Byzantine periods, it was an important centre for local viniculture.[16] It was a focus of pilgrimage for early Christians, which continued into the early Islamic period. The earliest evidence of occupation on the site dates to the fourteenth century BCE.[17] In the late 4th century BCE, Alexander the Great's Macedonian Greeks founded a military colony concentrated around the defensive hilltop position, either during Alexander's campaign through Palestine in 332BCE or as they returned west after Alexander's death in Babylon in 323BCE.[18]

The Yarmouk River and the Golan heights formed a natural border between the Ptolemaic and Seleucids territory that resulted from the division of Alexander's territory after his death. Gadara's significant strategic position on this boundary made it a focus of successive Seleucid – Ptolemaic (1st to 5th Syrian Wars) and later Hasmonean - Nabatean territorial conflicts throughout the 3rd to 1st Centuries BCE and political control of the city repeatedly changed hands.[19] Archaeologically the expansion of the defensive walls and water supply reflect these repeated conflicts.[20] The Greek historian Polybius described that by 218 BCE, Gadara was "the strongest of all places in the region", and identifying Gadara's importance as a centre of Hellenic culture. He also reflected on the mixing of cultural influences to produce a unique Gadarene identity in opposition to the Hasmonean kingdom's cultural influence centred on Jerusalem.[21]

Typical of Greco-Roman planning, the site is characterised by an organised street plan consisting of perpendicular streets, from a large, east-to-west street known as Decumanus Maximus. This street divides the city into two main sections: the north and south, while other Cardo streets

intersect with the Decumanus Maximus at a right.[22] The city included a public terrace built into the western edge of the Acropolis in the Roman period and re-used in the Byzantine period by constructing two churches and other civil and religious architectural structures built on both primary and secondary streets.[23] The city's streets were paved and equipped with a significant water supply and drainage system consisting of deep-water channels and tunnels.[24] (Fig. 3 and 4)

Throughout the Roman period, the size and importance of Gadara grew as a critical point on the trade routes to Bostra and Provincia Arabia and as a major centre for viniculture. The city underwent several phases of major urbanization, expanding the city westward along the high ground onto the fan-shaped basalt plateau but with the city's civic focus remaining on the original settlement hill. [25 & 26] Increasing city population and economic prosperity increased water demand. Gadara and the neighbouring Decapolis cities of Adra'a and Abila built a 170km long quanat aqueduct tunnels system to connect dams and springs in Syria to the North. The 106km section of tunnels represents the longest and one of the ancient world's most important engineering achievements.[27] The nearby battle of Yarmouk in 636 CE led to the collapse of Byzantine power in the Levant which caused large scale damage to the city, for example, the loss of water supply connections in the aqueduct tunnels which went into rapid decline. [28]

Early accounts of the Umm Qais village are found in the Ottoman Salnamat (15th &16th C. yearbooks) that refer to a human settlement in the village of "*Mkeis*", as the locals know it till today.[29] The change to the current more formal name of Umm Qais was attributed to Arabization (ta'reeb) of Latin or non-Arabic names that took place in Jordan during the 20th Century. For many centuries, the settlement has occurred on this site based on the same economic rationale that linked it on the routes to major markets. This advantageous position on good trade routes was again a logical action by the grandfathers of the villagers settling in Umm Qais at the beginning of the 19th Century, providing the exact connection between north Jordan villages, their Palestinian counterparts and the coastal cities. Those historic routes emerged over centuries to trade and exchange goods and services between northern Jordan and Palestine.

The community's historical accounts refer to the strong trade with Palestinian villages and towns like Haifa for manufactured commodities or crafts. They used to travel to Palestinian lands for work or to seek medical treatment or entertainment. Furthermore, the large agricultural lands of Umm Qais required a continuous flow of labour, especially during harvest seasons. Equally, Palestinian textile and fabric used to be purchase from nearby markets. Local interviewees stated that the village's local families lacked professional skills in some civil activities such as building construction, and hence, they used to call for builders from Palestine. According to *Al-Husban,*[30] local communities sought some Jewish builders who were then residing in *Safad* to build the first big house at Umm Qais (The House of Falah al Rousan) is known now as the *Rousan* House Museum. [31]

As in the ancient past, Umm Qais location on natural landscape boundary features again brought the community to the front line of events and conflict after the end of Ottoman control in the Levant at the start of the 20th Century. Following the relocation of Umm Qais' original community, the built environment of the Ottoman houses and shops suffered from neglect, physical deterioration and unsympathetic conservation resulting in loss of much of their cultural value and compromising their historic spatial integrity. The loss of appreciation and awareness of the site's importance amongst the local community and more recently the sharp decline in the local tourism economy due to the conflict in nearby Syria is further endangering this important site.

The upper quarter (*Harah al-Fouqa*) of Umm Qais includes courtyard houses that created a new layer of structures on top of the original urban grid of the underlying Greco-Roman city. The line of many of the buildings utilises earlier buried walls as foundations, including the earliest Hellenic city

wall on the south west of the settlement (Fig 3). The reuse of earlier foundations and masonry has resulted in a village without the loose structure of other Ottoman rural settlements. All the buildings within the vernacular village of Umm Qais utilise the profusion of spolia of dressed basalt and limestone building materials recovered from the ancient buildings of Gadara. This has resulted in the village's characteristic architectural style and black and white appearance.

Research Methodology: Engaging Local Community Heritage

The Gadara site has been studied over the past four decades from several different perspectives, disciplines, and analyses. Driven by its archaeological importance, much of this effort was directed towards archaeological excavations by European missions, uncovering several Roman structures and remains on the site's edges. The focus on excavation has limited the site's relevance to the upper quarter's local communities' everyday life in *Harat al Fouqa*. The significant impact was primarily a negative one. The Jordan's Department of Antiquities (DoA) has managed to expropriate the lands and houses of the *Harat al Fouqa* and relocated the residents outside its premises and confines to clear the site for further excavations. Such actions prompted much socio-cultural discontent amongst the local communities and cutting a centuries-long relationship between the locals and the historic site. Such broken relationships hinder our capacity to understand how the area operated and the local communities' cultural practices engaged with the ancient site. Thirty years on, much of these cultural practices, traditions and rituals are disappearing along with those who witnessed them. A young generation (30 years old or younger) has never lived here and only noted the parents' storytelling. More critically, the processes that involved the continual reproduction of cultural habits and practices ceased to function. Hence, large parts of that culture and history have become increasingly remote and drifted ever further from cultural and social memory.

The *Harat al Fouqa* at Umm Qais, on the other hand, has been studied from the anthropological perspective looking at the relationship between materialistic and non-materialistic elements of the Village. However, the formation of a particular cultural and social structure that remains so attached to the place, even 30 years following the displacement, has not been grounded in understanding everyday living and cultural practice. Records of oral history, socio-cultural memories have been seen as the best possible model to interrogate such hidden layers of traditional and heritage whilst developing a reconstruction of the socio-historical context of everyday life in the Village. We have worked closely with local members of those families who lived in the Village, or inherited the casual and traditional accounts from their older siblings, to weave causal narratives of a generic picture about economic, social, administrative, and ideological realities[32]. Such understanding of the village's socio-cultural patterns of everyday lives explains the materialistic aspects of the village's architectural remains. It also provides two integral parts of the Ottoman village's tangible and intangible heritage and how the locals lived within and around Gadara's heritage sites. Notwithstanding, the cultural heritage and memories of the families themselves prove to be very informative and introduce a novel picture of different aspects of the site's history. Individual conversations, spatial mapping of historical activities, events and cultural engagements offered invaluable information about understanding the practical and meaningful aspects of living with Umm Qais heritage.

We designed a methodology that utilises digital heritage tools to understand the relationships between the archaeological and the socio-cultural aspects of Umm Qais and reflect the interconnectedness of these two layers of the site's heritage. We aimed to build a digital platform with user-generated content constituting a growing segment of digital memory outputs to reinforce the collective cultural memories of practices and events that could be accessed across multiple devices,

platforms, and networks. Each recorded story, map or object has a future use, which is, in effect, preparing future users for the digital practice of remembrance and memorisation. With each piece of digital content, we document and upload. Each search we conduct, we are leaving behind a record of their presence, activities, and interests, no matter how seemingly negligible. Over time, this archive will become a legacy and proof of the past. We have worked on: a) Theoretical and historical investigation of archaeological remains of the history and structures of central Gadara, using archival records, archaeological surveys, historical maps and narratives, previous excavations & satellite images; and b) Research, analysis and evaluation of archival records and historical narratives of cultural practices of the local communities. Both analyses develop a coherent understanding of the site's chronological evolution, using historic and travellers' narratives and historical records of economic activities, including tax records from the archives. We are creating an evidence-based picture of the everyday life of the village, including its recent history. These historical documents and records will enable the curation of fuller perceptions of trade routes through the city and its roles through different eras.

As this research involves the analysis of new evidence from material and stone, from one side, and people's everyday living traditions from another, we engaged with local architects and archaeologists from the Jordan University for Science and Technology (JUST) and the Department of Antiquities (DoA) to verify sites, locations and original excavation maps. We aimed to creatively engage with existing research and archaeological records to enable new analysis and a novel understanding of original spatial layout points and their relationship to the Village. We also delivered capacity-building and training workshops targeted at the local community and heritage professionals and researchers on data gathering and collecting techniques. The training included running spatial surveys, recording social and cultural narratives, oral history and running analytical processes untangle complicated histories. The data and material collected have been precious in developing a website that hosts a new digital archive of Umm Qais: digital story maps, 360 tours, drone imaging and recorded short films with the community.

Therefore, one of the main objectives of this paper is to reconstruct everyday life's cultural heritage that links communities to their local heritage and helps re-establish that missed link. We have re-established links and relationships through this fieldwork by bringing back local family members to their old houses and interviewing them on-site. The historical, social and cultural aspects of their memories can be spatially-connected to the realities of place and history. The analytical study of the discursive cultural practices produced by those families over the years in *Harat al Fouqa* reflects the deep connections between people and place, what ancient structures meant to them, how they contributed to the evolution of oral traditions and folklore that lived on through generations. Therefore, the documents, oral history, narratives, biographies, and land records and the various stories, poetry, and songs all form the main components for those discursive practices.

Spatial mapping of significant cultural spots, families and houses

The fieldwork was conducted in three phases via workshops that helped engage with different actors and actors in the local scene. This approach supported us to acquaint ourselves with the complexity, sensitivities of the local dynamics, tribal affiliations and grievances, especially toward the management of the site. A vital part of this process is to understand how the site's social history is particularly important in generating interest and consensus with local families, groups, and communities. Those activities have helped us enhance and develop the research programme to be led by capacity-building events and support local members as mediators of the village cultural history.

The village has 32 mapped houses that belong to several families, who are mostly connected by the same extended family and inherited the houses generation after generation. For example, *Al-Rusan* family own nine houses; *Al-Masry* and *Al-Umary*, each own seven. Whilst others like *Al-Husban*, *Al-Malkawy* and *Al-Sharif,* own one courtyard house, locally named as *hawsh (singular): ahwash (plural)*. Such distribution of properties does not represent a lower or higher social ranking for a family on another, as the male owner's last name knows those houses. However, they are mostly married to each other, creating an interconnected community. Besides houses, there were several utilities like the Mosque, the *Madsara* (now the restaurant), and a few shops on the village's outer edges, which emerged as the community expanded during the 20th Century. (Fig. 5)

Buildings, Traditional Houses and Public Spaces

Houses in Umm Qais varied in size, shape and form depending on their location when they were built and the level of seniority and affordability of the household and his extended family. Nevertheless, most of them had a typical arrangement on one level that includes closed rooms overlooking a backyard/ garden and a terrace called *Beydar*. According to *Nidhal Al-Masry*, his family house had "two bedrooms, an olive garden, and a *Beydar* (Threshing Floor)". Every house had a "*Khom*" [Chicken Coop], where they grew local chicken and maintained a continuous domestic supply of eggs. Average family and most households owned cows. They milked them, and all dairy products were locally sold. Pigeons, however, used to grow within roof cages.[33] (Fig.6). In fact, the reuse of decorative elements and higher quality masonry elements is more prominent within the site's higher socioeconomic status areas. The upper part of the rocky hill that provided the high-status civic centre of the earlier city was mainly reserved for the large farmsteads of the *Mellakin* (landowners), while the smaller houses of the *Fellahin* (landless tenants, day labourers) cluster on the western and northern slopes. Yet, none of the early western scholars provides detail on the vernacular village's architecture or the social distributions that might have been relevant to the ethnographic research included in the stated aims of the Exploration funds supporting such investigation.

The minimization of the cultural significance of later periods of the site and the continuity of heritage and tradition has had a significantly negative impact on the site's heritage management with notable knock-on effects for the local communities' connections to their heritage. In 1967, the Jordanian Ministry of Tourism & Antiquities decided to promote the tourist potential of the Greco-Roman and Byzantine elements of Umm Qais and thereby protect its archaeological remains for external visitors. The approach involved the purchase of all the land on the settlement hill along with policies of the displacement of 1500 people through the 1980s to modern built accommodation to the east of the site. The historic evacuated houses within the original Village were to be demolished to make way for further archaeological investigation of the site's ancient phases, with some areas proposed as large-scale redevelopment for tourist accommodation. Some houses were demolished to facilitate some archaeological investigations by the local academics, particularly on the large terrace north of the western theatre. A collaborative campaign against these plans by the local community, Jordanian and German architects, anthropologists' archaeologists successfully led to the retention of the vernacular village buildings. However, delay in implementing revised national development plans resulted in the neglect of the currently vacant, deteriorating and collapsing buildings and a loss of some of the villages unique architectural value.

 In fact, since relocating Umm Qais' original community from the settlement hill of the ancient city, 90% of the unoccupied Ottoman houses and empty shops have fallen into a state of deterioration; 25% have had their roof and walls collapse, and stairs connecting the courtyards destroyed. Buildings like *Beit Heshboni*, the Ottoman mosque, and the girls' school's remains, over time, have lost their

authenticity and contextual setting. Moreover, restoration ventures, such as in *Beit Rousan*, have compromised the house's historic spatial integrity and failed to generate additional income to the local economy.

The modern houses that the community were moved to were smaller and no longer reflected the integration of Ottoman architectural styles with the pre-existing layout and materials of the ancient city on which they were built resulting in a loss of the communities' connection to the daily domestic and social practices.[34] Their size and layout also precluded the social, political and economic functions of the courtyard houses that they were meant to replace[35] and their modern construction methods have energy and thermal properties that make them less well adapted to the specific local environmental conditions requiring greater energy costs compared to the traditional architecture of the village.[36] Additionally, the relocation of the village included the removal of c. 460 donoms (c.460,000m^2) of farmland overlaying the areas of western expansion of the ancient city. The loss of grazing, cultivating and olive production income for households impoverished the village's economy and dismantled the community's links and relationship with the land. The economic impact led to extensive displacement of younger portions of the population to urban centres such as Irbid to work in low paid jobs further distancing them from their heritage and breaking the demographic equilibrium, social structure and associated intangible traditional practices that sustained the unique heritage of the village.[37] The anticipated economic development from both internal and international tourism has failed to offset the economic and social harm to the community and more recently the Syrian conflict magnified by Umm Qais' border location has again severely impacted Umm Qais community and prosperity.

The Local Primary School

> *"Our backpacks were either tailored Shewal [bags] or a piece of fabric. This applied to everyone. When it rained, it got soaked".[38]*

The Primary School was established in one of the houses towards the village's north edge by donations from the families. The nearest school was far away, so it was deemed necessary to have a village school. It was at a walking distance from the houses, and the daily journey in groups bore a lot of memories that vary from the winter and summer. Everyone wore the same clothes, with no difference between wealthy and low-income families, whilst teachers wore suits and ties.[39] In the summer boys, wore patched pants and sandals; "In winters, we used to jump in water puddles. When they are frozen, we broke the surface ice and jump into them".[40] The school day had two sessions; the morning session would end at 2.00 pm, so children could go back home for lunch. They return for the evening session that takes place in the school garden where the children were taught farming classes. (Fig. 7)

In its early life, the School covered all primary and secondary education. However, since 1978, the School was limited to Primary education only due to the lack of maintenance. From 7th Grade onwards, children had to go to town to study at a different Secondary and High School, "we moved to a school in town, a rented house that Al-Rumi owns, then built a new school".[41] While tiring, walking through the archaeological site, this journey was also a socially pleasant daily practice. Other trips from Umm Qais to Irbid would be via *Abu Kahoul* Bus, the only and familiar bus service where the driver knew all the passengers who are familiar with each other.

School teachers were mostly employed from the local community who taught children for their primary education, from year 1 to year 6. In line with the village culture of the time, education was strict and about discipline. It was not normal for children to be physically punished.[42] Teachers were respected and feared. Parents would warn their children to tell the teachers to discipline them, and

children would not play in the streets to avoid being seen by their passing by teachers. "We used to go to the valleys to play. We didn't play in the streets because we were afraid that the teacher sees us ... After school was the time to look after local cattle, cows and sheep in the summer and collecting lump wood for fires in the winter, "night time was for the family to make *Magleye, Simsmiye, Saleege,* or *Hummus* together."[43] (Fig. 8 and 9)

The Local Community and the Ottoman Village (Harah al-Fouqa)

According to the historic study by Abdel-Hakim Al-Rusan, the Ottoman administrative records mention *Um Keis* in the *tabu difter* number 430 in 1523 that documents the presence of five dwelling units, number 401 from 1534 documents 10 dwelling units, and number 99 dating to 1597 that records about 21 dwelling units in addition to 15 individual bachelors.[44] Family ownership refers to the initial presence of the *Rousans* followed by the *Husbans* and then the *Malkawis,* the *Omaris,* the *Na'washis,* the *Shana'ats,* and the *Swaitis* who were the first to inhabit the area.[45] They are part of larger lineage in the area for families who historically present outside the area; "The *Rousans* came from *Sama al Rousan,* the *Hosbans* are a branch of *Bani Hassan* who came from *Mafraq,* the *Omaris* came with the Village of *Dair Yousef,* the *Masris* came originally from Egypt, and the *Malkawis* came from nearby *Malka".[46]* Such diverse origins show that migration came different places and regions to settle in the area influenced by the potential of its agricultural land and its geographical proximity to several travelling routes, mirroring the reason for the initial founding of ancient Gadara several millennia earlier. Those families, however, grew over time and more interlinked as they married from each other and now each family have a number of houses attributed to them.

The form and spatial arrangement of the Upper Quarter village, including their differing sizes, specific architecture and architectonics, and their courtyards (*ahwash*), provides us with an indication of the families' social and economic hierarchy through the act of building that developed over time. In their livelihoods, local families were mostly reliant on the area's moderate climate with a substantial amount of rain every year, topography and soil conditions in the Jordan Valley which were ideal for agriculture and vegetation. The natural topography allowed for a "good" layer of fertile soil suitable for planting trees and livestock, with many olive trees being planted in the area until today. Many families also had large farms and lands beyond the site's immediate locality, adding to the range of crops and various agricultural activities in the valley that range about 18,000 donums. The pattern of subsistence agriculture and the specific range of crops and livestock that could be successfully exploited are key to forming an essential practice, food culture and calendar events, whereas families and individuals took part. The research has witnessed and filmed these otherwise intangible heritage practices, including recording the olive tree harvesting season during the Second Workshop (Nov 2019) (Fig.10).

Local accounts refer to the Ottoman Government in 1876 distribution of land to local families and residents with different percentages. Earlier peasantry work was collective where labour work and produce was shared until land was distributed and divided into two main sections in 1836 for peasant and agricultural activities and for woodlands agriculture[47]. The agricultural production included wheat, barley, lintel, chickpeas, and different types of vegetables and fruits such as watermelon, *aukra, zukini,* tomatoes, and cucumbers[48]. In addition, there are a lot of wild plants that are used by the local community in their own food and also in the food of their animals. These include *khubaizeh* (geranium), *atliy, humaid, louf, zatar* (oregano), *jwaizeh, shomar,* and *fiter* (mushrooms).

Through the interviews with local families and their senior members, memories of their daily journeys to the farms and field were very vivid in their minds, with many describing the women's food

journey taking the food to their husbands working in the valley. In addition, they mentioned how the seed bags, mainly wheat, provided the main currency for internal trading, such as clothing or seats purchase from the local shop. The everyday life had a specific routine and seasonal events that drove the village culture and traditions over the centuries. To a large extend, similar to tribal and rural culture in the region, work is connected to providing for immediate family living needs. Hence, the local economy was based on the following principles:[49] a) economy that ensures basic needs for the local family and communities; b) Socially driven, cooperative and transactional in nature that enable people to exchange material, seeds and crops to satisfy their basic needs; c) work force was largely a hybrid mix of local family members, poor peasants from local villages and use of domestic animals (mules, horses and cows); and d) social and economic hierarchy were driven by land ownership differentiating between smaller homes and large houses.

Digitizing Traditions, Culture and Memory

One of the important definitions of cultural heritage was noted by Dalbello description that *"heritage is created through acts of collecting and preservation by institutions such as archives, libraries, museums, through processes of social memory by which popular significance becomes based on memory stores and historical materials".*[50] To a large extent, this definition frames cultural heritage institutions as supporting the society to remember events that not everyone experienced directly by preserving artefacts, stories and narratives, as well as transmitting from generation to generation various cultural values and interpretations and shared remembering. While heritage institutions have conventionally preserved and maintained collections, they have also had to deal with the increasingly digital world. Materiality has become a digital representation, and its location is determined by network access. One response to this shift is that numerous initiatives through organisations and institutions have moved into digitising their collections and embracing the new digital technologies' dynamic interfaces. Today, people across the globe upload and share their personal experiences with internet repositories. Still, at the same time, there is a need to focus our attention on how these forms of cultural production are authentic and considered historical and cultural artefacts, and how users interact with digital media as sociotechnical practice for creating a collective experience and constructing the meaning of the past.

For this, we created an online platform and repository that supports the reconstruction of stories and narrative of the Umm Qais heritage site in Jordan. The platform is interactive and includes a range of digital memory forms to learn about the people and the history of the site. The website has two major parts on the tangible and intangible history of Umm Qais. With the collaboration of the local community and other stakeholders, we generated ArcGis story maps, 360o tours, 3D modelling of artefacts and the site, and community recorded narratives and short films (Fig 11 and 12). We have also worked with university students from the Department of Architecture at JUST to develop and design visual productions such as branding objects, recorded short films about the site history and children trail maps. We anticipate that the interactive website will provide a good opportunity for uplifting the tourism industry in Umm Qais by uniquely fashioning together specific components of its heritage by individual visitors. We are also designing an interactive mobile-friendly App that provides an exclusive guide to the history of the place using CGI, videos, photos and 3D-animations. Some of its key features will include a 3D-image of the displayed objects in the museum with each identified, a GPS map showing the location of key sites and 'Stories of the community' that provides information on events and history (Fig 13).

Indeed, questions to investigate ways the public could engage with digital practices of remembering are particularly important in digital heritage initiatives, where cultural heritage institutions are increasingly employing digital platforms to connect the public with their history. Although heritage institutions have conventionally documented, preserved, conserved, and exhibited significant objects and sites, they are also now contending with how to use digital media and systems of mobile technologies to provide new forms of access, content generation, reproduction, distribution, engagement, and participation. The ubiquity of mobile digital technology and freely available tools offer an opportunity for increased accessibility and participation. It is now becoming necessary to merely depict evidence of the past and provide new ways of memorialising multiple platforms across the different generations. Digital heritage approaches may bring in views about the lived experience around places and ensure broader stakeholder engagement that a greater range of sociocultural perspectives on cultural heritage value is considered to inform a more plural perspective on heritage conservation. While researchers have consumed much time to examine the implications of what it means to develop digitised cultural productions into intangible representations, what has yet to be thoroughly explored is the potential to use such interactive environments of the digital media to allow increasing interaction and sharing of content as ways to articulate meaning and transmit social memories.

Acknowledgement

Figures

Figure 1. *Regional map showing the location of Umm Qais in northern Jordan. Drawing by Gehan Selim.*

Figure 2. *The vicinity of the site and its visual access to the Sea of Galilee/Lake Tiberias.*
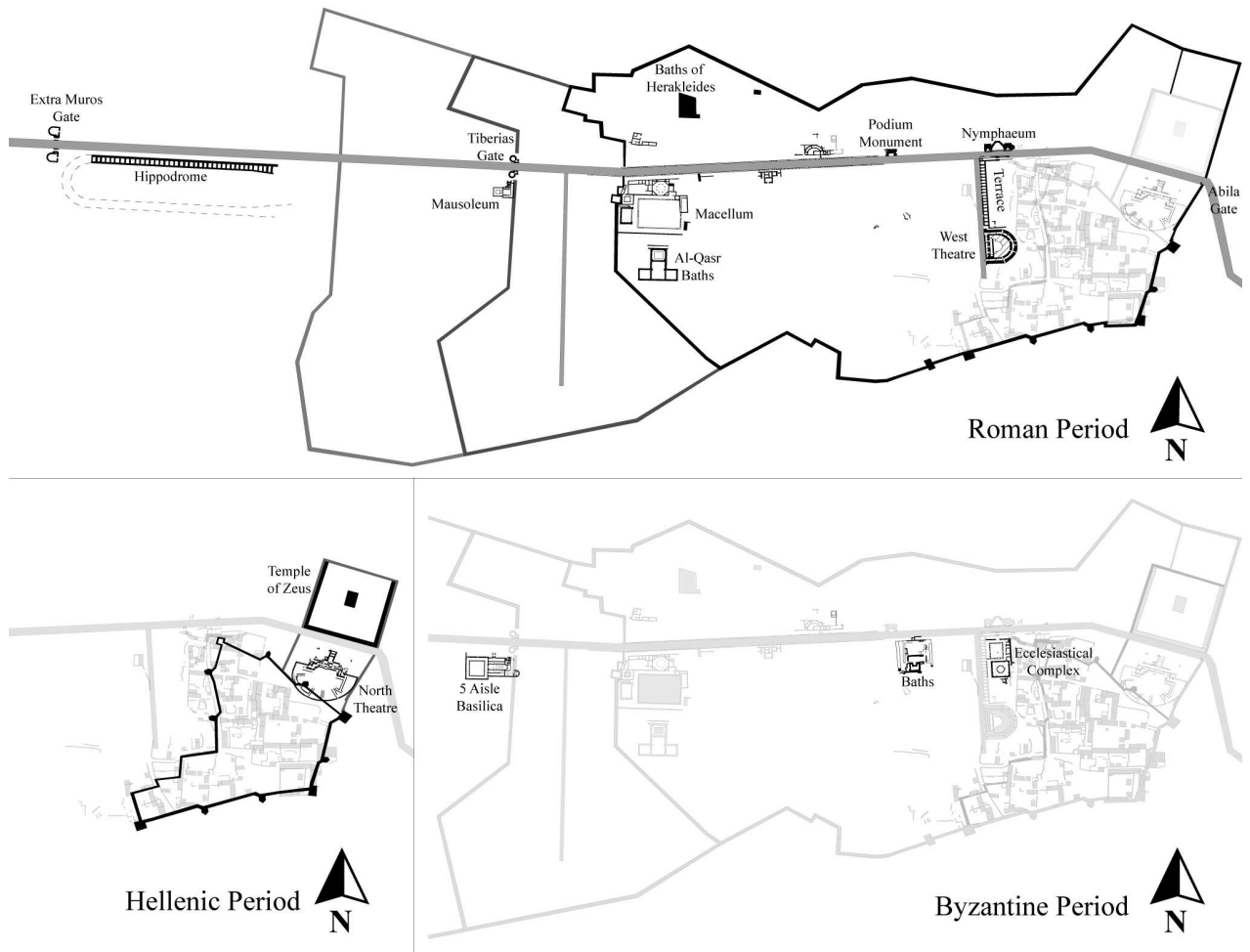
Figure 3. Plan of the ancient monuments of Gadara and the Ottoman village of Umm Qais. A) Hellenic Period. B) Roman period. C) Byzantine period.

Figure 4. *The Decumanus Maximus, the main east-to-west street that divided the ancient city into north and south.*
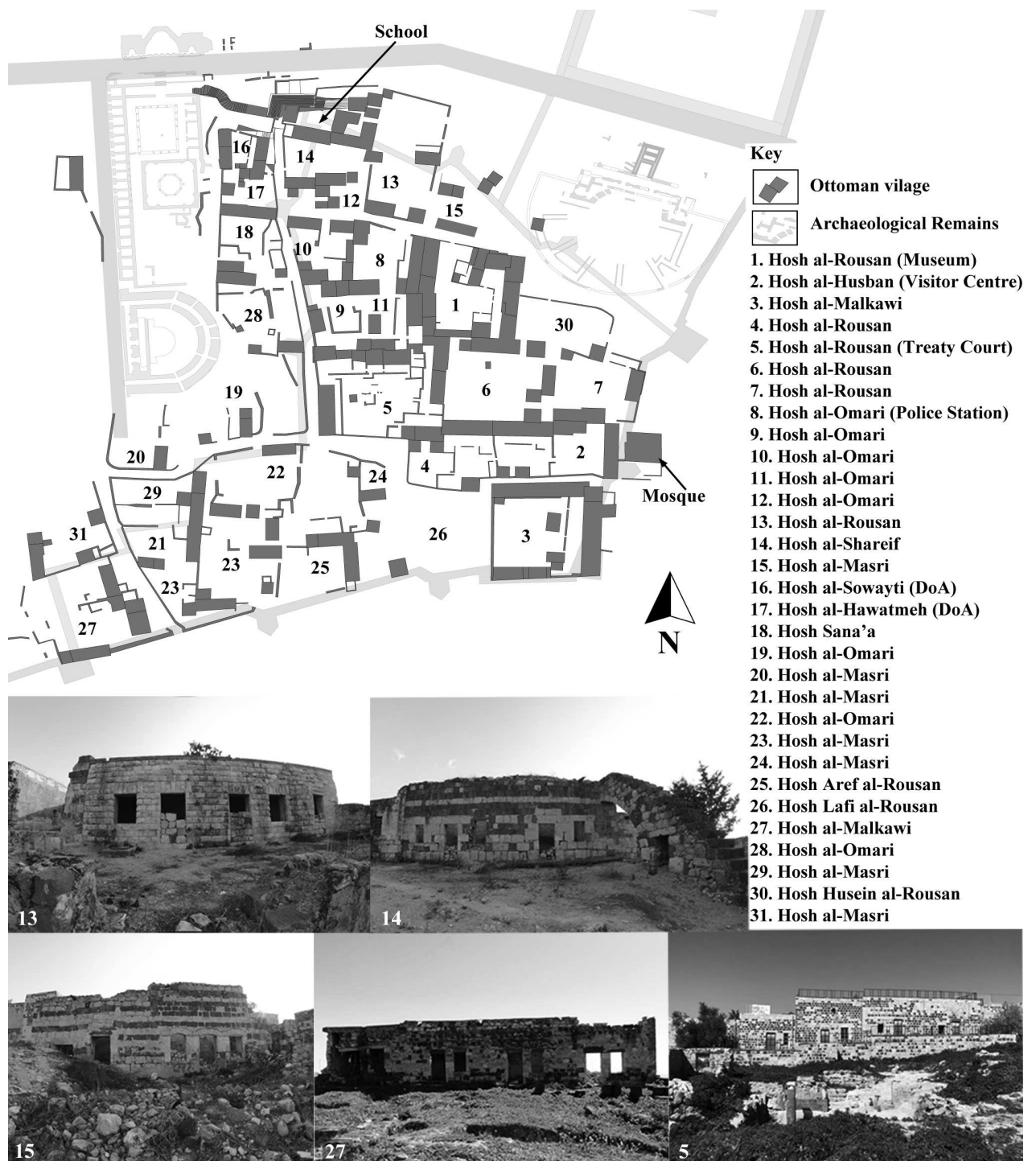
Key

▨ Ottoman vilage

▨ Archaeological Remains

1. Hosh al-Rousan (Museum)
2. Hosh al-Husban (Visitor Centre)
3. Hosh al-Malkawi
4. Hosh al-Rousan
5. Hosh al-Rousan (Treaty Court)
6. Hosh al-Rousan
7. Hosh al-Rousan
8. Hosh al-Omari (Police Station)
9. Hosh al-Omari
10. Hosh al-Omari
11. Hosh al-Omari
12. Hosh al-Omari
13. Hosh al-Rousan
14. Hosh al-Shareif
15. Hosh al-Masri
16. Hosh al-Sowayti (DoA)
17. Hosh al-Hawatmeh (DoA)
18. Hosh Sana'a
19. Hosh al-Omari
20. Hosh al-Masri
21. Hosh al-Masri
22. Hosh al-Omari
23. Hosh al-Masri
24. Hosh al-Masri
25. Hosh Aref al-Rousan
26. Hosh Lafi al-Rousan
27. Hosh al-Malkawi
28. Hosh al-Omari
29. Hosh al-Masri
30. Hosh Husein al-Rousan
31. Hosh al-Masri

Figure 5. *Spatial mapping of Umm Qais's families and houses in the Upper Quarter (Harat al-Fouqa).*

Figure 6. The courtyard houses in Ottoman Umm Qais were built using a mix of basalt and limestone salvaged from the remains of the ancient Roman city. This photo shows the Liwan House within the al- Husban courtyard house.

Figure 7. *Site topography and landscape, showing the new areas to the east where village residents were moved. The remains of the Harat al- Fouqa are just to the left of center. Based on Google Earth imagery 2021.*
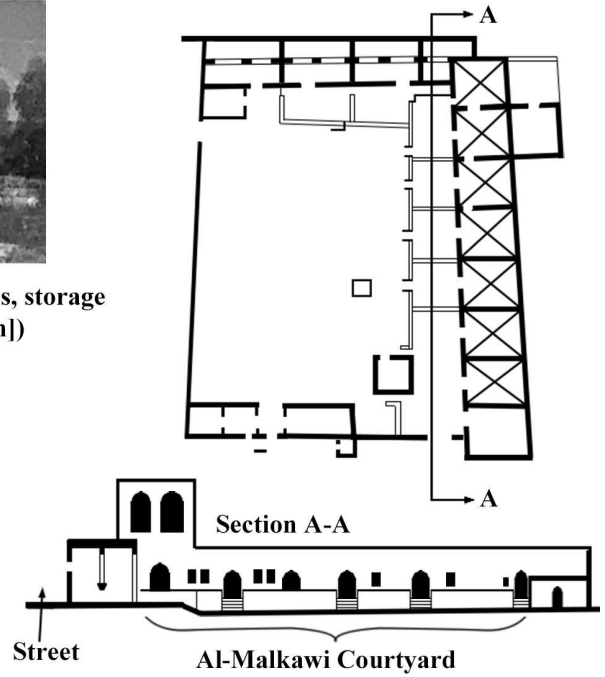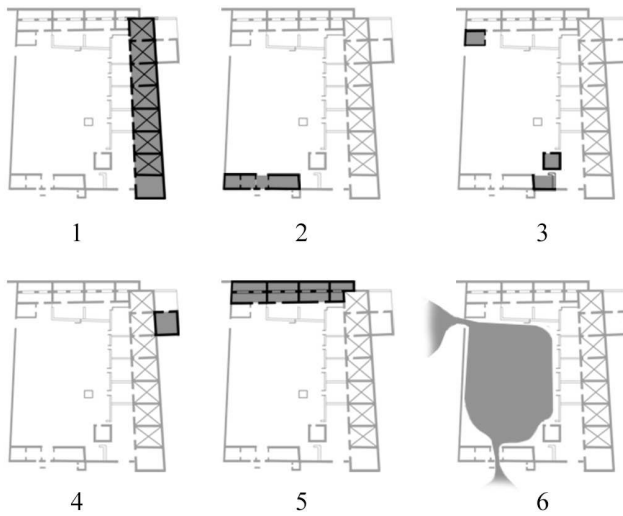
Figure 8. *Contemporary aerial view of the Umm Qais primary school, as renovated and transformed into a rest house.*

Figure 9. *Morning line-up at the village school, 1970s. Photo from a display at the Umm Qais museum.*

Minor Buildings (Horse stables, storage areas and Oven [Tabun]) in Hosh Malkawi

1

2

3

4

5

6

Section A-A

Street

Al-Malkawi Courtyard

Zoning of Courtyard House
1. Living Space
2. Horse Stables
3. Utilities (Kitchen, WC)
4. Food Storage
5. Animal Barns
6. The Negative Space.

Figure 10. *Spatial analysis of the living quarters in a local courtyard house: the al-Malkwai house. After Dar al-Umran, 2005.*

Figure 12. *3D laser scan of the main settlement showing the archaeological remains overlain by the Ottoman village.*
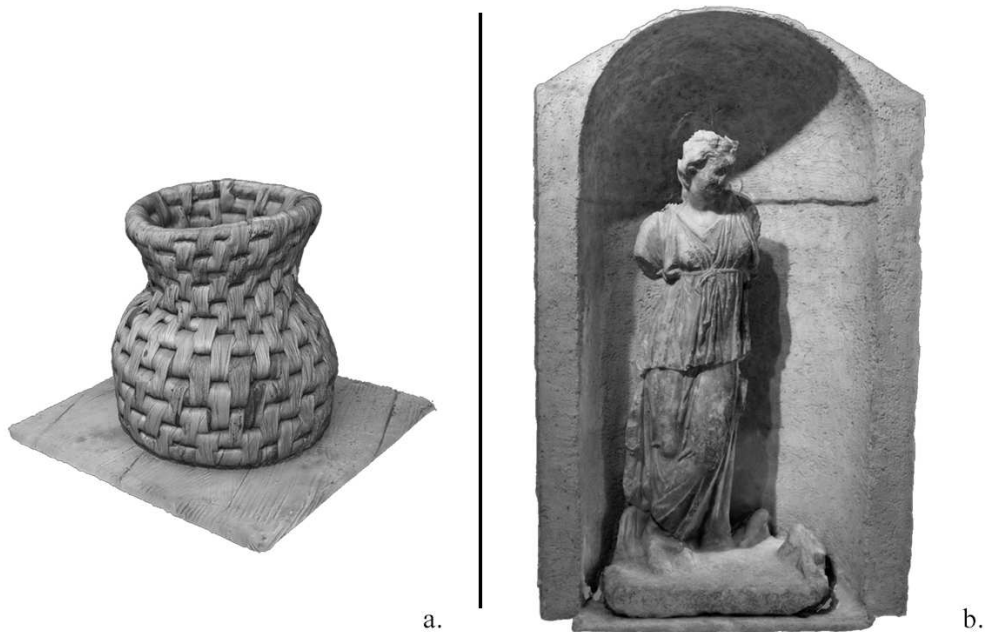

a.

b.

Figure 11. *Screenshots of 3D digital objects of (a) intangible heritage and (b) archaeological artifacts digitized by members of the Umm Qais community and uploaded to the Umm Qais Heritage online platform.*
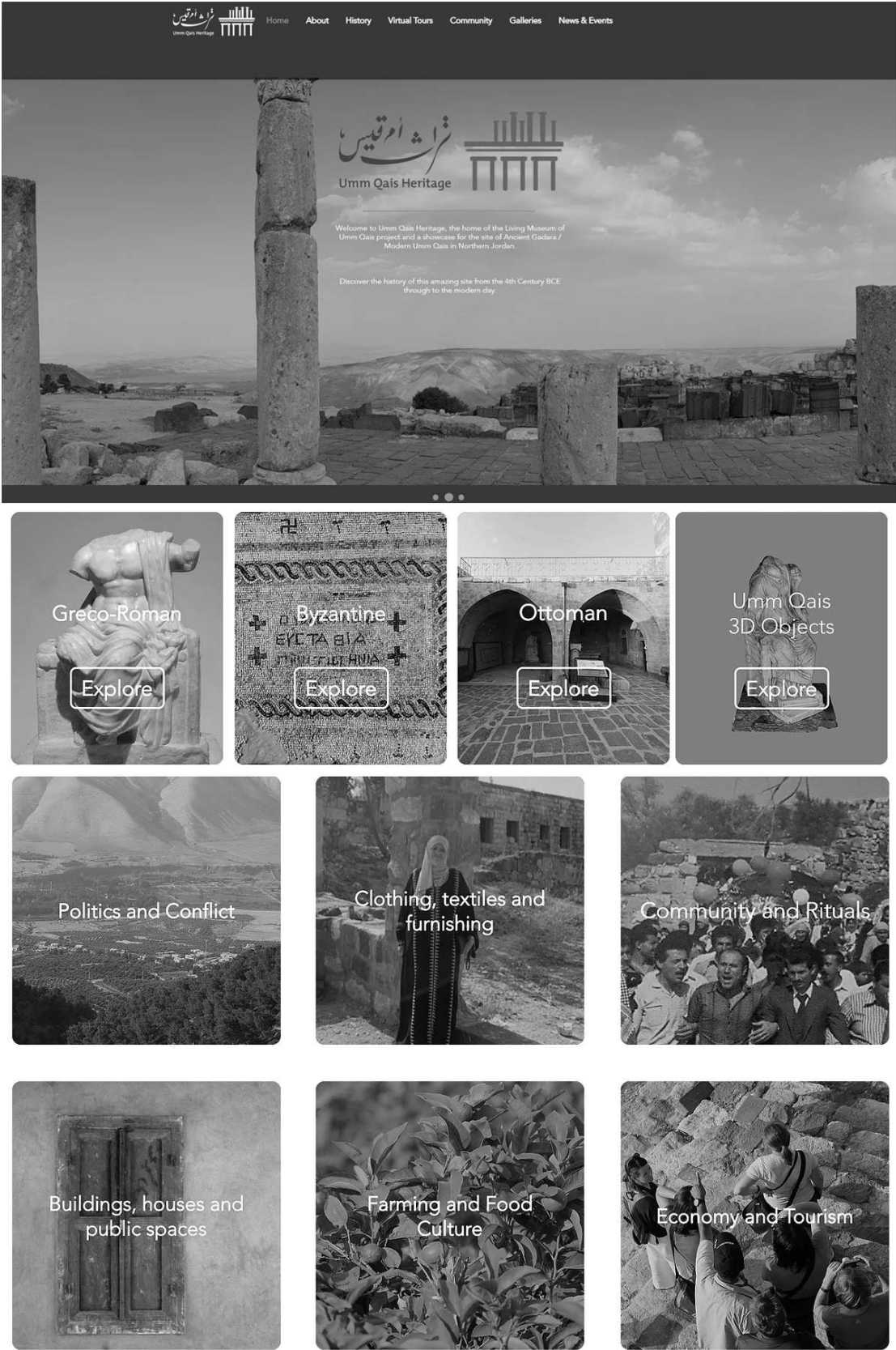
Figure 13. *Screenshots from the interactive online platform of Umm Qais Heritage.*

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