The Awareness of Danger. African Rock Art in the Archive of the Italian Institute of Prehistory and Protohistory

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Paper is fragile, but so is rock. The "Italian Institute of Prehistory and Protohistory" (IIPP) choose to take fragility as the main topic to communicate the heritage of the Institute, more specifically that of the photographic archive which conserves evidence of one of the most ancient human heritage at risk of disappearing forever. The IIPP archive consists predominantly of images and films related to Prehistory, produced by its founder Paolo Graziosi between the 1930s and 1970s, during several missions he carried out to study the rock art of the Horn of Africa and Libya, including in the "Rock-Art sites of Tradart Acacus", which has been inscribed in the UNESCO World Heritage list since 1985 and in the "World Heritage in Danger" list since July 2016. The digitization project has given rise to the exhibition "The Fragility of the Sign. African Rock Art in the Archives of the Italian Institute of Prehistory and Protohistory". The exhibition aims at protecting the photographic archive left to the Institute by its founder, and to make it accessible to the greater public. Through an immersive itinerary, it was possible to make known some of the most ancient and extraordinary examples of human artistic expression, situated in places that are currently inaccessible as a result of domestic and international conflicts. The purpose of the present work is to share an experience of public archaeology carried out through the use of visual and immersive technologies.

Key words:

African rock art, UNESCO, Archive, Immersive exhibition, Digitization.

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INTRODUCTION

Prehistoric rock art can be analysed from several different points of view: iconography, various execution techniques, the cultures and the people that made it, the meaning of this art. The "Italian Institute of Prehistory and Protohistory" (IIPP) designed and implemented its own project on prehistoric rock art that starts from the key assumption that it is possible to communicate and to preserve great human heritages (like prehistoric rock art specimens) only through enhancing the awareness of the risk of damaging such heritages. The IIPP was founded in 1954 to coordinate, promote and intensify, on a national and international level, research and studies of prehistory and protohistory by proposing initiatives and projects [Revedin 1996; Tarantini 2004]. Like other international institutions that preserve important archives on prehistoric art, such as the "Trust for African Rock Art" (TARA) [Anderson et al. 2018], the "African Archaeological Archive" (AAArC) [Lenssen-Erz et al. 2018] and the Centro Camuno di Studi Preistorici [Anati 2004], the IIPP is constantly engaged in protecting, managing and enhancing its specialised documentary heritage, unique within the rich Italian archaeological panorama. The IIPP set up, protects and manages a large documentary and photographic archive, highly specialised in prehistoric art and archaeology, together with a highly specialised library [Bachechi 2012]. The IIPP team focused on two key aspects of modern archeological and conservation practices to accomplish the preserving and the valorisation mission of the institute: fragility and technology. Fragility is an urgent theme for those who work in monumental heritage, such as rock art, particularly in war zones, as well as for those who deal with an inner heritage, such as archives. Technology provides new instruments, new possibilities to preserve and show this heritage. The scientific team decided to

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promote and valorise the IIPP archive through the use of new visual technologies, in order to reconstruct and spread the knowledge of the archaeological heritage in danger in Libya and the horn of Africa. The IIPP choose to start from those two conflict zones because it has inherited some of the most important photographic archives regarding the prehistoric rock art of Libya and the Horn of Africa.

AFRICAN ROCK ART: GEOPOLITICAL ANALYSIS OF THE HERITAGE LOCATIONS

Before diving into the valorisation project of the IIPP archive, it is necessary to briefly define and analyse the political situation of Libya, Somalia and Ethiopia, and the consequences towards their archaeological heritage.

Even after gaining its independence from the United Nations Trusteeship Council in 1951, Libya remained a deeply divided country, a classic example of colonial era improper borders drawing, irrespective of the cultural differences existing in the country. In 1969 Colonel al-Qadhafi overthrew the monarchical government and found the Libyan Arab Republic. However, his regime turned with time more and more dictatorial. In 2011, a civil war erupted between al-Qadhafi loyalists and rebels, that quickly transformed into a more complex internal conflict once the former dictator was killed in October 2011.

In 1985 the prehistoric rock art site of Tradart Acacus entered the UNESCO World Heritage List [UNESCO 1985]. The last monitoring mission in the site dates back to the beginning of the latest conflict, in January 2011. After that time, local authorities tried to provide annual reports, where emerged that this region is exposed to unprecedented rates of human presence due to migratory movements and are increasingly exposed to vandalism too (Fig. 1). The consequences of these risks over the site are evident in the subsequent reports: vandalism, deliberate destruction of heritage and illegal activities [UNESCO 2018] have been all reported. In light of this unfortunate situation, the rockart sites of Tradart Acacus has been inscribed in the UNESCO List of World Heritage in Danger in 2016 [UNESCO 2016].

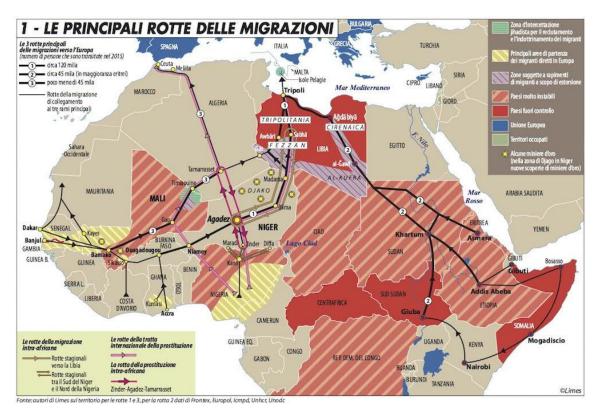


Fig. 1. The African's migration route, according to Frontex, Europol, Icmpd, Unchr, Undoc and Limes data, in Limes 7/2016 (© Limes, map edited by Laura Canali). Note the Fezzan crossroads, linking southern Libya to the Sahel and sub-Saharan migrant routes to northern Libya and onto Europe

Today's Somalia consists of a war-torn country made of three main and often conflicting regions, without a reliable central government: Somaliland, Puntland, and south-central Somalia. Because of this fragmented political environment, very little effort has been made to ensure the preservation of Somali cultural heritage and archaeological remains. In the last 20 years, warlords have commissioned illicit diggings to finance the war, while the poverty also has led to others taking up looting and selling of artefacts. Prior to the conflict and the current geopolitical situation, in colonial times and postcolonial times, Somali cultural heritage and archaeological research have not been preserved sufficiently. The result is one of the worst records of loss of archaeological remains in the Horn of Africa [Mire 2011].

Internal instability has been a chronical feature of, and a great threat to Ethiopia. In the last years there have been numerous anti-government protests, often marked by the loss of civilian lives. These protests were mainly led by the ethnic groups of the Oromo and the Amara, with the participation of other minority groups. Conflicts and instability grew in volume and importance also among the more than 80 ethnic and religious groups dwelling in Ethiopia: this led to an increase in internally displaced people that rose to 1 million in total between April and June 2018, according to UN data. In September fights between groups caused more than 75 casualties in the capital alone. We can also report some positive developments in the Horn of Africa region; the young leader Abiy Ahmed is working for the modernisation of Ethiopia and the peace process with Eritrea has just been concluded with the signature of the peace treaty between the two former Italian colonies. Another positive development is the election of the first female president of the country, the long-term diplomat Sahle-Work Zewde¹. Unfortunately, Ethiopian rock art is heavily threatened by the natural degradation process and by the human factor: vandalism and pillaging occur regularly in the most remote areas, while conflicts and the increased flow of tourists contribute to the destruction of the rock-art sites [Bachechi 2014].

Given the critical geopolitical situation in the area, the IIPP took it upon itself to showcase the prehistoric rock paintings and engravings produced by man between 10.000 and 2.000 years ago. This is an invaluable heritage for all humanity that cannot be forgotten. This challenge is the core part of the IIPP mission.

THE IIPP ARCHIVE PROJECT

To understand the ambitious mission of the IIPP project in Libya and the Horn of Africa it is fundamental to know the founder of the IIPP, Paolo Graziosi, one of the most important prehistory researchers, active in Italy from 1930 to 1980. His research focused not only on prehistoric art but also on anthropology and ethnography. The largest part of his activity on the field was devoted to research projects in Africa, between 1933 and 1972 [Graziosi 1940; Graziosi 1962]. In this timespan, Graziosi held 20 scientific missions in Libya and East Africa [Vigliardi 1992]. Paolo Graziosi became one of the first Italian archaeologists to document all his missions with graphic procedures, photographs, and footage (Fig.2, a-b).





Fig. 2. Paolo Graziosi, the founder of the IIPP, collecting pictures and data in two different missions in Libya a) 1938, Ghira, Fezzan, AFIIPP 3069; b) 1968, Tilizzaghen, Libya, AFIIPP 5706 (©IIPP)

¹ for the updated geopolitical situation in Ethiopia see https://www.ezega.com/News/

All results of this intense research lead to the creation of an important photographic archive, left to the IIPP. The IIPP photographic archive counts 10460 digitized pictures (colour and b/w slides, colour and b/w pictures, colour and b/w negatives), 69 real scale graphic reliefs of rock-art paintings and engravings (Fig. 4), and dozens of films. A relevant section of the archive concerns Africa: almost 60% of the entire archive is referred to various Graziosi's research missions in Libya and in the Horn of Africa between the thirties and the seventies [Bachechi 2012]. The IIPP wants to increase access to and the visibility of the collection, in parallel with the raising awareness on the importance of preserving historical scientific and artistic heritage. Between 2016 and 2017 the IIPP scientific team designed and implemented the project "Archaeology in the desert. Photographs and documents of Paolo Graziosi in the archive of IIPP", funded by the Italian ministry of education and research, and by Fondazione CR Firenze [Florindi and Lucarelli forthcoming]. The goals of this project were the conservation of documental heritage of IIPP related to African rock-art to one hand, and to another hand to focus on the future of ancient and meaningful evidence of humankind in areas tormented by war and destructive ideologies.





Fig. 3. A young girl in Riccab, Eritrea, 1961, AFIIPP 3491 left: Scan of the original photo; right: After the digital restoration (©IIPP)

The project consists of two different phases. In the first phase, focused on conservation, the whole group of images related to Africa was digitized in high definition. About 3000 images were scanned (2500 dpi) following the standards given by the "Italian Institute of Union Catalogue" (ICCU), using an Epson Perfection V850 Pro scanner and the software Silverlight. After that, a digital restoration of a first group of 250 slides and photographs was carried out. The restoration consisted in reconstructing the original colours of the films and in removing the traces of mould, scratches, and dust, using the image editing software Adobe Photoshop CC (Fig. 3). The first operation consisted in the elimination of the frame, followed by correction of the color balance, to offset the deterioration caused by the chromatic alteration. Lastly, scratches, cuts and traces of dust where removed from the film mainly using the clone tool. The footage of the archive has been digitized and restored thanks to the collaboration with the University of Florence. The real scale graphic reliefs on paper were also inventoried and photographed. The original pieces were in a precarious state of conservation and therefore they were rolled in non-acid paper to ensure their conservation, awaiting proper intervention.

The second phase focused on increasing the visibility to the collection from a scientific and historical perspective, by producing an exhibition called "The fragility of the sign", edited by Anna Revedin, Luca Bachechi, Andrea De Pascale and Silvia Florindi [Bachechi and De Pascale 2017]. The exhibition was hosted by the National Archaeological Museum of Florence from September to December 2017. The importance and the urgency of the exhibition were recognised by both the Italian National Commission for UNESCO and the UNESCO. The inauguration event was enriched with a performance designed by the artist Virgilio Sieni, on the theme of fragility. The visitors discovered the rock art of the Horn of Africa and of Libya via the images from the IIPP archives. The immersive exhibition itinerary, realized by Vincenzo Capalbo and Marilena Bertozzi, evolves through three sections: An introductive space on the "heritage in danger" theme, with a video mosaic of the international media coverage of the most brutal scenes of heritage destruction throughout the world. The second section was dedicated to the prehistoric art of the Horn of Africa, recorded by Graziosi and preserved in our archive. The visitors were guided

into Eritrean and Somali rock art paintings and engravings thanks to the reproduction of three real scale reliefs of the Horn of Africa. The presentation was enriched with two monitors with sliding images and footages of Paolo Graziosi's missions with an ethnographic and anthropological perspective. In the last space, the visitors were surrounded by evocative sounds and an immersive projection (Fig. 5), showing animations, images and footage of great suggestion about rock art and the ethnographic research in Libya made by Graziosi. The immersive presentation used the pictures of the prehistoric rock art representing engravings and paintings of man and animals as a starting layer over which multiple lines emphasized the contours of the subjects.



Fig. 4. Real scale relief of a rock art painting sited in Carora – Eritrea (312x115 cm) made with pencil and tempera on paper during a mission directed by Paolo Graziosi. IIPP Archive, RG 20 (©IIPP)

These effects were animated to bring life to the prehistoric art depicted on rocks using the software 3DStudio Max and Cinema 4D and the video was projected over multiple panels using three projectors synchronized by the software Watchout and BrightAutor.

The exhibition itinerary was designed as an emotional path, starting with the destruction of the heritage, and ending with the idyllic representation of animal/human relationship as depicted in the prehistoric African rock art. The exhibition has been accompanied by a catalogue, edited by Andrea De Pascale and Luca Bachechi [Bachechi and De Pascale 2017], containing a rich selection of pictures from Graziosi's archive and some brief framework essays written by rock-art specialists and other researchers, realized for a large public.

CONCLUSIONS

The final evaluation of the effectiveness of the project was positive. On the scientific level, an important intervention of conservation and restoration of the documental and photographic archive has been performed, which will help us to protect and spread a so fragile heritage. Regarding communication and awareness-raising, the exposition was visited by around 11.000 people. Furthermore, a brief film has been created based on the exposition material. This video was awarded with the Golden Prize in the category "Creative exhibition installations" at the Festival of Audiovisual International Multimedia Patrimony, organized by AVICOM and with the "Archeo" special mention at the International Festival of Archaeological Cinema of Rovereto. The video is available on YouTube² and has allowed a large public to approach the IIPP archive, together with the important documentation and fascinating tales that those archives can tell.

² https://www.youtube.com/watch?v=KCDeYE3d5DU&feature=youtu.be



Fig. 5. The immersive section of the exhibition "The fragility of the sign" (©IIPP)

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