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Marina Gallinaro

Mobility and pastoralism in the Egyptian Western Desert

Steinplätze in the Holocene regional settlement patterns

All'Insegna del Giglio

to Chicchi and Tin, my guides

Meslen, meslen: ibaraden-in karad, s-iyen as igla wer di-toqqal,
iyen adijiwenket ittatu, iyen wer ifil aghiwan,
*ma imos? - ehu, temse, ekadewen**

* "*Guess what, guess what: of my three children, the first leaves and does not come back, the second returns and wastes away, the third never leaves the field. What are they? - The smoke, the fire, the hearth stones*". Tuareg riddle (Bernus 1981: 206)

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Foreword

Although initially imagined as a series of monographs devoted to the archaeology of arid zones of North African and South-West Asia, the first books of AZA remained focussed on our own research in SW Libya, with the exception of the proceedings of a conference held in Rome in 2001 (AZA 4, *Arid lands in Roman times*, edited by M. Liverani, 2003). This choice was motivated by the need to create a data-set of fully published information on our study region, virtually absent until then in Libya. For this reason the first books were devoted to the exhaustive publication of the new season of research started in the early 1990s in the Tadrart Acacus and surrounding, such as the excavations at Uan Afuda Cave (AZA 1, edited by S. di Lernia, 1999) and Uan Tabu rockshelter (AZA 2, edited by E. Garcea, 2001), as well as the territorial program of research in the Wadi Tanezzuft: the study on the archaeology of death of the latest prehistoric pastoral phases (AZA 3, edited by S. di Lernia and G. Manzi, 2002) and the focus on the Garamantian contexts, such as Aghram Nadharif (AZA 5, edited by M. Liverani, 2005) and Fewet (AZA 6, edited by L. Mori, 2013). Although the pace of publication has been quite uneven (mostly for the lack of fieldwork in many regions of North Africa and in Libya in particular after the beginning of the war in 2011), the corpus of published data made available to the scientific community is in any case relevant.

Nonetheless, our interest to open our Series to other regions has remained strong: I am delighted to present here the new monograph of the Arid Zone Archaeology Series, which is centred on the research carried out by Marina Gallinaro in the Eastern Sahara, in the frame of the Farafra project, Egypt, directed by Barbara Barich and Giulio Lucarini. In a sense, this book marks a new phase in our editorial line – following the constitution of the new Editoral Board in 2013 – having for the first time a single-authored book (and not an edited collection of several contributions), whose research and analysis is also out of our traditional core area (SW Libya). Although stemmed from her doctoral research, this book is a completely original, fine and updated piece of research on a particular feature of Saharan archaeology – the *Steinplätze*, a form of fireplace –, that has attracted the interest of travellers and scientists since the second half of 20th century. Despite their ubiquitous presence, and the enduring scientific attention, no systematic synthesis was available so far. And never these features have been connected – by means of radiometric, spatial and statistical analyses – to other specific features of the Early to Middle Holocene Egyptian Western Desert, such us pits and huts.

This book is also particularly timely, since the effects of the Arab Spring still hamper the field work in much part of North Africa, and particularly in the desert stretches of Al-Wahat – halfway between Farafra and Bahariya where 12 tourists were tragically killed and 10 wounded by Egyptian military force during an anti-IS military operation (September 2015). Since then, it has been progressively more difficult to undertake any activity that hopefully will resume once safety will be guaranteed again. Hence, this book has the merit to keep vivid our attention to this crucial region of North Africa, as for the monograph edited by Barich *et al.* (2014) a few years ago.

I am pleased to thank here the Advisory Board of this book: Maria Carmela Gatto, Kathleen Nicoll and Andrea Zerboni, for their comments and revisions on the original manuscript. I am also glad to thank here Peter Mitchell, University of Oxford, for his commentary to the book. In a workshop recently organized in Rome by Marina Gallinaro and myself (December 2017) on "*Archaeology in Africa. Potentials and perspectives on laboratory & fieldwork research*", Peter has drawn an enlightening picture on the future of our discipline "*Carpe Diem. Building African Archaeology for the Twenty-First Century*", raising attention to many aspects of our research, from the relations with the local communities to the need of integrating different dimensions of analysis.

I believe that this book by Marina Gallinaro, and others hopefully forthcoming, are exactly in that direction, and I hope they can help to remain attentive to the African cultural heritage.

Savino di Lernia
Series Editor
Arid Zone Archaeology

Commentary

Cattle have held great symbolic and practical importance from one end of Africa to the other for millennia. The continent's northeastern corner is particularly important for understanding how this came about. Whether, as Fred Wendorf and Romuald Schild have argued, cattle were independently domesticated there from wild aurochsen early in the Holocene, or whether – as now seems more likely after decades of critical review of their arguments and the latest genetic research – they were introduced from Southwest Asia around the same time as sheep and goats, the region's pre-eminence as the first part of Africa in which cattle were kept is clear. So, too, is its significance for documenting the antiquity of *Bos taurus*' ritual and ceremonial importance, something amply demonstrated by Wendorf and Schild's excavations of elaborate cattle burials at the famous site of Nabta Playa. The early and mid-Holocene archaeological record of Egypt's Western Desert, home to Nabta Playa and many other key archives, is thus central to understanding how pastoralism emerged and spread and how it started to develop into a quintessentially African mode of existence.

A well-established feature of those archives is the phenomenon known as *Steinplätze*, concentrations of burned pebbles or fragments of stone that are frequently found slightly raised above the level of the surrounding terrain. Recognised already by Gertrude Caton-Thompson in the mid-twentieth century, *Steinplätze* were first studied intensively by Baldur Gabriel. Given the frequent paucity of any associated finds and an absence of obvious dwellings, he interpreted them as the ephemeral traces of fireplaces left by mobile pastoralists. Yet although they are among the most distinctive of the Sahara's archaeological features, *Steinplätze* have received little systematic attention in recent decades. Marina Gallinaro's work thus marks a new phase in their study, one that draws them back into discussions of how early livestock-keeping populations in Northeast Africa used the resources and landscapes to the west of the Nile along a trajectory of increasing aridification that eventually culminated in the desert we see today. To do this, Gallinaro draws together a varied set of evidence — palaeoenvironmental as well as more strictly archaeological — to produce a volume that is synthetic in covering the Western Desert as a whole and simultaneously specific in its detailed exploration of the more local context of Farafra Oasis, scene of much other Italian archaeological research over the past forty years under the auspices of Barbara Barich and Giulio Lucarini. In doing this, she not only presents a wealth of hitherto unpublished data, but also offers new interpretations of the behaviour of those responsible for creating the *Steinplätze*, interpretations developed by close reference to relevant archaeological theory and ethnographic analogy.

Chapter 1 defines the importance of *Steinplätze* as a class of archaeological feature, while also establishing the significance of Northeast Africa as a whole for the emergence of pastoral, and specifically cattle-based, ways of life. Gallinaro emphasizes that the low number and frequently poor quality of the available faunal samples, coupled with the likelihood that people who kept livestock may not always and everywhere have left their bones behind for the convenience of future archaeologists, renders problematic too strict a distinction between herders and those who combined herding with hunting and gathering. Precisely this issue, of course, recurs across African archaeology, whether in the Pastoral Neolithic of East Africa or the continuing (I am tempted to write 'never-ending') debate over how best to understand the late Holocene record of South Africa's Western Cape. Neatly sidestepping some of the semantics that these topics involve, Gallinaro focuses on the significance of mobility as an adaptive strategy for all those living in the Western Desert, regardless of whether, or how many, livestock they possessed. This forms the main interpretative platform for the model that she eventually develops, while the remainder of the chapter briefly presents the structure of the rest of the monograph.

Chapter 2 focuses on the palaeoclimatic and archaeological background to *Steinplätze* as a whole and those of Farafra in particular. Most of the relevant evidence takes the form of geomorphological studies, complemented where possible by analysis of botanical and faunal samples from archaeological sites and of patterning in the spatiotemporal distribution of radiocarbon dates employed as a proxy for past climatic conditions. As we are quickly made aware, however, complete stratigraphic sequences are lacking and organics only rarely preserved. Radiocarbon determinations, too, have their problems: produced from samples of widely varying kinds and quality, pre-treated in different ways and to different standards, and cited in formats that variously employ calibrated and uncalibrated timescales or BC and BP ages. Spelling out the challenges that these biases introduce – and what can be done to overcome them – is achieved with refreshing clarity and honesty. This done, it becomes possible to identify a sequence of phases across the Western Desert that track the initial return of wetter conditions early in the Holocene, the climatic optimum between 8000 and 6600 BP, and successively worsening circumstances as the region became more arid. The sequence ends with the southward retreat of the Inter-Tropical Convergence Zone and the dessication of all the basins west of the Nile (except the Fayum) around 5000 years ago. This palaeoenvironmental record then forms the context in which no fewer than 664 (chronometrically house-cleaned) radiocarbon dates are interrogated to explore patterning in the presence of people in the Western Desert from before 9500 cal BC to as late as 2600 cal BC.

After a reprise of Gabriel's work and a brief discussion of how *Steinplätze* may have formed, Chapter 3 explores their distribution across the various sub-regions of the Western Desert, from Nabta Playa and Bir Kiseiba in the south to Abu Muhariq and the Great Sand Sea in the north. The level of detail provided for each site, including not just associated features and dates, but also artefacts and faunal and botanical remains, means that this chapter will become an essential reference point for future studies of Western Desert archaeology. Chapter 4 then focuses on Farafra Oasis itself, outlining the methodologies employed there (topographic survey, mapping of individual sites, selective excavation, GIS analysis of artefact and feature distributions) before exploring three localities in depth: the El Bahr Basin, the Hidden Valley Basin, and the Sheikh el Obeiyid Plateau. Supported, as elsewhere, by high quality illustrations, the result is a detailed picture of the oasis' *Steinplätze* and their associated archaeology over almost 5000 years. Though a few are older, it is around 6500 cal BC that *Steinplätze* begin occurring here in number, marking ephemeral camps that permitted people to exploit areas on the periphery of more permanently occupied, architecturally more complex settlements. Likely located with respect to the availability of water, they document activities that were both commonplace (stone tool production, plant-processing) and more specialized (e.g. ostrich eggshell bead manufacture, arrow-making), all tied together within a pattern of mobile and periodic occupation.

The nature of that occupation constitutes Gallinaro's final chapter. Two models, in particular, serve as the basis of the interpretations offered: Lewis Binford's well-known juxtaposition of forager and collector behaviour and Kimball Banks' contrast between tethered and linear settlement strategies, which, while based on a varied ethnographic dataset, was specifically developed in the context of eastern Saharan archaeology. Gallinaro uses these ideas to frame a discussion of movement, group composition, and economic strategy with reference to the communities that constructed *Steinplätze* in the various regions of the Western Desert. Though data are fragmentary, she is able to detect a persistent pattern of middle and late Neolithic landscape use, one focused around playas and springs that was combined with more far-ranging mobility beyond individual study areas like Farafra, as signalled by access to exotic materials and widely shared details of stone artefact production. Gathering and hunting, as well as herding, were undertaken at the localities where *Steinplätze* occur, all within an economy that only gradually came to emphasize the herding of domestic livestock. Collectively, this forms a nuanced and well-substantiated argument, one that is supported by detailed evidence, but at the same time one that identifies challenges for the future: engagement in further large-scale studies; acquisition of better quality palaeoecological data; employment of experimental archaeology to determine the precise purposes for which *Steinplätze* were built; and more effective integration of geomorphological and archaeological research.

Lucidly written, Gallinaro's volume will, I believe, help inspire individuals to take up the research agenda she sets out. At a time when so much of the Sahara is off-limits to archaeological fieldwork, it is deeply gratifying to see here yet more evidence of the thoroughness and high quality that have characterized the work of Italian archaeologists in this region of Africa over many decades. The continuing publication of their research, Marina Gallinaro's included, in the *Arid Zone Archaeology* monograph series will surely help sustain widespread interest in Saharan archaeology until it becomes possible to excavate and survey again free of current geopolitical restrictions. May that day come soon!

Peter Mitchell
University of Oxford

Acknowledgements

This volume is the result of a long process of research started in 2001 when I took part for the first time, as a student, in the Archaeological Mission in the Farafra Oasis, at that time directed by Barbara Barich and since 2006 jointly by herself and Giulio Lucarini. This process continued with my PhD on data from Farafra, concluded in 2008, and finally matured in the following through work in the Central Sahara, as a member of the Italian-Libyan Archaeological Mission in the Acacus and Messak (now Mission in the Sahara), directed by Savino di Lernia.

I am deeply indebted with several Institutions and colleagues that more or less directly supported me since the first steps of the work, during the PhD period and during the long way of the final writing of the book. My deep thanks go to Barbara Barich and Giulio Lucarini, directors of the Archaeological Mission in the Farafra Oasis. They allowed me to carry out my research providing scientific, logistical, financial and institutional support, including Egyptian Institutions – in particular the Supreme Council of Egyptian Antiquities –, the Italian Ministry of Foreign Affairs, the Italian Cultural Institute and its Archaeological Centre. Permits to access the area and facilities have been granted by the Supreme Council of Egyptian Antiquities to Sapienza University of Rome. This research project was carried out in the frame of the PhD in African Studies at the University of Naples "l'Orientale", with a three-year full tuition scholarship.

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Marina Gallinaro