Preliminary report on Qumayrah–Ayn 2, a new prehistoric site in northern Oman

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Abstract: This paper reports briefly on the results of a short reconnaissance at the site of Qumayrah—Ayn 2 (QA 2), a new prehistoric site located in a poorly studied part of the Qumayrah Valley in northern Oman. A survey and limited probing by the Omani–Polish Qumayrah Archaeological Project confirmed the presence of a sediment, approximately 15–20 cm thick, which yielded not just lithics, but also stone installations discovered *in situ*. One of these installations was evidently a hearth, the other a kind of platform. The lithic assemblage is characterized by a prevalence of flake technology with rare blade products. Predominant in the tools group are side-scrapers, notches and perforators produced by direct-scaled retouch. The most characteristic tools are tanged projectile points made on flakes. The main problem is contextualizing these materials. On the grounds of certain premises they may be associated with the Fasad technocomplex, but not necessarily the pre-Neolithic one as is the case of the classic types. However, a much later chronology is also quite possible.

Keywords: Arabian Peninsula, Oman, lithic technology, Qumayrah-Ayn, late Stone Age

A prehistoric site at Qumayrah–Ayn 2 (=QA 2) in northern Oman was tested in the fall of 2016 by the Omani–Polish Qumayrah Archaeological Project directed by Piotr Bieliński (Institute of Archaeology, University of Warsaw) from the Polish Centre of Mediterranean Archaeology University of Warsaw in cooperation with the Ministry of Heritage and Culture of the Sultanate of Oman.

The site was first recorded in 2015 during a short reconnaissance survey of a little known part of the southern Qumayrah Valley (locally known also as Wadi al-Fajj) in the Al-Ayn village area.

A large lithic scatter was noted on the surface. The Project then established that the scatter was not displaced from an eroded prehistoric site situated further to south and surveyed the immediate vicinity to check for the presence of other traces of settlement.

A survey in a radius of about 2.5 km from QA 2 identified 15 settling points, including ones from prehistoric times. It thus appears that this poorly studied area of the Qumayrah Valley was explored intensively during the late Stone Age. The new information coming from this area is of particular significance considering the

continuous disproportion between the state of research of the coastal areas and inland territories (Cleuziou and Tosi 2007; Magee 2014).

SITE DESCRIPTION

The site of QA 2 is the first prehistoric settlement discovered in Qumayrah Valley. No traces of Stone Age occupation had been reported by the previous two surveys of the area (Costa 2006; Hélène David-Cluny, personal communication). The site is located on the left bank of a wadi, on a flat terrace approximately 90 m by 110 m [Fig. 1], judged by the distribution of material remains on the surface. A hill slope limits it on the north, whereas the southern end is cut by the modern asphalt road to Al-Ayn and Qumayrah, which actually separates the site from an Umm

al-Nar cemetery (QA 1) located further to the south (see Rutkowski 2017, in this volume). The surviving part of the site is in good condition. The lithic scatter on the surface is spread over the entire terrace, but the largest clusters were noted in the central and southern parts [Fig. 2]. A similar lithic assemblage was recorded on the surface among the Umm al-Nar tombs at QA 1, suggesting a much larger extent of the site. A working assumption for the present is that the cemetery on the opposite side of the modern road overlies part of the prehistoric site.

TESTING QA 2

Two probes were dug to determine whether the lithic scatter was accidental or not. The site was thus tested for the presence of sediments and the stratigraphy was



Fig. 1. Location of prehistoric site QA 2 in the Qumayrah Valley (PCMA Qumayrah Project/Ł. Rutkowski)

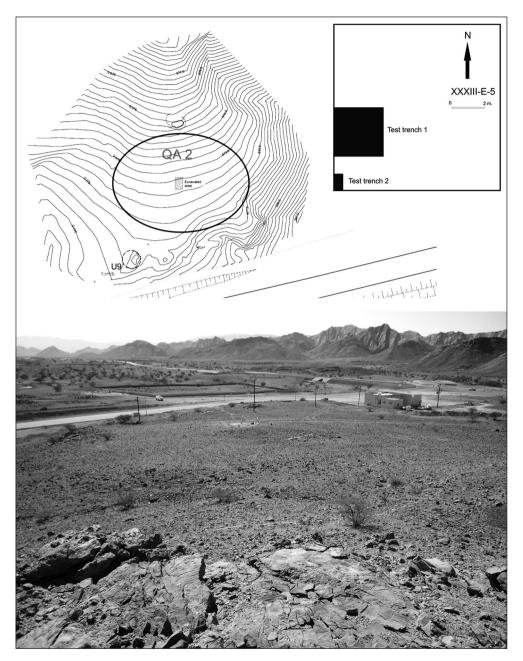
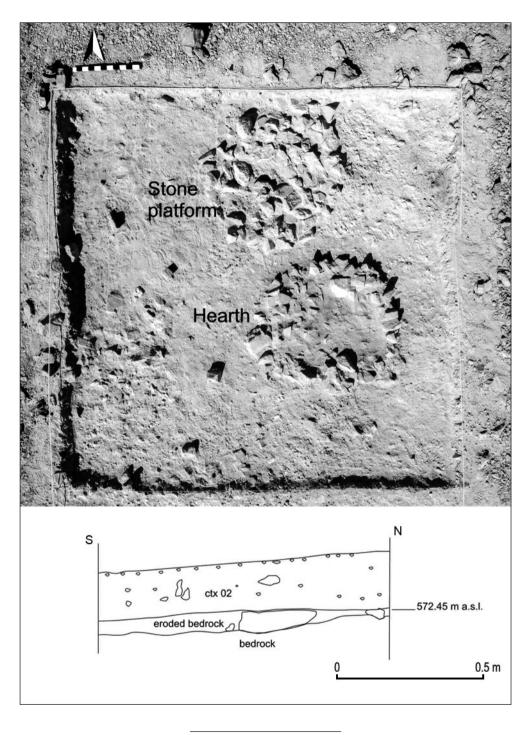


Fig. 2. The site QA 2: top, schematic range of settlement and location of the excavated area; inset, square XXXIII-E-5 with location of test trenches 1 and 2; bottom, general view of the site (PCMA Qumayrah Project/photo M. Białowarczuk; plan M. Antos)



established. A detailed spatial analysis of lithic distribution indicated a higher density of the clustering in the central part of the site, which was also the flattest part of the terrace. This situation promised the undisturbed character of sediment accumulation in this spot.

The southwestern corner of square XXXIII-E-5 was investigated with two probes [Fig. 2 inset]. Test trench 1 was 3 m by 3 m and was explored by arbitrary levels more or less 5 cm thick. The presence of a sediment 15–20 cm thick was confirmed. It encompassed lithics as well as stone installations. A detailed planigraphy of the lithic scatter was made. Lithics in the explored levels contained mostly waste debitage and blank flakes, although the number of retouched flakes and various tools was also substantial. The uniform distribution of the lithics indicated regular occupation. They were concentrated around two stone structures discovered in situ [Fig. 3 top]; no workshop areas were noted however.

The two installations were circular, approximately 1 m in diameter, placed on bedrock. One was definitely a hearth: semi-subterranean, surrounded by stones and with a rich layer of ash on the bottom. The other, located directly next to the first one, may have been a kind of circular platform. It was of a similar size, but constructed of a single layer of pebbles without any traces of fire.

Test trench 2 was a small but deep probe, 1.00 m by 0.50 m, dug to test the stratigraphy. It reached slightly below bedrock and confirmed the existence of a single layer of sediment accumulated directly on the limestone bedrock [Fig. 3 bottom].

LITHIC ASSEMBLAGE

The analyzed lithic assemblage contained 440 artifacts including 342 from the excavation and 97 from the surface collection [Table 1]. All the artifacts seem to be made of raw materials from local sources, with a variety of radiolarites in predominance, as well as yellow and reddish flints easily available in the near vicinity of the site. The diversity of raw materials as well as the forms of the tested nodules and cores indicate use of nodules collected from the surface rather than extracted from an outcrop.

The lithic assemblage from QA 2 is characterized by a domination of flake technology with rare blade products. Flake

Table 1. Basic structure of the QA 2 lithic assemblage

Quantity				
	Surface collection 2015-2016	Probes 2016		
Cores	24	28		
Flake blanks	7	101		
Retouched flakes	3	29		
Blade blanks	2	32		
Retouched tools	61	55		
Waste debitage	0	97		
Total	97	342		

▼ Fig. 3. Probes: top, ortophoto plan of test trench 1 with two stone installations in situ; bottom, west section of test trench 2 (PCMA Qumayrah Project/photo A. Oleksiak; drawing M. Białowarczuk, digitizing A. Szymczak)

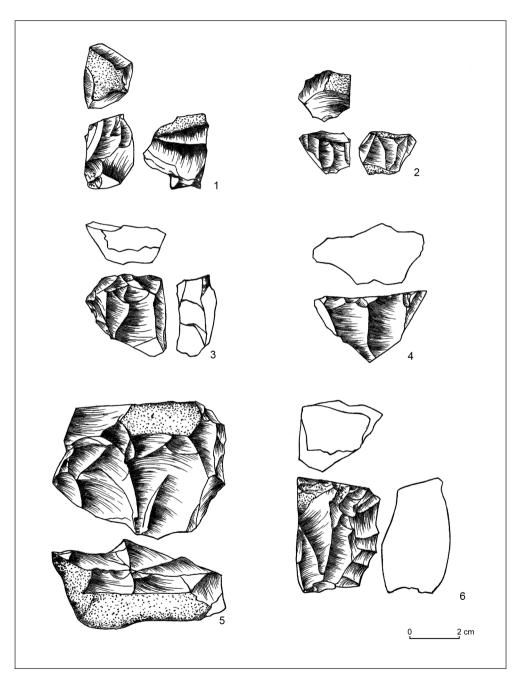


Fig. 4. Cores (PCMA Qumayrah Project/drawing M. Białowarczuk)

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blanks were struck mostly from singleplatform cores [Fig. 4:5] or sometimes from unpatterned changed-orientation cores [Fig. 4:1]. Use of unprepared tabular cores is also common. In this case selected slab fragments were exploited directly from naturally flat surfaces used as a striking platform. Three kinds of flakes are distinctive: oval non cortical, fanshaped non cortical and massive crescent cortical. All of them are characterized by wide butts, usually flat or dihedral, and prominent bulbs which are indicative of a direct hard-hammer technique.

Standarized blade blanks are rare and came from prepared conical, single-platform cores [Fig. 4:2-4], some with crested backs [Fig. 4:6]. These blades are regular and have small bulbs as well as linear or punctiform butts [Fig. 6:1-3, 5, 10]. They are also narrow, have parallel

Table 2. Basic typology of retouched tools identified in the QA 2 lithic assemblage

	Quantity		
	Surface collection 2015-2016	Probes 2016	
End-scrapers	9	11	
Side scrapers	13	6	
Notches	12	5	
Burins	1	2	
Backed blades	0	3	
Retouched blades	8	11	
Perforators	6	8	
Combined tools	5	0	
Points	2	3	
Splintered pieces	5	6	
Total	61	55	

and straight sides. Most of them have a sectioned distal extremity.

The most common blade products present unstandarized forms [Fig. 6:4, 6-9]. They have various sizes, less regular shape and flat butts. Some of them also have a sectioned distal extremity. It is also possible that the most irregular ones are indeed para-blade blanks, struck accidentally rather than in effect of preplanned organized debitage.

The tools typology is diversified [*Table 2*]. A preliminary typological list of retouched tools lists the following types:



Fig. 5. Side scraper made on a massive rock fragment (PCMA Qumayrah Project/photo A. Oleksiak)

- 1. End-scrapers [Fig. 6:11–13]
 A common and diversified type of tool, made mostly on various flakes where one abrupt edge could easily be adapted as an end-scraper front, which can be straight, arched or diagonal. Some also with retouch on the ventral face.
- Side scrapers
 Numerous tool types, usually made on massive flakes with one naturally semi-abrupt or low angle edge, which was slightly retouched only by direct short-scaled or margin retouch, total on one longer edge [Fig. 5]. Delineation of

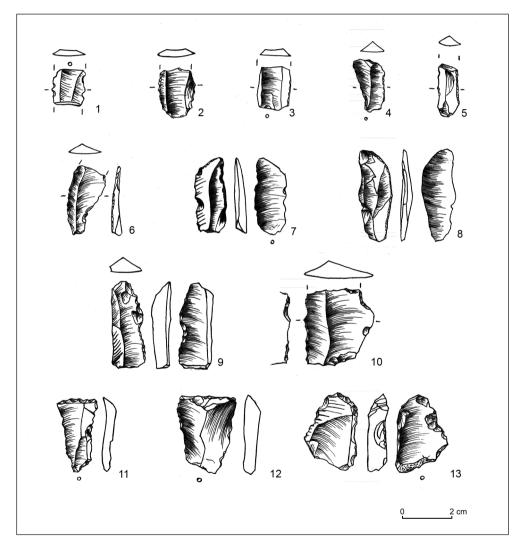


Fig. 6. Various lithics: 1–10 – retouched blades, 11–13 – end-scrapers (PCMA Qumayrah Project/drawing M. Białowarczuk)

the edge is usually convex, but it can be rectilinear, too. A single example with bifacially retouched edge was identified as well.

Fig. 7. Combined tool – side scraper and burin (PCMA Qumayrah Project/photo A. Oleksiak)



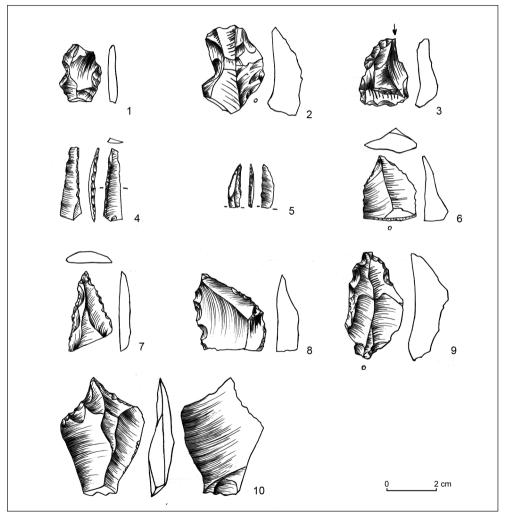


Fig. 8. Various lithics: 1-2 – notches, 3 – burin, 4 – backed blade, 5-10 – perforators (PCMA Qumayrah Project/drawing M. Białowarczuk)

3. Notches

Another numerous and varied tool type in the QA 2 lithic assemblage. Mostly on flakes with single shallow notch retouched directly [Fig. 8:1–2].

4. Burins [*Fig. 8:3*]

Very rare type of tool with two subtypes: single blow burin and dihedral angle burin. All the identified tools were made on flakes.

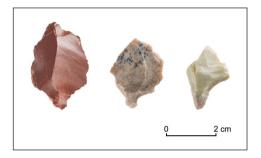


Fig. 9. Tanged points (PCMA Qumayrah Project/photo A. Oleksiak)

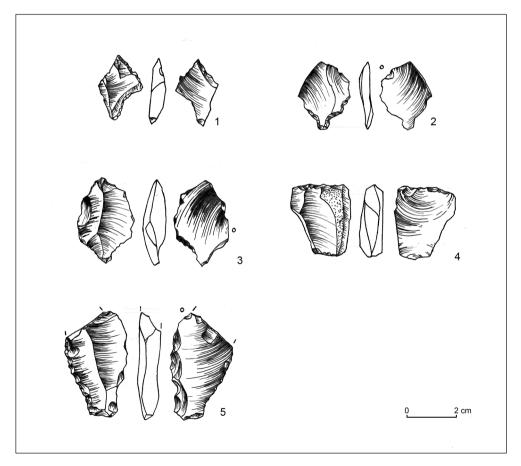


Fig. 10. Various lithics: 1-3 – tanged points, 4 – splintered piece, 5 – probably unfinished point (PCMA Qumayrah Project/drawing M. Białowarczuk)

- 5. Backed blades [*Fig. 8:4*] Only three examples of fragmentarily preserved pieces were identified.
- Retouched blades
 Rare type of tool made on blades with pointed tips. It has a typically low-angle direct margin retouch along one larger edge [Figs 6:1–10].
- Two kinds of perforators can be distinguished: small forms on blades or bladelets with narrow sting retouched by direct partial retouch on both edges

by direct partial retouch on both edges [Fig. 8:5], and bigger forms, made on flakes, with a characteristic triangular wide sting retouched by direct retouch along both edges [Fig. 8:6–10].

8. Combined tools

7. Perforators

Tools with dual function are not numerous in the QA 2 lithic industry, but noted nevertheless. The most common combination are side scraper and burin [Fig. 7] or side scraper and perforator.

9. Points

Projectile points are the most typical, usually made on short and wide blanks, giving the points a robust appearance. The tang is generally short and fashioned simply by direct or inverse retouch. The distal extremity of these points is naturally sharp and not retouched, although some are sometimes reworked by intentional breaking of an edge or a series of short marginal retouches [Figs 9, 10:1–3,5].

6. Splintered pieces [Fig. 10:4]
Rare. They were made on small nodules or massive flakes and rock fragments.
Their purpose in this industry is not clear. Some examples have an intentionally retouched one pole forming a slightly concave notch.

CONTEXTUALIZING THE MATERIAL

It is too early with the limited data available to associate the material from QA 2 with any of the known lithic assemblages from prehistoric Oman. Similar tool types are known from various sites of the Arabian Neolithic. Certain characteristic features of the QA 2 lithic assemblage show some links with the Fasad lithic technocomplex connected with the early Holocene hunters prior to the development of the Arabian Neolithic (Charpentier 1996; 2008; Charpentier and Crassard 2013). The technocomplex is characterized by a variety of projectile points with pointed distal extremity and a tang clearly shaped by retouching. The so-called Fasad points have been discovered in Oman and the United Arab Emirates for decades. Owing to their large territorial spread they represent a high variability of shape and blank-production methods (Charpentier and Crassard 2013: 28).

The points from QA 2 remain in the Al-Haddah tradition of "Type 3" points in the Fasad point taxonomy proposed by Vincent Charpentier and Remy Crassard (2013: 32-34). This type of point is made on a short, thick flake that is usually irregular in shape. A natural pointed or cutting (transverse) edge is used as the distal part. The tang is made by all types of retouch. This type presents a high variability of final shapes. The points found in the test trench in QA 2 reveal the closest similarity to Fasad points known from the site of Ra's al-Jinz (RJ-37) (Charpentier 1991) and Al-Haddah (BJD-1) (Charpentier, Cremashi, and Demnard 1997). Of greatest significance is that one of them [see Fig. 10:5] is nearly of the same shape and size as some of the

points found on sites in the Ja'alan region of northeast Oman (see Charpentier and Crassard 2013: Fig. 5:10). On the other hand, there are also points with completely different features. The most significant are shorter tangs with less pronounced retouch. Some of QA 2 arrowheads could thus be much later, despite similar ubiquitous technological simplicity. Such examples are known from Hadramawt (Crassard 2008: Fig. 152) and along the Wahiba coasts (Charpentier et al. 2012: Fig. 2/5).

Other lithics beside the said points from QA 2 also reveal multicultural connections, starting from the Fasad technocomplex to the end of the Neolithic and beyond. The domination of side-scrapers, notches, and perforators produced by direct-scaled retouch is significant for the Fasad industry (Charpentier 2008: 61–63). Additionally, the lithic assemblage from QA 2 is represented by different perforators, including micro-lithic ones [Fig. 8:5–10]. All of them are close parallels to RJ-37 (see Charpentier 1991: Fig. 5:3-10 and Charpentier, Cremashi, and Demnard 1997: Fig. 3:9). However, parallel types of tools exist in the Late Neolithic or even Early Bronze Age industries. Some perforators and side scrapers for example present close similarities to those known from Neolithic Khor al Hajar and Ra's al-Hadd 1 dated to Umm an-Nar (Charpentier 2001: Figs 2 and 8:3–4).

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CONCLUSION

A short exploration season and no radiocarbon dates as yet do not permit an unambiguous contextualization of the site and its material: possibilities start with the Fasad facie and run through the end of the Neolithic and even the Early Bronze Age.

The reconnaissance nature of the fieldwork at QA 2 necessitates the working character of the hypotheses presented here to be verified in the coming seasons. The survey that was carried out within a radius of about 2.5 km from the site resulted in the discovery of 15 other settling points. At least six of these could be referred to the Stone Age indicating intensive exploration of the Omani interior in prehistoric times. Because of its location and spliced as it is between the well recognized Ja'alan region and UAE territory, the site of QA 2 as well as the whole Qumayrah valley has a good chance of becoming an important link for understanding the spread of late Stone Age occupation in northern Oman.

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