

1<sup>ST</sup> BIENNIAL  
INTERNATIONAL CONFERENCE  
OF THE SOCIETY OF  
IRANIAN ARCHAEOLOGY:  
"CULTURAL INTERACTIONS,  
CONTINUITY AND DISRUPTION"

EDITED BY:  
SEYED MEHDI MOUSAVI  
SHAHIN ARYAMANESH  
MAJID MONTAZER ZOHORI  
MORTEZA KHANIPOUR



Aryaramna Press





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# **Iron Age Short Bronze Sword in Iran, Mesopotamia and around the Persian Gulf: an Analysis of the Dispersion and Evolution**

**Narges Bayani**

## **Introduction**

This paper is survey of the so-called "Maka" style of short swords found in Iron Age Arabia. The best known image of a this peculiar type of short sword is found on the grave of Darius II at Persepolis (Potts 1985: Fig. 1a), and in other Achaemenid royal inscriptions, where the the people of the land of Maka, called the Mačiya, are shown carrying it slung over their shoulder (Potts 1998: 193). Previously associated the region of Makran in southeastern Iran, Maka is now known to have referred to the region of modern day Oman (Potts 1992, 2014; Yule 1999), which may have been part of the 14th satrapy of the Achaemenid empire (Potts 1985). The curious crescent shaped pommels of the Maka swords is echoed in the short swords found at a number of Iron Age sites in the UAE and Oman. Typologically unprecedented in this part of Near East, these swords attest to the connections of southeast Arabia with the Zagros mountains and its piedmonts.

This paper examines the evidence for appearance of these so-called "Maka" short swords at sites along the southern coast of the Persian Gulf during Iron Age, tracing the diffusion of this type of weaponry from western Iran and the greater Fertile Crescent to southeast Arabia (now encompassing modern day UAE, Bahrain, and Oman). These short swords with flanged hilts and crescent shaped pommels were often made of bronze, but occasional Iron examples have also been found. The entire sword was cast in one piece, which represented a structural advantage in terms of strength, and allowed



for use in combat modes that put a substantial pressure on the weapon, such as thrusting or slashing. As such, the marked rise in popularity of this type of short sword in southeast Arabia during Iron Age points to a shift in modes of combat and the predominance of close combat situations. It aims to showcase the wide distribution of this particular type of short swords across Iran, greater Mesopotamia and the southern coast of the Persian Gulf, as a marker of cultural interactions between various competing entities in Iron Age Western Asia.

### **History of research on short swords of Arabia**

Lombard published the first study of short swords in Arabia in 1981, followed by a much more comprehensive treatment in his Phd dissertation few year later (Lombard 1985). Before the discovery of such swords in southeast Arabia, there had been numerous attempts at typological and chronological analyses that dealt with similar objects. These earlier publications included a catalogue of then-known Luristan Bronzes by Godard (1938), a comprehensive overview of swords and daggers and their connection with mounted Cavalry by Colonel H. Gordon (1953), and a highly detailed typology of the entire known corpus of swords and daggers from Ancient Near East, Egypt, Classical world, and Europe by Maxwell-Hyslop (1946). Another monumental typology of all bronze tools from Indus to Danube is by Deshayes (1960). A number of smaller studies, such as Nagel's (1959-1960) analysis of daggers from the time of the 2nd dynasty of Isin, and Calmeyer's analysis of datable bronze artifacts from Luristan and Kermanshah (1969) inadvertently set the stage for the study of the southeast Arabian short swords that began to be discovered from the 1960s onwards.

Since the completion of Lombard's 1985 PhD dissertation, several scholars who had conducted fieldwork in southeast Arabia have discussed various aspects of these short swords (Frifelt 1970; Potts 1998; Magee 1997, 2003; Jasim 2012; al-Shanfari and Weisgerber 1989; Yule 2001; Yule and Weisgerber 1986, 2001; Velde 2003; Weisgerber 1988, 2007). The majority of these works have focused on drawing typological parallels for the Arabian specimens, as well as fine-tuning the chronological context of their find spots. Only a small portion of scholarship has turned to interpreting the appearance of these swords

in southeast Arabia in the larger context of regional exchange, and the circumstances of their arrival as a artifact type in this region. The adoption of the short sword as a diagnostic and long-lasting staple of material culture in southeast Arabia, certainly merits exploring these questions.

The goal of the present paper is to review and evaluate the evidence for such swords, both locally in southeast Arabia and on a regional scale in neighboring Iran and Mesopotamia during the Iron Age, in order to shed some light on the circumstances of their dispersion to this region. While a complete cataloguing of the every single example of comparable artifact from Western Asia is well beyond the scale of this paper, only the strongest and most concentrated parallels (in Iran and Mesopotamia) will be discussed.

### **Chronology of 2nd mill and Iron Age Arabia**

The chronology of the Iron Age in UAE is largely based on the sequence from the three type sites of Tel Abraq, Rumeilah, and Shimal (Magee 1996). Ceramically, there is a stark difference between the early part of Iron Age in Arabia (identified with Phase 1 at Tel Abraq, and Rumeilah 1) and the later periods. In Iron I period in Arabia is identified by material culture of Rumeilah Period I, Tel Abraq phase 2, and Shimal phases 4c-4b. The subsequent Iron II horizon includes Period II at Rumeilah and Phase 3 at Tel Abraq, and is absent in the Shimal sequence (Magee 1996: 244). The Iron II period is the classic Iron Age in the UAE (Potts 2001: 49). An unprecedented increase in settlement size and number is attested at a number of sites with substantial mudbrick architecture including Rumeilah and Bint Saud in the Al 'Ain area (Boucharlat and Lombard 1985; Magee et al. 1998) during Iron II period. The third and final sub-period of the Iron Age, Iron III, is not very well known, although occupation is attested at half a dozen settlements (Potts 2001: 50). The appearance of previously unattested shapes in an imported Iranian ware called 'Burnished Maroon Slipped Ware' found in Iron III contexts across the UAE probably reflects this area being under the control of the Achaemenid rule (Potts 2001: 50). The absolute chronology of Iron Age period in Arabia, which is based on collated evidence from number of sites,

places the beginning of Iron I around 1300/1200 BC, Iron II at c.1100 BC, and Iron III at c. 600 BC (Magee 1996: 248).

In Oman Peninsula, the archaeological evidence from 2nd millennium BC can be divided into two distinct cultures (al-Shanfari and Weisgerber 1989; Velde 2003): a Wadi Suq period and a Late Bronze Age period. Magee (2014) argues for placing the Late Bronze Age remains within the Early Iron Age (Iron I).

In terms of settlement, there is a shift in settlement pattern observed during the Iron Age. Unlike the earlier periods, many Early Iron Age sites are not immediately on the coast of Oman but inland, a situation that appears to have been enabled by the development of *falaj* irrigation system (Boucharlat and Lombard 1985: 45; Magee 2014).

The preceding Wadi Suq and Late Bronze Age periods in UAE and Oman correlate with the middle Dilmun period in Bahrain. There is substantial evidence for interaction between the Bahrain and southeast Arabia during this time (Carter 2001), with a focus on copper production industry destined for the Mesopotamian market. The abundance of bronze weapons and tools in tombs of Wadi Suq period suggest that the copper industry in southeastern Arabia produced a lot for local consumption as well (Magee 2014: 183). The sheer volume of weaponry in Wadi Suq burials has been suggested to represent a period of relative peace (Potts 1998), as weapons are more disposed of as grave goods in times when there is no immediate need for them. By the Early Iron Age, an entirely new group of material culture appears in burials across southeast Arabia, which includes a number of short sword forms, new ceramic forms, among other things. These short swords made of bronze appear to be limited to the Early Iron Age, and give way to the longer swords of the Late Iron Age (Potts 1998; Yule 2014).

In Bahrain, the beginning of the Kassite rule is placed at around 1500 BC (Magee 2014: 178). The Middle Dilmun period authority over Bahrain appears to be overwhelmingly Kassite in nature, and probably related to the Kassite ruling family of Nippur (Potts 2006; Magee 2014:177). The discovery of a number of Kassite seals, sealings and administrative tablets (Potts 2006; 2010) highlight the extensive range of Kassite administrative control that was brought to Bahrain (Magee 2014: 178). The strong connection of Nippur to the ruling family at



Dilmun at this time is also evident in the discovery of two texts from Nippur that mentioned a Kassite governor in Dilmun (Potts 2006: 115). In fact, there is substantial infiltration of Kassite influence over Dilmun society that goes beyond the economic and administrative mechanisms. The inter-dynastic marriages between Kassites and Elamites may have had a role in the relationship of Dilmun, and the Persian Gulf region in general, with the rest of the Ancient Near East (Potts 2006). Kassite ceramics influence is seen in predominance of footed goblets and other imported Kassite wares. Excavations on Failaka have shown that Mesopotamian control over the Persian Gulf at this time was even greater towards the northern part of the gulf (højlund 1987; Magee 2014; Potts 2010). The end of Kassite control over Bahrain appears to have come to an end at around 1350 bc, as evident by the destruction levels at Qal'at al-Bahrain.

### **Contexts of find**

Despite the rapid intensification of settlements in southeastern Arabia during the Iron Age, nearly all of the short swords found in Arabia come from funerary contexts. Many were found in disturbed or reused graves. Of those that have secure contexts, most are found in Iron Age II contexts (Potts 1998: 192). Iron Age burial practices in Arabia appear to have been diverse, and various types of graves were in use during this Period: re-used older tombs, rock-shelter tombs, individual graves, or small cairns. In UAE, the first example of this type of short sword was found in Cairn 20 at Jebel Hafit, in a much older 4th mill BC tomb that was reused in the Iron Age (Frifelt 1970). In necropolis of Jebel Buhais, near Sharjah, a number of burial chambers from the 2nd millennium BC were re-used during the Iron Age (Jasim 2011: 192). The two bronze small swords (Jasim 2012: Fig.127: 5), however, were not found in re-used chambers, but in two rock shelter tombs dating to Early Iron Age. Each was found in a burial chamber that contained the bones of many individuals in a disorderly manner (Jasim 2012: 87; 98), therefore it is not possible to distinguish between grave goods of various individuals. Similarly, at Qidfa, near Fujairah, a horseshoe-shaped Wadi Suq tomb that was reused in the Iron Age (Potts 1998: 193) produced a short sword. The site of Qarn Bint Saud, near Abu Dhabi consists of several tombs of 3rd and 2nd mill BC and some 1st

mill settlements (Frifelt 1975). Nine of these earlier tombs had evidence for Iron Age reuse (Lombard 1985: 113). At Saruq-Al-Hadid, in Dubai, Recent geophysical survey and excavations (Hermann, Casana and Qandil 2012; Hermann 2013) revealed it to be a multi-period site with distinct site functions, with evidence for occupation during Umm an-Nar and Wadi Suq periods, while Iron Age remains at the site was limited to funerary and ritual activities, some of which included reusing earlier funerary structures (Hermann, Casana and Qandil 2012: 66). The nearby site of Al-Qusais also consists of a cemetery, a settlement, and a small mound with evidence for ritual activities (Taha 1983). The site of Al-Qusais is the only coastal site where a short sword was discovered.

This situation is also reflected in Oman, where a communal grave excavated at the site of Al-Wasit, which included the remains of 18 individuals, produced two short swords (Weisgerber 2007: 277). At Nizwa an accidental discovery of some objects between two cliffs by a local farmer resulted in the recovery of two short swords. The find spot appears to have been a partially preserved rock shelter burial (Al-Shanfari and Weisgerber 1989: 17; Cleuziou and Tosi 2007: 283). At Selme on the edge of the 'Ibri oasis a great hoard of prehistoric artifacts was discovered during gardening work. The hoard, which is the largest collection of ancient metal artifacts found together, appears to have been placed into one -or perhaps two ruined Umm an-Nar period burial cairns (Yule and Weisgerber 2001). It has been suggested that the Selme hoard could represent a cache stashed by an ancient grave robber in an already partially plundered Umm an-Nar cairn (Yule and Weisgerber 1986).

The only evidence for non-buried context for a short swords comes from the site of Rumeilah, near Al 'Ain, where it was found in an unspecified context in level II of House F (Boucharlat and Lombard 1983: 5; fig.9), in a settlement that was securely dated to the Iron Age (Lombard 1985: 137)

### **Typology of southeast Arabian short swords**

The collection of bronze short swords from southeast Arabia can be divided into four main typological categories:

The first category (fig.1) includes swords with a larger blade-to-hilt ratio, a flanged hilt and crescent shaped pommel. The hilt nearly always ends in a raised semi-circular feature on the blade. The hilt tightens just below the grip. To this category belong two examples from Jebel Buhais (Jasim 2012: fig. 117.1, fig.125.7), one from Cairn 20 at Jebel Hafit (Bibby 1970: 298; Frifelt 1970; Lombard 1985: 138; Cleuziou and Tosi 2007: 283), one from Saruq al-Hadid (Al-Khreisha and Al-Nashif 2007, Fig. 17), one from Rumeilah (Boucharlat and Lombard 1985: Pl.36.4), and a partially preserved one from Nizwa (Weisgerber 2007: fig.327).

The second category (fig.2) includes swords with longer hilts and crescent shaped pommels. The inlay for the hilt was either secured through one -or both- methods for attaching the grip: either through use of rivets, such as in the short sword from al-Qusais (Qusais no. 5, Lombard 1985: fig.107-347), one from Qidfa (Potts 1998: 193) with a unusually high number of rivets, and a partial one from Selme hoard (Yule and Weisgerber 1986: cat.24). Alternatively the grip could be secured to the hilt through bending of the metal at the hilt to overlap the grip. The pommel in this category tends to be larger than the category 1, and the midrib is usually not pronounced, although two examples from Nizwa (al-Shanfari and Weisgerber 1989: 17: Nizwa 7721 and Nizwa 7784) have articulated midribs.

The third category (fig.3) includes swords with elements of two previous groups: shorter blade relative to hilt length, large crescent shaped pommel, a semi-circular feature at the guard, and raised midribs. This category is only known from Selme (Tule and Weisgerber 1986: cat. No 14, 20, 21, 22).

The last category (fig.4) includes short swords with the diagnostic crescent shaped pommel, although in some example (ie. Al-Qusais no.1; Lombard 1985: fig.107-375) the crescent form is not quite pronounced. In profile, the hilt is flat and lacks riveting or overlapping of the rim. The guard is plain and undecorated, and no midrib is visible. Six short swords (Yule and Weisgerber 1989: Pl.2, no.44-19) from the hoard at Selme belong to this category, as well as one example from Nizwa (al-Shanfari and Weisgerber 1989: 17: Nizwa 7720), three from al-Qusais (Qusais no. 1-3, Lombard 1985: fig.107), and two from al-Wasit (Weisgerber 2007: 277).



### **Diagnostic material culture found in association with the swords**

The diverse range of Iron Age funerary traditions has a direct impact on how much we know about the material culture complex associated with these swords. Many Arabian short swords were found in earlier tombs that were reused. Additionally, as the tradition of communal burials continued in the Iron Age, it is often virtually impossible to distinguish between grave goods of various individuals. However, confusion is not always the case. The Iron Age saw the diversification of burial traditions in Arabia and the introduction of individual burials in this region. These occasional individual graves provide for the first time the opportunity to investigate the complete funerary offerings of graves that contained these peculiar short swords.

The bronze shot sword from Cairn 20 at Jebel Hafit -which was a much earlier structure reused during the Iron Age- was found with two bronze vessels and a soft stone bowl, among other things (Lombard 1985: 138). The sword from Qidfa also came from a re-used Wadi-Suq tomb (Potts 1998:193), and was accompanied by ceramics of both Early Iron Age and some Late Iron Age sherds (Yule 2014: 28). The two swords from Jebel Buhais, were each found in a rock shelter grave, possibly containing one individual each. The material content of the two tombs, BHS 27 and BHS30, is closely related to one another and includes forms that are not found elsewhere at the site. These include a set of identical soft-stone carved vessels with matching lids (Jasim 2012: fig. 126), intact spouted vessels (Jasim 2012: fig.114), and plain pottery sherds some of which were from spouted vessels (Jasim 2012: 91). The pair of identical soft-stone vessels with lids (figs. 125: 5; 126) found at Jebel Buhais in association with swords have no parallel so far from any of the Iron Age sites in the Oman Peninsula (Jasim 2012: 91). While it is not possible to know whether or not the two peculiar and identical soft stone vessels and the short swords were for the same individual, it is certainly more probable that they did, given the uniqueness of the two tombs in comparisons to all others at the Jebel Buhais. The only example to come from a non-buried context, the sword from Rumeilah, was found in Level II deposits of House F, possibly as part of a small hoard, but incomplete publication limits our understanding of its find circumstances. The ceramics of Level II at Rumeilah include vessels with incised graffiti on them (Boucharlat and

Lombard 1983: 5), not found in the earlier period at the site. Other diagnostic finds of this period at Rumeilah include soft stone vessels (Lombard 1982) including a unique spouted vessel (Boucharlat and Lombard 1983: fig.10). A second, unpublished dagger was reported from another hoard nearby (Lombard 1985: 220, no.15). The ceramic assemblage of Level II at Rumeilah represented continuity from the earlier Level I, but also shows the introduction of an entirely new ware (both in terms of style and technique), with dark red-brown or black polished surfaces (Boucharlat and Lombard 1983: 5). The two swords from al-Wasit were found in a communal grave with at least 18 individuals, which also yielded 50 soft stone vessels (Weisgerber 2007: 277). The “warrior grave” at Nizwa, which was most probably an individual rock shelter tomb, included in addition to the three bronze short swords, three soft stone vessels, a few ceramics of Iron I, and a Calcite stamp seal but no metal vessels (al-Shanfari and Weisgerber 1989: 17). The Selme hoard, consists of some 600 metal vessels, weapons and bangles, as well as over a dozen vessels in soft stone. While the typical stone bowls of the 3rd and late 2nd millennia BC suggest a long timespan for the dating of the hoard, the vast majority of the finds seem to belong to the end of 2nd mill BC, which is consistent with a cache stashed by an ancient grave robber in an already partially plundered Umm an-Nar cairn (Yule and Weisgerber 1986). Many of the object types from Selme have no previous attestation, and have no close-by or foreign parallels. Yet the morphological similarities among the finds suggests that they were produced in the same place, rather than being collected from scattered points of origin (Yule and Weisgerber 2001: 15). The Selme hoard does not qualify as a primary context as the artifacts were clearly collated from various -possibly funerary- contexts in antiquity. The assemblage derives from different periods: Umm an-Nar, Wadi Suq and Early Iron Age -Lizq-Rumailah period- (Yule and Weisgerber 2001: 17, 28–29). Yet few of the metallic artifacts in Selme hoard predate the Early Iron Age (Yule and Weisgerber 2001: cat. nos. 6–11 (daggers), no. 268 (vessel). Among the find in the Selme hoard were at least 12 daggers with crescent pommels and flared hilts<sup>1</sup>. Analysis of chemical composition

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<sup>1</sup> types D8-14 (Yule and Weisgerber 2001: 42-44)

of 8 examples, 4 of which were among these flanged daggers, showed that all were made of tin-bronze (Yule and Weisgerber 2001: 78). The analyzed signature of the copper used in the samples was consistent with Omani sources, while the tin used in alloying must have been imported (Yule and Weisgerber 2001: 78). In their form the metal vessels from Selme hoard resemble Iranian pottery from this same time, and thus can be roughly dated to Iron I and II (Yule 2015: 138). The two short swords from Saruq al-Hadid were discovered with other copper artifacts including a long spouted bowl on an occupation floor in level 3 of a test trench, along with ceramic sherds and pieces of soft stone vessels common in the Iron Age (Qandil 2005: 133). As the finds from the site of al-Qusais remain largely unpublished, we have very limited understanding of the accompanying finds. A number of spouted ceramic forms were published (Taha 1983: fig.14) as well as stone vessels and incised bronze arrowheads (Vogt 1985a: 192-193).

### **Dating of the southeast Arabian Swords**

Among the material culture found in association with the swords, the presence of soft stone vessels is of limited help chronologically. Soft stone vessels are a common component of Iron II period in the region, and are found at virtually every site belonging to this period. There is no clear difference in terms of forms between Iron I and II periods, but they seem to be much more abundant in Iron II (Lombard 1985: 192; Carter 1997: 229). Lombard's (1981; 1985: 189-197) study of the Iron Age stone vessels from Oman provides a framework for categorizing and dating the soft stone vessels found in association with Arabian short swords. He identifies four main groups based on form: flat based cups (often with a horizontal spout), large bowls with splayed sides and a flat base, strongly carinated vessels with convex base, and barrel shaped suspension vessels with four lugs (Lombard 1981: 42), with a few subcategories identified (Lombard 1985: 193). Aside from noting the few outliers, the discovery of soft stone vessels along with nearly all bronze short swords from the region does little other than confirming the dating to Iron Age II. The pair of nearly identical soft stone vessels with lids (figs. 125: 5; 126) found at Jebel Buhais in association with swords are rare (Jasim 2012: 91). Lombard has published a comparable example from Qarn Bint Saud (1981: fig.14.2),

noting it as a solitary form that does not constitute a category. However, the general shape, style, material, and decorations of these two vessels are very close to the general corpus of Iron Age soft stone vessels from Oman and UAE, and as such do not suggest being imports.

The ceramics that were found in association with these short swords are more helpful in providing a comparative framework for placing the swords in local and regional context. While a detailed discussion of the various ceramic traditions from this period is well beyond the scope of this paper, a brief overview of the ceramic traditions of UAE, Oman and Bahrain during the Iron Age is necessary in evaluating the evidence.

Iron I period is not well understood in this region, and the material culture of this period is often indistinguishable from that of the Late Bronze Age. In Oman, the Early Iron Age pottery has close contemporary parallels with neighboring Iran (Yule 2015: 133) and Mesopotamia. Ceramics of Iron I are coarse and limited in shapes, with a pedestaled goblet form that recalls contemporary Kassite forms from Mesopotamia, and of Kassite levels at Bahrain and Failaka (Magee 2014: 190).

Iron II ceramics are distinct in form and decoration and unlike anything previously produced in this region. A distinctive local fabric called "sandy ware" becomes widespread. The ceramic assemblage from Iron II and III in southeast Arabia also includes a number of wares with clear foreign parallels. Most notable among these are the painted and unpainted bridge spout vessels, diagnostic of Iron II contexts in Western and Northern Iran, found in Iron II contexts across southeast Arabian sites (Magee 1996: 247; 2005). As they do not occur in Iron I contexts in Iran, their presence in southeast Arabia was originally regarded as an anchor to suggest the earliest possible date for the beginning of Iron II in Arabia (Magee 1996: 249). Such vessels are found in both local Sandy Ware and in a fine painted version that in fact is an import from Iran (Magee 2011). The bridge spout form is also found imitated in stone vessels of the period, examples of which have been found at Rumeilah (boucharlat and Lombard 1985: fig.3).

The material culture of the two rock shelter tombs at Jebel Buhais, BHS 27 and BHS 30, share a number of similarities with 'Ibri/Selme

hoard (Yule and Weisgerber, 2001. Pl. 47: 528), such as spouted vessels (Jasim 2012: 99). The long spouted vessel found in BHS27 (fig.114:1-4) has a parallel at al-Qusais (Taha 2009: pl.20F). This plain, long-spouted form (Fig. 114; 1) differs from the bridge-spouted examples known from Rumeilah and Muweilah and which are comparable to distinctively decorated artifacts of the Iranian Iron Age II and later periods (Potts 1990, 378; Magee 1996, 246; Jasim 2012: 293).

Foreign parallels for southeast Arabian ceramics continue into the Iron III period. The “Burnished Maroon Slipped Ware (BSMW)” (Boucharlat and Lombard (1983: 58) found at sites across Oman, Bahrain and UAE (Magee 1997: 46), has very close parallels throughout Iran (Magee 1997). Known in Iran as “Burnished Red Ware”, it is found in Iron III contexts in western Iran (Magee 1996: 249), including Baba Jan, Godin Tepe, Nad-i Ali, Dahan-i Gulaiman, Tal-i Zohak, and Pasargadae; in contexts dating to between the sixth and fourth centuries BC (Magee 1995:182–183). It is noteworthy that BSMW is completely absent at Jebel Buhais (Jasim 2012: 296), while it was found at Rumeilah Period 2 and Tell Abraq Phase 3. Although examples from Iron Age I and III contexts were also found, the majority of the Jebel Buhais pottery vessels are closely comparable - in terms of technique, shape and decoration - to those from Rumeilah Period 1 & 2 and Tell Abraq Phase 2, i.e. Iron Age II period (Jasim 2012: 294).

### **Columned halls and bridge spouted vessels**

The appearance of bridge spout vessels forms in southeastern Arabia has been the subject of several studies (Magee 2005; Lombard 1982), and dealt with in some detail by others (Carter 1997). Magee (2005) has traced the distribution and chronology of Bridge-Spouted vessels in both Iran and eastern Arabia. His geochemical analysis of some examples from sites in UAE has demonstrated that while some vessels were imported from Iran, others were produced locally (2005: 93). In Iran, they appear to have a very long production period and are found within diverse ceramic traditions, with the oldest one dating to the late 2nd millennium, occurring all the way to the ninth century BC (Haerinck, Jafar-Mohamadi and Overlaet 2004:117). Magee’s (2005) thorough review of all such vessels found at southeast Arabian sites demonstrates a very wide distribution for them from Oman to Bahrain.

Absolute dates, derived from samples from many recently excavated sites across Arabia have provided independent absolute chronology for the bridge-spouted vessels at these sites, confirming that all come from local Iron Age II contexts, placed at ca. 1000-600 BC (Magee 2005: 96). The site of Muweilah (Magee 2004) near Sharjah has yielded over 70 vessels, the largest collection of bridge-spouted vessels ever discovered in southeast Arabia. C14 analysis from this single-period site placed the window for bridge-spouted vessels after c. 920 BC, and before the settlement's destruction at some point around 800-600 BC (Magee 2005: 98). Bridge-spouts vessels from Rumeilah also confirm these dates (Boucharlat and Lombard 1985: pl.51.3). These dates from eastern Arabia, therefore, align well with the Iranian evidence, yet they are typologically distinct -in form, surface treatment, and decoration- from their Iranian counterparts (Magee 2005: 99). A geochemical study (Magee 2005) of the two most common eastern Arabian wares that contained the bridge-spouted form, demonstrated that Sandy Ware was produced locally, while the other Fine Painted Ware was not (Magee 2010: 49), and was perhaps produced in Iran (Magee 2005: 107). Stylistic variations between the Fine Painted Ware and bridge-spouted vessels from Luristan suggests that the production center for this ware were somewhere else, perhaps in the Fars region (107).

The context where bridge-spouted vessels were discovered in southeast Arabia provides an interesting link to a contemporary Iranian architecture, sharing strong similarities to an Iranian columned hall. Bridge spouted vessels have been found in large numbers at a number of cultic sites across southeast Arabia that rose in the Iron II period along major transit areas: Saruq al-Hadid, Muweilah, and al-Qusais are among these. At all these sites extensive evidence for ceremonies (Benoist 2010: 129) that included snake-adorned representations has been found, along with large quantities of metal in the form of finished artifacts (many arrowheads) and unfinished slag (Magee 2014: 237-238). The evidence for bronze working alongside cultic activities reinforces the connection between the two spheres of activity.

A small room in Iron II complex that featured a columned hall, close to bronze working facilities at the site of Muweilah in UAE (Magee et al 2002) contained nearly 50 painted bridge-spouted ceramics, as well



as a Mesopotamian jars and soft stone vessels (Magee 2014: 229). The scale of imported ceramics highlights the inter-regional exchanges with neighboring Iran, Mesopotamia and Bahrain.

The columned halls are a staple feature of inland settlements (such as Rumeilah) during the Iron Age II period, and have well established parallels in western and northwestern Iran (Magee 2007). As there is no precedence in Arabia for such architectural element, the sudden appearance of columned halls in Iron Age II period is striking (Magee 2003: 184). The direct association of columned halls in Arabia with banqueting paraphernalia (spouted vessels, bronze ladles, incense burners) might suggest that the spread of these type of ritual activity reflects evolution of political strategy and organization (Magee 2003: 186). Magee has hypothesized that the desirability of bridge-spouted forms in Iron II Arabia and their functional specialization for pouring liquids suggests that the local population was emulating the behavior of an Iranian elite (Magee 2005: 112).

Despite the abundant evidence for association of bridge spouted vessels with bronze short swords and copper production facilities, the question of manufacturing of the bronze items remains unanswered. At Saruq al-Hadid evidence for copper smelting and production has been identified (Qandil 2005: 122). Recent survey work at Saruq-al-Hadid has revealed a highly dispersed site with a very large amount of metalworking slag (Nashef 2010). No real settlement has been excavated here, yet Saruq al-Hadid has yielded a very large assemblages of metal artifacts, and massive evidence for bronze and iron production. Two copper short swords were found in an area very close to a slag heap (Qandil 2005: 131) and furnace fragments (Qandil 2005: 138), suggesting that this area was involved in copper smelting, yet no direct evidence of production for the sword was identified. The discovery of a bronze tripod with clear Urartian and Assyrian parallels (Potts 2009) at this site highlights the extremely long possible range of exchange with northern Mesopotamia and northwestern Iran.

The use of bridge spout is not limited to ceramics: it occurs as with soft stone and metallic vessels as well. A type of metallic biconical bowl with long -often bridge- sprout (Weisgerber 1988: fig.166; 168:14) is found at numerous sites in southeastern Arabia. Metallic bridge spout vessels were found in association with bronze short swords in the

Salme/Ibri hoard, as well as at al-Qusais necropolis (Boucharlat and Lombard 1983: 6), Qarn bint Saud, and Saurq al-Hadid (Qandil 2005: 133). A soft stone example from Rumeilah is unique (Boucharlat and Lombard 1983: fig.10), and clearly imitates contemporary metal vessels. The form is very close to the bronze examples from Al-Qusais necropolis (Boucharlat and Lombard 1983: 6). The incised decoration of this spouted stone vessel from Rumeilah is consistent with *serie tardive* style of soft stone vessels that begin in the Wadi Suq period and continue into Iron Age (Carter 1997: 94).

### **Foreign parallels for southeast Arabian short swords**

The limited presence of flanged hilt daggers at a number of sites across the Mesopotamia in the second quarter of the 2nd mill has been suggested by Phillip (1995: 140) to represent these short sword were not originally a Mesopotamian development, but rather a product of western Iranian traditions.

In Mesopotamia, the closest parallels to the southeast Arabian short swords comes from Tell Zubaidi in Hamrin. The site of Tell Zubaidi (Boehmer 1983; Boehmer and Dämmer 1985) yielded two bronze short swords. The first was discovered on the main floor of a building in stratum II, which was probably burnt down as a result of Assyrian hostilities perhaps around 1230 BC. The full length of the sword -still preserved- is 40 cm, with traces on the handle indicating that the handle was once inlaid with wood (Boehmer 1983: 101). There is a slight central ridge to both sides of the blade. Comparable examples in Mesopotamia have been reported from Kassite period levels at Nippur (McCown, Haines and Hansen 1967: pl. 30: 4 and 5; 32: 4). At Tell Zubaidi, the second sword was found in a double-pithoi burial of an adult male (Boehmer and Dämmer 1985: 40; grab 8). It was placed in front of the bent arms together with a whetstone (Boehmer 1983: 101). The two rivets that secured the original handle were preserved in place.

The form of the two examples from Tell Zubaidi, as a typical find from the period of 2nd dynasty of Isin, was discussed in detail first by many, including W. Nagel (1959/60) and Calmeyer (1969: 59-66), among others. The shorter example from Tell Zubaidi is particularly close to an inscribed example belonging to Marduk-Nadin-Ahe (1099-

1082 BC) (Boehmer 1983: 103) from which also an overlap-hilt similar to the longer Tell Zubaidi specimen is known. The form of Tell Zubaidi's example without the overlap is similar to one sword inscribed with the name of another Kassite ruler Adad-sumausur (1216-1187 BC) and one of the third king of the Second Dynasty of Isin, Ninurta-nadinsurmi (1131-1126 BC) (Fig. 9).

The double pitthoi burial containing the short sword was found embedded in a wall of a building in Stratum I, the end of which was probably caused by the invasion of the Elamite ruler Šutruk-Nahhunte in 1160 BC. It is therefore more recent than Stratum I. The ceramics in the burial (two nipple-breakers, a round flask and a round jar) were not that different from those of the Stratum I, however, suggesting that the burial occurred not long after the abandonment of Stratum I, perhaps in the second half of the 12th century BC (Boehmer 1983: 107). The dagger is thus a little older than that of Marduk-nadin-ahhes, but it still belongs firmly to the period of the 2nd Dynasty of Isin. Interestingly, this is the only burial from Tell Zubaidi that contained any weapons (Boehmer and Dämmer 1985: 39). The dates suggested by the names are indeed consistent with the archaeological evidence of plain examples from secure contexts. Much discussing has concerned theories of how and why these inscribed daggers ended up in the Zagros (Porada 1964; Dyson 1964a; Hertzfeld 1968; Calmeyer 1969). Hertzfeld (1968: 29-31) had suggested that they were from the graves of Assyrian soldiers garrisoned in Luristan, while Calmeyer (1995: 36) suggested they may have been dedicated to local sanctuaries, similar to the one found in the wall hoard at the sanctuary of Surkh Dum-i-Luri (Schmidt, van Loon and Curvers 1989: 322), or given to soldiers who had served as mercenaries in Babylonian armies. Porada (1964) suggested that these inscribed daggers were given to the leaders of troops from Zagros, serving in the Babylonian army. Calmeyer discussed a range of interpretations for the inscribed bronze daggers, possibly as pillage from Mesopotamia, or alternatively as votive offerings by conquerors to local shrines (Calmeyer 1969). In any case, the independently dated contexts for similar swords in Mesopotamia and Iran aligns perfectly with the dating suggested by the chronology of Isin II and Kassite kings whose names are inscribed on unprovenanced short swords.

In Iran, closest parallels to the southeast Arabian swords are found in Pusht-i Kuh region of Luristan. The chronology of "Luristan bronzes" is now generally placed in the Iron I period. Haerinck and Overlaet have further divided the evidence from Pusht-i Kuh into four chronological sub-phases: Iron IA, Iron IB-IIA, Iron IIB and Iron III (Haerinck and Overlaet 2004: 129). The Iron IA in Pusht-i Kuh is placed at around 1300-1150 BC. While the Iron IA presents a continuation in material culture from Late Bronze Age, the presence of a number of objects imported from Kassite Mesopotamia, such as Iron IA carinated beakers, which are related to late Kassite pottery of contemporary Mesopotamia (Haerinck and Overlaet 2004: 129) and faience vessels (Haerinck and Overlaet 2004: 130) suggests the existence of connections with Mesopotamia. All known evidence from this period at Pusht-i Kuh comes from burials. The cemeteries of Duruyeh and Kutal-i Gulgul belongs to this period. Bronze flanged-hilt short swords are common among the Iron I to IIA burial goods (Haerinck and Overlaet 2004: 130). A sub-type is characteristic of Pusht-i Kuh: slightly crescent shaped pommel, flanged-rim hilt, and with no decoration on the guard (Haerinck and Overlaet 2004: fig.5.26). The short swords of Iron Age Luristan are never longer than 40cm (Overlaet 2003:151).

Iron IB-IIA period, placed at ca. 1150- 900 BC, sees a reduction in imports from neighboring regions. The diagnostic form of short sword continues but by Iron IIB (ca.900-750 BC) it is no longer common in graves. In general, the absence of diagnostic objects in Iron IB/IIA makes it difficult to identify the remains of this period, and often it is the absence of diagnostic IA form that differentiates a context as being of IB/IIA (Haerinck 2005: 12). In Iron IIA, several Late Bronze Age habitation sites that were abandoned in Iron IA are resettled (Haerinck and Overlaet 2004: 132), where a characteristic painted ceramic known as Baba Jan III is found. Iron Age III (ca. 750-650 BC) sees a rise in both habitation and burial sites in Pusht-i Kuh, yet the short sword is no longer in the repertoire of burial goods. While the bridge spouts are very common in Baba Jan III ware of neighboring Pish-i Kuh, they are almost never found in Pusht-i Kuh (Haerinck and Overlaet 2004 133).

Some of the pottery forms that are in use during Early Iron Age periods (Iron IA-IIB) in Pusht-i Kuh include teapots with bridge open spouts and a vertical handle (Overlaet 2003; Haerinck and Overlaet

2010: 284). Shapes specific to Iron IA include pitchers with pinched spouts, gradually replaced by the teapots. Such pitchers are found at the Late Bronze Age sanctuary level IIIB at Surkh Dum-i Luri (Schmidt, van Loon and Curvers 1989: 20-23), and at in phase 7 at Tepe Guran, which is dated to Iron I (Thrane 2001: 86, pl.40). Tall "Istakan" beakers with narrow or pedestaled bases are also common in Iron IA Pusht-i Kuh, and find many parallels in contemporary Kassite sites in Mesopotamia, including Tell Zubaidi (Boehmer, Kessler and Dämmer 1985: 16-17, 52, Taf.50: 222, 30: 422). In general painted vessels are very rare in Early Iron Age Pusht-i Kuh, and are only found in Iron IA contexts (Haerinck and Overlaet 2010: 291). Iron IIB forms include a broad necked vase with three or four vertical handles on the shoulder, and is found at Kutal-i Gulgul and Shurabah, but it is generally not common in Pusht-i Kuh (Haerinck and Overlae 2010: 292).

An important Pusht-i Kuh site with substantial connections to southeast Arabian material is Kutal-i Gulgul, where nine burials contained short swords. Many of the tombs were re-used, with earlier remains pushed back to make space for the new body. A total of 11 short swords were found from Area B at Kutal-i Gulgul, 6 of which were found in a re-used burial (Burial B.3), all of which dated to Iron I (Haerinck 2003: 396).

In Area A, in one of the reused tombs (Haerinck 2003, tomb.A2) a short sword was found next to the most recently interred individual, an undisturbed male skeleton, along with an iron arrowhead and the iron dagger on its waist, and a single Iron IIB pottery (Haerinck 2003: 393). In another tomb (tomb A4), two flanged bronze daggers, an arrowhead and shell rings were found. These diagnostic shell rings are a marker of Kassite period in Mesopotamia and occur often in early Iron Age tombs of Pusht-i Kuh. An Iron I date for this tomb is also supported by the presence of an Iron I beaker (Haerinck 2003: 394). Another reused grave (Tomb A9) presented five short swords and many bronze arrow heads. The grave goods put the date in Iron IA period, and consist mostly of Kassite imports, including a Kassite shell finger ring and a faience Pyxis. Another seven short swords were found in various graves at this site (Haerinck 2003: 395). In tomb A11, another re-used tomb, three short swords and a handful of arrowheads were found (Haerinck 2003: 395).

The three graveyards of Kutal-i Gulgul, Shurabah and Bard-i Bal were originally started in Iron IA, but were continuously reused during the remainder of the Iron Age (Haerinck and Overlaet 2010: 295). The end of Mesopotamian influence in Luristan can be tentatively placed at around 1150 BC, evident in the absence of Mesopotamian-influenced objects in Iron III contexts in Luristan. This disruption may be the result of the military campaign of Shutruk-Nahhunte, an Elamite king, into Mesopotamia in 1150 BC and the subsequent disruption of Kassite settlements in Hamrin (Overlaet 2005: 11).

The short swords from Pusht-i Kuh can be divided into several subvariants (Haerinck 2003: 151). The earlier flanged-rim swords, by far the most common in Iron Age assemblage from Pusht-i Kuh, are found with flange the size of the full grip as early as ca. 1700 BC, and supplied with rim flaps from 1300 BC onwards (Maxwell-Hyslop 1946: 36-38). From Pusht-i Kuh, 53 examples were excavated by the Belgium Archaeological Mission in Iran; with many more looted in clandestine excavations and on display in collections around the world. Two variants of the rim flapped swords were identified in Pusht-i Kuh. The first sub-variant (=A1) (Overlaet 2003: 153; fig. 119) does not find direct parallels among the collection of South Arabian short swords. This type is however, the most common in Iron Age I and II of Pusht-i Kuh (Overlaet 2003: 152), yet very few have been found elsewhere. The closest parallels for this type come from Tell Zubaidi, found on the floor of a building that was probably burned in 1230 BC (Boehmer 1983: 101). The two unprovenanced examples with inscriptions to Marduk-Nadin-ahhe and Nebudchadnezzar I are also of the same form (Nagel 1959-1960; Calmeyer 1969), and agree with the Iron IA date of the Pusht-i Kuh specimens. Haerinck has noted that the flap rims are very prone to corrosion and occasionally only traces of them remain (2003: 152). This may be the case with the two examples from al-Wasit and from al-Qusais nos. 2 and 3. These four swords find their closest parallels at Kutal-i Gulgul and Duruyeh (Haerinck 2003: fig.122. KT.A0-42, DR.7-5). Kutal-i Gulgul and Duruye are the two earliest Iron I cemeteries excavated by the Belgium Expedition, and are firmly dated to Iron IA on the basis of ceramics and other grave goods that display strong ties to contemporary Kassite levels in Mesopotamia (Haerinck and Overlaet 2010: 295). A similar short sword found at



Nimrud (Curtis 1983: fig.4-3), which looks identical to the examples from al-Wasit, al-Qusais no.3 and from Tell zubaidi. This specimen from Nimrud was found in a grave that is now dated to ca.1500 BC (Curtis 1989: 76).

The second sub-variant from Pusht-i Kuh (=A2) is not nearly as common as the first, with only 5 examples ever excavated from this region (Haerinck 2003: 157). The form consists of a narrowing of the area between the pommel and the flap rims of the grip. Two examples from Nizwa, in Category 2 of Southeastern Arabian swords correspond to this group from Pusht-i Kuh. While not found in great numbers from either Southeast Arabia or Pusht-i Kuh, this type of short sword has a wide distribution in the Near East, with examples found as far as Ras Shamra (Schaeffer 1939: fig.63), Ur (Woolley and Mallowan 1976: fig.4.1-2) and Nimrud (Layard 1849, pl.60.10) and Nippur (McCown, Haines and Hansen 1967: pls. 30.3-5, 32-4); all of which have been found in 14th cent BC contexts (Haerinck 2003: 157).

The overall shape of the third sub-variant (=B1/2) of short swords from Pusht-i Kuh, which include those without flap rims (Haerinck 2003: 160), corresponds to Category 1 of the southeast Arabian short swords. In Pusht-i Kuh, examples of this type are found in an Iron IA context at Bard-i Bal (Harnick 2003: pl.194-5). It is interesting that the pronounced constriction in the lower part of the hilt, a diagnostic feature of the Category 1 of southeast Arabian swords, is not represented in the Pusht-i Kuh assemblage. Comparable examples are known from Kassite sites in Mesopotamia (Boehmer, Kessler and Dämmer 1985) and the unprovenanced examples with names of Isin II kings (Nagel 1959-1960: abb.12; Calmeyer 1969).

The closest parallels for Category 4 come from a Iron IA tomb at Payi Kal Cemetery that was reused through the Iron III period in Pusht-i Kuh (Haerinck 2003: 523, pl. 141), however, Haerinck noted that the location of the sword in the tomb made it clear that it was among the earliest deposited, and as such most probably belonged to the original burial in the Iron IA period (Haerinck 2003: 160).

The only evidence for a short sword from a non-funerary context in Luristan came from the site of Surkh Dum-i Luri. A Bronze partial hilt fragment from (Haerinck 2003: Sor 1628) was discovered level 2B, in a wall hoard between two rooms of the main building level at the site.

This building was identified as a sanctuary (Schmidt, van Loon and Curvers 1989: 50; pl.155: e). Many votive offerings with dedicatory inscriptions to Ninlin were found in this building. The hoard to which the hilt belonged included seals, a bronze axe and a number of copper and bronze ornaments. It also contained a fragment of a copper/bronze nipple beaker or goblet that carries a design of ruler-and-attendant scene (Schmidt, van Loon and Curvers 1989: H.H 322), of a type common in Iran in the 10th and 9th centuries BC (Calmeyer 1973: 224-28; Muscarella 1974: 243-49, 1977:77, 1981a:322). Surkh Dum-i Luri had an unusually high percentage of seals, many of which were found incorporated into the floors and walls of the sanctuary, and thus were perhaps previously been part of the sacred inventory. Nearly all were of Iron Age variety, with a few earlier one that were well worn. The ones found with the hilt included one Neo Assyrian and four Elamite/Neo Elamite cylinder seals (Schmidt, van Loon and Curvers 1989: 413-451).

Outside Pusht-i Kuh, a comparable bronze dagger (Thrane 2001, fig. 65:1) was found in Settlement layer C at Tepe Guran. The burial was of an adult male, laid on a bed of mudbricks. The mudbrick bed of this burial resonates with Kassite graves from Babylon, where bodies were found on mudbrick or clay platforms (Reuther 1968: 159). The dagger was found resting on the lower part of the chest on the pelvis. In Guran's example, the hilt is crescent-shaped and had remains of rivets preserved. Other grave goods in this tomb included some personal ornaments and a small bronze jug with a nearly-bridge spout. The base of the spout has a bulge and decorative nails around it, similar to the bronze jugs from Bard-i Bal tombs 2 and 19. The form is well attested at the cemetery of Pa-yi Kal as well (Vanden Berghe 1973a grave 1969,3, fig. 23, pl.XXVIII), and another one from Cham Chakkal 2 (Vanden Berghe 1979b, fig.2).

### **Unprovenanced swords**

A rather large collection of unprovenanced short swords are known from museums and private collections. Moorey (1971) has published a number of these unprovenanced examples in the collections of Ashmolean Museum (1971: fig.3. no.47, 48, 50), all of which come from the art market and were found through clandestine excavations, most likely come from either Luristan or southwestern Caspian regions

(1971: 37). Other comparative unprovenanced examples include one in the Beitz collection, now in the collection of Folkwang Museum in Essen, Germany (Orthmann 1982: fig.72), which is very similar to the Category 1 of southeastern Arabian swords, and which he attributed to northern Iran (Orthmann 1982: 23). To this list we must add the corpus of seven inscribed bronze short swords attributed to Luristan in the Foroughi Collection (Dossin 1962: no.1-6). The importance of these inscribed examples lies in their mentioning of the kings of the 2nd Dynasty of Isin and Kassite kings of Babylonia (Dossin 1962: 150).

## **Discussion**

### **typology**

This brief overview the body of comparanda from the western Iran and eastern Mesopotamia serves to demonstrate that not all types of southeast Arabian shorts were present in Iran and Mesopotamia. This is particularly true of what has been classified in this paper as Category 3, where no close parallels were identified in western Iran or Mesopotamia. The semi-circular pattern that decorated the base of the grip is in general appear to be very rare outside of southeast Arabia, as Iranian and Mesopotamian examples comparable to Category 1 are also devoid of the semi-circular feature that is so ubiquitous in the southeast Arabian corpus. On the other hand, the flapped rim examples that are very common in western Iran and Mesopotamia are not found in Oman and UAE. While the fragility of the flaps may have contributed to their absence in the southeast Arabian corpus, it is also possible that the flapped rim version simply did not achieve widespread appreciation in this region. The long hilts of Category 3 -a feature they share with category 4- is equally rare outside southeast Arabia, and may represent a regional preference for shorter blades.

### **Dating**

Another possible explanation for the absence of flap rim feature in southeast Arabian collection may be chronological. As demonstrated above, the majority of comparable swords in Pusht-i Kuh were found in Iron IA contexts, which corresponds to the rule of Kassites in Babylonia, ca. 1300-115- BC. The material culture of Pusht-i Kuh in this period demonstrates substantial influence from Kassite Mesopotamia.

The flap rim swords were discovered at Kutal-i Gulgul and Duruye, both of which are among the earliest Iron IA cemeteries (Haerinck and Overlaet 2004: fig.5.26). One flap rim sword found at Tell Zubaidi also belongs to this horizon (Boehmer, Kessler and Dämmer 1985: Taff. 149, no.646.).

In Oman and UAE, however, short swords are primarily found in the Iron Age II context, corresponding to Rumeilah II and Tell Abraq III. The dating of this horizon is partially based on shared ceramic traditions with contemporary and independently -dated levels at Qal'at al-Bahrain.

The Iron I ceramics of Oman are coarse and limited in shapes, with a pedestaled goblet form that recalls contemporary Kassite forms from Mesopotamia, and of Kassite levels at Bahrain and Failaka (Magee 2014: 190).

In Bahrain, Kassite ceramics are from Qal'at al-Bahrain periods IIIa-b, which is roughly contemporary with Failaka periods 3B and 4A. Period IIIc is post-Kassite at Qala'at al-Bahrain (Højlund and Andersen 1994: 185) and the greenish ware pottery found in Qala'at IIIc, which clearly belongs in a Mesopotamian tradition of late 2nd mill and early 1st mill date, is found at Tell Zubaidi in Mesopotamia (Boehmer and Dämmer 1985: pls.42-43). This pottery is also found at Rumeilah Period I and at Qarn Bint Saud (Højlund 1987: 85), and includes bowls with near vertical rims (Højlund and Andersen 1994: fig.840; pl.29: 44-55), and thickened banded rims (Højlund and Andersen 1994: 189; Velde 2003: 105; fig.4-10). As such, Iron II horizon in southeast Arabia, which contains the short swords, is placed well into the post-Kassite period on Bahrain.

Therefore, the two tombs of al-Wasit and Nizwa in Oman, both of which are dated to the Iron I on the basis on pottery (Magee 2014: 190), represent the earliest context for the short sword in Arabia. In fact, Al-Shanfari and Weisgerber (1989: 20) had suggested that the three examples from Nizwa must be typologically earlier than those with semi-circular features (i.e. Moorey 1971: no.50), yet this suggestion was not stratigraphically explored. Their proposed date for the three Nizwa short swords is ca. 1200 BC.

This reviewed evidence for relative chronology of short swords in the region serves to propose three observations. First, it suggests that

the bulk of connections between the southeast Arabian collection of short swords is later than their western Iranian and Mesopotamian counterparts. Second, it highlights a delay in Kassite's presence -and rule- in Bahrain and the appearance of Kassite-related material in Oman and UAE. Third, it questions the medium and modality of the appearance of Zagros-related cultural traits -such as columned halls, bridge spout vessel forms, and short swords- in southeastern Arabia, especially in light of the absence of any short swords from Bahrain and Failaka. While ceramic examples of bridge-spouted vessels are known from many sites in western and northern Iran, they are not common in excavated sites of Pusht-i Kuh (Vanden Berghe : 94). This poses an interesting question for future research as to the route of exchange that resulted in the arrival of short sword form in southeast Arabia.

### Conclusions

The present review of the chronological and typological evidence for southeast Arabian short swords of the Iron Age is far from a comprehensive study of the material. The very diverse and widespread evidence for evolution of short swords in Ancient Near East requires a much more in-depth analysis of the archaeological and historical records, a situation that is rendered more difficult by the dearth of historical documents from Kassite and Isin II periods in Mesopotamia. To add to this lack of sources one must add the near complete lack of Kassite imagery of weapons, both in glyptic and in monumental forms. In light of the strong ties between the short swords of Iron Age southeastern Arabia and Kassite period sites in Mesopotamia and Western Iran, it is surprising that no Kassite imagery -seals, seal impressions, or Kudurrus- containing short swords of this type has been found.

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## انتشارات آریارنا

انتشارات آریارنا بر آن است تا کتاب‌های ارزندهٔ تألیفی و ترجمه‌ای پژوهشگران ایرانی یا نیرانی را در زمینه‌های گوناگون ایران‌شناسی همچون باستان‌شناسی، تاریخ، فرهنگ و زبان‌های باستانی منتشر کند، کتاب‌هایی که برای شناخت تاریخ و فرهنگ گرانسنگ و ورجاوند ایران بسیار ارزشمند باشند. با توجه به پیوندها و ریشه‌های ژرف و عمیق فرهنگی میان ایران و جهان بشکوه ایرانی که از سده‌ها بلکه هزاره‌های دور و دراز برجا بوده است و در دهه‌های اخیر تلاش دشمنان بر آن بوده تا این پیوندهای ژرف را بگسلند و ریشه‌های عمیق را با تیشه برکنند، ایران فرهنگی که دل و دین به آن سپرده‌ایم از چشم دست‌اندرکاران انتشارات آریارنا دور نمانده و چاپ کتاب‌های پژوهشی و ترجمه‌ای ارزنده دربارهٔ جهان ایرانی یا ایران فرهنگی از اولویت‌های انتشارات آریارنا است؛ باشد که از این راه پیوندهایمان پیوسته‌تر و ریشه‌هایمان ژرف‌تر شود. کتاب‌های انتشارات آریارنا پیشکشی ناچیز است به ایرانیان، ایرانی‌تباران، ایران‌دوستان و همهٔ مردمان جهان ایرانی که ایران و جهان ایرانی را از جان دوست‌تر می‌دارند.



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## انتشارات آریارمنا

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| همه حقوق این اثر برای انتشارات آریارمنا و گروه پژوهشی باستان‌کاوی تیسافرن محفوظ است. |  
| تکثیر، انتشار، چاپ و بازنویسی این اثر یا بخشی از آن به هر شیوه همچون رونوشت، انتشار الکترونیکی، ضبط و ذخیره روی سی‌دی و چیزهایی از این دست بدون موافقت کتبی و قبلی انتشارات آریارمنا ممنوع است و متخلفان بر پایه قانون «حمایت از حقوق مؤلفان، مصنفان و هنرمندان ایران» تحت پیگرد قرار خواهند گرفت. |

۲۴

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شناسه افزوده	منتظر ظهوری، مجید، ۱۳۵۹-، گردآورنده
شناسه افزوده	آریامنش، شاهین، ۱۳۶۳-، گردآورنده
شناسه افزوده	خانی‌پور، مرتضی، ۱۳۶۴-، گردآورنده
شناسه افزوده	گروه پژوهشی باستان‌کاوی تیسافرن
شناسه افزوده	انجمن علمی باستان‌شناسی ایران
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به کوشش  
دکتر سیدمهدی موسوی، دکتر شاهین آریامنش،  
دکتر مجید منتظر ظهوری و دکتر مرتضی خانی‌پور  
و همکاری  
دکتر جواد حسین‌زاده و دکتر مصطفی ده‌پهلوان





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Society of Iranian Archaeology



نخستین

# همایش دوسالانه بین‌المللی انجمن علمی باستان‌شناسی ایران:

”برهمکنش‌های فرهنگی، پیوست و گسست“

به کوشش

سیدمهدی موسوی، شاهین آریامنش

مجید منتظر ظهوری و مرتضی خانی‌پور



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