

Stolen Heritage

Multidisciplinary Perspectives on Illicit Trafficking of Cultural Heritage in the EU and the MENA Region

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Faces in Stone. Rock Art in the Duhok Region (Kurdistan Region of Iraq) A Seriously Threatened Cultural Heritage

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Abstract The article discusses the threat posed to the sizeable rock art heritage of the Duhok area (Kurdistan Region of Iraq) by vandalism, the expansion of production activities and extensive construction of infrastructures without prior assessment of the work's archaeological impact, looting, and illegal excavation. All of the sites with rock reliefs dating from the mid-third millennium BCE to the early centuries CE have been seriously damaged – in some cases irretrievably. The lack of awareness regarding the importance of these unique rock art complexes and the requirements for their tutelage by local communities need to become the principal focus of any project for protection and conservation of the Duhok region's heritage. This can happen only in the context of a virtuous collaboration at both legislative and operative levels between local authorities, foreign archaeological expeditions and international institutions active in the cultural heritage protection field.

Keywords Kurdistan Region of Iraq. Rock Art. Vandalism. Uncontrolled intensification of production activities. Looting. Awareness Raising. International Cooperation.

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1 The Iraqi Kurdistan Region: Economic Development and Threats to Cultural Heritage

The recent stabilisation and full realisation of Kurdistan's regional autonomy after decades of political instability, civil and military conflicts, as well as economic and humanitarian crises, were accompanied by considerable developments in the region's political, economic and social environment of the region and in education, culture and scientific research.

Since 2009, thanks to the political openness towards foreign archaeological expeditions of the General Directorate of Antiquities of the Kurdistan Region of Iraq and its peripheral branches, the plains and piedmont regions of the Iraqi Zagros have seen the birth of numerous archaeological survey and excavation projects aimed at the census and mapping of their immense and widespread monumental and cultural heritage. Iraqi Kurdistan has consequently emerged as a new frontier of Near Eastern archaeology and as a promising laboratory for the development and experimentation of innovative methods, especially in the fields of landscape archaeology and multidisciplinary research. Even more strategic is the fact that the region has also become the arena of new projects for the recording, protection and enhancement of cultural heritage and the monitoring of the risks that threaten it.¹

Archaeologists and cultural heritage professionals – as well as international public opinion – have been profoundly shaken by the dramatic series of devastations of monumental and other cultural heritage sites and museums in the Near East in recent decades, from the damage to Iraq's archaeology caused by the first Gulf war in the nineties, to the more recent iconoclastic destruction due to Islamic terrorist fundamentalism in numerous countries of the MENA area.² The shock wave following these terrible devastations, conveyed through sophisticated mediatic strategies, has focused the attention and action of government and international agencies dedicated to the protection of cultural heritage in military and post-conflict contexts. However, less attention has been given to other – in my opinion no less dangerous – challenges to the integrity of cultural herit-

¹ Kopanias, MacGinnis, Ur 2015; Kopanias, MacGinnis 2016; MacGinnis, Wicke, Greenfield 2016; Orazi 2019; Ur, Lashkri 2019.

² For an overall view, see the websites listed here: Antiquities Coalition; APSA; ASOR; EAMENA; Gates of Nineveh; Monuments of Mosul in Danger; RASHID International. For analysis and in-depth critical studies on the devastations of cultural heritage in the MENA countries in recent decades, see, for example, Córdoba 2000; Polk, Schuster 2005; Rothfield 2009; Brusasco 2012, 2013, 2018; Isakhan 2013; 2015; Casana 2015; Danti 2015; Harmanşah 2015; Matthiae 2015; Morandi Bonacossi, Tonghini 2018; Turku 2018; Kamel 2020.

age in the MENA area. In fact, especially in countries experiencing a phase of marked economic development, phenomena such as the swift growth of urban centres, the impetuous development of production enterprises and the unsustainable exploitation of resource must be added to the more traditional threats to cultural heritage, such as vandalism, illegal excavation of archaeological sites, and the clandestine trade in antiquities.

Some of these problems are particularly evident in the Iraqi Kurdistan region, where the years following the fall of the Baathist regime in 2003 saw the frenetic expansion of the sizeable urban centres of Erbil, Sulaymaniyah and Duhok, as well as the expansion of productive enterprises in both urban and rural areas of the autonomous region (Stansfield 2003; Sabr 2014; Jarah et al. 2019). The regional archaeological survey conducted between 2012 and 2018 in the Duhok region by the “Land of Nineveh Archaeological Project” (LoNAP) of the University of Udine [fig. 1] (Morandi Bonacossi, Iamoni 2015; Morandi Bonacossi 2016; 2018a; 2018b) revealed how particularly negative effects on the integrity – and often survival – of archaeological sites may derive from agricultural activities,³ from the growing industrialisation of the territory through the creation of large industrial installations and extensive road infrastructures which were not preceded by assessment of the archaeological impact of their construction, and the uncontrolled exploitation of mineral resources.⁴ The construction in 2014 and the following years of numerous refugee camps located in the foothills in the Duhok region to house hundreds of thousands of evacuees who escaped from the threat posed by Islamic State in the Mosul plain (Munoz, Shanks 2020) has also contributed to the destruction of the archaeological record, again due to the absence of impact evaluations prior to their construction.

3 In particular, deep ploughing, which may completely destroy prehistoric and protohistoric sites of small dimensions, and the exploitation of tells as stores of anthropic deposits, rich in organic components to be used as fertilizers in agriculture. LoNAP has recorded frequent cases in which the deposits excavated from archaeological sites were used in order to produce mudbricks for maintenance work on extant mudbrick structures.

4 Especially the oil industry, which requires not only the construction of mining installations, but also the preliminary actuation of geophysical prospecting that has a destructive impact on archaeological landscapes, and the cement industry, which extracts large quantities of gravel from riverbeds. This last practice is greatly damaging the region's river landscapes, destroying a large part of the linear distributions of archaeological sites lying on its hydrographic grid.

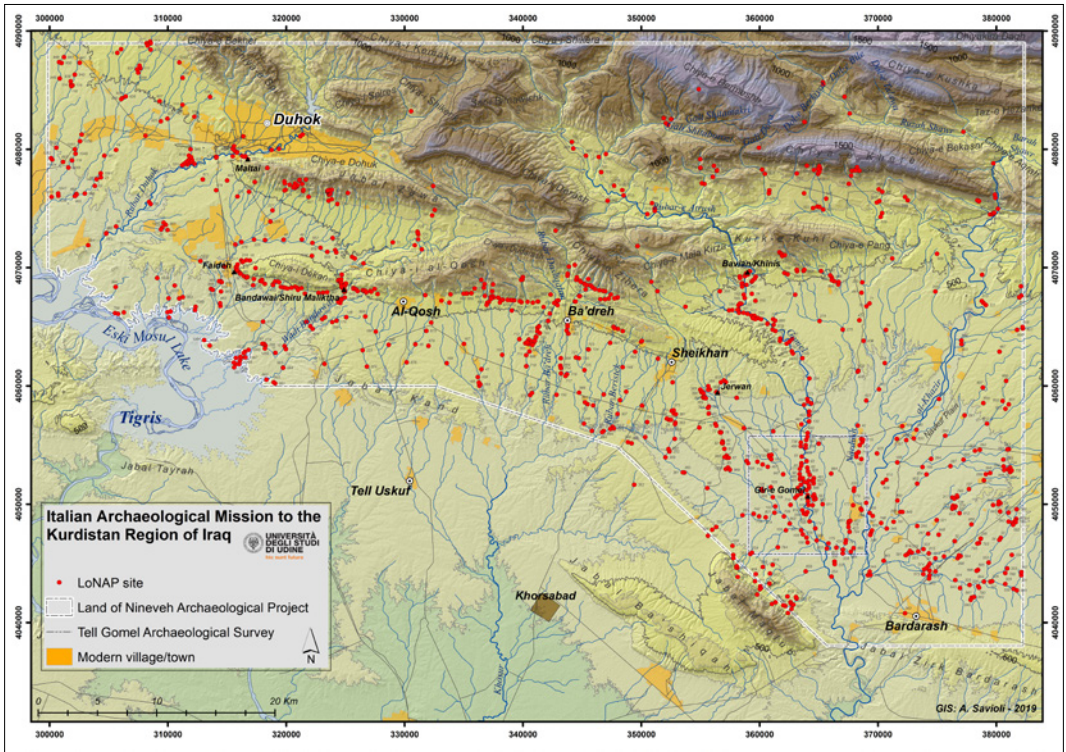


Figure 1 Map of the archaeological sites discovered during the surface survey conducted by LoNAP in the Duhok region (2012-18)

2 The Rock Reliefs in Duhok between Vandalism and Looting

The economic and urban development of Kurdistan has therefore had considerable repercussions on the preservation of many archaeological sites in the region. The impact of vandalism and intentional acts of destruction has of course been far more devastating, and these have not spared the region's most visible monuments, even those located in mountain areas which are difficult to reach, sparsely populated or completely deserted.

This is the case of numerous important examples of rock art in Kurdistan.⁵ The Duhok Governorate contains significant rock reliefs

⁵ For an overview of the rock reliefs known in Iraqi Kurdistan up to the eighties, see Börker-Klähn 1982.

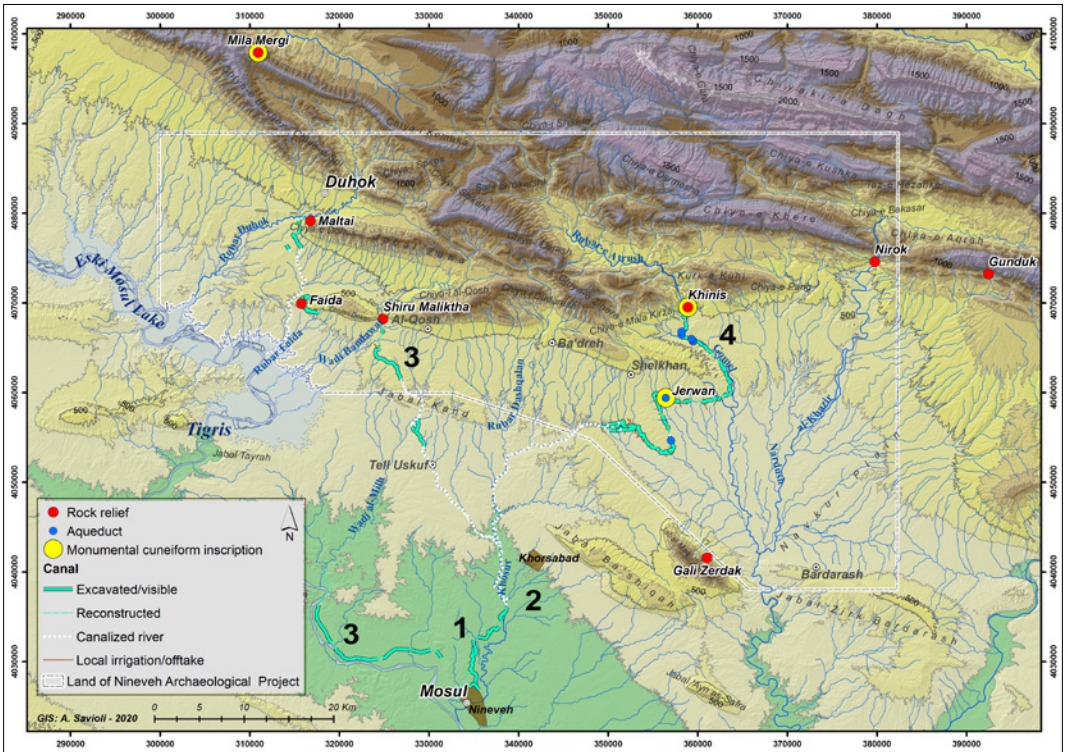


Figure 2 Map of the rock reliefs and monumental sites present in the Duhok Governorate that have suffered acts of vandalism

dating from the third millennium BCE to the early centuries of the first millennium CE. In the area made available to LoNAP, which covers a surface of about 3,000 km², and in its immediate vicinity, there are eight monumental complexes, unique in the rock art landscape of the ancient Near East, located in Gunduk, Khinis, Shiru Maliktha, Faida, Maltai, Mila Mergi, Gali Zerdak and Nirok, along with the Assyrian aqueduct in Jerwan with its monumental celebratory inscriptions of Sennacherib [fig. 2]. In the last few decades and especially in recent years, all of these sites and rock reliefs have been subjected to acts of vandalism and deliberate damage, or even partial, or in some cases total, destruction. Notwithstanding the efforts of the Duhok Directorate, which controls and protects an extensive area containing abundant archaeological remains with reduced personnel

and means,⁶ the phenomenon's dimensions are such that we should worry about the short-to-medium term survival of the exceptionally important rock reliefs in the region.

This article gives an overall picture of the damage inflicted to date and the anthropic dangers that threaten the reliefs' survival. Risks relating to atmospheric agents (erosion caused by wind and rain, solar radiation, rock exposure to cooling and heating cycles, water infiltration from behind the rock faces, on which reliefs are carved, caused by karst phenomena) are not taken into consideration.⁷ Nonetheless, weather-related risks constitute an equally serious risk for the long-term preservation of rock art.

2.1 The Gunduk Reliefs

At the small oasis of Gunduk, about ten kilometres north-west of the small town of Akre, there are three rock reliefs on the entrance and walls of a cave that overlooks the oasis and the village of the same name from the side of a rocky ridge [fig. 2]. The site's exploration history and specialist debate regarding the chronology of the three bas-relief carved panels were recently reviewed and further examined by Julian Reade and Julie Anderson (2013, 78-97), who proposed a convincing dating of the reliefs to around the mid-third millennium BCE (Early Dynastic III period). The three Gunduk panels are of extraordinary importance, since they constitute the most ancient rock reliefs found in Mesopotamia to date (Reade, Anderson 2013, 85) and probably represent scenes concerning religious and mythological themes otherwise undocumented in the rock art of the ancient Near East (see also Koliński 2016, 168-70).

In 1994 or 1996, during the Kurdish civil war years (1994-97), treasure hunters who probably came from nearby Turkey, in the conviction that the panels signalled the presence of treasure hidden behind them in the mountain's interior, caused an explosion that partially destroyed the reliefs (Reade, Anderson 2013, 83; Koliński 2016, 168). More than 50% of Panel 1, which probably represents a royal figure hunting an Alpine ibex, was damaged, while Panel 2, located underneath the former, was completely destroyed by the explosion. In 2013, the Polish archaeological mission of the Upper Greater Zab Archaeological Reconnaissance was able to recover two fragments belonging to Panel 2 which were still lying on the ground nearby. Recently, Rafał Koliński (2016, 168 and fig. 8) interpreted the scene de-

⁶ The Duhok Governorate covers an area of 11,000 km².

⁷ For the reliefs in Khinis and Maltai, these types of natural risk have been extensively analyzed by Finzi Contini 2019.



Figure 3 Drone view of the Khinis rock complex from the north-east. In the foreground, the Sculpted Monolith near the water intake of the “Sennacherib Canal” (SM) and the relief fragment on the small rock face upstream of the water intake (RBR); behind, the “Large Panel” (LP), the “Rider Relief” (RR) and the rock steles 1-12 (photography A. Savioli, October 2018)

picted on the panel as a myth recounting the creation of the human species by the gods Enki, Namma and Nintu. The only panel that fully survived the devastation was the third one, located in a less visible position inside the cave, that represents another religious or mythological scene in which the protagonists are a sitting female deity wearing a horned headgear, an Anzû bird grasping two animals, and figures of domestic and wild animals (Koliński 2016, 169 and fig. 9).

Of the exceptional Gunduk rock reliefs only parts of Panel 1 and Panel 3 remain. The absence of permanent guarding for the protection of these unique testimonies of North Mesopotamia’s Early Dynastic rock art, and the isolated location of the site in the hilly region of the Zagros piedmont, leave the surviving reliefs exposed to the action of atmospheric agents as well as all forms of vandalism and deliberate destruction.



Figure 4a Graffiti on the Khinis Sculpted Monolith (photography I. Finzi Contini)



Figure 4b Graffiti at the base of the "Large Panel" (photography I. Finzi Contini)

2.2 The Khinis Neo-Assyrian Reliefs

The extraordinary rock art complex in Khinis is located at the exit of a narrow gorge between the ridges of Çiya Mala Kirza and Kurk-e Kuhi, where the River Atrush flows into the Navkur floodplain, taking the name of Gomel [fig. 2]. Here, in the Khinis site (Assyrian Khanusa), in around 690 BCE the Assyrian sovereign Sennacherib (704-681 BCE) ordered the building of a 51 km long irrigation waterway fed by the River Gomel. This canal, known as the “Canal of Sennacherib”, was part of a more complex regional hydraulic system that the king built between c. 703 and 688 BCE to transport water from the Zagros foothills to his new capital, Nineveh, and irrigate its surrounding countryside (Jacobsen, Lloyd 1935: 44-9; Reade 1978: 168-70; Bagg 2000: 212-24; Ur 2005: 335-9; Morandi Bonacossi 2018a-c). In the location where the water was diverted from the River Gomel into the canal through a rock weir, before the village of Khanusa, there are the remains of the *bāb nāri* (“the canal gate” [fig. 3]), a large monolith carved in relief which marked the water intake from the side of the river (Bachmann 1927: 1-22; Boehmer 1997; Bär 2006; Reade, Anderson 2013; Fales 2015; Morandi Bonacossi 2018c). On the steep cliff wall of the Khinis gorge which overlooks the start of the canal and its initial course, Sennacherib ordered the carving of a series of monumental rock reliefs in commemoration of his exceptional hydraulic construction: the “Large Panel”, the “Rider Relief” and twelve carved niches representing the king, under the symbols of the twelve principal deities of the Assyrian pantheon. On three of these niches the Bavian inscription was engraved,⁸ in which the king described the construction of the entire water-management system in four phases (Grayson, Novotny 2014, 310-17).

The reliefs, now protected by a fence and a permanent guarding service organised by the Duhok Antiquities Directorate, have been seriously damaged by long-term exposition to atmospheric agents and especially by continuous cycles of cooling and heating of the rock that cause the detachment of fragments from sculptured surfaces (Finzi Contini 2019, 222-32).

Despite the presence of guardians, Khinis has suffered from vandalism – even recently – like the appearance of writing done with oil paint from spray-cans [fig. 4]. Furthermore, in particular during summer weekends, when a lot of families go to Khinis to bathe in the Gomel (or often even to wash their cars in the river, just in front of the Assyrian reliefs), it often occurs that children climb on the bases of the “Large Panel” and “Rider Relief”: by doing this they risk damaging the carved surfaces.

⁸ So-called after the nearby village of Bavian by Sir Austen Henry Layard in the second of his travel accounts about his explorations (1853, 207-16).

In the past, probably during the years of the Kurdish Civil War, some of the twelve niches of Sennacherib were used as targets for firearm practice exercises [fig. 5a]. These exercises have severely damaged some reliefs and certain parts of the three versions of the Bavian cuneiform inscription [fig. 5b]. At the centre of niche no. 4 there is also a deep, circular hole, seemingly a cut made in the rock to discover possible treasures hidden inside it [fig. 5c].

In recent years, the head and anterior part of the body of one of the two *lamassu*⁹ carved on the “Sculpted Monolith”, which signalled the canal’s water intake, have disappeared, either because they were intentionally removed by plunderers or traffickers of archaeological finds, or because they broke off due to natural or anthropic causes and fell into the River Gomel beneath [fig. 6]. The *lamassu* figure was still intact at the time of Gertrude Bell’s visit to Khinis in 1909¹⁰ and the following one of R.M. Boehmer in 1978 (Bär 2006, figs. 27-8, 32). It cannot be excluded that the disappearance of the head and part of the body of the *lamassu* might have been caused by illegal traffickers in artworks who were active in Khinis during the Kurdish Civil War between 1994 and 1997, when the site was left unguarded.

Another potential threat to Khinis’s security comes from the building of an earthen dam on River Atrush 500 m upstream of the site. The increase in the groundwater level determined by the formation of the artificial water basin behind the dam could cause a parallel increase in the saturated portion of the basin; this groundwater might come into contact with the base and central portion of the “Large Panel”, threatening its medium- and long-term survival (Palpacelli 2019, 187-8, figs 13-14).

The unfortunate conclusion is that the entire monumental complex of Khinis is substantially degraded: the vegetation has not been cut back and becomes strongly invasive, hiding most of the big carved monolith near the water intake of Sennacherib’s canal; more generally, there is no provision for clearing away the waste left behind by visitors, which accumulates over time. In recent years, the concrete skeleton of a building planned to be a restaurant, was built without permission a few tens of metres upstream from the “Large Panel” and carved monolith. Although fortunately the building was never completed, its presence is heavily intrusive and it spoils the natural beauty of the location.

In general, the neglected state of the Khinis complex does not encourage the correct perception among the local population of the importance of this rock relief ensemble, which is unique in Iraq and

⁹ Human-headed, winged bulls which protected the entrances to cities, buildings and, in our case, the “canal head” of Sennacherib.

¹⁰ As testified by a picture kept in the Gertrude Bell Archive conserved at the University of Newcastle (<http://gertrudebell.ncl.ac.uk/>).

indeed the entire Near East. Most of all it does not promote a broader awareness of the need not only to protect the site from damage, vandalistic acts and unregulated building activity, but also to keep it in a clean and decent condition in order to favour its fruition by local communities. Consequently, the extraordinary rock art complex in Khinis, although protected by a fence (lacking on the side of the River Gomel) and a permanent guarding service, as well as getting included in 2014 in the World Monuments Watch,¹¹ is not adequately maintained and protected. Furthermore, as Finzi Contini has observed (2019, 231-2), all the reliefs in Khinis require urgent consolidation interventions and conservation treatment. For this purpose, the University of Udine and the CNR (National Research Council) Institute of Technologies Applied to Cultural Heritage¹² prepared an overall conservation project for the Khinis reliefs (Finzi Contini 2019), along with an analysis of the instability conditions of large rocks and their risk of detachment from the rocky hillside where the reliefs are carved (Di Luzio 2019). All of the studies were part of the “Land of Nineveh Project. Training for the enhancement of cultural heritage in northern Kurdistan (Iraq)”, funded by the Italian Agency for Development Cooperation. The project also included the documentation of the Assyrian reliefs of Khinis, Faida and Maltai, as well as the Jerwan aqueduct, using advanced technologies (drones, laser scanners, digital photogrammetry, 3D restitution). A blueprint for an archaeological park was drawn up in order to protect and enhance these monuments and, following the criteria specified by UNESCO, a Nomination Format was outlined, proposing the inscription of the entire Assyrian hydraulic system of the Duhok region and its natural and archaeological landscape in the UNESCO World Heritage Tentative List (Orazi 2019).¹³

2.3 The Shiru Maliktha Assyrian Rock Relief

About 6 km west of the village of Al-Qosh, along the Bandawai canal (which belongs to the third construction phase of the network built by Sennacherib), in a place known by its Syrian name of Shiru Maliktha (“Image of the Queen”), there is an extremely eroded stone relief carved in a deep rectangular niche excavated in the side of the hill [fig. 2] (see Reade 2002; Morandi Bonacossi, Iamoni 2015, 26-9;

¹¹ <https://www.wmf.org/project/khinnis-reliefs>.

¹² Currently Institute of Cultural Heritage Science.

¹³ The results of the conservation project for the rock reliefs in Khinis and Maltai and the Jerwan aqueduct and of enhancement of Sennacherib’s hydraulic system are also presented on the website <https://sennacheribarchaeologicalpark.com/>.

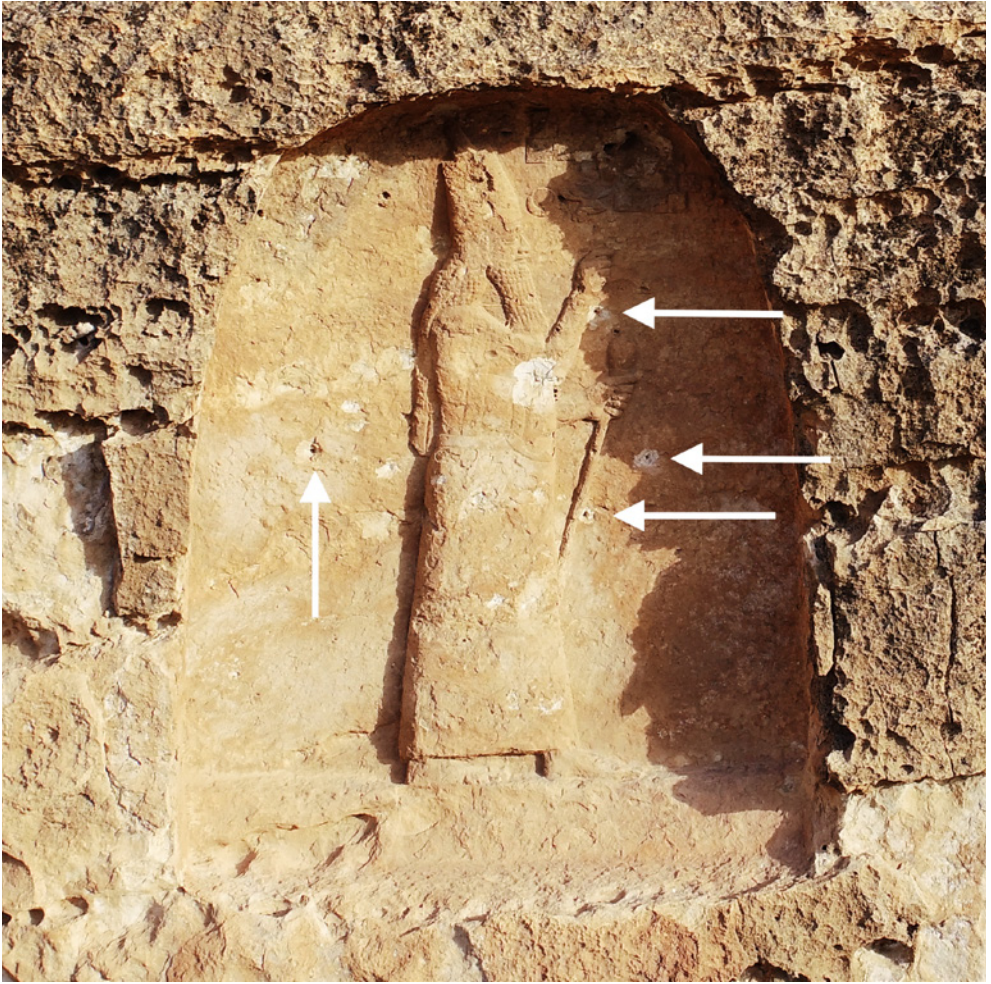


Figure 5a Khinis rock stele no. 9 hit by firearm bullets (photography I. Finzi Contini)





Figure 5b (On the left) One of the three replicas of the Bavian inscription engraved on stele no. 4 damaged by a bullet (photography I. Finzi Contini)

Figure 5c Stele no. 4 and the inscription damaged by the excavation of a large hole (photography I. Finzi Contini)



Figure 6 North elevation of the "Sculpted Monolith" with the figure of Ashur on the right and Sennacherib on the left. To the right of the sovereign's figure, you can see the abraded surface where the head and the front part of the body of one of the two *lamassu* sculpted on the monolith were originally located (photography I. Finzi Contini)

Morandi Bonacossi 2018b). As in the twelve niches in Khinis, the Shiru Maliktha relief represents an Assyrian king – most probably Sennacherib himself – under the astral symbols of the deities of which few traces persist today [fig. 7]. The relief has been heavily eroded and damaged by long exposure to the elements, and is also defaced by blue paint graffiti. The main threats to this important site come from the presence of a leisure centre only a few tens of metres away, which takes advantage of the abundant waters of Wadi Bandawai¹⁴ and offers bathers – which for the most part belong to the Assyrian community of Al-Qosh and the villages in the northern area of the Nineveh plain – a restaurant for their weekend excursions. In 2018, illegal construction work for the expansion of a parking lot, adjacent to the restaurant and not far from the Shiru Maliktha relief, was conducted using mechanical excavators which brought to light numerous rock ashlar probably belonging to the stonework of the Assyrian canal of Bandawai, which thus seems to have been partially destroyed [fig. 8]. The canal's water intake consisted of an underground tunnel more than half a kilometre in length, which opened upstream of Shiru Maliktha, in the narrow gorge of Wadi Bandawai. A few metres to the left of the Assyrian relief, the stream water directed into the tunnel re-emerged at the end of the gorge, in the plain. Most probably at this point the water flowed into an earthen canal which, as in Khinis, had an initial tract built of stone blocks. This canal was built to take the river water to the massive Bandawai canal. The work to enlarge the Shiru Maliktha restaurant's parking lot has most likely destroyed a portion of the stonework of the initial part of the canal.

The situation at Shiru Maliktha is another important example of how the expansion of production activities through construction work can endanger the survival of Iraqi Kurdistan's cultural heritage.

2.4 The Faida Rock Art Complex

In 2019, near the site of Faida, a dozen kilometres south of Duhok, the joint Italian-Kurdish mission of the Duhok Antiquities Directorate and the University of Udine, co-directed by Hasan Ahmed Qasim and the author, has brought to light extraordinary panels carved in stone, along the bank of a canal 8.5 km long [fig. 2]. Three of these reliefs were uncovered for the first time in 1973 by J. Reade (Reade 1973; 1978, 159-63; Boehmer 1997), while the following six were found in 2012 during the LoNAP survey (Morandi Bonacos-

¹⁴ Although the Arab term wadi indicates a seasonal stream, this is in fact a permanent watercourse fed by karst sources.



Figure 7 The relief of Shiru Maliktha and the graffiti covering it (photography R. Orazi)

Figure 8 View of the stone blocks belonging to the masonry of the Assyrian canal of Shiru Maliktha reused in an embankment of the Wadi Bandawai (photography A. Savioli)

si 2016, 146, fig. 14.4).¹⁵ Since 2015, the threats to the survival of the reliefs and the occurrence of damage and episodes of partial destruction have increased to the point that in 2019 there was urgent need for an Kurdish-Italian rescue project dedicated to the excavation, documentation, protection, restoration and enhancement of the panels carved in bas-relief along the Faida canal (Morandi Bonacossi 2020, 8-10). They depict a scene of divine veneration in which, at the extremities, there is the figure of an Assyrian sovereign portrayed in adoration of seven statues representing the main Assyrian deities, who stand on bases carried on the backs of their sacred animals.

The archaeological complex in Faida is surrounded by four factories producing blocks of cement, located only a few tens of metres from the reliefs. These establishments produce thousands of cement blocks that are put to dry on large squares just downslope of the course of the Assyrian canal [fig. 9]. Furthermore, a farm where chickens are raised and a cattle shed partially occupy the canal's course [fig. 10]. In 2015 the personnel of the cement block factory ascertained that during particularly abundant winter and spring rainfalls the surface runoff from the western side of the Çiya Daka hill ridge, at the foot of which the Assyrians built their canal, flooded the squares in which the cement blocks were placed to dry. They therefore decided to empty the canal, removing the fill with a mechanical excavator [fig. 11]. The tract of the Assyrian canal located upstream of the cement factories was hence reactivated to collect the surface runoff from the hillside in order to transport it far away from the cement production area, through a secondary canal that originally branched from the Assyrian canal. This excavation operation of the canal has put to risk the integrity of its course, but luckily caused only limited damage.

The most serious episode of destruction of the canal and the Assyrian reliefs occurred in 2017. The enlargement of a cattle shed located just a few metres from the canal involved demolition of the rocky hillside in which the canal was excavated [fig. 12]. Unfortunately, in that exact spot there was a relief (Panel no. 9). Its upper part, that above the depiction of the sacred animal figures carrying the Assyrian deities' statues on their backs, was completely removed and destroyed by the bulldozer [fig. 13]. Fortunately, the prompt intervention of the Duhok Antiquities Directorate impeded the cattle shed's enlargement, thereby permitting the recovery and documentation of the surviving portion of the relief.

15 The first nine reliefs were found during survey work because the upper part of the carved panels emerged from the ground and the debris filling the canal, a tenth one, entirely covered by the canal fill, was found during the 2019 excavation season.

The following year, the construction of a new aqueduct in Faida by “GIZ Water Projects” cut the Assyrian canal into two. The trench dug to contain the pipe installed to distribute water supplied by the aqueduct to the residents of the village missed one of the panels by only a few metres [fig. 14].¹⁶

Furthermore, in May 2012 an illegal excavation of one of the ten reliefs found so far was noted. Fortunately, this illegal action was stopped by the emergency intervention of the Duhok Antiquities Directorate and of KRG security forces (Asaish). The carved panel only suffered slight damage caused by incautious and non-professional excavation procedures [fig. 15].

The extremely serious risks posed by the development of the village’s productive activities, the necessity of supplying the local inhabitants with services and modern infrastructures – which are however built without preliminary evaluation of their archaeological impact, and the occurrence of illegal excavations and vandalism – as well as the reliefs’ exposure to the damage due to long-term erosion processes – all contribute to making the Faida rock art complex the most severely threatened archaeological cultural heritage in the Duhok region, which has urgent need of a security reinforcement intervention. For this purpose, already in 2019 the “Kurdish-Italian Faida Archaeological Project” started a collaboration looking not only to bring the canal and its reliefs to light, but also – and especially – to document them, protect them by fencing of the site, institute a permanent guarding service, guarantee the stability of their conservation state through the introduction of a monitoring system and conservation project, and lastly to secure their enhancement by creating an archaeological park. Unfortunately, in 2020 the pandemic temporarily interrupted the fieldwork, although the very recent acquisition of an Emergency Relief Grant from the ALIPH Foundation and funding by Gerda Henkel Stiftung will sustain the continuation of the security operations, as soon as the health emergency permits, in order to preserve this unique and extraordinary archaeological site.

2.5 The Assyrian Reliefs of Maltai

Some of the risks that menace the Faida reliefs have also damaged – and still threaten to this day – the four panels in Maltai, on the northern side of Çiya Duhok, overlooking the modern town and the Rubar Duhok, from which the Maltai canal would have branched. There is

¹⁶ The “GIZ Water Project” is a new system of water supply in the Faida district which will guarantee potable water availability to a population of about 200,000 people (<https://www.giz.de/en/worldwide/52838.html>).



Figure 9 Drone view of three of the four concrete block factories built close to the Assyrian canal at Faida. Note the new aqueduct built in 2018 (top right) and the large trench for housing the water pipe that cuts the canal in two (photography A. Savioli)

little doubt that the construction of the latter is at the origin of the reliefs [fig. 2] (Ur 2005, 327-8; Morandi Bonacossi 2018b, 92-3). The four panels depict the same scene of divine veneration – with seven deities standing on the backs of sacred animals – as the Faida panels, to which they were contemporary; all probably date to the reign of Sennacherib or his successor, Esarhaddon (Morandi Bonacossi 2018b, 93-6).¹⁷

Since the Maltai reliefs are located on the side of the large ridge of Çiya Duhok, at about two thirds' way up the hillside, their isolation and the absence of any kind of protection whatsoever has exposed them, especially in recent years, to damage related to vandalism.

¹⁷ For previous studies on the Maltai reliefs, see Thureau-Dangin 1924; Bachmann 1927: 23-7; Boehmer 1975; Reade 1989.



Figure 10 View of the Assyrian canal at Faida entirely filled with earth and debris in the foreground, and the terraces created to house a poultry farm and a cattle shed (photography D. Morandi Bonacossi)



Figure 11 Drone view of the section of the Assyrian canal at Faida emptied in 2015 by the staff of the concrete block factories to be used as a drainage channel for surface runoff (photography A. Savioli)



Figure 12 View of a section of the Faida canal devastated by excavation of the rocky hillside in which the canal was dug. The position of the person in the image indicates the location of buried Panel no. 9, which was partly destroyed by this intervention. The cattle shed is in the background (photography A. Savioli)

Figure 13 Faida Panel no. 9 largely destroyed by the preparation work in the area intended to house an extension of the cattle shed (photography A. Savioli)



Figure 14 View of the huge trench for the installation of the pipeline for the new Faida aqueduct that cuts the Assyrian canal in two. In the background, notice illegally uncovered Panel no. 4 (photography A. Savioli)

Figure 15 Faida Panel no. 4 after excavation by the “Kurdish-Italian Faida Archaeological Project”. The right part of the panel was unearthed by clandestine excavators. On the right side of the illegally excavated relief, note the numerous scratches on the surface caused by the use of unprofessional excavation practices (photography A. Savioli)



Figure 16 Maltai Panel no. 2 with one of the painted Kurdistan flags and graffiti (photography I. Finzi Contini)

Already between 1923 and 1932, Panel no. 3, the third from the east, was vandalised by illegal artwork traffickers. The upper parts of both the third and fourth figures from the left (the goddess Mullissu and the god Sin) were removed (Reade 1989, 322; Finzi Contini 2019, 206, fig. 35). Part of the figure of Mullissu was subsequently recovered by the Iraqi authorities and is currently kept in the Baghdad museum with the inventory number IM 28150.

At the right extremity of Panel no. 1 a considerable hollow was dug, which has partially removed the upper part of the king's figure, the goddess Ishtar on the lion and a small part of the god Adad (Finzi Contini 2019, 203 and fig. 9). It is not clear if, as Reade hypothesized (1989, 321), this was an unfinished attempt to create a tomb inside the relief in antiquity, similar to that present in Panel no. 3 and dated to the first-third century CE, or rather a more recent excavation performed with the aim of extracting parts of the figures of the king and Ishtar.

In 2016, two big Kurdistan flags were painted with oil paint under the second and third panels [fig. 16]. Upon request of the Duhok Governor and the Antiquities Directorate, in summer 2016 the conservator of the University of Udine removed the two flags (Finzi Contini 2019, 205-7).

The following year, in May, Panel no. 4 was then subjected to deliberate acts of vandalism and destruction. The king's tiara, at the left extremity of the panel, had contained a nodule of dolomite and calcite, which was extracted, leaving an empty spot in the badly damaged tiara [fig. 17].

In February 2018, Panel no. 1 was damaged by an extreme act of vandalism which, along with those on Panels 2-4, make clear the extreme danger to which the Maltai rock reliefs are constantly exposed to due to their isolated position and the absence of an enclosing fence, as well as permanent guarding service to protect them. A sizeable hole measuring 55 × 56 cm and 36 cm deep dug with a pickaxe or ice axe devastated the lower part of the figure representing the goddess Mullissu, her throne and the head of the underlying lion, and partially destroyed the figure of the god Ashur in front of her [fig. 18] (Finzi Contini 2019, 203-4, figs. 24-8). As in the case of Panel no. 2 in Gunduk, the most probable cause for such destructive actions is a widespread belief in northern Iraq and eastern Turkey that ancient rock reliefs signalled the presence of ancient treasure hidden inside the rock behind them. Some fragments of the broken portion of the relief were recovered by the team of the University of Udine and the Duhok Antiquities Directorate and digitally recomposed [fig. 19]. Future restoration work will probably allow the recomposition of at least a part of the damaged portion of Panel 1.

In conclusion, all the reliefs in Maltai except for relief no. 4, which is located in a slightly more sheltered position about 50 m from Panel 3, are defaced by writing and graffiti in paint and charcoal [fig. 20]. The largest and most defacing graffiti have already been removed

by the University of Udine conservator (Finzi Contini 2019, 205 and figs. 4, 14, 30); further cleaning interventions are programmed as part of a broader project for conservation of the Maltai reliefs which, as mentioned with regard to the Khinis reliefs, has already been drawn up and is ready to be executed.

The overall picture of the preservation state of the Maltai reliefs, and in particular of the vandalism and acts of devastation they have suffered – especially in recent years – is gravely preoccupying. Due to the absence of efficient protection, based on the enclosure of the entire area by the construction of a fence, and the establishment by the competent authorities of a permanent guarding service featuring a remote surveillance system of the site by means of cameras, as that designed by the University of Udine (Orazi 2019, 100, Pl. 5. and 3.8b), it will be impossible to avoid future cases of vandalism, which could irreversibly compromise the conservation – or even the survival – of this extraordinary rock art complex. The Duhok Antiquities Directorate and the University of Udine are currently moving in this direction and attempting to find the necessary funds to protect Maltai's rock reliefs through the construction of a fence and the actuation of a restoration and enhancement project.

2.6 The Mila Mergi Assyrian Rock-Carved Stela

A similar fate to that of Panel 2 in Gunduk and Panel 1 in Maltai was shared by the stela carved by the Assyrian king Tiglath-pileser III (745-727 BCE) in the Mila Mergi site, on a small rock face in the mountains north-west from Duhok [fig. 2]. The Mila Mergi stela, ordered by the Assyrian king in 739 BCE on Mount Ilimeru after the conquest of the land of Ulluba below, was published by J.N. Postgate, who copied it *in loco* in 1972, producing a preliminary copy, although without the possibility of conducting an accurate and complete study of the Akkadian text (Postgate 1973). In 2013, the central portion of the inscription was devastated by pickaxe blows, presumably by treasure seekers which thought they could find ancient treasures hidden inside the rock behind Tiglath-pileser III's panel [fig. 21]. Unfortunately, the devastation of the Akkadian inscription is extensive enough to irremediably compromise the possibility of making a new copy of it, which would have allowed a clearer and better interpretation of the text. The Eastern Habur Archaeological Survey of the University of Tübingen directed by Prof. Peter Pfälzner, which has the inscription in its concession area, promptly recovered numerous fragments of the destroyed part of the Mila Mergi inscription, and is now drawing up a restoration project.

Thus the Mila Mergi stela, although located in a completely isolated position in the uninhabited mountains north of Duhok, has been gravely and irremediably damaged, presumably by treasure seekers.



Figure 17a Lefthand ruler's figure on Maltai Panel no. 4 before damage



Figure 17b After the hole was dug in the sovereign's tiara (photography I. Finzi Contini)



Figure 18 Hole dug in Maltai Panel no. 1 (photography P. Pagnin)



Figure 19 Digital recomposition of the recovered fragments of Panel no. 1 (I. Finzi Contini)



Figure 20 Panel no. 1 with the hole dug in 2018 on the left, the large arched niche excavated at an unknown date on the right, and oil paint and charcoal graffiti (photography I. Finzi Contini)

2.7 The Gali Zerdak Rock Relief Complex

At the opening into the Navkur plain of the narrow valley on the north-west side of Jebel Maqloub, called Gali Zerdak in Kurdish, there is the location of an important and little studied group of seven rock reliefs that probably date to between the Hellenistic period and the Parthian era [fig. 2] (Boehmer 1981; 1982; Mathiesen 1992; for a new analysis, Wójcikowski, Morandi Bonacossi, Marciak forthcoming). Three of the reliefs in the complex were completely or partially destroyed by vandals in the period between 1978, date of the last documented visit to the site by an archaeologist, R.M. Boehmer, and 2013, when the LoNAP team went to Gali Zerdak, for the first of a series of explorations of this rock complex located in a marvellous and isolated natural landscape.

The first relief to be vandalised was carved on the portion of rock near the bottom of a deep, curved niche and depicted a baetylus crowned by a Nike [fig. 22]. The relief, which can be attributed to the Parthian age, of which only a few photographs and a sketch by Boehmer (1981, 153-8) remain, was entirely and systemically removed with chisel strokes, to the point that there is now nothing left of it.

The second severely damaged rock relief of the Gali Zerdak complex can be probably dated to the Hellenistic period and might be a commemorative relief of the victory of Gaugamela in 331 BCE, carved by Alexander the Great in a position overlooking the battlefield, located near the site of Gir-e Gomel/Gaugamela, where he defeated the great Persian King Darius III (Wójcikowski, Morandi Bonacossi, Marciak forthcoming). The relief, located at the bottom of a large, deep hollow, depicts a horseman crowned by a Nike [fig. 23]. The body and head of the Winged Victory (except for the wings), the crown and its ribbons, the anterior part of the horse's body and part of the rider's torso were intentionally destroyed. Since the sculptured surfaces of the Nike, the horse's body and part of the horseman's torso were smashed, in the place of the crown the Winged Victory offered to him there is now a deep, circular hole. It seems that here too, as in the cases of Gunduk, Maltai and Mila Mergi, the damage was caused by treasure seekers.

Finally, to the right of the rider there is a rectangular niche which was originally supposed to have contained a relief destroyed prior to Boehmer's 1978 visit, when the site had not yet suffered any significant intentional devastation. It is not clear whether the removal of this relief occurred in ancient or recent times.

The extremely serious destruction of three of the seven rock reliefs in Gali Zerdak is made worse by the fact that the entire complex has not yet been carefully studied, nor indeed adequately documented. The total destruction of the baetylus crowned by a Nike and the partial destruction of the horseman relief therefore once again con-



Figure 21a The Mila Mergi rock stele in 2012 before it was damaged (photography A. Savioli)



Figure 21b After damage in 2013 (photography R. Orazi)



Figure 22 Arched niche with destroyed Parthian relief depicting a baetylus crowned by a Nike (photography G. Garna)



Figure 23 Relief of a rider crowned by a Nike badly damaged by vandalism (photography G. Garna). The blackening of the sculptured surfaces is due to carbon from black smoke accumulated over the centuries due to the use of the large niche on the bottom of which the relief was carved as a shepherd's bivouac



Figure 24 Graffiti on the Jerwan aqueduct (photography A. Savioli)

stitute irremediable losses caused by the extreme difficulty of protecting a widely spread and rich heritage of rock art distributed in a challenging territory, mostly mountainous and in isolated localities.

2.8 The Nirok Hellenistic Relief

In 2015 during survey work conducted by LoNAP a small, poorly preserved Hellenistic relief was found, located in Nirok, on a rock face where the River Al-Khazir exits from the narrow gorge between the Çiya Khere and Çiya Aqrah ridges [fig. 2] (Wójcikowski, Morandi Bonacossi, Marciak forthcoming). The relief, carved on the bottom of an arched niche, depicts three stars inscribed inside circles arranged so as to form a triangle.¹⁸ Originally, the central star was inscribed inside a lunar crescent, while today it has been completely eliminated due to the fact that the niche was used as a target for military firearm drills, a fate which – as already mentioned – was shared by various rock niches in Khinis on which images of Sennacherib were carved under the symbols of the deities of the Assyrian pantheon.

2.9 The Assyrian Aqueduct of Jerwan

Along the Khinis canal, which belongs to the last construction phase of the regional hydraulic system constructed by Sennacherib, there is the stone aqueduct of Jerwan, brought almost completely to light in 1993 by the American expedition of the Oriental Institute of Chicago [fig. 2] (Jacobsen, Lloyd 1935). As is well known, on the more than 400,000 limestone blocks extracted from the Khinis quarry, the Assyrian king ordered four different types of royal, monumental inscriptions to be carved (most recently Fales, Del Fabbro 2014). As demonstrated by LoNAP's research, the aqueduct was not an isolated structure built by Assyrian hydraulic engineers, but was instead part of a more extended network that comprised at least four other aqueducts, constructed along the course of the canal at every point where a reasonably sized wadi crossed its course, threatening its existence with violent seasonal floods (Morandi Bonacossi 2016, 146-7; 2018b, 101).

For the time being, the preservation state of the Jerwan aqueduct does not cause any particular concern, although the presence in its vicinity of a shepherds' camp is a frequent cause of garbage accumulation fairly close to the structure. Moreover, graffiti and writing de-

¹⁸ For a relevant discussion of its iconography and interpretation as a rock monument in commemoration of Alexander's victory in Gaugamela, see Wójcikowski, Morandi Bonacossi, Marciak forthcoming.

face the walls of the aqueduct [fig. 24], while three inscribed blocks have been removed from the site of Jerwan and are now kept in Mr. Qadir Qachakh's private museum in Duhok.

3 Conclusions: Unresolved Problems and Prospects for Protection and Enhancement

The dramatic overview outlined above of the preservation state of numerous extremely important rock art complexes located in the territory of the Duhok Governorate, in northern Iraqi Kurdistan, allows us to formulate some final considerations. All of the sites with rock reliefs dated from the mid-third millennium BCE to the first centuries CE have been seriously, and in some cases irretrievably, damaged by vandalism and the deliberate destruction of portions of the reliefs (Gunduk, Khinis, Faïda, Maltai, Mila Mergi, Gali Zerdak, Nirok) or even of entire monuments (Gunduk and Gali Zerdak). In numerous sites other types of destruction have also been observed, as in the case of Shiru Maliktha, where in 2018 work to enlarge the external area of a restaurant located across from the Assyrian relief have caused the partial exposure and destruction of some courses of stone blocks probably belonging to an Assyrian canal made of stonework, connected to a tunnel that fed water into the canal. All the reliefs have been defaced by graffiti, most often particularly invasive, the removal of which, involving cleaning and restoration operations, still leaves weak but permanent traces on the rock surface of the monuments, due to the high porosity of the limestone characteristic of the Duhok region.

Furthermore, all the regions' rock relief sites are frequented by visitors who show scarce respect for and pay little attention to these unique testimonies of the ancient civilizations that determined the history of this territory. Local communities' lack of awareness regarding the importance of these sites and rock art complexes and the requirements for their tutelage need to become the principal focus of any project for protection and conservation of the Duhok region's heritage, which must involve extensive awareness-raising campaigns aimed especially – but not only – at schools and young people. Safeguarding the extensive rock-art cultural heritage of Duhok and all of Kurdistan requires that local communities know about it, understand it and identify with this unique patrimony and their rich and stratified past.

The situation outlined above highlights an extremely alarming fact: the vast majority of damage to and significant destruction of rock art in the Duhok Governorate is very recent. Damage was less frequent during the Kurdish Civil War years in the 1990s, and much more serious in nature in the most recent past. This last aspect is par-

ticularly disturbing, since it highlights that since around 2000 the establishment of increased stability, safety and lively economic growth in Kurdistan has brought a rapid and intense anthropization and urbanisation of the territory.¹⁹ The pervasive growth of human activity throughout the region, with its innumerable forms and consequences (e.g. the uncontrolled intensification of production and extraction operations) constitutes an extremely serious threat to the survival of rock reliefs (and more in general, all archaeological sites), which cannot be ensured by Kurdistan's Antiquities Directorates alone, since however active and willing they may be, they do not have the means to confront such a complex problem and its variety of implications.

The only option for success would require a virtuous collaboration at both legislative and operative levels, such as that outlined in recent years between the Kurdistan Regional Government, the Iraqi Institute for the Conservation of Antiquities and Heritage in Erbil, the peripheral directorates and international organizations (foreign archaeological missions and international institutions for the protection of cultural heritage which act in this field). This type of cooperation will be able to approach the different aspects of these broad issues by spreading awareness of Kurdistan's cultural heritage and sensitizing local communities, together with the training of local personnel, the application of correct practices and the conduction of specific projects aimed at documenting, protecting, conserving and enhancing the wide range of cultural heritage in this region.²⁰

19 The direct correlation between intensification of occupation and land use on one hand and the spread of episodes of vandalism against the most exposed cultural heritage, such as rock reliefs, on the other is also suggested by the fact that in the substantially uninhabited mountainous region in southern Kurdistan between the Iraqi (Sulaymaniyah Governorate) and Iranian Zagros, there are a dozen late third and early second millennium BCE rock reliefs which have never suffered damage or destruction. These are the rock reliefs of Bitwata, Darband-i Ramakan, Darband-i Gawr and Darband-i Belula/Shaikhan on the Iraqi side of the Zagros and the reliefs of Sarab-e Sey Khan, Bamu, the recently discovered Darvan Duhol 1-2 reliefs and the Sar Pol-e Zahab reliefs on the Iranian side (for a recent overview, see Alibaigi et al. 2020).

20 Although it is not our purpose here to give a complete list, it must be noted that various projects have been conducted and are still ongoing in the territory of the Kurdistan Region of Iraq to protect its cultural heritage. In 2009, the "Iraqi Institute for the Conservation of Antiquities and Heritage" was founded in Erbil, born from a collaboration between the Regional Government of Kurdistan, the Ministry of Tourism in Iraq, the U.S. State Department and other academic and research institutions in the U.S. (<https://www.facebook.com/Iraqiinst/>). There followed a project coordinated by the Erbil Antiquities General Directorate for the creation of an overall archaeological map of Kurdistan based on survey results and ongoing archaeological excavations in the region (Kopaniyas, MacGinnis, Ur 2015; Ur, Lashkri 2019), the "Safeguard and Enhancement of Cultural Heritage in Iraqi Kurdistan" project of the La Sapienza University of Rome and the Antiquities Directorates of Erbil, Sulaymaniyah and Duhok, the "Erbil: Historical Commercial Buildings in the Bazaar" project of the Polytechnic of Berlin and the German Archaeological Institute, "The NINO Archaeological Project on the Rania Plain" of the Netherland Institute for the Near East and "The Land of Nineveh Training Project for

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