

# IC-NACHRICHTEN

Nr. 98

2016



 **IC**  
INSTITUTUM CANARIUM

 **ICDIGITAL**

Separata ICN98-5



Eine PDF-Serie des Institutum Canarium  
herausgegeben von  
Hans-Joachim Ulbrich

Technische Hinweise für den Leser:

Dieses Separatum ist ein Ausschnitt aus den seit 2013 online angebotenen IC-Nachrichten, dem Informationsbulletin des Institutum Canarium (IC). Englischsprachige Keywords wurden nachträglich ergänzt. PDF-Dokumente des IC lassen sich mit dem kostenlosen Adobe Acrobat Reader (Version 7.0 oder höher) oder mit jeder anderen aktuellen PDF-Lese-Software öffnen.

Für den Inhalt der Aufsätze sind allein die Autoren verantwortlich.  
Dunkelrot gefärbter Text kennzeichnet spätere Einfügungen der Redaktion.

Alle Vervielfältigungs- und Medien-Rechte dieses Beitrags liegen beim Autor und beim  
Institutum Canarium  
Hauslabgasse 31/6  
A-1050 Wien

IC-Separata werden für den privaten bzw. wissenschaftlichen Bereich kostenlos zur Verfügung gestellt. Digitale oder gedruckte Kopien von diesen PDFs herzustellen und gegen Gebühr zu verbreiten, ist jedoch strengstens untersagt und bedeutet eine schwerwiegende Verletzung der Urheberrechte.

Weitere Informationen und Kontaktmöglichkeiten:

[institutum-canarium.org](http://institutum-canarium.org)  
[almogaren.org](http://almogaren.org)

Abbildung Titelseite: Original-Umschlag der Online-Publikation.

# Inhaltsverzeichnis

(der kompletten Online-Publikation)

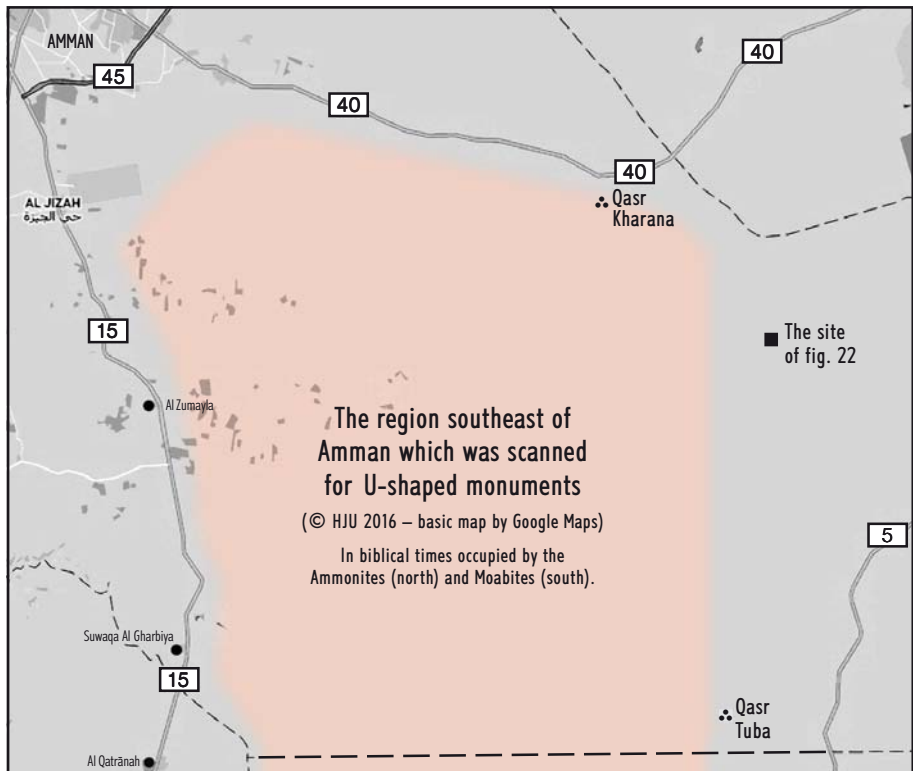
Impressum .....	4
IC-Intern .....	5
Noticias Canarias .....	10
Eingegangene Publikationen .....	17
Buchbesprechung .....	18
Veranstaltungen .....	20
Beiträge:	
Hans-Joachim Ulbrich:	
Tegala-Stationen – ein Warnsystem der Ureinwohner von Lanzarote .....	21
Mark Milburn:	
Prehistoric rock carvings and their fading in several continents .....	29
Alain Rodrigue:	
«Type Metgourine», à nouveau: une nomenclature à abandonner? .....	33
Susan Searight-Martinet:	
The battle of the axes? .....	37
● <b>Hans-Joachim Ulbrich:</b>	
<b>U-shaped monuments in the badlands of northern Jordan</b> .....	39
Hans-Joachim Ulbrich:	
A giant new geoglyph in Botswana .....	55
Im Fokus 2016: Die Spirale in der Kultur der kanarischen Ostinseln (Abbildungen auf den Umschlagseiten).	

**Zitieren Sie bitte diesen Aufsatz folgendermaßen / Please cite this article as follows:**

Ulbrich, Hans-Joachim (2016): U-shaped monuments in the badlands of northern Jordan.- IC-Nachrichten 98 (Institutum Canarium), Wien, 39-54, map on p. 38 [PDF]

**Keywords:** Mediterranean, Jordan, Syria, Ukraine, ancient stone works, U-shaped monuments, wheel-shaped monuments, geoglyphs, walls, pseudo-roads, enclosures, cairns, fertility cult, reincarnation, ancient ramparts, sun cult.

P. 38:



Hans-Joachim Ulbrich

**U-shaped monuments in the badlands of northern Jordan**

Deserts and badlands are not always as devoid of humans as one would expect. A good example is the *Bilad ash Shayton*, the Black Desert in the northeast of Jordan, where already around 1920 military pilots sighted archaeological structures (Kennedy 2012). Researchers focussed *inter alia* on the so-called "wheels" of which two were dated to 8.500 BP (Rollefson et al. 2016). Fig.1 shows sketches of wheels which were found near the Azraq Oasis; others were discovered in the Wadi Wisad. In fact the entire string out of southern Syria, eastern Jordan, Saudi Arabia, Yemen, Ethiopia and Kenya comprises these strange buildings. Examples from Syria shows fig. 2. The Black Desert monuments have close relations to other stone works in Jordan including the U-shaped monuments.

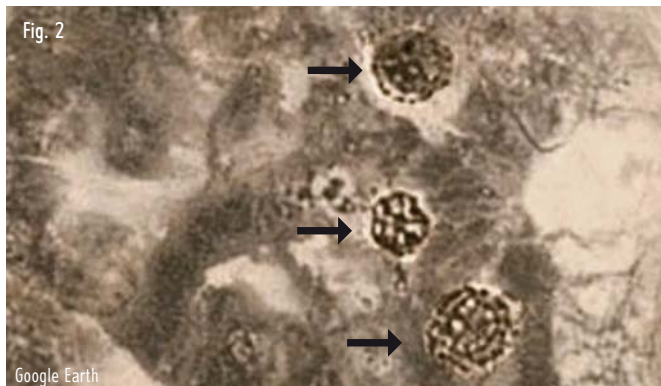
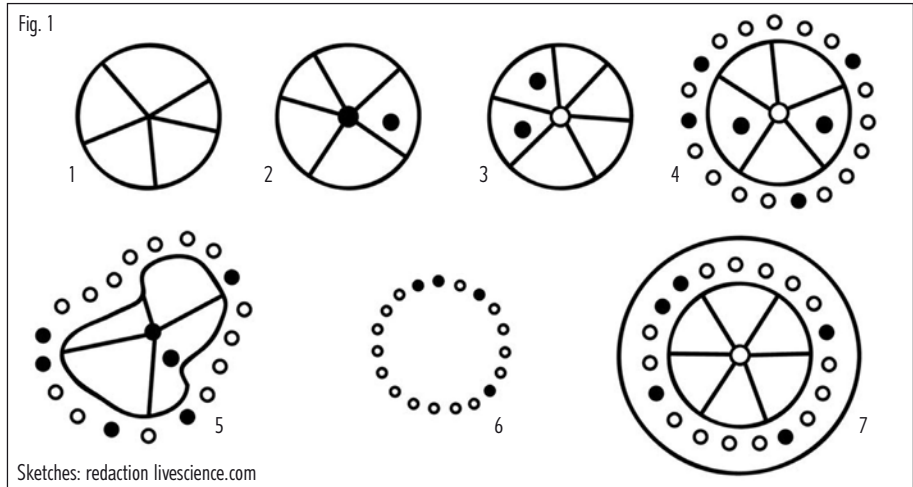


Fig.1 - Groundplans of wheel-shaped geoglyphs from the Azraq region, Jordan. Compare the first one with fig.7.

Fig. 2 - Three wheel-shaped monuments (GE 37SCS5814353078) from southern Syria.

Another aspect is the occupation of the badlands by Bedouins and the reign of the Umayyad caliphate whose aristocracy built several "desert palaces". One of these – near the region which we discuss here – is the Qaṣr aṭ-Ṭūbah (Qasr Tuba/fig.3); unfortunately it is not preserved as well as other *qasrs* in Jordan.



Fig. 3 - Solitarily located in the desert: the uncompleted clay brick buildings and ruins respectively of Qasr Tuba in the Wādī al-Ghadaf, built 743 during the Caliph Walid II era (photo: apaame.org).

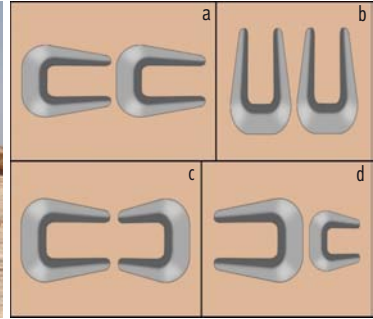
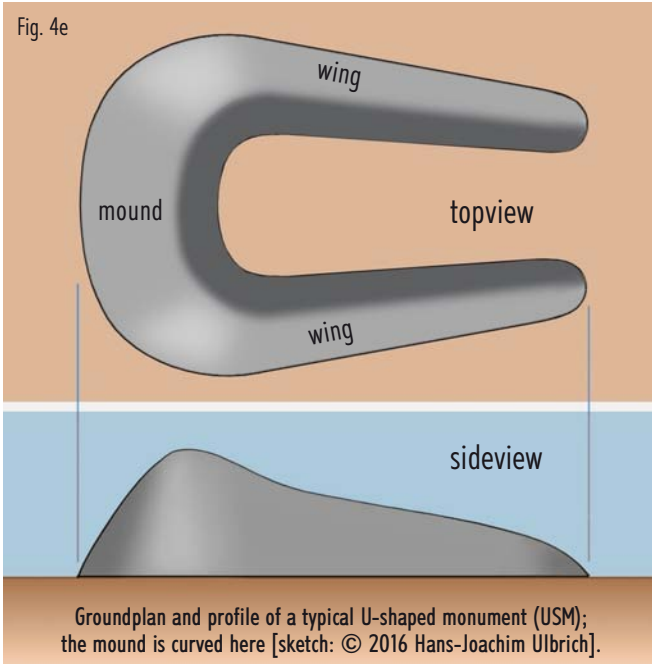


Fig. 4 a/b/c/d - U-shaped monuments – here with longish mound – are often positioned in rows or opposite one another (sketch: H.-J. Ulbrich 2016).

U-shaped monuments (USMs) can be found everywhere; in the Mediterranean periphery from the Canary Islands and the Sahara to the Near East and the hinterland of the Black Sea. USM means here not an U-shaped arrangement of buildings but a single entity. A common form shows fig. 4e; derived thereof are hundreds of variations, combinations and fusions. So the wings can widen to the outside (C), run parallel (C) or widen to the interior (C). Closely related are the similar "horseshoe" (O), "headphone" (O), "keyhole" (C), "sickle" (C) and "diapason" (C) monuments which all can be found in Jordan too. The small mounds may have a longish, angular, oval or round form. Possible are also mergers: oval double-USMs (OO) and double-USMs strung parallel (OOO).

To limit the region of research mainly the southern part of the Amman Governorate – east of Highway 15 (the "Desert Highway") and west of a line running through the Qasr Tuba – was scanned for USMs (map p.38). This means that the finds were made in more or less flat or unspectacular hilly terrain, with broadly running *wadis* which are not always perceptible as valleys. The scarce vegetation – only used by herdsmen – adjusts to the desert- or steppe-typic conditions of the former Ammonite and Moabite land. Some field-like, abandoned looking structures amidst the wilderness – today also in the neighbourhood of modern agricultural facilities – do not imply that they once were used farmerly (fig. 14).

Roughly there are tens of thousands of USMs on the territory of the Jordan kingdom. That USMs, usually consisting of stones or small debris (sometimes baked



with soil or sand), are definitely not the result of the expensive application of bulldozers yields in the technical execution of the USMs, their geographic position, their time of emergence, their big physical occurrence, their amalgamation with other USM versions and their ambience regarding datable adjacent monuments. No farmer and no public authority can allow that the driver

of a bulldozer creates useless figures in the landscape during a payed job. Furthermore many special forms of USMs do not match the modern thinking of bulldozer drivers and contractees alike. A prove for that are USMs in USMs (☞), round conic mounds (☞) and countless long alignments of USMs (figs. 4 a/b, 5, 7, 8, 11, 14, 18, 19, 21 and GE 37RBR3412428833) which f.i. can be found also in the northern Black Sea region (fig. 6) – to refer to a European site.

The mentioned wheel-shaped monuments of the Black Desert are rare in the region examined here. Nevertheless there is a giant "wheel" in the south of the Amman province with a max. diameter of ca. 140 metres (fig.7); a closer look reveals that the "spokes" ("rays" of a sun symbol would be better) and the outer ring consist partly of small lined-up USMs. A local equivalent to the wheels may therefore be the circles formed exclusively out of USMs (figs. 8/9).

The frequentness of USMs is quite different in Jordan: One can find in some regions only 1-3 monuments per km<sup>2</sup> while in others there exist places where over hundred of USMs are located close together (figs. 10, 14). This could be the result of sufficiently available stone material, enough population density (workforce) and the engagement of the local clan/tribe and its priesthood.

We can describe physically the U-shaped monuments, but regarding their purpose and aim we know nearly nothing. Their construction is surely not a



Fig.6 - Row of USMs in southern Ukraine.

Fig.5 - U-shaped monuments of different size and execution lined-up across valleys and hills (GE there can be found numerous additional rows. Considerably longer and more straight rows made-aim at a potentiated power of prayers. So many ancient geoglyphs are nothing else than worshipping





37RBR4353800907). The arrows point to such rows. On neighbouring hills – beyond this cutout – a group of USMs are situated in the province of Zarqa (Jordan). Manifold sacred signs in the landscape including tellurian Gods and superior beings in the sky via stone monuments and geometric structures.



Fig. 7 - A big wheel-shaped monument in the USM-region (GE 37RBQ4292670089). The lines cross *wadis* and hills likewise. Its diameter is max. 140 m. Parts are made up of USM rows.



Fig. 8 - USMs arranged as circle (GE 37RBQ2358740705 / Kerak Province). Their mounds form the outer ring of the construction ( $\varnothing$  20 m). The center seems to comprise a betyl. It is technically impossible that this is the work of a bulldozer. See also fig. 9. Large scale modern mining is threatening and eliminating here highly interesting protohistoric and prehistoric evidence.

matter of mundane bread-and-butter measures. There is a vague hint that a fertility cult plays a role: USMs can be found together with longish structures which enclose a straight trench or wall (fig. 9, 12 a/b). One is drawn to the conclusion that the USM (and also a circle like the wheel) is a female monument – as in



Fig. 9 - This circle comprises like the one in fig. 8 an outer ring formed by the mounds of USMs (GE 37RBQ2624763755). But in the center there are two deepenings moulding a cross. The upper penis-like structure is 50 m long (see also figs. 12 a/b).



Fig. 10 - Over 100 small USMs at one place (GE 37RBQ1833097007); at the border of the field some bigger USMs with more special forms (like type USM007). Read also legend for fig. 5.

fig.14 – and that the long structure is a masculine one (like fig.13). Some wheel monuments may have a burial function (Gary Rollefson in Jarus 2015) what could point to a reincarnation belief if the wheels have a female connotation.

A fertility cult would fit to the kind of prehistoric population of the region: hunters and herdsmen who were interested in the abundance of wild animals



Fig. 11 - Around thirty small USMs combined with three bigger USMs in a rampart-like wall (GE 37RBQ2719191706); 220 m long.

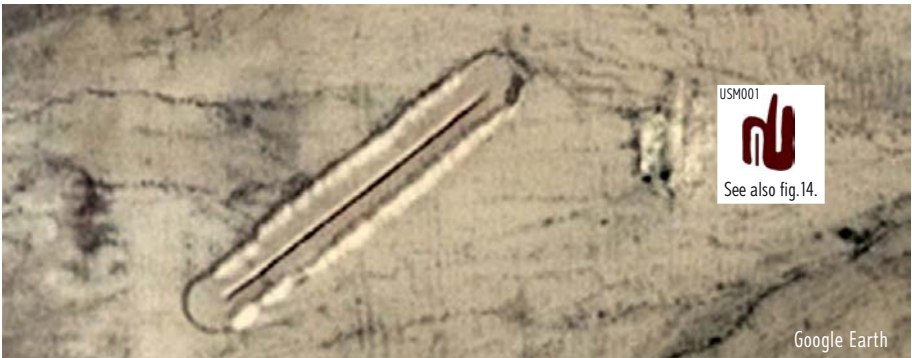


Fig. 12a - A longish monument – perhaps a penis abstraction emphasizing the corpus cavernosum [the trench line is in several other cases outside this region a wall] – with two more or less damaged USMs. About 100 m long (GE 37RBQ3584188944).

Fig. 12b - Another long monument – with apparently no practical purpose [the trench cannot collect water] – with two USMs. Around 140 m long (GE 37RBQ3391179797). See also fig. 9.

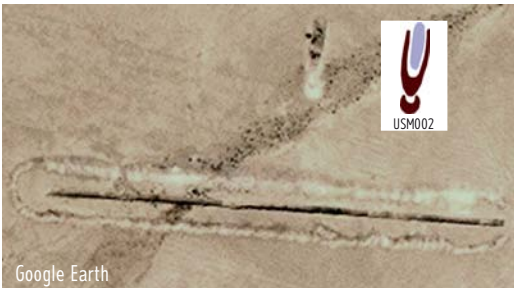


Fig. 13 - A relatively clear penis geoglyph from southern Syria; ca. 20 m long.

and the permanence of vegetation for their sheep and goats. The domestication of the latter started around 10.000 BP in Iran, partly in the Jordan region too.

The bandwidth of USM versions is amazing (p. 48-53). All parts – mound and wings – can adopt highly different forms. Frequent are combinations of USMs which may be distinct in size and form; but docking to totally different structures is also widespread. There was obviously a liberal attitude regarding which monuments and which execution of these is pleasing to God(s). We can also suppose a kind of competition among the tribes. Nevertheless there was a guiding thread which connected the elements of this culture: the Nazca-like geometric patterns ("streets", lines, "saw blades", rectangles, platforms etc), the round or oblong ramparts, the accumulation of surface material (cairns and fields of them, tumuli), the "wheels", circles and other concentric builds, the artificial meanders, the repetition and alignment concentrating at one place, the linking of different monuments and – as one of the main characteristics – the U-shaped monuments which can be found in practically every altitudinal zone.

RAF Flight Lt. Percy Maitland was informed by local Bedouins (Maitland 1927) that the ancient monuments of the Black Desert were the "works of the old men" what probably should mean that both were older than local traditions could define, i.e. older than the Middle Ages. We cannot exclude that single USMs and related monuments were built until Late Antiquity, dependant of the longevity of local cults, but the origins lie probably in the advanced Neolithic and parts continued until the Bronze Age, although this is speculative at the moment. How could exist enough manpower to construct all the monuments and ritual avenues (one 88 km long!) in Jordan? Who had the technical skill and the tools? Who cared for the daily living? The changing dry/humid periods complicate an estimate. Anyway the increasing aridification of the eastern deserts in Jordan lets doubt that there could have been a population in Late Antiquity or early Middle Ages which was able to erect this mass of religious structures; their original inventors are surely far older.

One perception about these creators is irrevocably certain: They loved geometric forms of all kind. Who were the Gods who were believed to estimate such monuments too in this striking variety and number?

**Literature** (choice / starting on p. 54):

For the topic of this article, the U-shaped monuments in the Amman province, there exists – as far as I know – no special literature; if there is one I kindly ask the colleagues to give me a hint (hjulbrich@institutum-canarium.org). So the citations offered here regard only the prehistoric settlement of the Black Desert and its stone works, including the wheel-shaped monuments. The "U-shaped stone alignments" (Rowan et al. 2011) – I suppose – are no USMs.




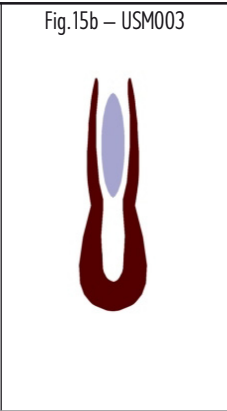

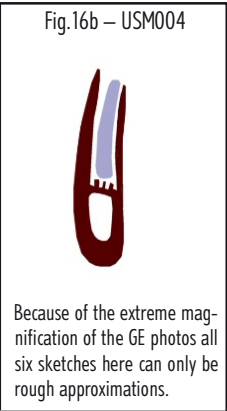








Fig. 14 - An area with over 140 U-shaped monuments (GE 37RBQ3338692373). Together with a small slot other prehistoric monuments in Jordan – marked with white colour (limestone/chalk ?) which appear geoglyphs with "roads" and non-agricultural fields comprising small deepenings. In the center (arrow) the point or tip marking. At the bottom of the picture there is one of the countless pre-Islamic ramparts/enclosures because often small USMs are integrated in their interior or – like here – in their walls. Other enclosures

Google Earth (horizontal width = 1,1 km)



The USMs here are open to southern directions, opposite the sun.

ated trench in the middle they could easily be interpreted as vulva. The wings of the USMs are – like many  
tly has been exploited at the same place. The USMs were constructed over an older layer of geometric  
ere is a small round and probably conic accumulation without wings; it seems to have an artificial center  
sures of the region. Their purpose seems not to be a shelter for herds because many have no entrance and  
s are used or re-used respectively to save water – regardless whether constructed in our or ancient times.

<p>Fig.15a – USM003</p> 	<p>Fig.15b – USM003</p> 	<p>Fig.16a – USM004</p> 	<p>Fig.16b – USM004</p>  <p>Because of the extreme magnification of the GE photos all six sketches here can only be rough approximations.</p>
<p>GE 37RBQ1998296642</p>		<p>GE 37RBQ2105195826</p>	
<p>Fig.17a – USM005</p> 	<p>Fig.17b – USM005</p> 	<p>Fig.18a – USM006</p> 	<p>Fig.18b – USM006</p> 
<p>GE 37RBR2974700587</p>		<p>GE 37RBR2518305838</p>	
<p>Fig.19a – USM007</p> 	<p>Fig.19b – USM007</p> 	<p>Fig. 20a – USM008</p> 	<p>Fig. 20b – USM008</p>  <p>The "rays" are probably small simplified USMs which are docked to the big main USM.</p>
<p>GE 37RBQ3338692373</p>		<p>GE 37RBR3692312611</p>	

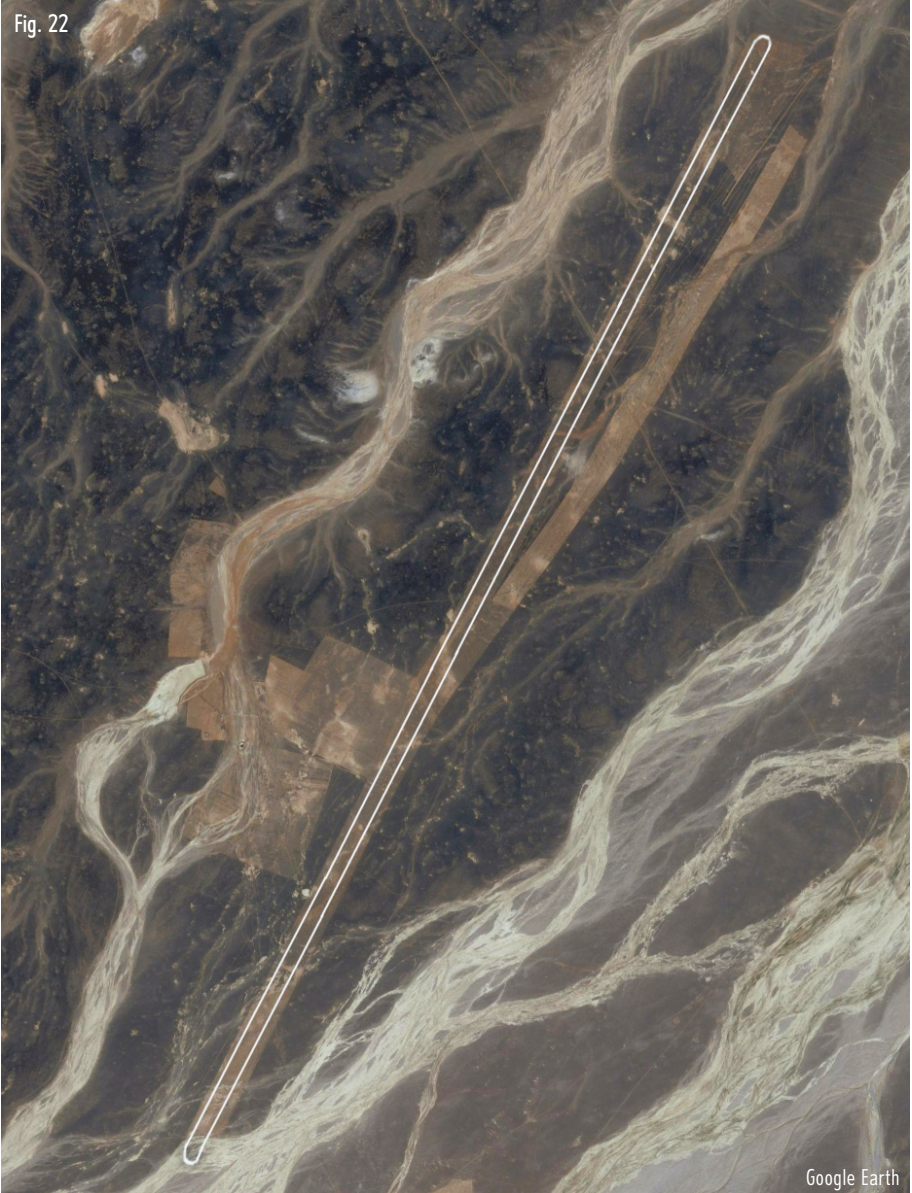
■ brown = USM or other accumulation – ■ blue = superficial deepening





Fig. 21 - In total solitude (10 km straight-line distance to the next modern settlement); U-shaped monuments in various combinations (GE 37RBR4309628768). One can see also some Nazca-like curves – which at first sight look like car tracks (two or three parallel traces) – and several pseudo-pistes. But they start and stop in the nowhere and run over hedge and ditch.

Fig. 22



Figs. 22, 23, 24 - Nazca is greeting! This double-USM (GE 37RBR7599202208) whose two sickles are connected by an over 6 km long double-line (emphasized by the author in fig. 22) is beyond imagination. How could the creators keep the lines straight for this long distance? Fig. 23 shows the upper or northeastern end; fig. 24 shows the lower or southwestern end. The USMs and lines are elevated what brings to mind that the whole structure is not a race course.



- Akkermans, Peter M.M.G. (2016): Jabal Qurma Archaeological Landscape Project.- *American Journal of Archaeology* 120/4, 633-634
- Akkermans, Peter M.M.G.; Huigens, H.O; Bruning, M.L. (2014): A landscape of preservation: Late prehistoric settlement and sequence in the Jebel Qurma region, North-Eastern Jordan.- *Levant* 46/2 (Council for British Research in the Levant), 186-205
- Betts, Alison V.G. (1984): Black Desert Survey, Jordan: second preliminary report.- *Levant* 16/1 (Council for British Research in the Levant), 25-34 [online since 2013 > tandfonline.com]
- Betts, Alison V.G. (1985): Black Desert Survey, Jordan: third preliminary report.- *Levant* 17/1 (Council for British Research in the Levant), 29-52 [online since 2013 > tandfonline.com]
- Betts, Alison V.G. (1991): The late epipaleolithic in the Black Desert, eastern Jordan.- in Bar-Yosef, Ofer; Valla, François R.: *The Natufian culture in the Levant.- International Monographs in Prehistory*, Ann Arbor (Michigan), 217-234
- Brusgaard, Nathalie Ø. (2015): Pastoralist rock art in the Black Desert of Jordan.- XIX International Rock Art Conference IFRAO 2015 = *Arkeos* 37, Tomar, 761-767
- Helms, S.W. (1981): *Jawa - Lost city of the Black Desert.- Cornell University Press*, Ithaca (USA), 270 p.
- Hill, Austin; Rowan, Yorke (2016): Archaeology & drones: mapping neolithic structures in the Black Desert, Jordan.- [experiment.com/projects/archaeology-drones-mapping-neolithic-structures-in-the-black-desert-jordan](http://experiment.com/projects/archaeology-drones-mapping-neolithic-structures-in-the-black-desert-jordan) [visited Nov. 2016]
- Huigens, H.O. (2015): Ways of life and death in a pastoralist landscape: an archaeology of nomadism in Jordan's Black Desert between Hellenistic and Early Islamic times.- *Tijdschrift voor Mediterrane Archeologie* 53, p. 54
- Jarus, Owen (2011): Visible only from above. Mystifying 'Nazca Lines' discovered in Mideast.- [livescience.com](http://livescience.com) September 14, 2011 [visited Nov. 2016]
- Jarus, Owen (2015): Huge geometric shapes in Middle East may be prehistoric.- [livescience.com](http://livescience.com) December 1, 2015 [visited Nov. 2016]
- Kennedy, David L. (2012): Pioneers above Jordan: revealing a prehistoric landscape.- *Antiquity* 86/332 June 2012 (Cambridge Univ.), 474-491
- Maitland, Percy (1927): The "Works of the Old Men" in Arabia.- *Antiquity* 1/2 (Durham University / UK), 197-203
- Rawashdeh, Saeb (2015): Anthropologist unearths Neolithic life in Jordan.- *The Jordan Times*, Amman, October 29, 2015 [on Ain Ghazal, Black Desert etc]
- Rollefson, Gary O. (2013): Late prehistoric pastoral exploitation of arid lands in Jordan. New light from the Black Desert.- *The American Schools of Oriental Research (ASOR) / asorblog.org* [visited Nov. 2016]
- Rollefson, Gary O.; Rowan, Yorke; Wasse, Alexander (2013): Neolithic settlement at Wisad Pools, Black Desert, Jordan.- *Neo-Lithics* 1/13, 11-23 (online) [visited Nov. 2016]
- Rollefson, Gary O.; Athanassas, Constantin D.; Rowan, Yorke M.; Wasse, Alexander M.R. (2016): First chronometric results for "works of the old men": late prehistoric "wheels" near Wisad Pools, Black Desert, Jordan.- *Antiquity* 90/352 (Cambridge Univ.), 939-952
- Rowan, Yorke M.; Rollefson, Gary O.; Kersel, Morag M. (2011): Maitland's "Mesa" reassessed: a late prehistoric cemetery in the eastern Badia, Jordan.- *Antiquity* 85/327 (Cambridge Univ.), Project Gallery, <http://antiquity.ac.uk/projgall/rowan327/> [vis. Nov. 2016]
- Sala, Maura (2008): Across the desert and the steppe. Ancient tracks from the eastern edges of the az-Zarqa and al-Mafraq districts to the western fringes of the Black Desert of Jordan.- in Nigro, Lorenzo: *An early Bronze Age fortified town in north-central Jordan. Preliminary report of the first season of excavations (2005).- La Sapienza Studies on the Archaeology of Palestine & Transjordan*, Roma, 233-250 (full book 261 p.)