Research Article



Rethinking late prehistoric Mediterranean Africa: architecture, farming and materiality at Kach Kouch, Morocco

Hamza Benattia^{1,*} , Youssef Bokbot², Jorge Onrubia-Pintado³, Meryem Benerradi², Bouchra Bougariane⁴, Bouchra Bouhamidi², Jared Carballo-Pérez⁵, Othman Echcherif-Baamrani², Asmae Elqably², Noufel Ghayati², Hassan Hachami², Mohamed Kbiri-Alaoui², Raluca Lazarescu⁶, Lorena Lombardi^{7,8}, Giulio Lucarini⁸, Rafael M. Martínez-Sánchez⁹, Marta Mateu-Sagés¹⁰, Pau Menéndez-Molist¹, Ignacio Montero-Ruiz¹¹, Zayd Ouakrim², Guillem Pérez-Jordà¹², Moad Radi², Joan Ramon-Torres¹⁰, Eric Sobrevia-Corral¹³, Tachfine Touri² & Cyprian Broodbank¹⁴

¹ Department of History and Archaeology, University of Barcelona, Spain; ² National Institute of Archaeology and Cultural Heritage (INSAP), Rabat, Morocco; ³ Faculty of Letters, University of Castilla-La Mancha, Ciudad Real, Spain; ⁴ Faculty of Sciences and Technology, University Moulay Ismail, Errachidia, Morocco; ⁵ Department of Geography and History, University of La Laguna, Spain; ⁶ Institute of Archaeology, University College London, UK; ⁷ Department of Civilisations and Forms of Knowledge, University of Pisa, Italy; ⁸ Institute of Heritage Science (CNR-ISPC), National Research Council, Roma, Italy; ⁹ Department of History, University of Cordoba, Spain; ¹⁰ Catalan Institute of Classical Archaeology, Tarragona, Spain; ¹¹ Institute of History, Consejo Superior de Investigaciones Científicas, Madrid, Spain; ¹² Department of Prehistory, Archaeology and Ancient History, University of Valencia, Spain; ¹³ Laietana Patrimoni (LAIPAT), Catalunya, Spain; ¹⁴ McDonald Institute for Archaeological Research, University of Cambridge, UK * Authors for correspondence 🖙 hbenatme8@alumnes.ub.edu



The European shores of the Mediterranean are characterised by well-known sociocultural and economic dynamics during the Bronze and Early Iron Ages (2200–550 BC), but our understanding of the African shores is comparatively vague. Here, the authors present results from excavations at Kach Kouch, Morocco, revealing an occupation phase from 2200–2000 cal BC, followed by a stable settlement from *c*. 1300–600 BC characterised by wattle and daub architecture, a farming economy, distinctive cultural practices and extensive connections. Kach Kouch underscores the agency of local communities, challenging the notion of north-western Africa as *terra nullius* prior to Phoenician arrival.

Received: 27 April 2024; Revised: 24 September 2024; Accepted: 21 October 2024

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Keywords: Mediterranean, north-west Africa, Bronze Age, third to first millennia BC, radiocarbon dating, farming, architecture

Introduction

The Bronze Age (c. 2200–800 BC) to Early Iron Age (c. 800–550 BC) are renowned for seeing the formation of the first complex social and political organisations on the western shores of the Mediterranean. This period is distinguished by an increased frequency of both short- and long-range interactions, with trade routes connecting vast areas of the Mediterranean and extending along the Atlantic façade (Broodbank 2013; Iacono *et al.* 2022). Yet to date, the Mediterranean shores of Africa, west of Egypt, have been attributed almost no Indigenous role in this connectivity (Broodbank & Lucarini 2019).

Marking a point of proximity between two continents and with access to both Mediterranean and Atlantic seaways, the Strait of Gibraltar stands out as a gateway connecting the African and European Mediterranean (Tarradell 1959). The earliest evidenced interactions between these shores of the Strait started during the Late Stone Age (Raissouni et al. 2016: 456), subsequently becoming increasingly frequent as navigation technologies and skills improved. It is thus not surprising that this area reveals some of the earliest evidence for domesticated crops in Africa, dating to the mid-late sixth millennium BC (Martínez-Sánchez et al. 2018) and involving both local and non-local communities (for genetic perspectives, Fregel et al. 2018; Simões et al. 2023). Moreover, the movement of livestock (Anderung et al. 2005), objects and potentially technologies (Bokbot 2005; Brandherm 2007; Schuhmacher et al. 2009; Montero-Ruiz et al. 2012), cultural ideas (Ponsich 1970; Lillios 2015) and people (González-Fortes et al. 2019; Olalde et al. 2019) suggest sustained contact across the Strait throughout the following millennia. In Iberian terms these interactions correspond with the middle to later Neolithic (c. 4600–3200 BC) and the Copper Age (c. 3200–2200 BC), the latter locally characterised by the emergence of mega-sites, new social structures and long-distance exchange.

Recent excavations in north-west Africa have identified a full farming economy with evidence of extensive Iberian connections that flourished at Oued Beht (Morocco) during a regional Final Neolithic *c*. 3400–2900 BC, providing initial insights into societies and African agency south of Gibraltar (Broodbank *et al.* 2024). Later activity is suggested by a distribution of mid–third millennium BC Beaker-period finds (Bokbot 2005) and three Beaker settlements (Rodrigue 2009, 2010, 2012), coastally clustered on the light soils of fossil dunes surrounding the current Gharb lowland, which may then have been a lagoon (Figure 1A & B). Finally, near the Strait of Gibraltar, the site of Mzoura stands as a unique megalithic complex in north Africa. Although poorly dated and understood, its closest parallels are found in third-millennium BC Atlantic Europe (Daugas *et al.* 2006).

Yet the last 1000–1500 years of prehistory in this key area of north-west Africa remain almost unknown, a situation all the more extraordinary given the prominence of the neighbouring Iberian Early Bronze Age and equally regrettable because it precludes any local baseline against which to evaluate the ensuing dynamics of the 'Phoenician' Early Iron Age. This latter period is somewhat better known thanks to projects elsewhere along the Atlantic and Mediterranean Maghreb, including Rachgoun, Carthage, Lixus and Utica (Vuillemot 1965;

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Hamza Benattia et al.



Figure 1. A) the north-western Maghreb, showing the location of Kach Kouch and other sites mentioned in the text; B) the Gharb region showing the reconstructed palaeolagoon and known Bell Beaker sites; C) view of Kach Kouch and the Oued Laou estuary, looking east; D) view from Kach Kouch, looking west, of the inner valleys of the western Rif mountains. Basemaps: ASTER GDEM and Landsat 8 (figure by H. Benattia).

Docter *et al.* 2004; Aranegui-Gascó 2005; López-Castro *et al.* 2016), but the phase immediately preceding it (known regionally as the Late Bronze Age, *c.* 1300–900 BC, and a critical period for the study of pre-established local communities) remains all but unknown. Elsewhere in the Maghreb this period remains enigmatic, too—at Althiburos (Tunisia) a phase that pre-dates Phoenician imports is associated with a settlement of stone-built structures, yet it can be no earlier than 1000 BC (Sanmartí *et al.* 2012).

Some of the reasoning for the absence of Bronze Age settlement evidence in the northwestern Maghreb is similar to that for earlier millennia—a reliance on isolated finds lacking context and old excavations in caves, whose upper levels are often disrupted by later activity. Another factor is the focus on cemetery excavations (see Camps 1961), particularly the dozens of cist cemeteries around Tangier (Ponsich 1970). These cist burials likely date from the Early Bronze Age and have clear parallels in southern Iberia (Benattia *et al.* in press), but in the absence of excavated settlements serve to reinforce a collective, if misleading, notion of predominantly nomadic communities. In fact, extensive survey around Tétouan indicates a declining role for caves (now used mainly for ritual and burial, Ramos *et al.* 2011; Vijande-Vila *et al.* 2019) and a likely settlement shift to open sites from the third millennium BC onwards (Raissouni *et al.* 2016).

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This article presents the first evidence of Bronze Age settled occupation in the north-west Maghreb, and arguably anywhere in Mediterranean Africa west of Egypt, characterised, moreover, by cultural and economic practices indicative of a full farming settlement. The occupation sequence from the site of Kach Kouch, in north-west Morocco (Figure 1A), has profound implications for understanding the local social landscape prior to Phoenician establishment in the early first millennium BC. Moreover, it underscores the active role played by local North African communities in the exchange networks of the broader Mediterranean and the inner Atlantic during late prehistory and into the Iron Age. This in turn prompts a reassessment of prevailing research biases, questioning the driving role of external agents in the social, cultural and economic dynamics of Bronze Age and Early Iron Age North Africa (for current debates see Mattingly 2023: 71–226).

Kach Kouch (Oued Laou, Tétouan Province, north-west Morocco)

Kach Kouch extends over approximately 1ha and sits atop a limestone outcrop overlooking the lower Oued Laou Valley (Figure 1C), some 10km west of the current coastline on the Mediterranean flank of the Strait of Gibraltar (Figure 1A). It occupies the head of what could have been a palaeo-estuary that potentially offered direct maritime access. The contours of the outcrop and the cliffs on the northern and eastern sides act as a natural fortification, with access restricted to the southern and eastern approaches. From this strategic position, the inhabitants of Kach Kouch controlled one main access route from the sea to the inner valleys of the western Rif mountains (Figure 1D).

Discovered in 1988 by a joint Moroccan-Spanish project, Kach Kouch underwent initial excavation in 1992, revealing an eighth- to sixth-century BC settlement consisting of daub-built habitations and rock-cut pits (Bokbot & Onrubia-Pintado 1995). Since 2021, a team composed mostly of early career researchers from Morocco's National Institute of Archaeology and Heritage (INSAP) has resumed excavations. The project now aims to understand the nature of its occupation and architecture as well as their evolution over time, establishing a diachronic sequence supported by radiocarbon dates. In addition, it explores economic and subsistence strategies through bioarchaeological data and material culture, and investigates the surrounding landscape to place the site in a broader spatial and chronological context. One final aim is to invest in the training of future Moroccan archaeologists by serving as a field school in best practice and methodology.

The radiocarbon sequence in its broader regional context

The radiocarbon data presented here comprise 16 dates, performed on short lived samples including domesticated plant seeds and non-charred faunal remains. The results demonstrate the existence of at least three occupation phases at Kach Kouch (KK1–3), corresponding with observed stratigraphic and cultural changes, with an apparent occupation hiatus between the first and the second phases (Figure 2).

KK1 (2200–2000 cal BC)

The earliest occupation phase is represented by a single basal context (514) under the northern wall of later structure 1 (Figures 2 & 3). Only three undecorated pottery body

Hamza Benattia et al.



Figure 2. The radiocarbon sequence from Kach Kouch. Calibrated dates produced with OxCal v4.4.4 (Bronk Ramsey 2021) (figure by H. Benattia).

sherds, a single chipped stone and a *Bos taurus* bone have been recovered. The scarcity of stratigraphic contexts and materials relating to this phase may be due to their erasure by later building, alternatively habitation may have centred elsewhere on site, in locations still

pending investigation. Nonetheless, dating of the cattle bone indicates activity from at least the end of the third millennium BC. This situates KK1 as contemporaneous with the Copper/Bronze Age transition in Iberia, and the Tangier cist cemeteries (Benattia *et al.* in press), but after activity at Oued Beht and subsequent Beaker sites.

KK2 (1300–900 cal BC)

This occupation phase is extensively documented in the spatial distribution of contexts and the variety of finds and associated materials, making Kach Kouch the earliest definite evidence of settled life along the Mediterranean coast of the Maghreb, decisively pre-dating the Phoenician presence. Identification of domestic daub-built structures, rock-cut pits and a full farming economy corroborates a stable occupation during this phase, extending through to the early first millennium BC.

This second phase corresponds with the Late Bronze Age in Iberia, a period characterised by a decrease in settlement size and an increase in settlement dispersion, in comparison to the preceding and subsequent periods (Iacono *et al.* 2022: 401–402), while contacts with the eastern Mediterranean and western Europe are attested (Ruiz-Gálvez 1995, 2009). Some 80km west of Kach Kouch on the Atlantic coast, the stray find of a Ballintober-type rapier in the Oued Loukos River may likewise hint at connections with north-west Europe in the late second millennium BC (Brandherm 2007; possibly even a Huelva-type deposition), potentially related to an unproven earlier settlement beneath Phoenician Lixus (as suggested by several authors, e.g. Bokbot & Onrubia-Pintado 1992: 19–20).

KK3 (c. eighth-seventh centuries BC)

KK3 represents the final occupation at the site. Although radiocarbon dating was performed on short lived samples recovered from layers associated with domestic structures and pits, calibration is affected by the so-called Hallstatt Plateau (Figure 2). Therefore, the chronology of this phase is based on Phoenician ceramic imports (see below). KK3 corresponds with the so-called Mauretanian 1 period in the north-western Maghreb and the Early Iron Age in Iberia, which saw the establishment of Phoenician settlements along the Iberian and northwest African coasts.

Building traditions across time

The late-second-millennium BC occupation phase (KK2) is characterised by circular or semicircular arrangements of postholes (see Structures 3 and 4 in Figure 3). Preservation of daub plaster fragments (Figure 4D) suggest that these may have been wattle-and-daub dwellings, arranged around a larger central post with the roofing possibly consisting of a perishable vegetal covering. This construction tradition extends into the early first millennium BC (KK3), visible in Structure 2 (Figures 3 & 4B–C). Although the shape of Structure 2 remains unclear, the charred remains of wooden posts were preserved in some of its postholes, and these have been extracted for further analysis.

During the eighth to seventh centuries BC occupation phase (KK3) a different construction technique emerges at Kach Kouch, characterised by a square or rectangular building with

Hamza Benattia et al.







Figure 4. Daub fragments with imprints of wattle (photographs by P. Menéndez-Molist).

stone plinth (Structure 1). This technique is well attested across early Phoenician sites in the western Mediterranean and is commonly associated with the arrival of new cultural trends from the levant as a direct result of increasing Phoenician presence. Phoenician settlements in Iberia demonstrate that the stone plinths were overlaid with mudbricks or rammed earth.

In the north-western Maghreb, rectangular buildings with stone plinths are attested in eighth- to seventh-century BC Lixus (Habibi *et al.* 2005) and also at Ceuta, where a partly preserved late-eighth-century BC mud-built structure is succeeded by a seventh-century BC phase featuring exclusively square stone-built structures (Villada-Paredes *et al.* 2010).

Structure 1 at Kach Kouch displays hybrid construction techniques that make it unique among other buildings from the same period (excepting perhaps a later building at sixthcentury BC Mersa Madakh, in modern Algeria; Vuillemot 1965). Although the plinth of Structure 1 consists of several courses of limestone blocks bonded with earth, the identification of daub fragments with the imprints of wattle (Figure 4A) indicates continued use of the wattle-and-daub technique for the superstructure. A possible posthole at the south-western corner of the building (Figure 3: St1 Ph) also suggests that a wooden frame may have supported the structure. This mixed technique seems to imply that exogenous cultural ideas were reshaped and incorporated by local people, creating hybrid elements that differ from both prior local and non-local practices—a common trend in colonial-period contexts (Van Dommelen 1998). To anticipate slightly, the material assemblage of Structures 1 and 2 are not substantially different in terms of the type of materials (though the trampled surface of Structure 2 was better preserved and generated a larger sample).

Rock-cut pits are another prominent structural feature at Kach Kouch. These were predominantly dug into the limestone bedrock and have round to elliptical openings. They exhibit a variety of sizes and range from 0.4 to 0.7m in depth. Some pits feature a small concavity associated with their aperture and, presumably, their function, which was most probably as silos for the storage of plant products (Figure 5C–D, E–F, G–H, K–L & O–P). One large ellipsoidal pit excavated into the limestone bedrock (Figure 5I–J) is identified as a fire pit based on the volume of charcoal recovered from it, yet this pit also contained two metallic objects (see below), pottery, chipped stone and five seeds (one radiocarbon dated to the KK3 phase; Figure 2).

Subsistence strategies at Kach Kouch: plant and animal domesticates

Floatation of sediment (see online supplementary material (OSM)) extracted from pits, as well as from layers associated with the three occupation phases, has allowed the identification of seeds from both domesticated and wild plant species (Figure 6). Of 60 contexts containing botanic remains, 19 correspond to KK2 (1300–900 BC) and 24 to KK3 (eighth–seventh centuries BC), while 17 contexts lack chronological markers and stratigraphic relations; no seeds have yet been recovered from the earliest phase (KK1; 2200–2000 BC).

In both the KK2 and KK3 phases, agriculture was based on the cultivation of hulled barley (*Hordeum vulgare*), naked wheats (*Triticum aestivum/durum*), beans (*Vicia faba*) and, to a lesser extent, peas (*Pisum sativum*). Hulled wheats (*Triticum monococcum* and *Triticum dicoccum*) represent a minor crop exclusive to the KK2 phase. Farming in the KK3 phase also incorporated new species: domestic fruits such as grapes (*Vitis vinifera*) and olives (*Olea europaea*) and wild fruits such as dwarf palm (*Chamaerops humilis*) and jujube (cf. *Ziziphus* sp.). This corroborates observations at Lixus, where cultivated fruits appear from the seventh century BC onward (Pérez-Jordà 2005). Mastic (*Pistacia lentiscus*) and some weeds (*Lolium*)

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Figure 6. Plant macroremains from Kach Kouch. Scale bar = 1mm (photographs by G. Pérez-Jorda).

temulentum and *Polygonum aviculare*) typical of cereal cultivation complete the KK3 archaeobotanical assemblage.

A total of 8851 animal bones have been recovered, with 1504 bones identifiable both by species and chronology (Figure 7, OSM). Of this identifiable portion, a single bone comes from the KK1 phase (0.1%), 243 from KK2 (16.1%) and 1260 from KK3 (83.8%). The bone associated with KK1 is the second phalanx of a potentially domesticated young bovid, but throughout the KK2 and KK3 phases, sheep/goats emerge as the most represented species, suggesting some continuity in herding practices in these later phases. This is particularly significant for KK3, given the contrasting faunal assemblages of contemporaneous Lixus and Ceuta, where sheep/goats are outnumbered by cattle and pigs (Iborra-Eres 2005; Camarós & Estévez 2010). At Kach Kouch, pigs slightly outnumber cattle during KK2

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Figure 7. Faunal remains from Kach Kouch: A) Bos taurus; B) Ovis/Capra; C & D) bone tools (photographs by M. Radi & R.M. Martínez-Sánchez).

but this position is reversed during KK3; caution is required with these data, however, as comparison is based on the number of identified specimens and not the minimum number of individuals. The identification of ostrich, represented by two eggshell beads from KK2 and

Hamza Benattia et al.

one unworked shell fragment from KK3, and Rodentia (potentially mice) during both main phases, offer further insight. Small numbers of donkey, dog and tortoise remains are restricted to the KK3 phase, although this could be a function of the larger sample size. Marine species are present only in the form of fresh and saltwater molluscs, with no fish species identified to date (see OSM). Where present, cut marks document joint disarticulation (Figure 7A & B) and fracture patterns suggest bone cracking for marrow extraction. Identification of more than 20 bone perforators suggests craft-related activities across the KK2 (Figure 7D) and KK3 phases (Figure 7C), probably linked with leather and skin work.

The material assemblage

The material culture from the 2021 and 2022 field seasons is substantial and comprises mainly pottery, chipped stone, macrolithics and metallic objects. Among these approximately 8000 handmade pottery sherds and 500 wheelmade sherds of Phoenician tradition constitute the bulk. The handmade pottery comprises a range of storage, processing, cooking and serving vessels, featuring open and closed shapes, primarily bowls and jars. A distinctive type of decorated pottery, with comb and wrapped cord incisions (Figure 8A–C), is notable in the later second-millennium BC (KK2) assemblage. Another characteristic second-millennium BC decoration involved the creation of deep, rounded punctures before firing; made from the exterior these punctures never completely perforate the wall (Figure 8D & E) and it is possible that they may also have been functional. A sherd with similar rounded punctures was uncovered in a hearth, radiocarbon dated to the later third to earliest second millennia BC, on the banks of the Moulouya River, approximately 230km south-east of Kach Kouch (Linstädter 2012: 47).

Vessels with flat bases are notably absent from the KK2 assemblage, contrasting with their prevalence in KK3. Wheel-made pottery appears exclusively during the KK3 phase, predominantly in the form of Phoenician amphorae of the western Mediterranean types T-10.1.1.1 (Figure 8F) and T-10.1.2.1 (Figure 8G; Ramon-Torres 2023). Las Chorreras, in southern Iberia, centres the chronology of the T-10.1.1.1 type in the second half of the eighth and first decades of the seventh centuries BC, while T-10.1.2.1 was widely produced and distributed along the southern Iberian coast in the last two thirds of the seventh century BC. The KK3 pottery assemblage also includes two red slipped plates with narrow rims (Figure 8H & I), one with a mild carination. These belong to the western Mediterranean type and, based on their diameter and the width of the rim, date to the late eighth century BC. A red slipped carinated bowl (Figure 8]) probably belongs to Type 17 B2b, using González-Prats's (2014) classification. Jars are also represented by a red slipped Cruz del Negro and a carinated and black painted jar (Figure 8K & L). The latter, Type CdE3 (Docter 1997), has a probable chronology centred in the seventh century BC. The coherence in typological dating, and the absence of definitively sixth-century BC pottery suggests that the abandonment of Kach Kouch happened prior to the outset of the sixth century BC.

The chipped stone, totalling 337 items, comprises debitage and retouched tools, with one piece (0.3%) belonging to the late third millennium BC (KK1), 191 (56.7%) to the late second millennium BC (KK2) and 114 (33.8%) to the first millennium BC (KK3). The remaining 31 pieces (9.2%) lack chronological contexts. Analysis of a selection of 49

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Figure 8. Second-millennium (A–E) and eighth–seventh centuries BC (F–L) pottery from Kach Kouch (figure by P. Menéndez-Molist & H. Benattia).

items from KK2 and KK3 reveals the predominance of high-quality, fine-grained, dark-grey flint, with a single flake of quartzitic sandstone (KK3 phase). Debitage elements are primarily represented by small flakes, some elongated, with blades being less common.

Hamza Benattia et al.

In both main phases, retouched flakes suggest scraping activities (Figure 9E). In the KK2 phase, tools include burins and a long blade with both edges retouched, the latter likely used for cutting (Figure 9C). In contrast, the KK3 assemblage exhibits a greater variety of types, including burins, backed pieces, perforators, a truncation and a sickle element. The



Figure 9. Chipped stone artefacts from Kach Kouch (photographs by L. Lombardi).

truncation (Figure 9D) is similar to another example found in a disturbed layer (Figure 9F) and exhibits a retouched distal end and left side. Two sickle elements were documented, one from the KK3 phase consisting of a large flake (Figure 9A), the second, potentially associated with KK2, being smaller and exhibiting a finer retouch that extends to both ends and the hafted edge (Figure 9B). The paucity of cortical elements suggests that the first stage of manufacture likely took place elsewhere, although the identification of cores, one rejuvenation core tablet and several small debris indicates that subsequent manufacturing phases took place locally. Excluding the sickle elements, the chipped stone assemblage consists of ad hoc artefacts for daily needs associated with domestic activities, likely manufactured by low-skilled knappers.

The macrolithic assemblage comprises 16 whole or fragmentary grinding tools—eight lower (Figure 10A, C & D), five upper (Figure 10B) and three undetermined—manufactured from various raw materials such as conglomerate, quartzitic sandstone and schist. Three items originated from KK2, two from occupation layers associated with Structure 4 and one from a posthole. Four lower grinding stones and three upper grinders originated from KK3 contexts, one uncovered in a pit associated with grape seeds. A rectangular lower grinding stone (Figure 10A), made by knapping and grinding conglomerate, is extraordinarily large (580 × 420 × 130mm); unfortunately it does not have a secure stratigraphic context. Most of these tools were arguably employed in plant processing activities, their presence alongside the evidence of cereal grains and sickle blades further highlighting the importance of agricultural activities at Kach Kouch.

Last but far from least, three metallic objects were recovered from stratigraphic contexts and have been analysed using portable x-ray fluorescence. One is an irregular tin bronze fragment with a 9.4 per cent tin content (Figure 10E), found in a KK2 context radiocarbon dated to 1110–920 BC (95.4% confidence). Tin bronze is a common alloy in the Late Bronze Age of the western Mediterranean, but this item has the distinction of being the earliest radiocarbon dated example known in North Africa, west of Egypt. It is uncertain whether this piece was locally made or imported; intriguingly, its shape may suggest a scrap metal fragment removed after casting in a bivalve mould, but its chemical signature is unusual for pre-Islamic metals in the north-western Maghreb (Montero-Ruiz *et al.* 2012), with the exception of the bronze flat axe discovered at Oued Akrech, near Rabat (Souville 1973: 96). The second fragment, from a KK3 context, is an irregularly shaped item made of almost pure copper with 0.7 per cent arsenic content (Figure 10F), while the third is an iron nail or punch (Figure 10G) that confirms the use of this metal during the KK3 phase. Both of these items were found in the rock-cut fire pit dated to the eighth to seventh centuries BC. To date, no secure evidence of local metallurgy has been identified at Kach Kouch.

Interpreting Kach Kouch in its broader context

The 2021 and 2022 field seasons have significantly enriched our understanding of Kach Kouch, a north-west African settlement exhibiting three distinct phases of activity spanning from c. 2200–600 BC. While the first phase (KK1; 2200–2000 BC) is ephemeral within the limited area of the settlement excavated so far, forthcoming fieldwork may reveal more. After an apparent hiatus, the next phase (KK2; 1300–900 BC) furnishes an abundance of data to

Hamza Benattia et al.



Figure 10. Grinding tools (A-D) and metallic objects (E-G) from Kach Kouch. Results of portable x-ray fluorescence on the metallic objects are shown in the table. MDL = Method Detection Limit (photographs by M. Radi).

prove that by 1300 BC onwards, Kach Kouch was a settlement practising a full farming economy based on animal husbandry and crop cultivation, the latter likely processed and stored on site. The continuity of cultural and economic practices (farming, herding, building and material culture) through to the next phase (KK3; eighth–seventh centuries BC), underscores

the primary role played by local communities in shaping the social, cultural and economic dynamics of the emergent Moroccan Bronze Age and subsequent Early Mauretanian period at this site, and probably much more widely. Yet, new domesticated fruit species, iron objects, wheel-thrown pottery and hybrid building traditions are also introduced in the third phase, indicating that the inhabitants of Kach Kouch were active in the exchange networks developing in the early first millennium BC in the western Mediterranean. Evidence from Kach Kouch therefore decisively challenges the notion that the north-western Maghreb was essentially terra nullius prior to Phoenician arrival, suggesting instead a complex history of negotiations, involving resistance, assimilation and hybridisation of new cultural practices among local North African communities. In this context, the apparently non-violent abandonment of Kach Kouch around 600 BC might be attributed to the disruption of earlier networks following the establishment of additional coastal settlements beyond the timeframe of this article, as well as escalating tensions arising from nascent processes of social, political and economic stratification in and beyond the region. This trajectory continued over subsequent centuries, ultimately leading to the formation of the Mauretanian Kingdom around the fourth to third centuries BC.

Conclusion

Kach Kouch is unlikely to stand alone as a local settlement in its region. While the chronic lack of projects specifically targeting the Bronze Age Maghreb so far prevents more comprehensive assessment of the extent of such second-millennium BC occupation, the existence of Kach Kouch strongly suggests a more complex landscape yet to be discovered. Further research into the third millennium BC, bridging the north-west Maghrebian Final Neolithic identified at Oued Beht with the Bronze Age now emerging at Kach Kouch, is imperative. By publishing the data from this unique site, we aim to stimulate interest and encourage further research on the third and second millennia BC in the Maghreb, a pivotal period long overlooked and underestimated.

Acknowledgements

In loving memory of Joan Sanmartí Grego (1955–2022), who so wisely showed us the importance of North African Late Bronze Age communities. We would like to acknowledge the support of Abdeljalil Bouzouggar and Abdelouahed Ben-Ncer (current and former directors of the INSAP), the Direction National du Patrimoine of Morocco, as well as the regional and local institutions of the provinces of Tétouan and Chefchaouen. We thank the following for support and advice: Louise Martin, Antoine Courcier, José Suárez Padilla, Alessia Brucato, Hassan Koujout and the Baztaoui family; the students who helped with fieldwork, Mouna, Maria, Oulaya, Ismael, Khaoula, Malakout and Pedro; and, finally, the two anonymous reviewers and the editorial team for their comments.

Funding statement

The Kach Kouch Archaeological Project is funded by the INSAP, the Prehistoric Society Research Fund, the Stevan B. Dana Grant of the American Society of Overseas Research,

Hamza Benattia et al.

the Mediterranean Archaeological Trust Grant, the Barakat Trust Early Career Award, the Centre Jacques Berque (MEAE-CNRS) Research Grant, the Institute of Ceutan Studies Research Fund and the University of Castilla La Mancha. Additional support for radiocarbon dating was provided by the CUPRUM Project (MEAE-CJB), the International Association for Mediterranean and Oriental Studies, Rome (ISMEO) and the FRUITCOM Project (CIDEGENT/2019/003, GV).

Online supplementary materials (OSM)

To view supplementary material for this article, please visit https://doi.org/10.15184/aqy. 2025.10 and select the supplementary materials tab.

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