

1. Introduction image Heidelberg, Mathäus Merian Atlas 1620

Our story begins in 1981 at a conference in Cambridge. Gerd Weisgerber of the German Mining Museum invited me to cooperate in order to publish the backlog of texts which arose from his fieldwork in Oman. I began in 1982. In those pioneer days the metals age chronological system was just forming. Key studies such as Boucharlat and Lombard’s Rumaylah settlement, Kroll’s Lizq fort L1, or Mouton’s PIR had not yet appeared. In different publications, Gerd attempted to fix this by means of high quality systematic catalogues – not a surprise for a German industry museum. The two excavations which I shall introduce today took place from the mid 1970s and continued sporadically into the 1990s. They are only new in the sense that they appeared a few months ago in print after an interval of a mere 20 years. I looked in Guinness book of records to see if this was the longest time for printing on record, to no avail.

2. Beatrice

I am dedicating to Beatrice, who I hold in high esteem. I entered the sites into a database which she and her team surveyed. She herself was a reason to come to the seminar. Aside from being reliable and pleasant, there was no trace of any intrigues. I certainly do not aim to offend anyone, but a real British lady and competent, she is simply irreplaceable. I could not wish for a more dear, able, assiduous or desirable colleague.

3. Beschaid Thyssen-Stiftung

As you can see here, in 1997 funds were granted for the EIA al-Raki and al-Maysar M42 excavations, but for the former unfortunately a substantive report never appeared. I published the team’s notes in Academia.edu and drawings in heidICON. I apologise for this, since I shared responsibility. Although research in ‘Ibrī/Selme and Samad appeared in print, unfortunately it took far longer to advance two other fieldwork projects to publication maturity - those of al-Akhdhar cemetery and al-Wāsiṭ tomb W1. After Gerd passed in 2010, the Mining Museum requested to finish up any of his Oman research. I felt most competent in the Iron Age and left other periods to other colleagues.

And now, our multi-period, pre-Islamic cemetery at al-Akhdhar:

4. Doe map + grave JOS 1976 102 fig 1, p. 156, pl 16

In 1974 six to eight graves first found public mention in an article in the Arabic language newspaper „Oman“ written by a colleague named ‘Abd al-Rahman. His mention of womens’ graves is incomprehensible.

In 1975 Brian Doe and Beatrice cleared at least one of the graves at their site 15. In the same year Gerd began to catalogue the numerous finds from the excavation of 1974, at a time when the different pre-Islamic periods were new and awaited definition.

#### 5. al-Akhdhar plan, Heckes Yule

In 1981 Andreas Tillmann and Burkhard Vogt excavated and re-excavated. It seems fitting to mention these two unsung rarely cited heroes (at least in this context). Both the graves and their spoil heaps yielded finds. 17 of the graves were excavated; the rest left for future research. Gerd stopped the work because he considered the cemetery Samad S10 to be a more promising research project.

#### 6. Satellite image of al-Akhdhar

The first road signs referred to this place incorrectly as Khudra and in the early publications Gerd used this place-name, the male form of al-Akhdhar. In Arabic this is a reference to verdancy. It looks like a typical settlement situation next to a wadi in Oman's Sharqiyah province. The German team were unable to confirm the published mention of associated settlement remains in the immediate vicinity for the usual reasons of later habitation destroying previous ones.

#### 7. Grave dating, Yule-Weisgerber 2015 126 Table 1

In 1974 colleagues gutted graves without recording individual find inventories. In their subsequent excavation, Tillmann and Vogt corrected this to the extent possible. Those already excavated obviously yielded only partial results. The finds and the graves date mostly to the Wadi Suq Period. Of course, dating depends on three factors:

- 1 when was the grave built?
- 2 which finds predominate?
- 3 which were the latest finds?

These days al-Akhdhar is for the dating of the Samad LIA and other periods relatively unimportant.

#### 8. chronology blues

I showed different versions of this pie graph over the years. It depicts the difficulty in dating these graves, with a large number with un-datable or no finds, i.e. the two sectors to the upper left. Thus we have to make do with what we have, try to identify heirlooms and make dating models for the artefact classes. The exactness of such datings rests on the quality of our contexts. It is not difficult to identify occasionally very early finds in late pre-Islamic graves. It gets more challenging in mixed group contexts or with certain artefact classes. However, rare Hafit and Umm an-Nar beads in LIA tombs should not discourage us.

To set matters straight, the table below, also previously published, shows different colleagues' estimates for the LIA chronology, and until the last few years the discussion was a bit movemented. It does not show that I am camouflaging an improbable LIA chronology, as to my amusement I recently read in a review of my book, Cross-Roads of 2014.

#### 9. Grave plans + gr. A4 phot with Umm an-Nar stones

Graves with a SE/NW orientation and a length over 2 m may well have been built in the Samad LIA. Grave A4, which is built of especially nice Umm an-Nar sugar stones, as you can see in the lower left, contained a few diagnostic iron arrowheads.

#### 10. al-Akhdhar pottery finds

On the left side you see rare figural decoration in Wadi Suq pottery. That on the right shows such decoration and forms, in addition to two LIA vessels at the top.

#### 11. L Metal work, R stone bowls of different periods

Some of the finds from the excavation from 1974 augur different periods. The weapons above left and the beaker-like bowl date to the Wadi Suq Period. The bangle and shaft-hole axe are classic EIA types. The finger ring below has parallels at the turning of the ages from BCE to CE.

Originally we identified the pointed weapons on the left as very large arrowheads. However, with newly excavated finds from al-Buḥaiṣ and al-Safah, the difference between dagger, knife and arrowhead seems increasingly uncertain and schematic.

To your right, most of the soft stone fragments excavated by Tillmann and Vogt are attributable to the Wadi Suq and Late Bronze Age Periods.

#### 12. heidICON print-out under the key word *Achdar*.

In 1967 Bruce Trigger in *American Antiquity* (32, 149) wrote that archaeologists tend to shy away from the difficulties of chronology in favour of settlement archaeology, where they are less likely to draw the fire of their colleagues. Naturally, chronology has been a thorny business in Arabia and elsewhere. I see the discussion as an ongoing, educational process.

Most of the images generated by any given project never do get published. You see here a view of images from heidICON, the virtual image base of the Heidelberg University Library searched under the key word *Achdar*. The 1900+ images for the archaeology of Oman continue to grow since we began data entry in 2008. You see published and unpublished images from the research of the Mining Museum and Heidelberg University: artefacts, contexts, landscapes and people. While some may denigrate these as just pretty pictures, for others they are a way to conceptualise ideas and periods. HeidICON is a cost-free search engine which is available not only to well-healed colleagues at rich western universities, but also to bush archaeologists in 3<sup>rd</sup> and 4<sup>th</sup> World countries. An antidote for neo-colonialism.

We now turn our attention to the communal tomb al-Wāsiṭ W1

#### 13. al-Wāsiṭ W1 plan, profile, phot

which in 1984 children discovered while playing. W1 yielded numerous prehistoric artefacts, mostly weapons and stone vessels. The wali of Buraimī submitted this large disturbed collection to the department of antiquities. In 1989 Ali al-Shanfari and Gerd conducted a *post hoc* excavation which yielded further numerous artefacts, many of which were restored.

#### 14. al-Wāsiṭ town plan c. 1990

The position of the tomb in the town.

#### 15. al-Wāsiṭ W1 skeletal remains

Manfred Kunter analysed 42.7 kg of human bone fragments from W1. He noted at least 32 femur heads (32!) and the left and right talus bones of 16 individuals. Thus we have a small population, which presumably were interred within a relatively brief interval.

#### 16. W1 & 'Ibrī/Selme: proportions of finds

We can attempt a comparison of the EIA hoard from 'Ibrī/Selme and the LBA tomb W1 inventories. Although one is a tomb and the other a hoard, they do reveal something about chronology. There are more contrasts than resemblances between the two, largely a function of chronology. In W1 metal vessels are underrepresented.

#### 17. W1 stone vessels

With 52 stone vessels and 22 lids, W1 yielded one of the biggest collections of published stone vessels in SE Arabia. Many vessel/decoration groups have been published previously as strays and from other contexts, but the importance is *which* find-classes occur together in the tomb. The majority are attributable to the Sg8 class. *Steingefäße acht*, pardon my German.

#### 18. al-Wāsiṭ W1, nos. 20-30 lance heads class L1, 31 class L3

Ali al-Shanfari and Gerd published examples of these so-called lance heads in photos, and they are well known. Prange's quantitative analyses shows a relatively pure copper with little alloying. The ores used appear to be sulphidic for the first time. Two high tin artefacts (8%+) are extremely rare from this context. Perhaps Lloyd or Thilo can comment about this.

#### 19. daggers D4, D8, D8a & swords class S1

Daggers and swords both occur mostly in copper, some of which Gerd published as photos.

In 1989 he identified a late Wadi Suq time-zone in terms of metal finds and stone vessels, those from Nizwá grave N1985 and tomb W1. While what I am showing is not wholly new, it verifies our knowledge of certain contexts, complete find inventories – scaffolding for the chronology.

#### 20. W1 pottery

The pottery is interesting since it is usually wheel-turned, as opposed to most of the EIA pottery. There are attributes of the Wadi Suq Period, but I doubt that anyone would date this context to anywhere else than to Christian Velde's LBA.

#### 21. Comparison of Christian's definition for the LBA with the finds from W1

The finds from W1 match best with those that Christian defined in 2003 in a much-cited article. Naturally, the W1 tomb has many more metallic artefacts than the Shimal complex which Christian mostly used for his definition.

In the few minutes available, I might also have mentioned relevant sites such as Rob and Carl's Kalba. My presentation was never intended to be exhaustive, but rather to draw attention to new publications.

#### 22. heidICON search, keyword: LBA

It is possible in heidICON to conduct different kinds of searches, for instance by period. Searching for LBA finds yields several images from W1. Many, such as this silver bovid pendant and other comparanda from Nizwa N1985, appeared first as drawings.

#### 23. heidICON search, keyword: dagger

You can search for a kind of find, such as a dagger or a find class, such as D1, i.e. dagger class 1. You see here different find classes from Mahut, Masirah, Samad, Selme, al-Safah and tomb W1.

#### 24. New classes from al-Buḥaiṣ and al-Safah

Of course, new finds force the classification to expand. On the left you see all new find classes as of 2006. On the right 3D-scanned finds which a European-Omani study group is preparing on the ministry's al-Safah excavation.

#### 25. Moribund find classification of 2001 for SE Arabia

Thus a find classification from 2001 must be radically revised to accommodate new finds. That classification was never intended to describe all of the Arabian finds, but concentrated on illuminating the Samad LIA. The further one strays from this period, the sketchier the classification gets. It was designed in order to better identify heirloom pieces.

#### 26. Arrowheads, Qatar D, Wadi Jizi, LBA, Wadi Suq

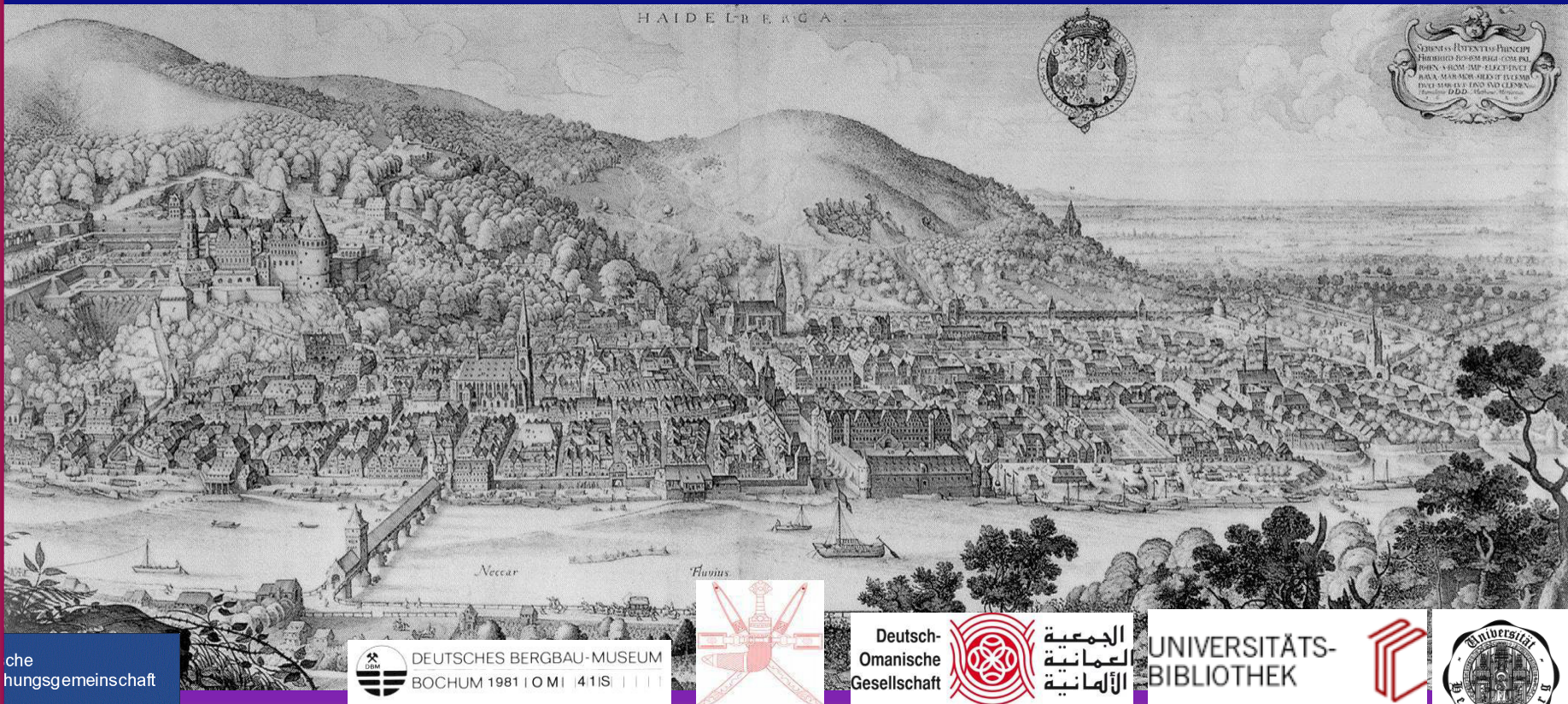
In conclusion, I show a slide to explain the difficulty of our dating project. Prior to the LBA there are surprisingly few good contexts for the dating of arrowheads such as the ones in the lower right. To the lower left you see part of what a LBA warrior had in his quiver, i.e. none of their flat concave blades perhaps best known from the Shimal tombs in Ras al-Khaimah. To my knowledge there are no arrowheads from Umm an-Nar contexts. Does this mean that archery begins with the LBA? I think not. That would force us to date the stone arrowheads into the Bronze Age. Above left you see Qatar D arrowheads and above right some from the Wadi Jizzi in Oman, documented by Dutch colleagues. Probably, most would date these arrowheads to the Neolithic, but some might see them as evidence for Ubayd Period archery. This shows the difficulty of such chronological hypotheses. In most cases the chronological modelling of specific find-classes requires risk-taking. No risk, no fun.

Thank you for your endurance.

# 'New' Excavations in Oman (1974-95)

Sem. for the Languages and Cultures of the Near East  
Heidelberg University  
Paul A. Yule

Seminar for Arabian Studies  
30.07.2016  
British Museum





## Dubai 2001



# Grant for field research in al-Raki and al-Maysar M42

*Fritz Thyssen Stiftung*

VORSTAND

Herrn Priv.Doz.  
Dr. Paul Yule  
Institut für Ur- und Frühgeschichte  
Universität Heidelberg  
Marstallhof 4

69047 Heidelberg

27. Januar 1997 V

Archäologische Strukturierung der Eisenzeit Ostarabiens  
Az. 1995 2019

Sehr geehrter Herr Dr. Yule,

ich freue mich, Ihnen mitteilen zu können, daß die Fritz Thyssen  
Stiftung Ihnen Mittel bis zur Höhe von


DM 100.000,--  
(i. W. einhunderttausend)

zur Verwendung im Rahmen der Kostenarten des Antrags als abschließende Förderung Ihrer Kampagnen zur archäologischen Strukturierung der Eisenzeit im östlichen Arabien durch die Stiftung bewilligt hat.

Grundlage der Bewilligung ist Ihr Antrag vom 22.7.1996.

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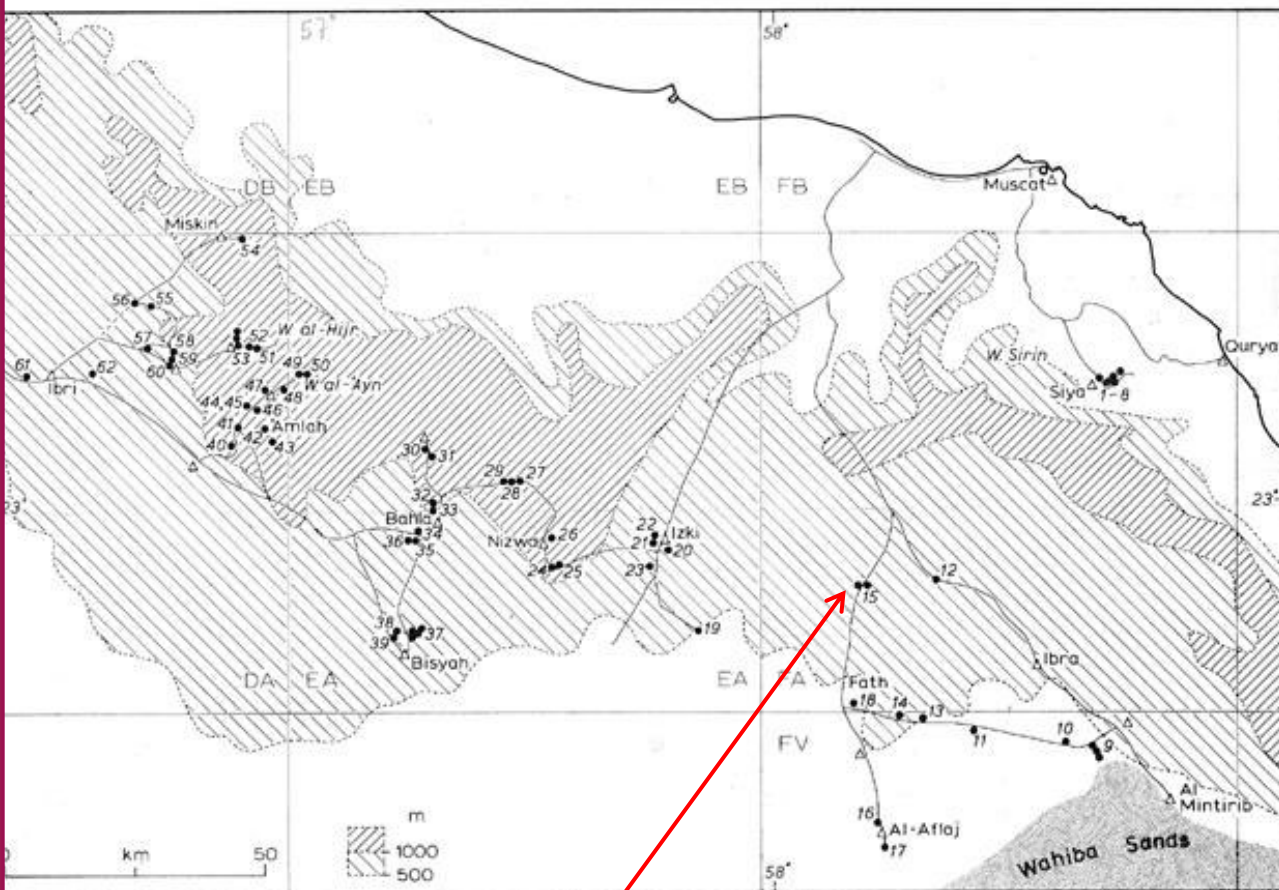
Mit besten Empfehlungen

  
Dr. Rudolf Kerscher



# al-Akhdhar, multi-period pre-Islamic cemetery

Slide 4



G. 1. General location map of sites recorded in the Gazetteer.

al-Akhdhar cemetery



Yule

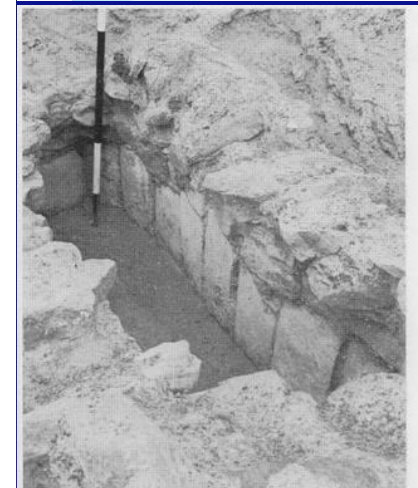
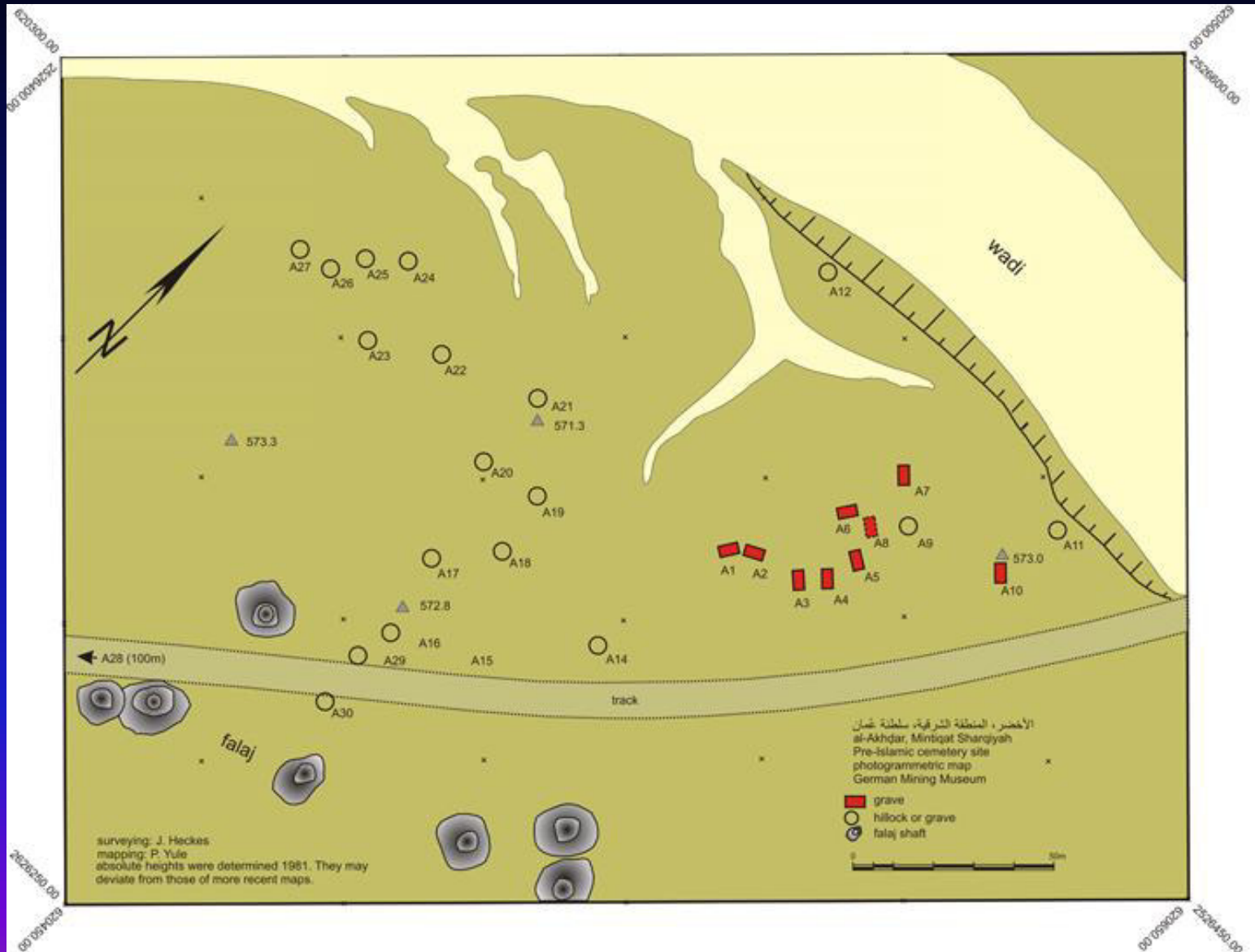


PLATE 16. Site 15, Sanad. On E. of wadi bed opposite Khudar, are a group of six graves near a 3rd millennium site. Four graves show the re-use of Umm an-Nar tomb pecked white ashlar masonry which line the grave.

de Cardi et al 1976, 102 fig 1  
& p 183 pl 16

# al-Akhdhar, multi-period pre-Islamic cemetery





4/13/2015 9:50 vormittags

Al Akdhar

al-Akhdar unexcavated

al-Akhdar excav

27

Viereck- Schnappschuss (STRG + F11)

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Image © 2016 DigitalGlobe

436 m

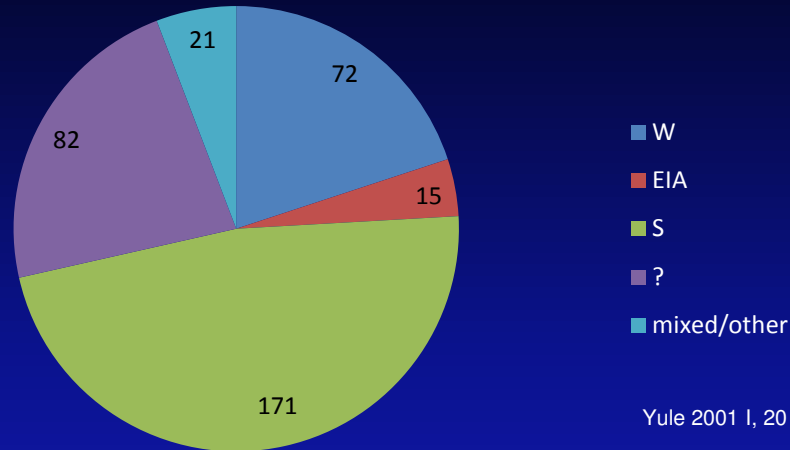
Image © 2016 ONEC / Astrium

# al-Akhdhar, multi-period pre-Islamic cemetery

grave	small finds	grave built	latest finds
A1	-	W	W
A2	-	W	W
A3	-	W	W
A4	S	S?	S
A5	-	S?	S?
A6	S	W?	S
A7	EIA	W?	EIA
A8	-	-	-
A9	W EIA	W	EIA
A10	IA	S?	IA
A11	W EIA	W	EIA
A12	W EIA	W	W
A13	-	-	-
A14	WS	W	S
W15	W	W	W
A28	-	W?	W?
A29	W	W	W

Yule-Weisgerbert 2015 126 Tab 1

## How mixed are the grave inventories? (Samad-Maysar excavations 1980-94)



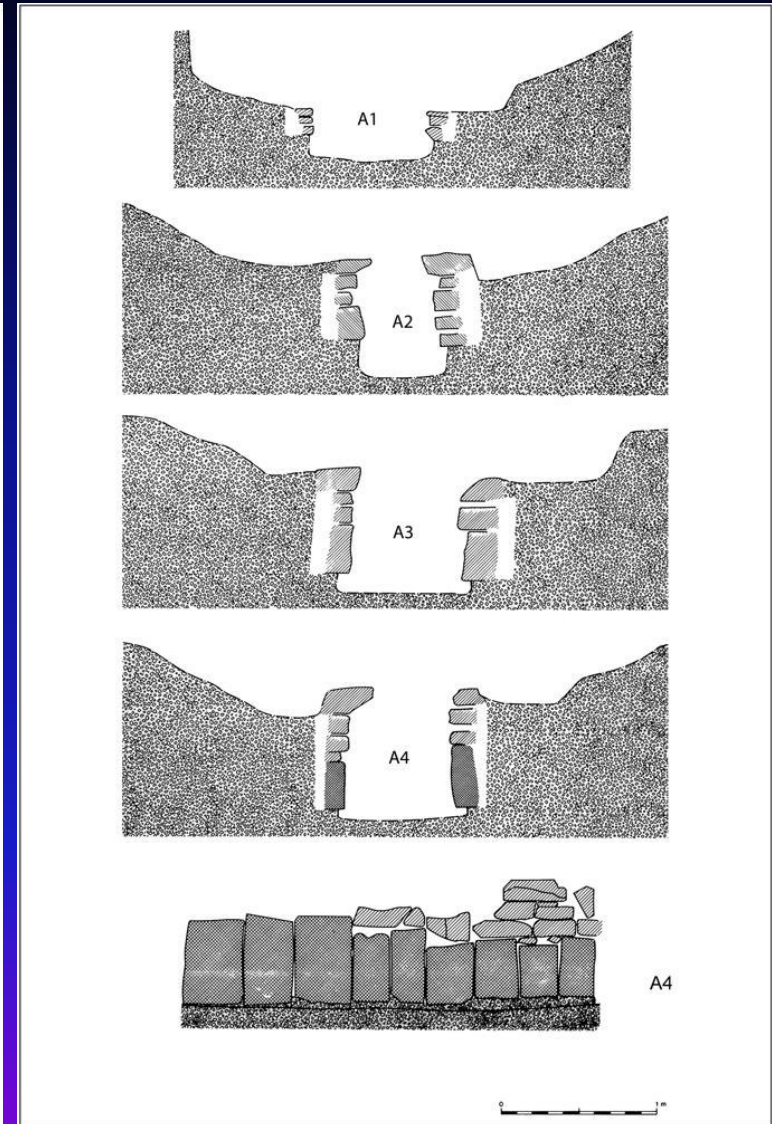
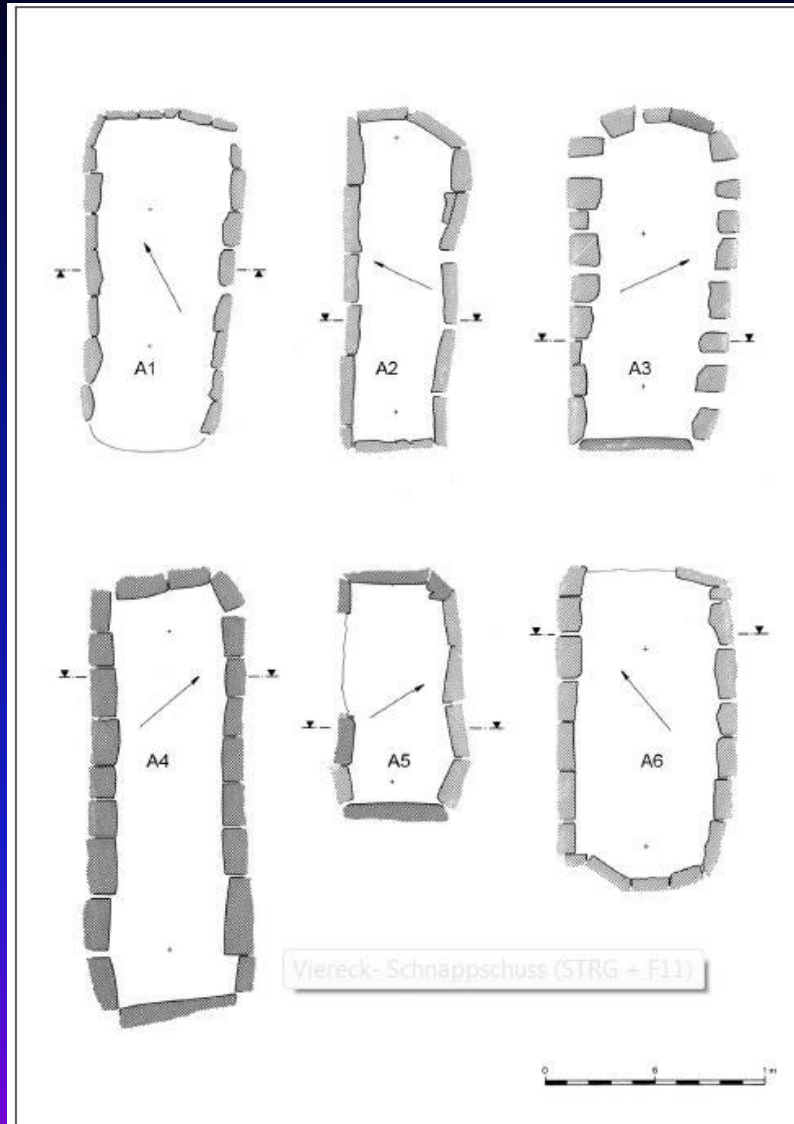
## development of the LIA chronology

Samad LIA chronology	source
>250 BCE	Weisgerber 1982, 82
4 <sup>th</sup> – 1 <sup>st</sup> cent. BCE	Vogt 1984, 277
>300 BCE – 1000 CE	Yule 2001 I, 164
1 <sup>st</sup> cent. BCE – 4 <sup>th</sup> cent. CE	Haerinck 2003b, 302
1 <sup>st</sup> to 3 <sup>rd</sup> cent. CE at latest	Kennet 2007, 100
mostly late BCE, to the 3 <sup>rd</sup> -4 <sup>th</sup> century	Schreiber 2007, 110
post 300 BCE – 300 CE?	this volume

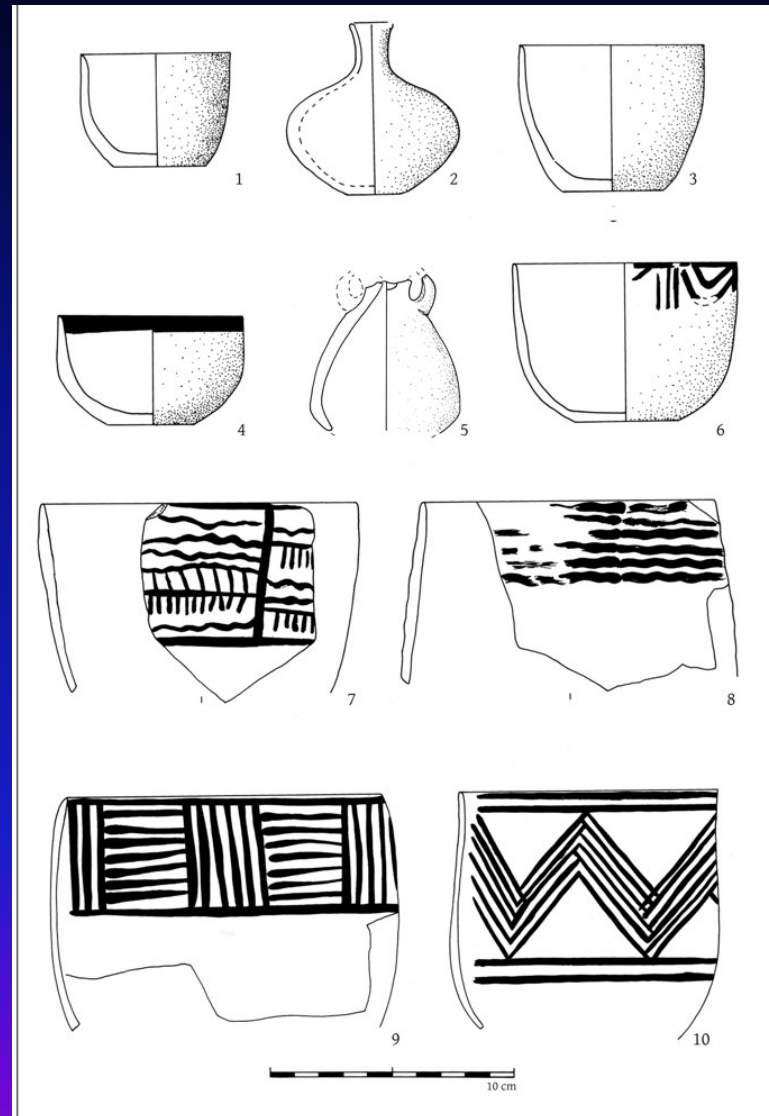
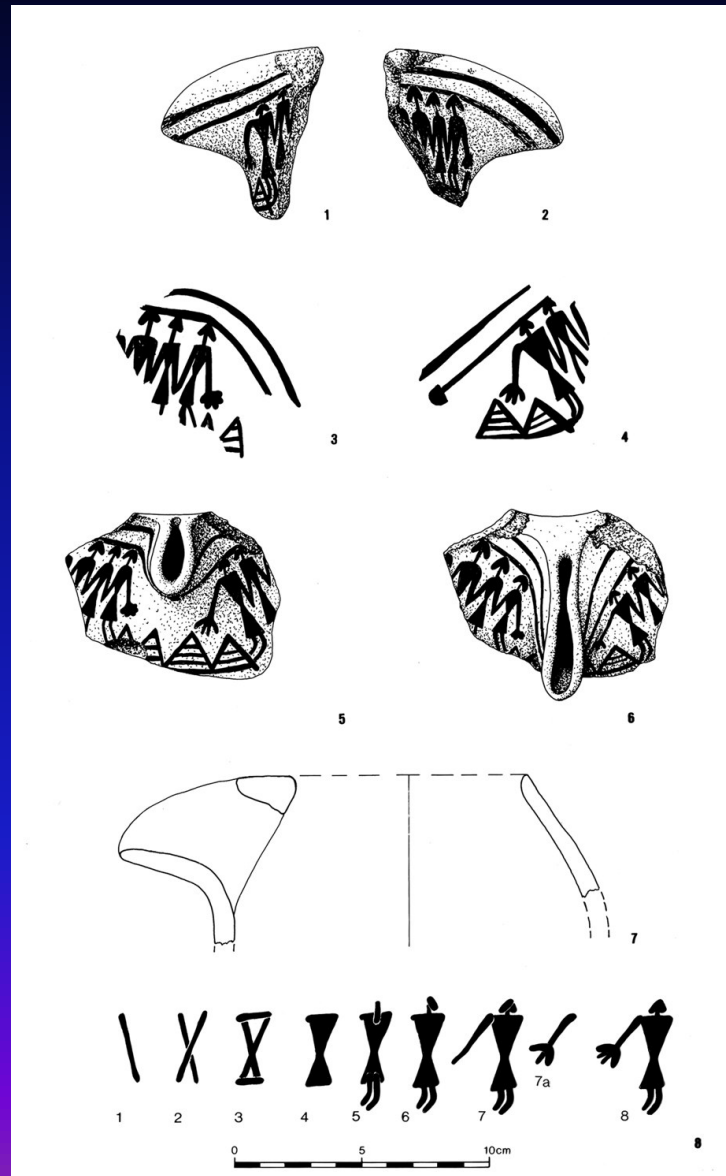
Yule 2014 64 Table 7



# al-Akhdhar, multi-period pre-Islamic graves

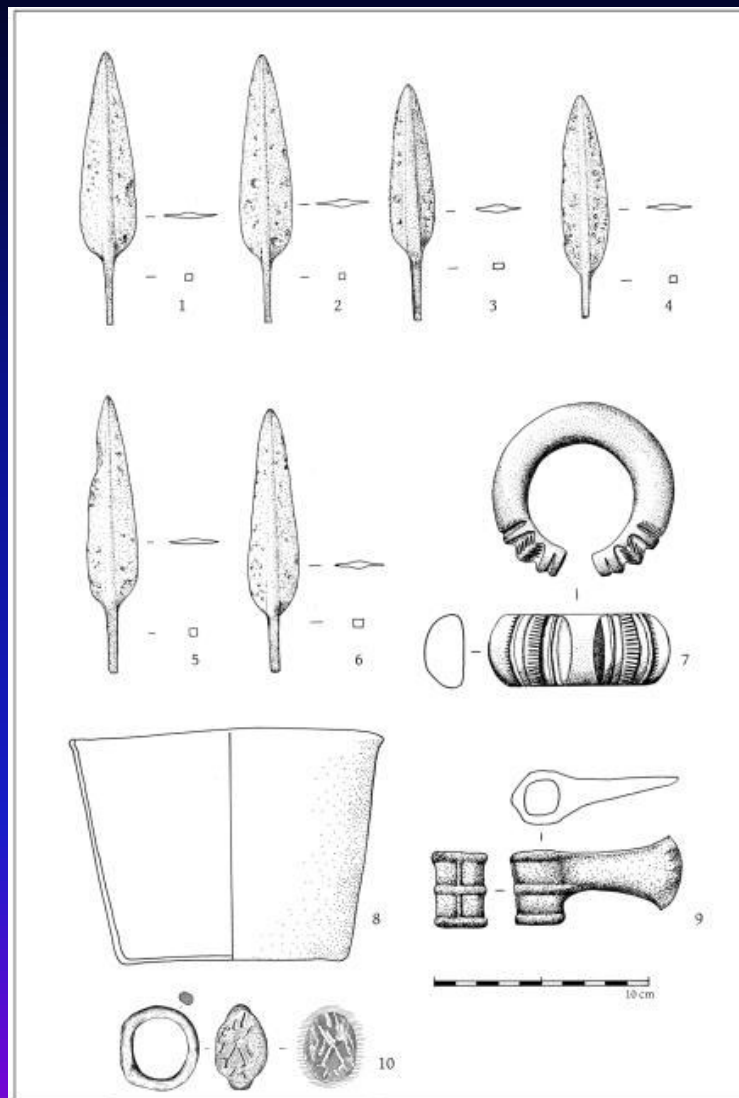


## al-Akhdhar, excavation 1974



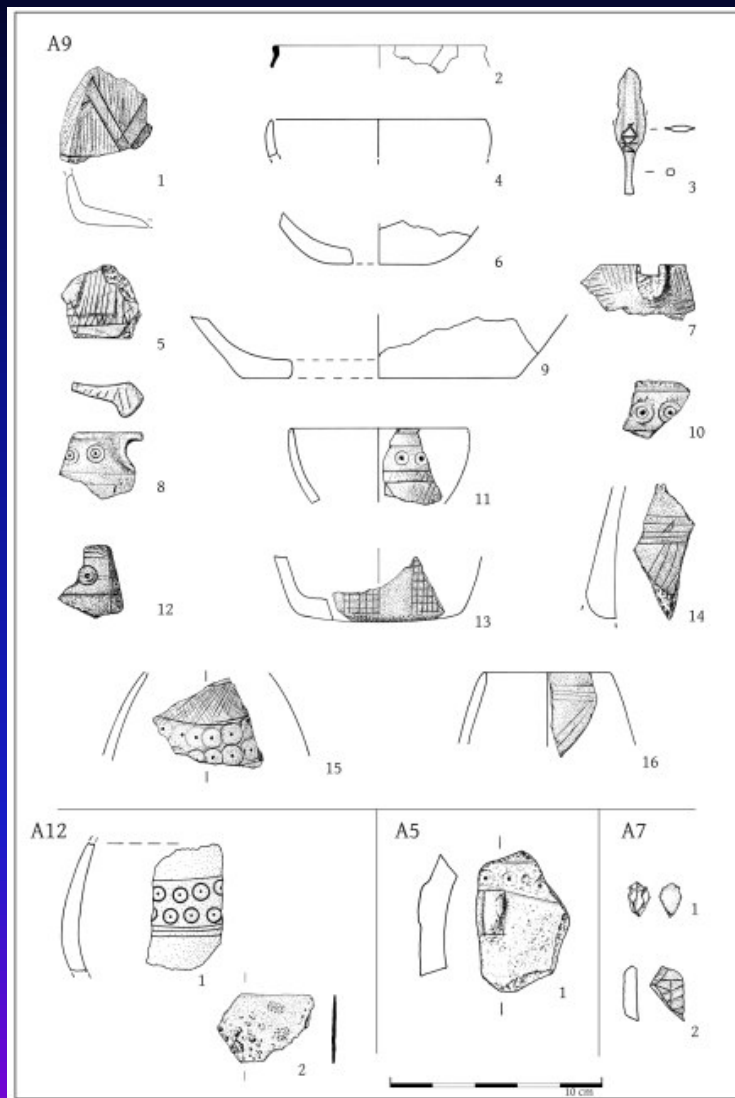
Pl. 22. Al-Akhdhar, pottery: 1 A 117, 2 A 121, 3 A 118, 4 A 119, 5 DA 968, 6 DA 110, 7 DA 954, 8 DA 955, 9 DA 959, 10 DA 964.

## al-Akhdhar, excavation 1974



PL 13. Al-Akhdhar. Metal finds: 1 A 139, 2 A 140, 3 A 141, 4 A 142, 5 A 137, 6 A 138, 7 A 127, 8 A 128, 9 A 134, 10 DA 2199.

## al-Akhdhar, excavation 1981



PL 21. Al-Akhdhar. Fragments of stone vessels.



# Keyword **Achdar** in heidICON

heidICON Recherche

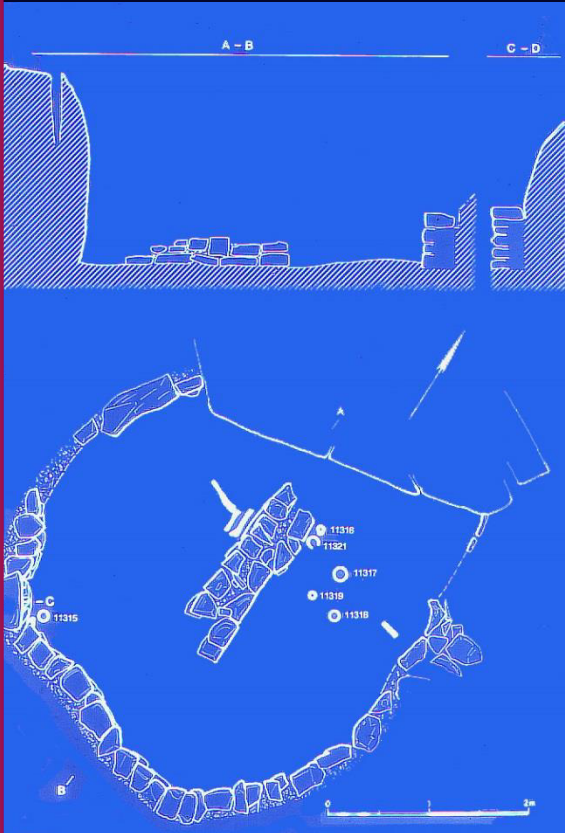
Neues Bild | Arbeitsmappen | Präsentationen

achdar SKVO "Oman" ☐ innerhalb Suche Erweiterte Suche Neue Suche

0 / 0 / 34 Standard Titel/Objekt 50

Achdar <Oman>; arrowhead 05392	Achdar <Oman>; arrowhead A 139	Achdar <Oman>; cemetery	Achdar <Oman>; cemetery	Achdar <Oman>; cemetery	Achdar <Oman>; cemetery	Achdar <Oman>; cemetery	Achdar <Oman>; cemetery	Achdar <Oman>; cemetery
Achdar <Oman>; cemetery	Achdar <Oman>; cemetery	Achdar <Oman>; cemetery	Achdar <Oman>; cemetery	Achdar <Oman>; cemetery al-achdar	Achdar <Oman>; cemetery gr A10	Achdar <Oman>; cemetery gr A11	Achdar <Oman>; cemetery gr A12	Achdar <Oman>; cemetery gr A13
Achdar <Oman>; cemetery gr A15	Achdar <Oman>; cemetery gr A2	Achdar <Oman>; cemetery gr A28	Achdar <Oman>; cemetery gr A29	Achdar <Oman>; cemetery gr A3	Achdar <Oman>; cemetery gr A4	Achdar <Oman>; cemetery gr A5	Achdar <Oman>; cemetery gr A6	Achdar <Oman>; cemetery gr A7
Achdar <Oman>; cemetery plan	Achdar <Oman>; finger ring 02999	Achdar <Oman>; finger ring 02999	Achdar <Oman>; metalware A 128	Achdar <Oman>; pottery 0968	Achdar <Oman>; stone lid 05996.1	Achdar <Oman>; sword 05251.3		

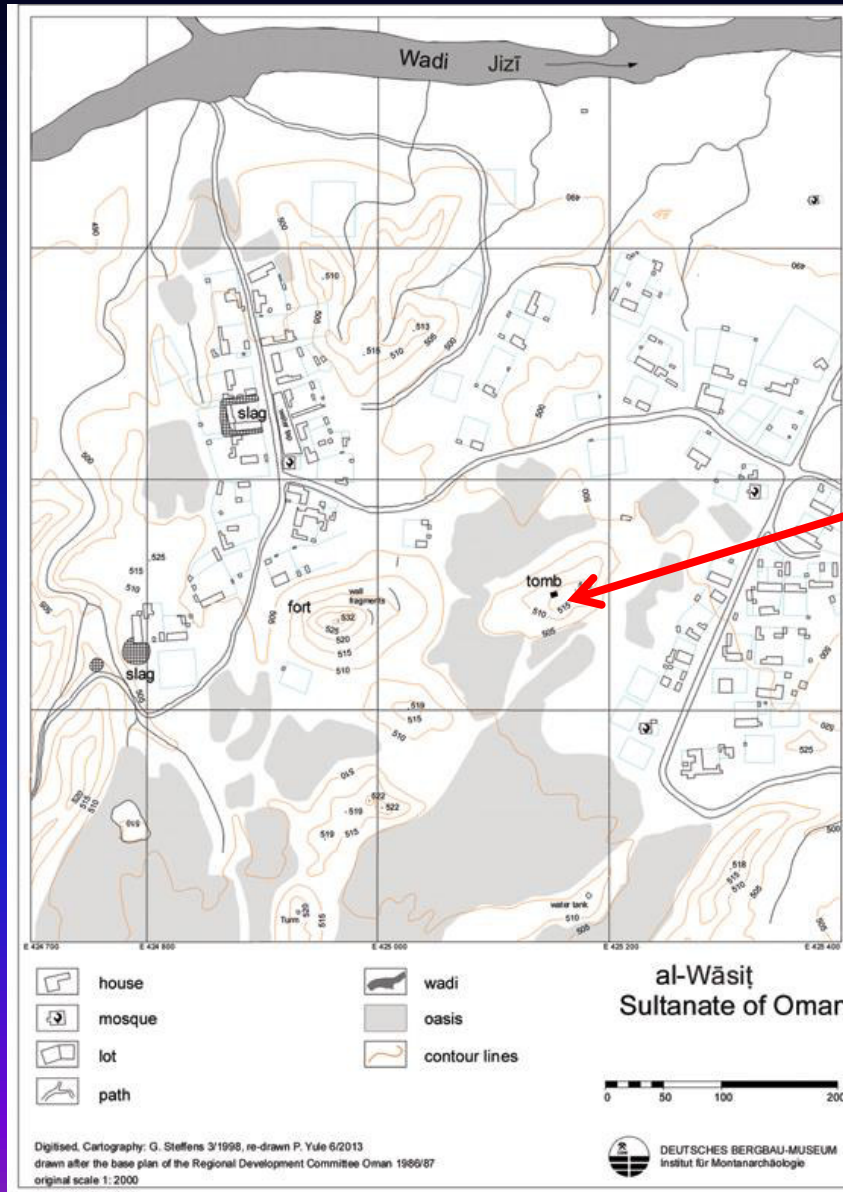
# al-Wāsiṭ tomb W1 plan, profile, phot.



Yule 2001 II Taf. 545, 597 (phot. Weisgerber)

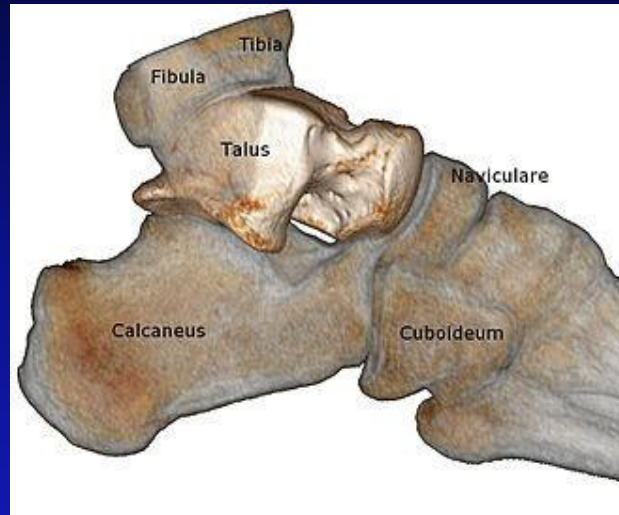


## al-Wāsiṭ, town plan &amp; town



Yule 2015, frontispiece (phot: Weisgerber, c. 1990)

al-Wāsiṭ W1 skeletal remains. 42.7 kg of human bone fragments, left & right talus occurred for 16 individuals



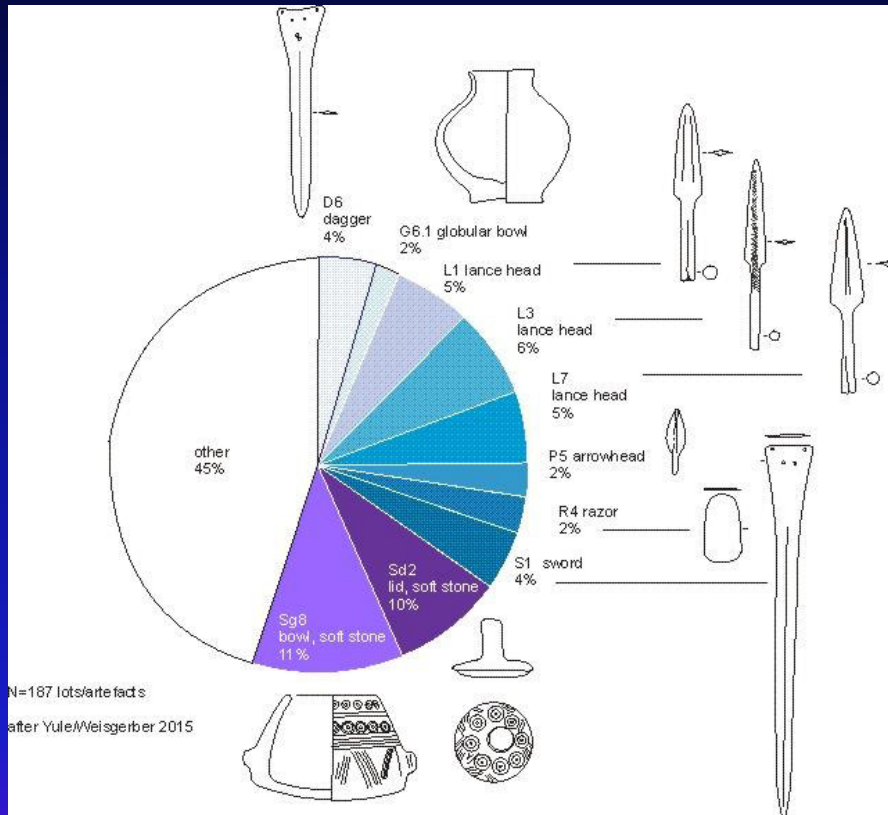
wikipedia

skeletal element	number	age	male	female	no info.
left patella	12	0–6	-	-	-
right patella	11	7–13	-	-	3
left talus	16	14–20	-	-	-
right talus	16	21–40	9	-	9
caput fem. right+left	32	41–60	4	-	4
right pars petrosa	10	61+	-	-	-
left pars petrosa	9				

Kunter 2015, 109 Table 1

# al-Wāsiṭ W1 & 'Ibrī/Selme: proportions of finds

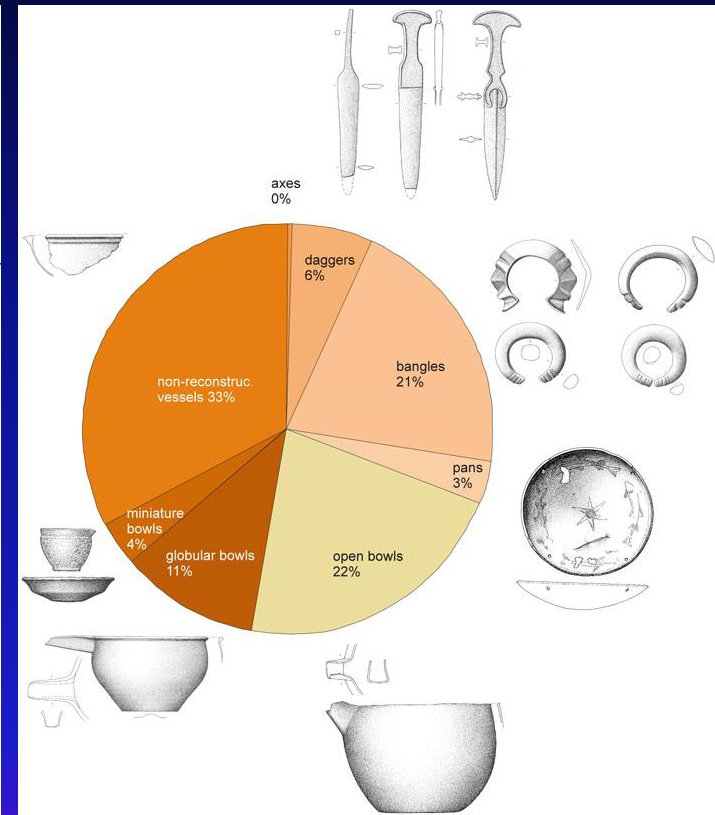
## W1 tomb



N=275 finds

Yule

## 'Ibrī/Selme hoard

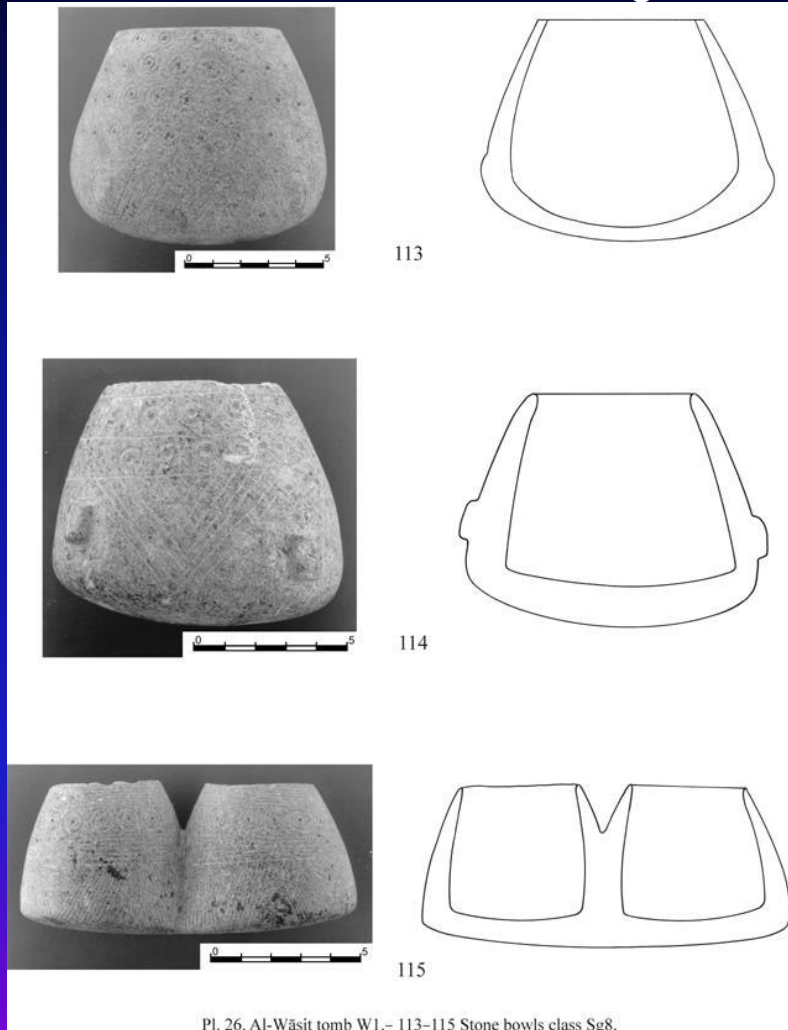


N=508 finds

Yule-Weisgerber† 2015, 107 Pl. 51.1

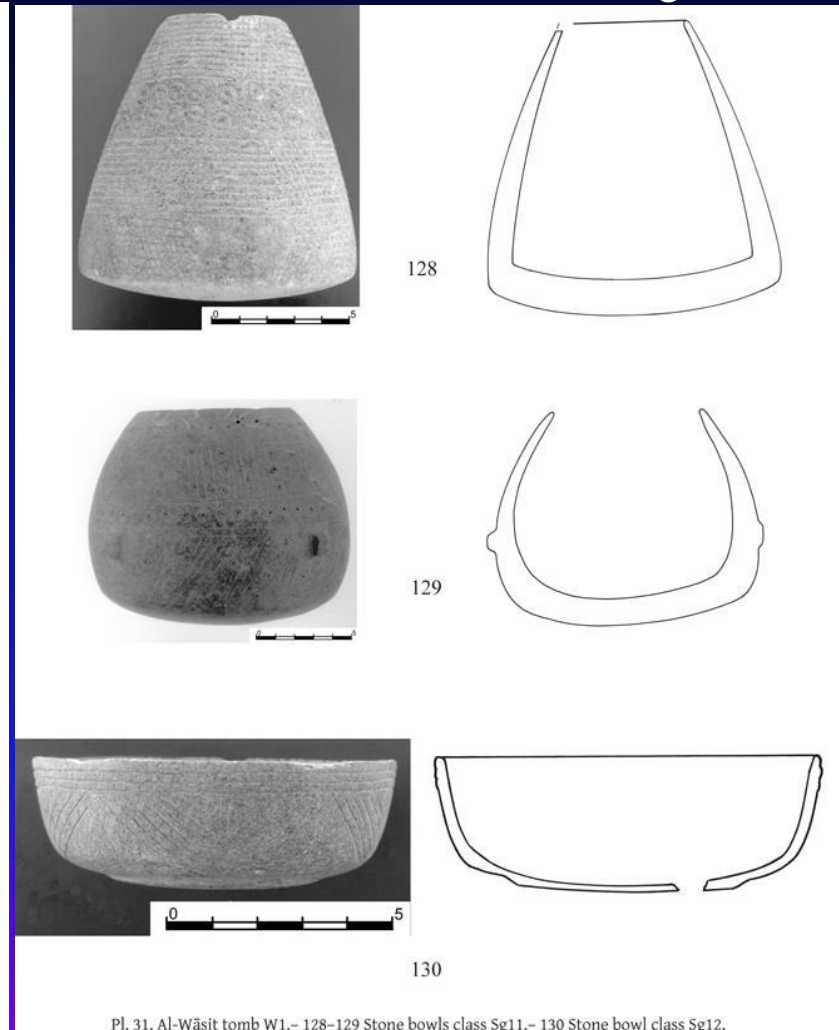
## al-Wāsiṭ W1, stone vessels

## Stone vessels class Sg8



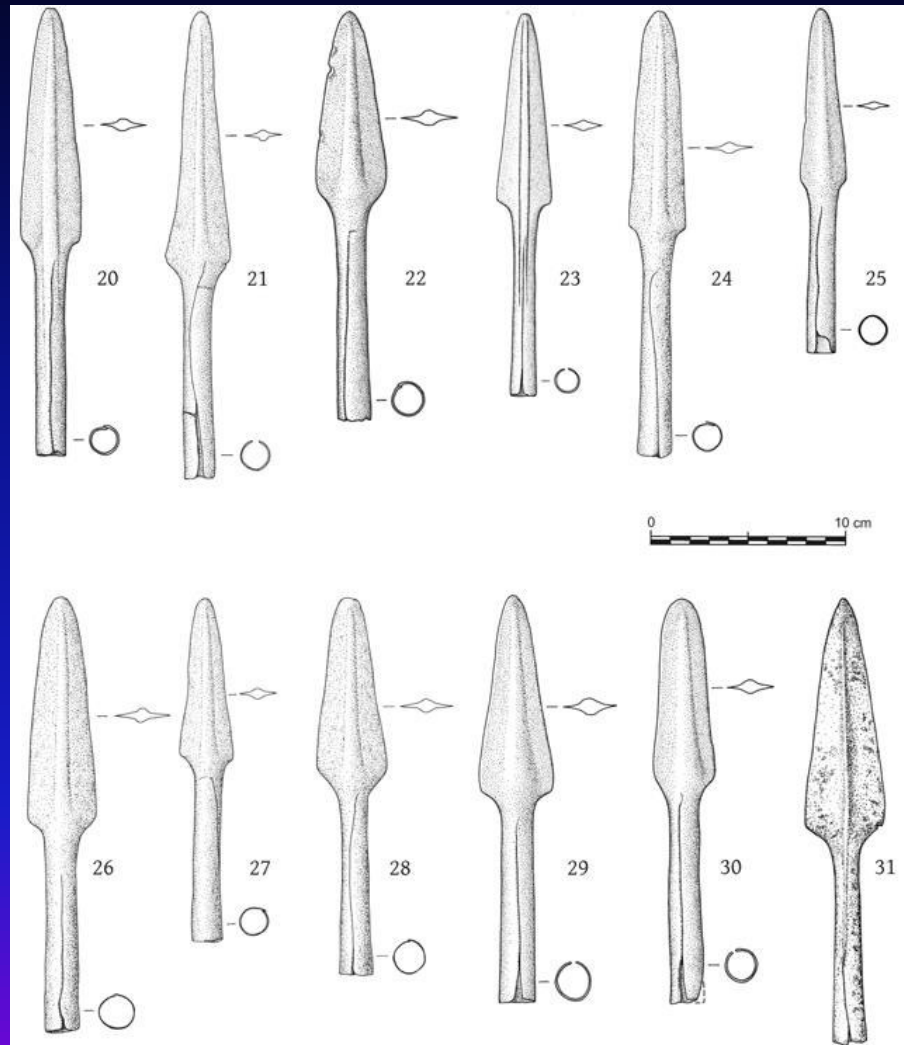
Yule-Weisgerber† 2015, 82 Pl. 26

## Stone vessels class Sg12



Yule-Weisgerber† 2015, 87 Pl. 31

# al-Wāsiṭ W1, nos. 20-30 lance heads class L1, 31 class L3

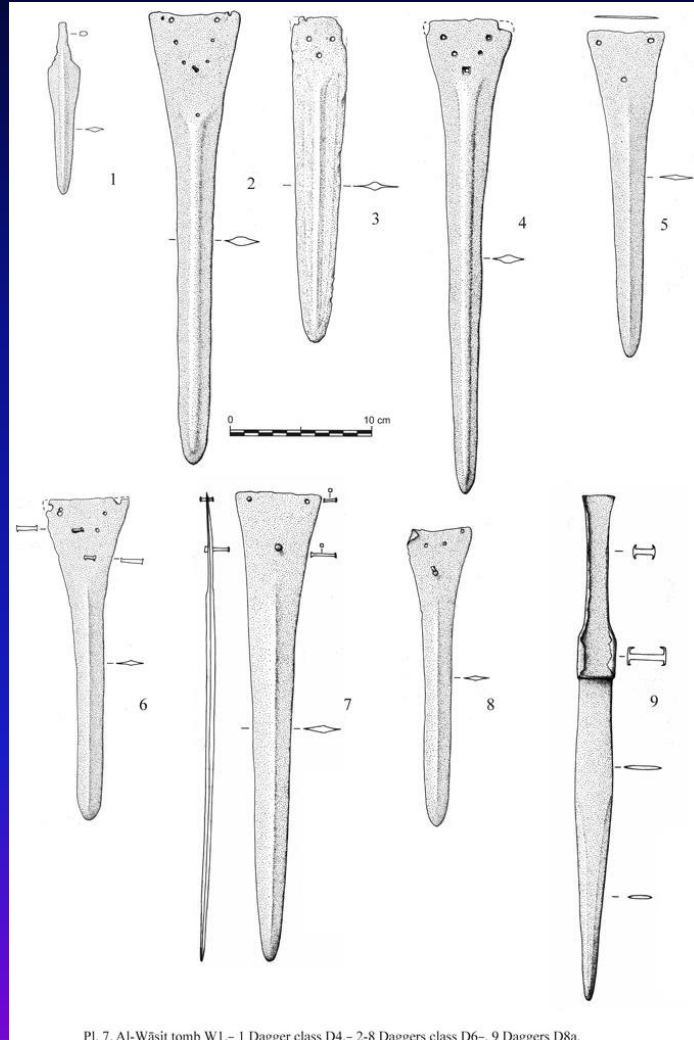


Pl. 10. Al-Wāsiṭ tomb W1.- 20-30 Lance heads class L1.- 31 lance head class L3.



## al-Wāsiṭ W1

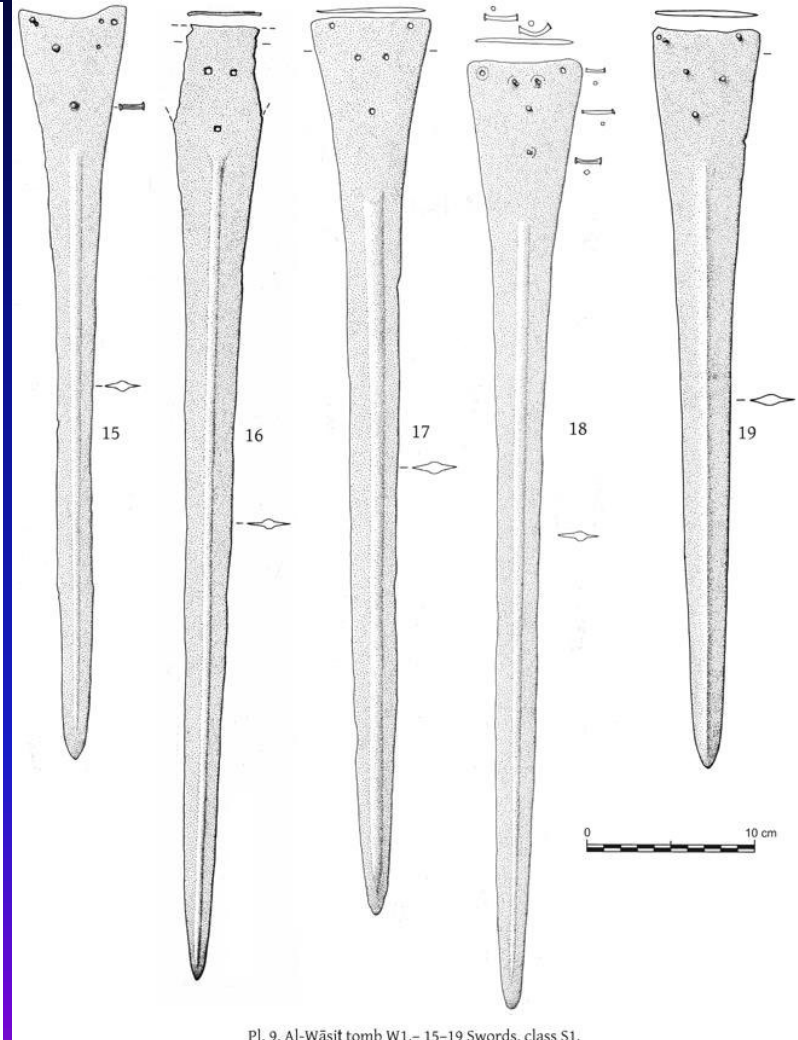
daggers D4, D8, D8a



Pl. 7. Al-Wāsiṭ tomb W1.- 1 Dagger class D4.- 2-8 Daggers class D6.-, 9 Daggers D8a.

Yule-Weisgerbert 2015, 63 Pl. 7

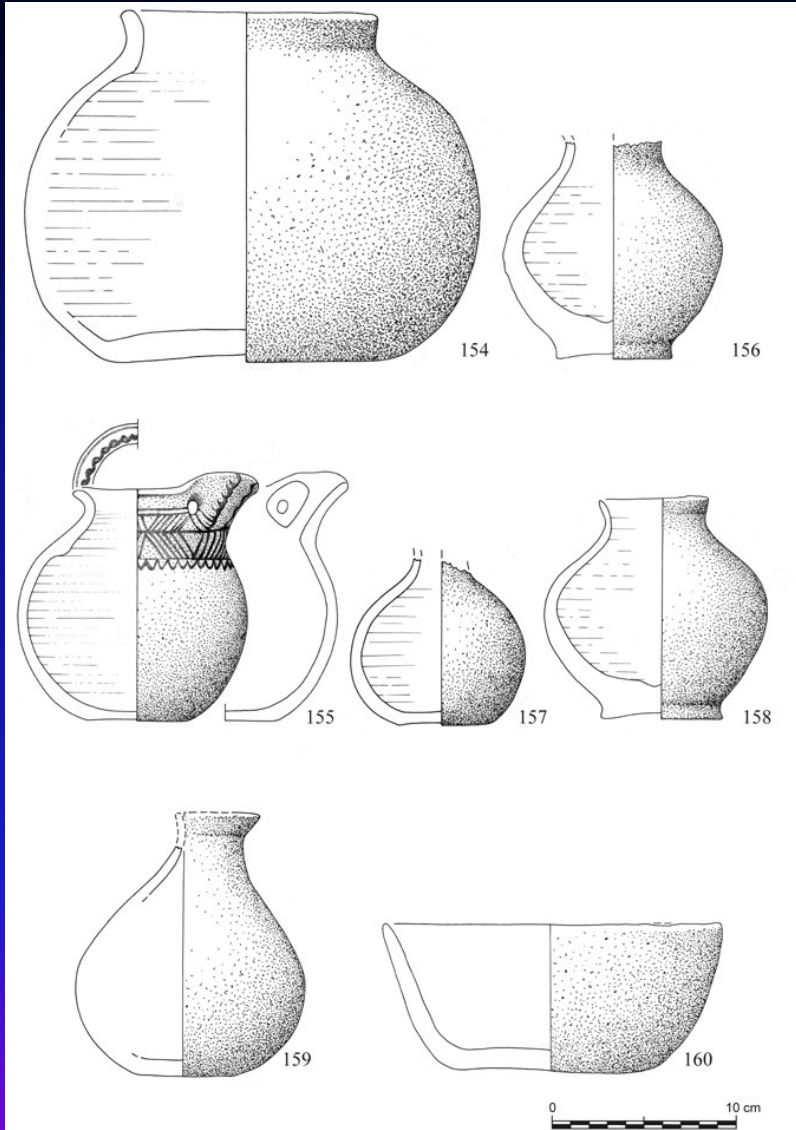
swords class S1



Pl. 9. Al-Wāsiṭ tomb W1.- 15-19 Swords, class S1.

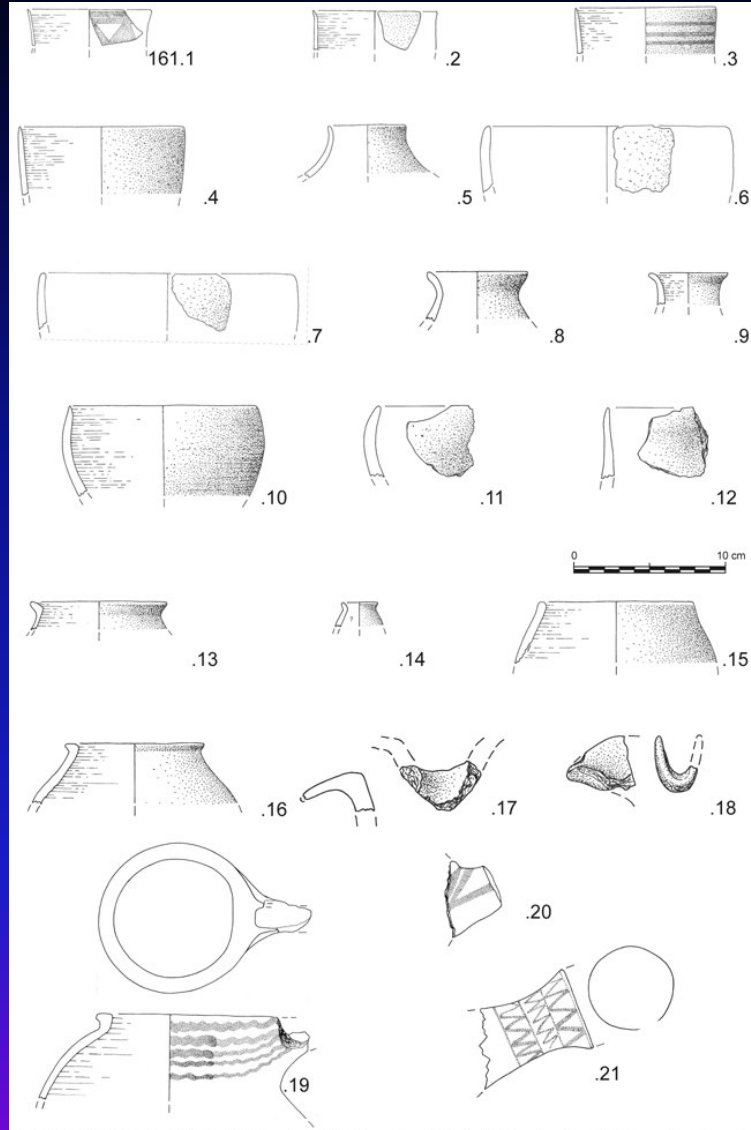
Yule-Weisgerbert 2015, 65 Pl. 9

## al-Wāsiṭ W1



Pl. 38. Al-Wāsiṭ tomb W1.- 154 Bellied vase class G3.3.- 155 Bridge-spouted jar class G4.2.- 156-159 Globular vases class G6.1.- 160 Bowl class G13.5

Yule-Weisgerber† 2015, 94 Pl. 38



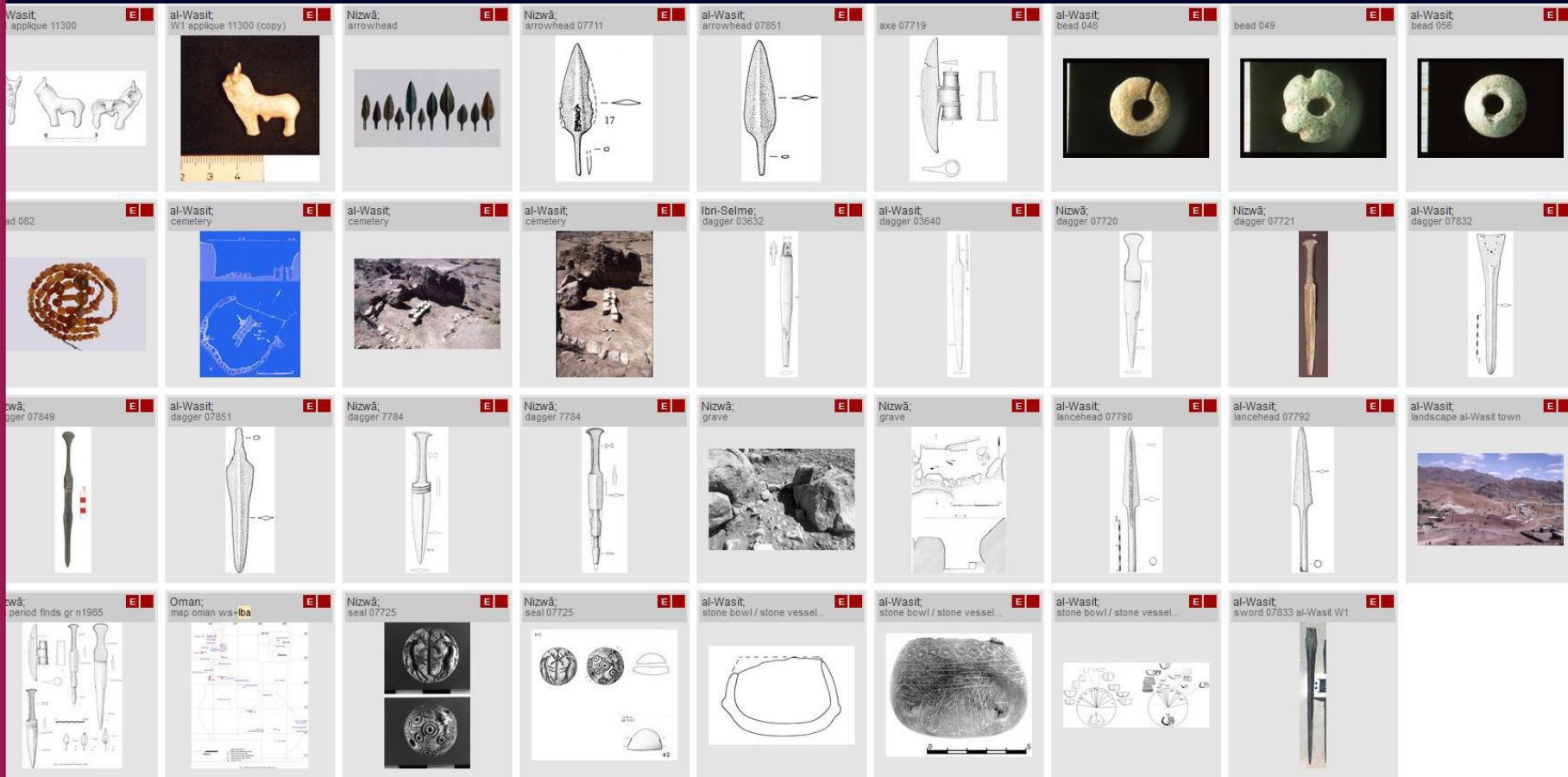
Pl. 39. Al-Wāsiṭ tomb W1.- 1-4 Beaker rims.- 5 Bottle neck.- 6-7, 10-12 Open bowls.- 13 jar turned out rim.- 14 Miniature vessel.- 15 Closed-mouth jar.- 16 Rimmed closed-mouth jar.- 17-18 pouring lips.- 19 Spouted jar.- 20-21 Pipe spouts.

Yule-Weisgerber† 2015, 95 Pl. 39

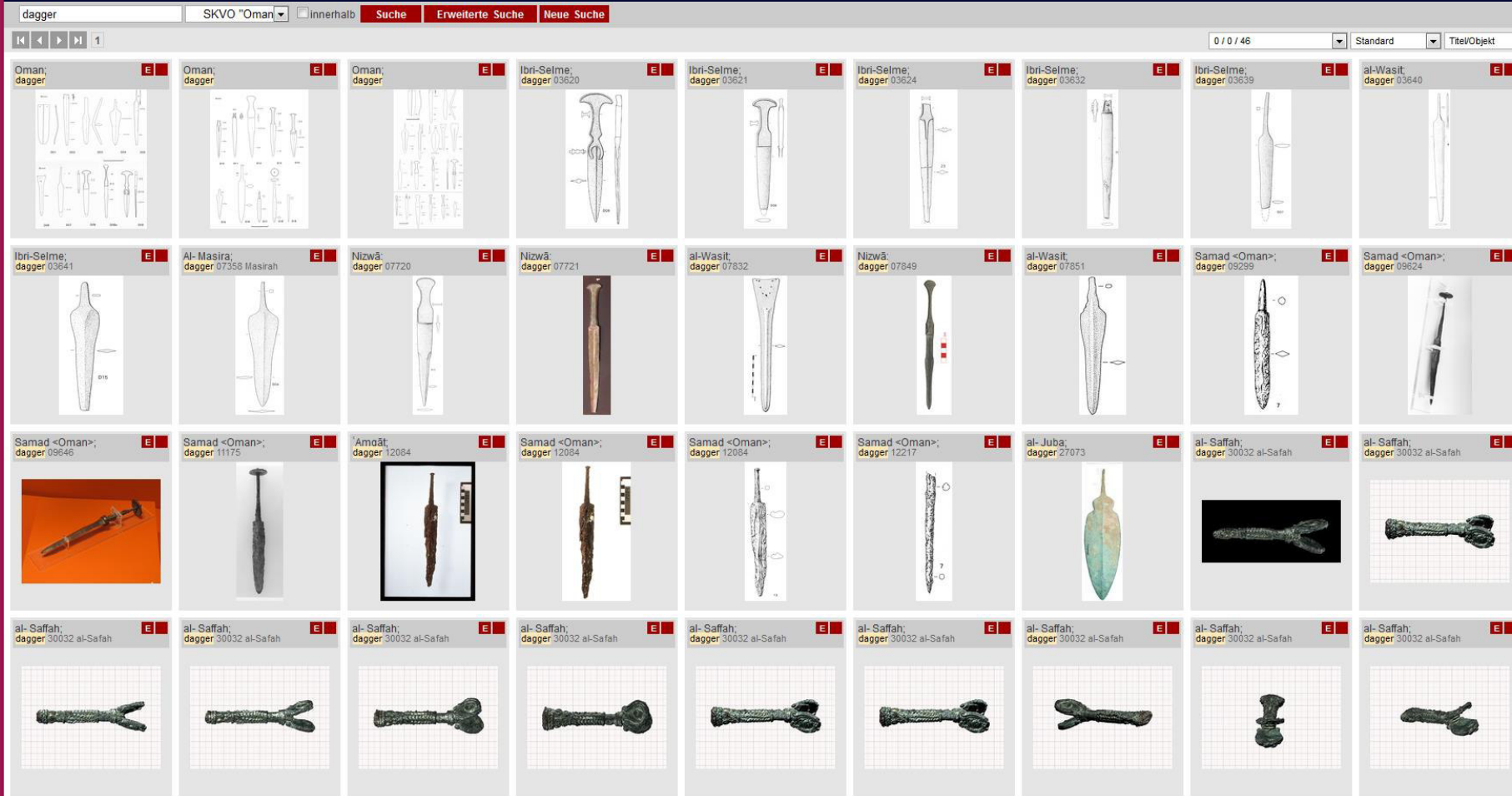
# Comparison of C. Velde's definition for the LBA with the finds from LBA tomb W1

Velde definition 2003 for the LBA			Inventory from tomb W1		
metal artefacts	stone vessels	pottery	metal artefacts	stone vessels	pottery
D6 daggers	mostly Sg9 bowls	handmade,	D6 daggers	mostly Sg8	handmade,
L3 lances	Sg10	undecorated	D8a dagger	Sg9	undecorated,
L5 lances	Sg11		L1 lances		wheel-thrown,
MeOB9 cup			L3 lances		painted
P5 arrowheads			L6 lances		
R6 razors			L7 lances		
S1 swords			MeOB8 open bowls		
			P4 arrowheads		
			P5 arrowheads		
			P7 arrowheads		
			R4 razors		
			S1 swords		

Yule-Weisgerber† 2015, 43 Table 21

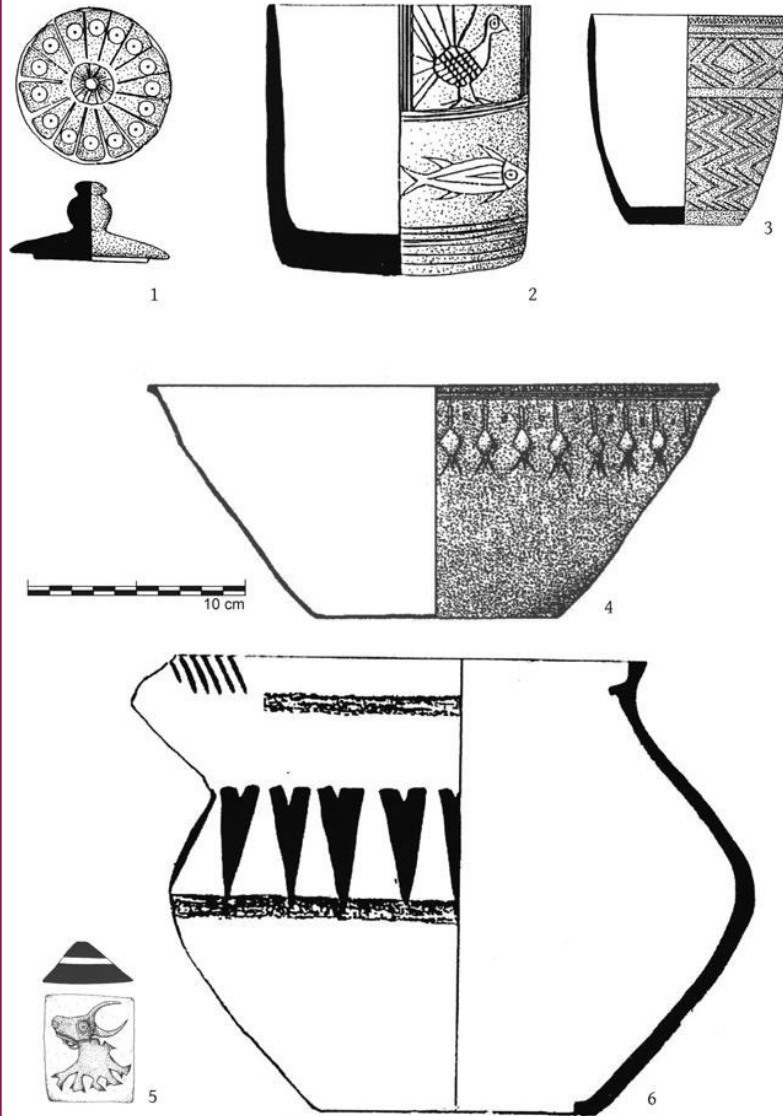
heidICON search, keyword: **LBA**

## heidICON search, keyword: dagger





# New find classes from EIA al-Buḥaiṣ and al-Safah



Pl. 54. Selected rare or unique Early Iron Age finds from the al-Buḥaiṣ cemetery.– 1 BHS 27.– 2 BHS 31.– 3 BHS 85.– 4. BHS 78.– 5. BHS 43.– 6 BHS 85.

Yule-Weisgerber† 2015, 106 Pl. 50 (after Jasim 2006)

heidICON Recherche

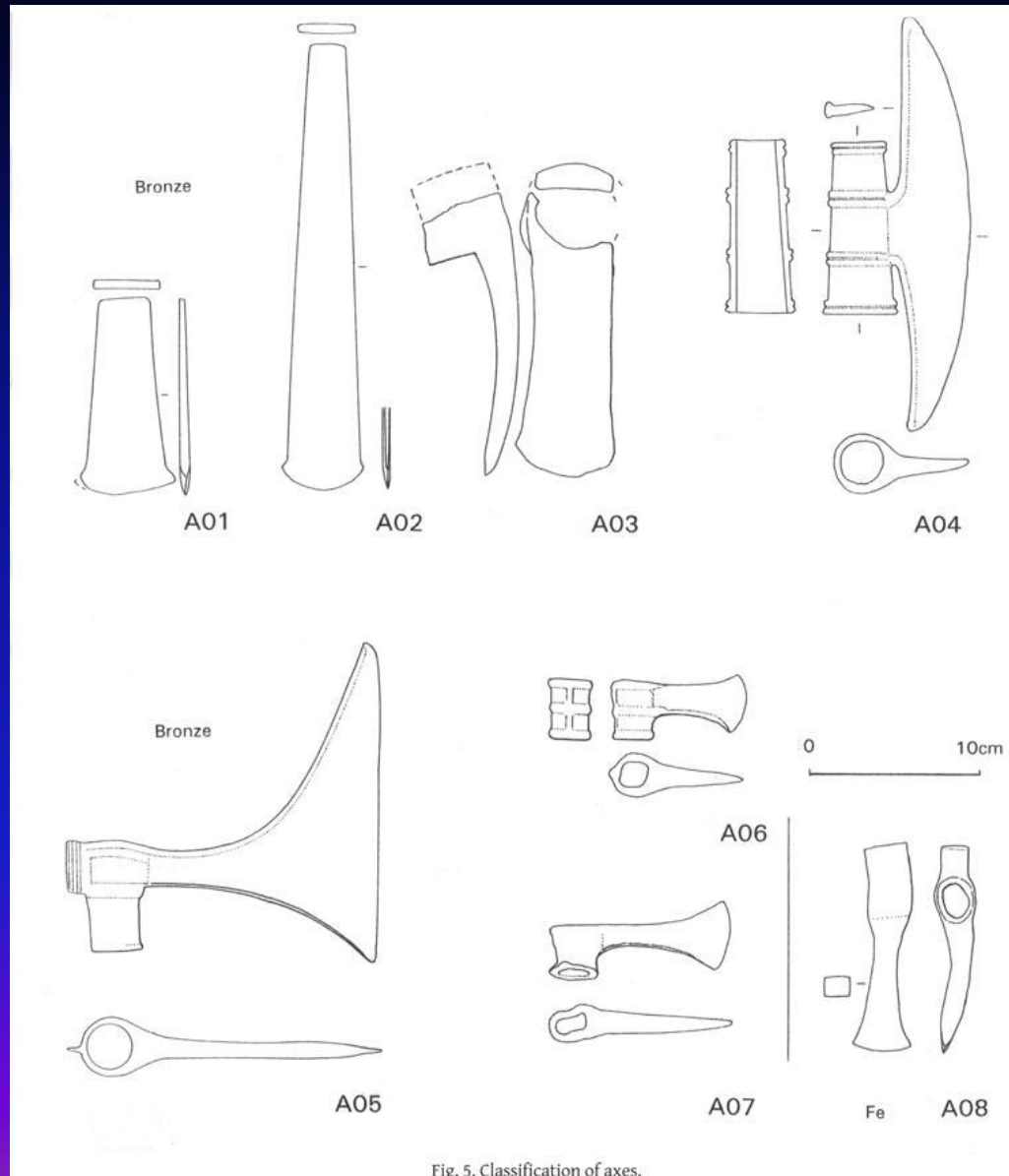
Neues Bild | Arbeitsmappen | Präsentationen

al-Safah SKVO "Oman" ☐ Innerhalb [Suche](#) [Erweiterte Suche](#) [Neue Suche](#)

1 2

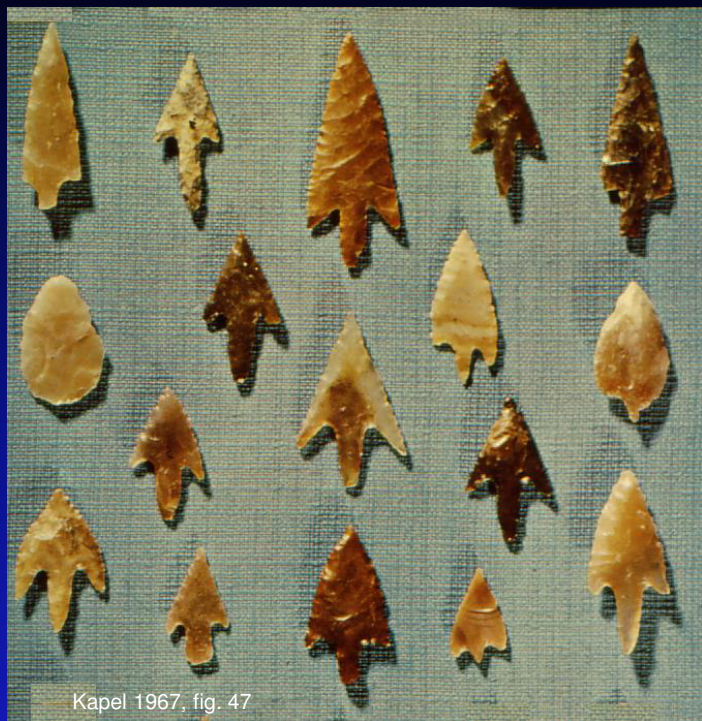
al-Saffah; axe 29434 al-Safah <a href="#">E</a>	al-Saffah; axe 29434 al-Safah <a href="#">E</a>	al-Saffah; axe 30103 al-Safah <a href="#">E</a>	al-Saffah; axe 30103 al-Safah <a href="#">E</a>
al-Saffah; axe 30103 al-Safah <a href="#">E</a>	al-Saffah; axe 30103 al-Safah <a href="#">E</a>	al-Saffah; axe 30103 al-Safah <a href="#">E</a>	al-Saffah; axe 30103 al-Safah <a href="#">E</a>
al-Saffah; dagger 30032 al-Safah <a href="#">E</a>	al-Saffah; dagger 30032 al-Safah <a href="#">E</a>	al-Saffah; dagger 30032 al-Safah <a href="#">E</a>	al-Saffah; dagger 30032 al-Safah <a href="#">E</a>
al-Saffah; dagger 30032 al-Safah <a href="#">E</a>	al-Saffah; dagger 30032 al-Safah <a href="#">E</a>	al-Saffah; hammer 30173 al-Safah <a href="#">E</a>	al-Saffah; hammer 30178 <a href="#">E</a>

# Moribund find classification of 2001 for SE Arabia





## Qatar D



Kapel 1967, fig. 47

## Wadi Jizi



Pflug-Arntz 22.03.2016

## Nizwa N1985 - LBA



Yule



Yule

## Madhe, Oman

shukran, yella bye