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An Overview on Metal Artefact Deposits in Southwest Asia during the Iron Age

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Abstract: This paper addresses the concept of 'metal artefact deposits' in societies of southwest Asia during the Iron Age (end of the 2nd to the beginning of the 1st millennium BCE). The act of deposition in its various forms has a long history through time and space. Archaeology attests that for thousands of years, man, in different societies, has intentionally deposited objects in specific places, temporarily or permanently, for various reasons. Dedication in temples or tombs, hiding valuable objects as treasure and storing working or personal materials are among different intentions which are hidden behind the act of deposition. These reasons are not easy to ascertain at the time of discovery. The content, the environment of the deposit and the act of deposition are among the decisive characteristics which can inform us about the reason for the action.
Through a typological approach based on different physical characteristics, this study tries to classify different types of deposits and identify different intentions which could lie behind the act of deposition. Thus, the diversity of deposits will be evaluated according to different regions of southwest Asia during the Iron Age.

Keywords: Archaeology, Votive deposit, Hoard, Favissa, Construction deposit, Treasure, Craft hoard, Economic hoard, Metal

Résumé : Cet article aborde le concept de « dépôts d'artefacts métalliques » dans les sociétés de l'Asie du Sud-Ouest à l'âge du Fer (fin du IIe-début du Ier millénaire avant notre ère). L'acte de dépôt, sous ses différentes formes, a une longue histoire à travers le temps et l'espace. L'archéologie atteste que, depuis des milliers d'années, l'Homme, dans différentes sociétés, a intentionnellement déposé des objets dans des lieux spécifiques, de manière temporaire ou permanente, pour diverses raisons. La dédicace dans les temples ou les tombes, la dissimulation d'objets de valeur en tant que trésor et le stockage de matériel de travail ou de matériel personnel sont parmi les intentions qui se cachent derrière l'acte de dépôt. Ces raisons ne sont pas faciles à déterminer au moment de la découverte. Le contenu, l'environnement du dépôt et la manière dont on le réalise sont parmi les caractéristiques décisives qui peuvent nous informer sur la raison de l'action.
À travers une présentation typologique basée sur différentes caractéristiques physiques, cette étude tente de classer différents types de dépôts et d'identifier différentes intentions qui pourraient présider à l'acte de dépôt. Ainsi, la diversité des dépôts sera évaluée en fonction des différentes régions de l'Asie du Sud-Ouest pendant l'âge du Fer.

Mots clés: archéologie, dépôt votif, *favissa*, dépôt de construction, trésor, dépôts d'artisan, dépôt économique, métal

The word 'deposit', borrowed from the classical Latin 'depositum', comes from the verb 'to deposit' which means to put, to place. The dictionary describes it in an anthropic sense, as "to put something to someone's care" or "to put something in a safe place" (Rey and Morvan, 2005, p. 2280–2281). Based on this definition, we define 'deposit' as one or more artefacts selected and deposited, for some reason, deliberately in a specifically chosen place in a specific manner, temporarily or permanently. It refers primarily to an act of deposition, which must be intentional, and acknowledged. It therefore involves the choice of objects, the environment of deposition and how the objects are placed.

In European archaeology generally the word 'hoard' is used for these deposits. In this study we intentionally avoid using this word, because its definition in the dictionary is always followed by the notion of 'hiding' and 'keeping in secret'.(1) As it's not possible to match these

1. Oxford dictionary: "A collection of money, food, valuable objects, etc., especially one that somebody keeps in a secret place so that other people will not find or steal it" (https://www.oxfordlearnersdictionaries.com/definition/english/hoard_1). Britannica :"A large amount of something valuable that is kept hidden" (https://www.britannica.com/dictionary/hoard).

notions with some cases in ritual spaces, we prefer to use the word 'deposits' as a more neutral and inclusive term.

Since the end of the 19th century, different researchers have tried to find motivations behinds acts of artefact deposition and this subject remains in active discussion. Dedication in ritual places, hiding the valuable artefacts and storing bullion or working materials are among different intentions which can exist behind the act of deposition.

A large range of material, such as clay, bone, ivory and stone can be found in artefact deposits. The material of concern to us here is limited to metal, in all its forms from raw material to final product.

Numerous metal artefact deposits in European Bronze Age cultures have been investigated. David Coombs and Richard Bradley were pioneer researchers on this topic (Coombs, 1975; Bradley, 1985). Recent work by Sylvie Boulud-Gazo, Muriel Mélin and Marilou Nordez also outlines an interesting scheme of different typologies of metal artefact deposits in the northwestern Atlantic region (Boloud-Gazo et al., 2017). Concerning southwest Asia, Richard Ellis and Judith Bjorkman provided a broad overview of the widespread phenomenon of 'foundation deposits' (Ellis, 1968; Bjorkman, 1994). However, metal artefacts didn't form the principal material of these deposits. Occasional discoveries in the large region of southwest Asia gave rise to several articles containing case studies (see below, deposits in different regions). In 1988, Graham Philip dedicated a more general study to metallic deposits of the Bronze Age in the Levant (Philip, 1988). More recently, in the 21st century, researchers such as Miriam S. Belmuth, Tzilla Eshel, and Elon D. Heymans have focused their work on a special type of metal artefact deposit known as 'hacksilber' (silver fragments), widespread mainly in the Levant (Belmuth, 2001; Eshel et al., 2018; 2023; Heymans, 2021). Our knowledge thus suffers from the lack of a general study covering the whole region of southwest Asia, to give an overview considering different types of and motivations for metal artefact deposits. To give a significant geographical comparative study, in this work, our focus will be on the Iron Age period and our analyses will be through space within this chronological framework. For a future study, it would be particularly interesting to undertake a diachronic study covering the entirety of the Metal Ages. This would let us analyze the evolution of these practices through time. This paper also seizes the opportunity to set up a typology for metal artefact deposits within this geographic and chronological framework, introducing the main elements to consider.

It's important to point out that funerary artefacts, which can be gifts or the deceased's personal effects, are in some ways a type of deposit. However, as a large domain, that deserves to be discussed in a separate paper. It is not our purpose here.

CHARACTERISTICS OF ARTEFACTS DEPOSITS

Several characteristics should be considered in the classification of artefact deposits (fig. 1): the contents, the environment and the modality of the act of deposition.

1. *The content of deposits* can include artefacts in different materials (here metal), state (final product, semi-product, raw material, broken or fragment of artefact) and category (weapon, vessel, jewellery, tools, etc.). These contents can be homogeneous and be made up of the identical material, state, category or type of artefacts; or they can be heterogeneous, made up of a variety of different materials, states, categories and types of artefacts.

2. *The environment* that receives the deposit can be natural and not associated with any anthropic construction – for example, a hole or cave (or more commonly a river in European archaeological contexts) – or it can be associated with an anthropic place constructed by humans such as a building. The physical characteristics of these environments, such as dry land and water bodies, should be considered in analyzing accessibility and the possibility of recovering the deposit. The archaeological interpretations of function of the place that receives the deposit can also associate it with various ritual, palatial, domestic, economic, artisanal or administrative spheres.

3. *The act of deposition* can be realized during different moments of life of the place which receives the deposition, in different locations and in a variety of forms and gestures: in a jar, wrapped in a textile, put on the floor, put on an altar or in a niche, buried beneath the floor, put at the foundation level or in the masonry of walls during construction/restoration, put in the building during the occupation, or put in the backfill or throughout the building at the end of its occupation. Identification of the gesture of deposition could also provide precious information. For example, deposits could be hidden without any signalization or conversely be marked by something. Such spatial markers indicate that deposits were not intended to be hidden and that the location could be identified. This information is crucial to identify the function of deposits. Along with the gesture of deposition, the internal organization of the deposit is also meaningful. A deposit can be realized in one step (uni-phase) or realized in successive different steps (multi-phase). The reopening of the deposit can be for repairing, removing or adding artefacts.

These informational elements, although crucial, are unfortunately not easy to recognize in old excavations. The particular intention of mentioning these characteristics here is to provide clues to be observed during future excavations. In cases where they are recognizable, they can help us to understand the motivation behind the act of deposition and allow us to propose functions and utilities of deposits.

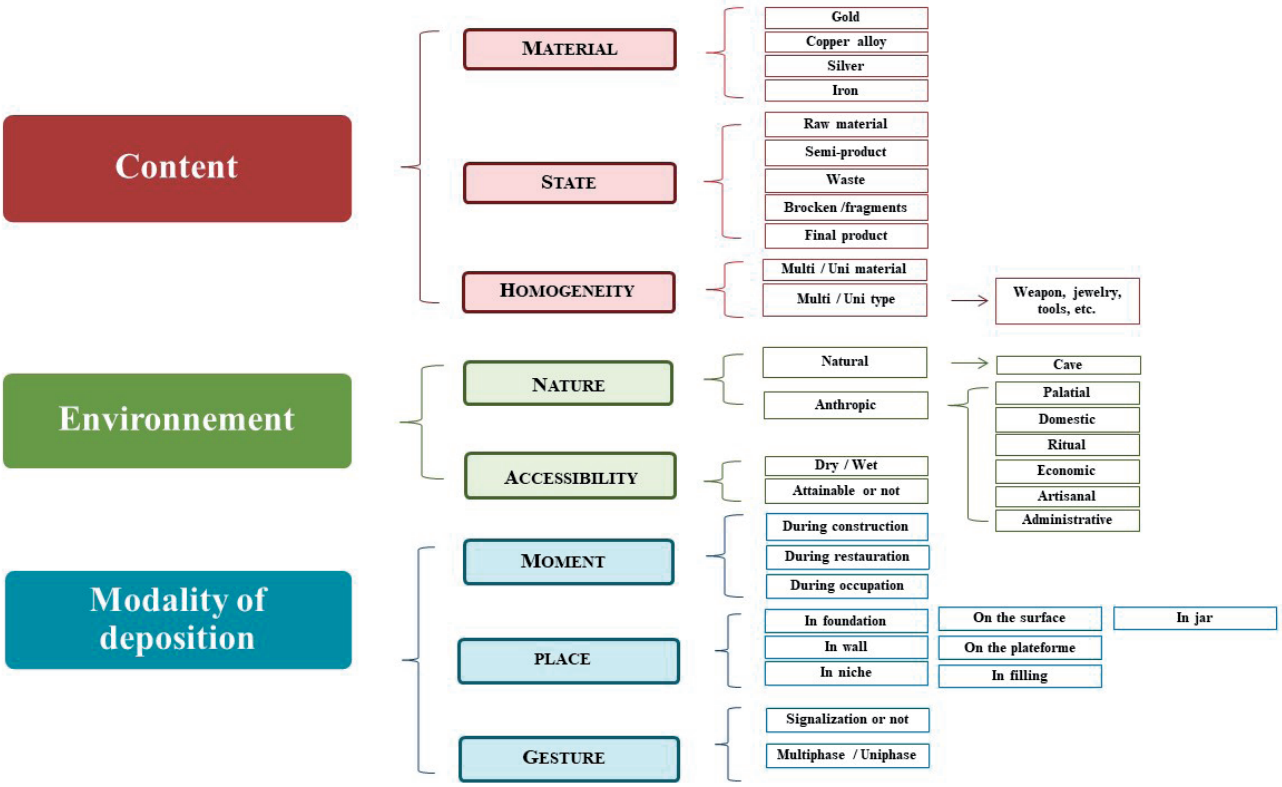

Fig. 1 – Different characteristics of metal artefact deposits.

FUNCTIONS OF ARTEFACTS DEPOSITS

Different intentions may lie behind an act of deposition (fig. 2):
1. *Dedication* (to a specific living or dead person, deity, supernatural power, building or place) for protection and commemoration or against malediction
2. *Storage*
3. *Concealment*

Dedication relates to the category of votive deposits. Storage and concealment, on the other hand, relate to the category of hoards. Votive deposits are generally permanent deposits, which means that they are not intended to change function even if they can change place. It doesn't mean that they have never been reused. A votive deposit, once deposited, can be reopened, used for a ceremony and deposited again. It can be repaired, and artefacts can be added or removed for different occasions. In some situations, such as natural and military disasters, votive deposits can even be exceptionally used by the same community or by enemies for other purposes. Hoards, on the other hand, are temporary deposits. They are intended to be recovered. However, for some of them, this didn't happen, and that is how they came to us.

With this array of characteristics and intentions, votive deposits and hoards can be classified into different sub-categories according to their environment, the modality of the act of their deposition and, in some cases, their contents.

Votive Deposits

Votive deposits can be classified to four subcategories:
1. *Offering*
2 Favissa
3.*Construction deposit*
4. *Closure deposit*

Offering

This refers to artefacts dedicated to a ritual place (natural or anthropic) during its use. Offerings are generally exposed, for example on a platform, in a niche, on an altar, on the floor, etc. The powers and specialities of each deity or place generally influence the types of objects dedicated. They cover a huge variety of materials and categories.

Favissa

This refers to a particular category of votive deposit dedicated to a ritual place. Contrary to offerings, which are generally exposed, favissae are not exposed. They are generally part of (for example, an excess of) temple offerings buried or stored in adjoining chambers, inside or near a ritual place. The word favissa has a Latin origin used in the Roman world. The earliest definition of the term appears in the first century BCE work of Roman author Terentius Varro, who refers to votive objects in temples which are in excess of temple offerings (Varro,

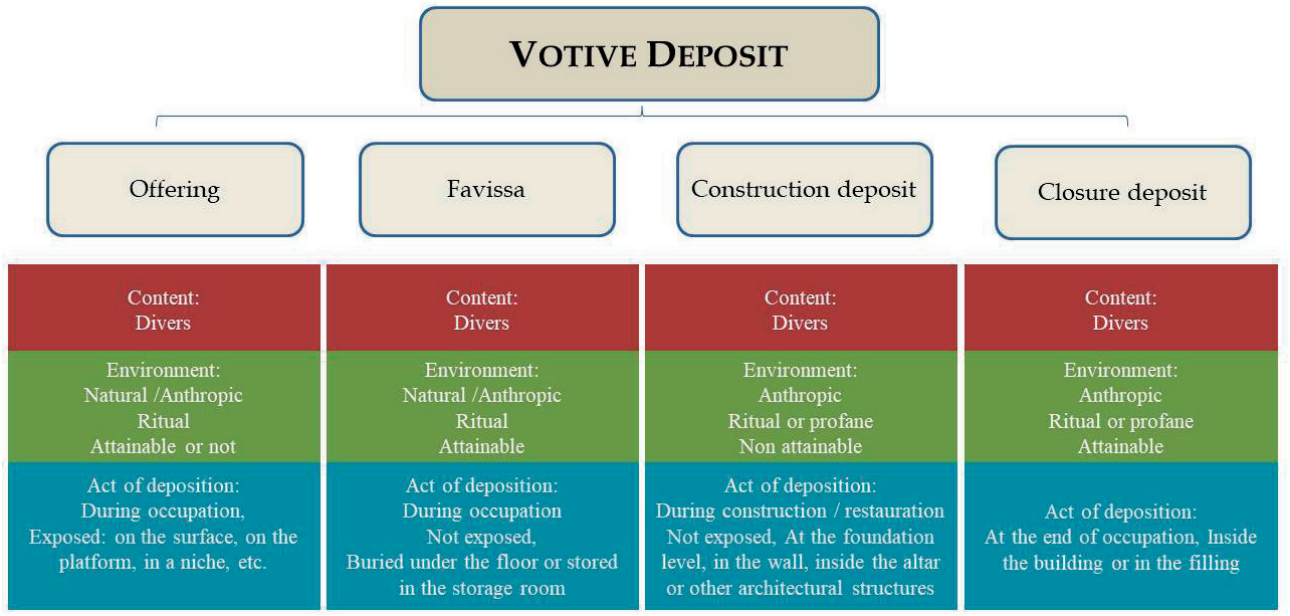

Fig. 2 – Different characteristics of votive deposits.

On the Latin Language, Vol. II: Books 8-10; Gellius, Aulus, The Attic Nights, II.10). Greco-Roman dictionaries define it as follows: "votive pits or ex-votos that were grouped together to make room in the sanctuary" (Thuillier et al., 2002, p. 98). Later archaeologists used this term outside the Greco-Roman world for the Eastern and Egyptian world. Jean Claude Margueron used it for some Bronze Age deposits in Mari, in Syria (Margueron, 2004, p. 563).

Construction deposit

This refers to artefacts deposited in the architectural elements of a building such as in the foundations or in the masonry of walls or altars, during the construction or restoration of a building. Although the act is ritual, the building is not necessarily a temple; it can be linked to a royal, administrative or domestic context. Construction deposits are not visible and are generally sealed when the building or structure is in use. They can have a role of sanctification, or protection of the building (symbolically guaranteeing its stability), or commemoration of an event. Generally, the expression 'foundation deposit' is used for this type of deposit even when it has not been found in the foundations. In this paper, the term 'construction deposit' is preferred because of its broader signification. What differentiates the favissa from construction deposits is that a favissa has a mandatory relation to the ritual sphere and its deposition takes place during the use of the building.

Closure deposit

This refers to artefacts placed at the end of a building's occupation to mark a dedication or commemoration of a historical event. A closure deposit is not necessarily linked to a ritual place. It can also be deposited in a profane building. Identification of closure deposits is very difficult. Artefacts found in the fill of a building can be intentionally deposited or be there accidentally, found in the soil that was used to fill the place.

Hoards

Hoards can be classified in three different sub-categories (fig. 3):

1. *Treasure*
2. *Craft hoard*
3. *Economic hoard*

Treasure

This refers to a category of non-exposed deposits stored or hidden in a profane building or natural milieu. Treasure includes valuable objects belonging to private, royal or administrative institutions. It's very difficult to differentiate treasure from offerings in a natural milieu. For example, artefacts deposited in the cavities of a cave can belong to both categories. In some cases, environmental characteristics can help. For example, a non-recoverable environment such as the bottom of a river or other wet milieu makes a votive context more conceivable than a hoard, which is perceived to be recoverable.

Craft hoard

This refers to a deposit including a mix of items related to metalworking activity such as tools, ingots, fragments, and broken artefacts, stored for re-melting or repairing. They are generally associated with profane contexts including domestic and artisanal contexts.

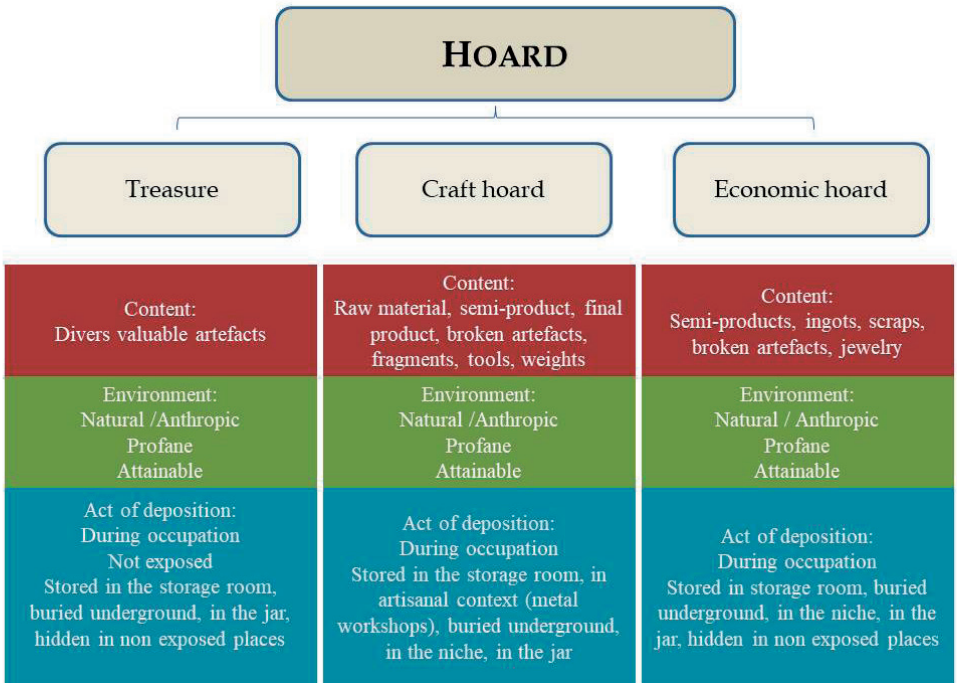

Fig. 3 – Different characteristics of hoards.

Economic hoards

This refers to deposits including fragments, broken artefacts and scraps hidden or stored somewhere intended to be used as currency, bullion and exchange. Economic hoards are thus generally in invisible positions buried underground, or put in non-exposed places.

Of course, differentiation between craft hoard and economic hoard is not always easy. Fragments, broken artefacts, scraps and weights can belong to both categories. There are some other elements of archaeological information, such as context and environment, which may help to differentiate them.

To these categories, it is possible to add others. Here, only the more common deposits in southwestern Asia are mentioned. The determination of the intentions behind the act of deposition remains delicate and the hypotheses formulated here are not absolute. In addition, these typo-functional classifications are not a starting point for analyses. They should, rather, grow out from the overall set of data as an end-result or interpretation, if at all.

METAL ARTEFACT DEPOSITS IN SOUTHWEST ASIA

Before the Iron Age

Archaeology attests that the history of metal artefact deposition in southwest Asia, in its various forms, goes back to at least the 4th millennium BCE (Moorey, 1982, p. 21). Votive deposits dedicated to deities (offerings, favissae) and the accumulation of valuable artefacts by elites (treasures) were two principal practices of deposition during these early periods. Regarding the accumulation of artefacts by elites, Arslan Tepe in Anatolia provides evidence of a group of copper-alloy artefacts, mostly weapons, found tied together and deposited near the wall of a prominent elite residence (Di Nocera, 2010, p. 257). One of the most impressive and ancient examples of metal artefact deposition in a natural environment is found in the Levant, in the Nahal Mishmar cave. Dated to the mid-4th millennium BCE, the cave contained more than four hundred elaborately crafted and sophisticated copper-alloy artefacts, representing a wide range of categories, placed within its natural cavities (Moorey, 1988, p. 171, 182). This significant deposit could either have been dedicated to the natural environment, and thus be interpreted as a votive deposit (offering or favissa), or it may have been intentionally hidden there, and thus be interpreted as a hoard (treasure)

During the Bronze Age (3rd-2nd millennia BCE), advancements in ore extraction methods led to a significant increase in metal production. Consequently, the deposition of metal artefacts gained importance throughout western Asia. However, ore deposits were not evenly distributed across regions, and thus, practices related to metal deposition varied from one area to another. In Mesopotamia, although metal artefacts were included in many deposits, those composed exclusively or predominantly of metal items are relatively rare. During the 2nd millennium BCE, the Levant became one of the key regions where metal artefact deposits became frequent and are attested through sites such as Nahariyeh, Ugarit, and Byblos (Dothan, 1956, p. 19–20; Philip, 1988; Al-Maqdissi, 2008). Among these, Byblos stands out as a remarkable example, where large numbers of metal objects—includ-

ing vessels, figurines, pins, jewellery, and a significant number of weapons—were buried in pits or jars, either near or within the masonry of various temples and sanctuaries. These deposits were mostly interpreted as favissae (Dunand, 1939; 1954; Benoit, 2003, p. 305–307).

Among the important practices of metal artefact deposition during the Bronze Age, one can particularly highlight the placement of metallic pegs and tablets at the foundation level of both sacred and profane (public and royal) buildings. Notable examples include the copper pegs from the Inanna temple in Nippur (Muscarella, 1988, p. 303–305), the copper pegs from the Ningirsu temple in Lagash (Ellis, 1968, p. 51), and bronze inscribed plates, pegs, and other objects found in square cavities at the corners of temples in Mari (Parrot, 1940, p. 5–6). Metallic pegs and tablets illustrate the diversity of artefacts included in such deposits. In some instances, even small metal fragments were placed at the foundation level of buildings, suggesting that the intrinsic value of the metal was also a factor in the practice (Ellis, 1968, p. 132). This custom was part of a broader tradition observed across Mesopotamia and neighbouring regions. It is also referenced in textual sources and is generally referred to by scholars as a 'foundation deposit'. This ritual involved placing votive or commemorative objects within the foundations, walls, or other architectural elements during construction. In our categorization, such practices can be classified as construction deposits.

Jar deposits are another important practice of metal artefact deposition during the Bronze Age in western Asia. These deposits generally include complete objects or a mix of complete and fragmented objects (scrap) as well as tools and weights, placed inside ceramic jars and buried beneath buildings. They represent common materials in circulation. These jar deposits could represent either objects collected by craftsmen for re-melting or similar, thus being associated with a craft hoard, or bullion for exchange, associated with an economic hoard.[(2)] The financial character of metal in exchange networks is attested in textual resources from the middle of the 3rd millennium BCE (Powell, 1978; Peyronel, 2010). Even though copper and gold are present in these economic deposits, silver seems to gain progressively in particular importance as a means of exchange and transaction from the Bronze to the Iron Age (Eshel et al., 2023).

During the Iron Age

After this brief overview of Chalcolithic and Bronze Age deposits, we now turn our focus to the Iron Age, covering the period from approximately the 13th century BCE to the end of the 7th century BCE (fig. 4).

The Caucasus and Anatolia (table 1)

Around the middle of the 2nd millennium BCE, a rupture in cultural traditions occurred in the Caucasus. This period is marked by a significant increase in the production of metal objects, both in their sophistication and in their volume of production (Chernykh, 1992, p. 275–295). Metal artefact deposits (mostly copper alloy) gained increasing importance in ritual contexts. Nazerlabi (Davitashvili et al., 2021) and Shilda (Maisuradze and Inanishvili, 2006) are examples of sanctuaries in Georgia, in the Caucasus, characterized by circular stone structures dated to the 13th–8th centuries BCE. Thousands of metal artefacts—spanning categories such as weapons and ornaments—were buried in various pits, in some cases inside jars. Their placement in pits beneath the floor suggests post-construction deposition. For this reason, they are best interpreted as favissae associated with the sanctuaries, rather than construction deposits. Bronze ingots and half-finished items are abundant among these deposits, suggesting that metalworkers may have been involved in the ritual practices. Another hypothesis—more delicate to pursue—is that these practices involved the hiding or stockpiling of metal in ritual spaces.

A large number of metal artefact deposits in the Caucasus are associated with the Colchis culture, which spanned from around 1600 to 700 BCE in western Georgia (Apakidze, 2000, p. 185; Apakidze, 2009, p. 12; Lordkipanidze, 1991, p. 95–109). These deposits, which often contain ingots and unfinished items, are referred to in Georgian and Russian literature as the 'Colchis hoards.' They are generally interpreted as 'founders' or merchants' deposits', intended for later use and having an economic function (Kuftin, 1949, p. 222; Kuftin, 1950, p. 162). As such, they can be categorized as economic or craft hoards.

At the beginning of the 1st millennium BCE, the Urartian kingdom (9th–7th centuries BCE) emerged in eastern Anatolia, the Caucasus, and northwestern Iran. One of the key activities in Urartian temples was the offering of metal artefacts—especially weapons—to the god Haldi. Ayanis (Çilingiroğlu and Salvini, 2001) and Toprakkale (Barnett, 1950) are two notable examples of Urartian temples rich in metal offerings. At Ayanis, hundreds of bronze weapons—such as shields, spears, helmets, and quivers—some inscribed with royal names, were found on a platform (altar) within the temple. Others were attached to the walls using hobnails. According to Altan Çilingiroğlu, offerings in Urartian sanctuaries, after being displayed for a period, were eventually stored in a special room within the temple, possibly due to an excess of offerings (Çilingiroğlu, 2012, p. 175). Thus, items deposited on platforms or fixed to walls can be considered as offerings, while those stored in dedicated rooms are more accurately interpreted as favissae.

The practice of hanging metal artefacts on the walls of Urartian temples is also depicted in the Assyrian reliefs of the Musasir temple at Khorsabad (Botta and Flandin, 1849, pl. 141; Merhav, 1991, fig. 4a). Both Urartian and Assyrian textual sources mention the metal richness of Urartian temples. Of particular note is the Kelishin stele, which records a pilgrimage to Musasir temple by the Urartian kings Ispuini and Menua. The stele describes their offerings to the god Haldi, including many metal

2. Arnaud et al., 1979; Huot and Naccaro, 2019.

Fig. 4 – Map of Western Asia showing the location of sites with metal artefact deposits mentioned in this paper (©Z. Hashemi).

weapons, standards, and vessels (Merhav, 1991, p. 10). Later, in 714 BCE, Sargon II of Assyria attacked Musasir. The Assyrian annals detail the looted treasures of the Musasir temple, including bronze and silver vessels and bronze statues (Merhav, 1991, p. 12).

Urartian fortresses also contained storage rooms linked to the royal sphere, where metal objects—ranging from finished products to semi-product and ingots of various forms—were stored. Other storage rooms contained primarily luxury or inscribed items, such as bronze bowls at Teishebaini (Piotrovsky, 1970, p. 153) or bronze plaques at Giyimli (Taşyürek, 1977). These can be considered as royal treasuries or hoards.

In sum, Urartian metal artefact deposits include royal treasuries as well as ritual offerings and favissae within temples. A further hypothesis is that some stored artefacts may have been intended for the use of royal or temple staff in their daily functions.

Mesopotamia (table 2)

During the first few centuries of the 1st millennium BCE, Mesopotamia was largely under the rule of the Assyrian Empire, a powerful political entity that maintained rivalries with Urartu to the north, Babylonia to the south, Elam to the southeast, and the Zagros mountain dwellers to the east. The Mesopotamian Plain itself is a region poor in metallic resources. However, archaeology, iconography, and epigraphy all attest to the abundance of metal in Assyria. This metal arrived through war spoils, tribute, taxation, and official gifts. The southwest palace of Sennacherib in Nineveh illustrates the acquisition of metal booty from a Chaldaean settlement (Reade, 1983, fig. 61). Since metal is recyclable, Assyrian artists and metalworkers could apply their stylistic traditions during the re-melting and re-production of imported artefacts. Such artefacts were stored in various royal storage facilities. The fort of Shalmaneser at Nimrud presents a remarkable example of Assyrian royal treasures in storage rooms (Mallowan, 1966). A particularly striking discovery was a huge assemblage of bi-pyramidal iron ingots—amounting to 160 tons—found in Sargon's palace at Khorsabad (Place, 1867, pl. 71; Oates and Oates, 2001, p. 249). This deposit was likely made up partly of spoils and iron tributes collected from Anatolia. It is also worth noting that storage rooms containing only weapons deposits are generally interpreted as arsenals (Mallowan, 1966, p. 376).

Site	Region	Content			Environement		Modality of action		Type of deposit
		Material	Categories	State	Nature	Context	Moment	Gesture	
Nazalebi	Caucasus	Copper alloy	Weapons, Ornament	Final and semi-final products	Anthropic	Circular sanctuary	During occupation	In a pit beneath the floor	Favissa
Nazalebi	Caucasus	Mostly Copper alloy, but also other materials such as stone beads	Weapons, Jewellery, Tools	Final and semi-final products	Anthropic	Circular sanctuary	During occupation	Inside jar, beneath the floor	Favissa
Shilda	Caucasus	Copper alloy	Weapons, Ornaments	Final and semi-final products	Anthropic	Circular sanctuary	During occupation	Inside jar, beneath the floor	Favissa
Shilda	Caucasus	Copper alloy	Weapons, Ornaments	Final and semi-final products	Anthropic	Circular sanctuary	During occupation	Inside jar, beneath the floor	Favissa
Shilda	Caucasus	Copper alloy	Weapons, Ornaments	Final and semi-final products	Anthropic	Circular sanctuary	During occupation	Inside jar, beneath the floor	Favissa
Shilda	Caucasus	Copper alloy, stone	Ornaments, Figurines	Final and semi-final products	Anthropic	Circular sanctuary	During occupation	Inside jar, beneath the floor	Favissa
Shilda	Caucasus	Copper alloy	Weapons,Ornaments, Figurines	Final and semi-final products, Mold	Anthropic	Circular sanctuary	Not clear	At the foundation level	Favissa
Ayanis	Caucasus	Copper alloy	Weapons	Final products	Anthropic	Temple	During occupation	Put on a plateforme / fixed on the wall	Temple Offering
Ayanis	Caucasus	Copper alloy	Weapons	Final products	Anthropic	Temple	During occupation	stored in storage room	Favissa
Toprakkale	Caucasus	Copper alloy		Final products	Anthropic	Temple	During occupation	Put on a plateforme / fixed on the wall	Temple Offering
Teishebaini (Karmir Blour)	Caucasus	Copper alloy	Differents categories	Final and semi-final products	Anthropic	Fortress	During occupation	Stored in storage room	Treasure
Giyimli	Anatolia	Copper alloy	Metal sheets, Ornament, Horse equipments	Final products	Anthropic	Fortress	Unclear	stored in storage room	Treasure?

Table 1 – Iron Age deposits from Caucasus and Anatolia.

Site	Region	Content			Environement		Modality of action		Type of deposit
		Material	Categories	State	Nature	Context	Moment	Gesture	
Nimrud	Mesopotamia	Copper alloy	Lion weights	Final products	Anthropic	Palatial	During construction	Beneath the gate of the North-West Palace throne room	Construction deposit
Nimrud	Mesopotamia	Differents materials	Different categories	Final products	Anthropic	Palatial	During occupation	In the storage room of shalmanasar fort	Treasure
Khorsabad	Mesopotamia	Iron	Bipyramidal ingots	Semi-products (Ingot)	Anthropic	Palatial	During occupation	In the storage room of sargon palace	Treasure
Assur	Mesopotamia	Differents metals	Beads+ fragments	Raw materials, fragments, broken artefacts	Anthropic	Palatial	During construction	At foundation level of each corner of Ziggurant of Assur	Construction deposit
Assur	Mesopotamia	Gold + Silver	Fragments	Fragments	Anthropic	Palatial	During construction	At foundation level of Nabu temple	Construction deposit
Nippur	Mesopotamia	Silver	Chunks of silver, beads	Fragments, final products	Anthropic	Domestic	During occupation	In a ceramic vessel	Treasure/economic hoard

Tables 2 – Iron Age deposits from Mésopotamia

Site	Region	Content			Environement		Modality of action		Type of deposit
		Material	Categories	State	Nature	Context	Moment	Gesture	
Susa	Susiana Plain	Gold + Silver + Copper alloy + Stone	Figurines, Ornaments, Tools	Final products	Anthropic	Temple	During occupation	Buried underground near the Insusinak temple	Favissa
Susa	Susiana Plain	Gold+ Silver + copper alloy, Ivory, Terracotta	Ornements, scrap of gold and silver, Figurines, tools, weapons, Cylinder seals	Final product, fragments	Anthropic	Temple	During occupation	Buried underground near the Insusinak temple	Favissa
Susa	Susiana Plain	Copper alloy	Modele of a ritual scene	Final products	Anthropic	Unclear	During construction	Put in the wall of a building	Construction deposit
Tchoga Zanbil	Susiana Plain	Differents metals	Weapons, Tools, Vessels, Figurines	Final products	Anthropic	Temple	During construction	Put in a pit under the floor of the ante-cella of Kiririsha East temple,	Construction deposit

Tables 3 – Iron Age deposits from the Susiana plain.

While much of the metal in Assyrian culture belonged to royal treasuries, another significant tradition finds its origins in the Bronze Age: construction deposits. These consist of artefacts placed at the foundation levels of buildings—both sacred and profane—as ritual acts of protection or commemoration. Assyrian kings were particularly devoted to this practice. Although stone tablets, clay cylinders, and prisms—inscribed with royal proclamations (Lackenbacher, 1990)—are the most prominent forms of construction deposits, other materials such as metal tablets, figurines, beads made of semi-precious stones, seals, and shells are also attested in various contexts and mentioned in texts. In one of the inscriptions from Khorsabad, Sargon II declares that he buried gold, silver, copper, and precious stones at the foundation level of a structure, probably a city gate. Similar declarations are found from Esarhaddon, Sennacherib, and Nebuchadnezzar II (Ellis, 1968, p. 135). Regarding metal specifically, numerous small objects—such as beads, fragments of iron and lead, and inscribed disks of gold and silver—were buried at each corner of the ziggurat at Assur (Ellis, 1968, p. 132–133). Likewise, in the Nabu Temple, over a kilogram of gold and silver fragments was found at the foundation level (Ellis, 1968, p. 137). The northwest Palace at Nimrud also contained bronze zoomorphic weights buried beneath its gate floor (Layard, 1853, p. 601-602; Oates and Oates, 2001, p. 247). Metal tablets, in particular, were a recurring type of deposit from the time of Shalmaneser I (13th century BCE) onward (Ellis, 1968, p. 174). However, this practice fell out of favour by the end of the Assyrian period. Neo-Babylonian rulers did not adopt it, though it was briefly revived during the Achaemenid period (Schmidt, 1953, p. 1, 70, 79, figs. 29, 42A-B, 43)—which lies beyond the chronological scope of this study.

It is also important to note that foundation deposits were not confined to royal or divine architecture; they could also be extended into the domestic sphere and be buried beneath the floors of private buildings (Wiggermann, 1992, Text I, lines 152, 155). As Bachhuber (2018, p. 276) observes: "…metal objects could become tokens of hidden power or objects that had been transformed into actions through communion with the cosmological realm."

Susiana plain (table 3)

The Susiana Plain, situated between the Mesopotamian Plain and the Iranian Plateau, maintained mutual contacts with both regions. In terms of artefact deposition, it followed the Mesopotamian tradition: the practice of placing construction deposits at the foundation level of buildings, which began in the Bronze Age and continued into the Iron Age. Tchoga Zanbil and Susa are two major Elamite sites on the Susiana Plain, where metal vessels, jewellery, figurines, weapons, and ingots have been discovered—either deposited on the surface, beneath floors, or embedded within the masonry of temples and sanctuaries (Ghirshman, 1968, p. 22, plates XVIII–XXI; p. 24, figs. 7–8; Ghirshman, 1966, p. 100–101, plates LIV, LV, XCII, XCIII).[3] These deposits, depending on their location and manner of deposition, can be categorized as offerings (when placed visibly in ritual contexts), favissae (when buried in pits beneath the floors of sanctuaries), or construction deposits (when placed at the foundation level or embedded within building walls). A remarkable example of a construction deposit is the bronze model of King Shilhak-Inshushinak, which represents a ritual scene and dates to the 12th century BCE. It was embedded in a block of plaster within a wall of a building in Susa (Jéquier et al., 1905, fig. 5).[4]

Iranian Plateau (table 4)

On the Iranian Plateau, despite its importance as a metal-supplying region, the situation is quite different from that in neighbouring areas. Even though ritual sites have been identified from as early as the 7th millennium BCE (Schmidt, 1937, p. 177; Negahban, 1979; Majidzadeh, 2001, p. 143; Sarlak, 2011, p. 394), all forms of temple offerings remain rare throughout the entire Metal Ages. What appears to be a more common ritual practice in this region is the custom of in-filling buildings at the end of their occupation. The Jiran Temple at Tepe Ozbaki, dating to the 5th millennium BCE (Majidzadeh, 2010, p. 112), as well as Iron Age sites such as Zar Bolagh (Malekzadeh et al., 2014, p. 174), Qoli Darvish (Sarlak, 2011, p. 392), and Tepe Ozbaki (Majidzadeh, 2001, p. 8–10)[5] are all examples of in-filled buildings that demonstrate the long-standing history of this practice on the Iranian Plateau. In some cases—such as at Qoli Darvish—artefacts including ceramic vessels and bronze bars have been found within the in-filling layers (Sarlak, 2011, p. 393). However, it remains unclear whether these objects were intentionally deposited or ended up there accidentally. If intentional, they can be interpreted as closure deposits. The custom of in-filling ritual buildings is also observed in regions neighbouring the Iranian Plateau. For example, Nush-i Jan in the central Zagros region (Stronach and Roaf, 2007, p. 91) and Tepe Bazgir in the Gorgan Plain (Moslehi et al., 2014, p. 112) both show evidence of this practice. Tepe Bazgir is a particularly noteworthy case: around 700 copper-alloy vessels, weapons, and tools—dated to the 2nd millennium BCE—were found piled in a large pit (approximately 4 × 3 × 1.5 meters) dug beneath a filled building. These artefacts may have been deposited either at the end of the building's occupation (closure deposits) or during its use (as favissae or a treasure). However, due to the limited extent of archaeological investigation at the site, the exact motivation behind the deposition cannot be definitively determined.

The Chaleh Ghar Cave, located between Qom and Kashan, represents an exceptional and significant case on the Iranian Plateau, where a metal supply site is directly associated with ritual practice. Chaleh Ghar lies in close proximity to the Veshnaveh copper mine and is itself a

3. https://collections.louvre.fr/ark:/53355/cl010180456

4. http://www.louvre.fr/oeuvre-notices/sit-shamshi.

5. http://www.iranicaonline.org/articles/palace-architecture

prehistoric mining site. Approximately one thousand artefacts—comprising various materials and categories such as jewellery, beads, rings, earrings, and coins—were deposited in a wet area within cavities of the copper mine. Some artefacts appear to have been thrown into the cave from the outside. This act is interpreted as a form of votive deposition (Bagherpour-Kashani and Stöllner, 2011; Overlaet, 2011). Copper ore extraction at Veshnaveh dates back to the 3rd millennium BCE. However, 14C dating places the votive deposits at Chaleh Ghar between the 8th century BCE and the 8th century AD. Chronological patterns indicate that in the earlier phases, only ceramic objects were typically deposited. It was not until the Sasanian period that beads, jewellery—especially distinctive finger rings—and votive plates began to appear. Thus, for the purposes of this study, which focuses on the Iron Age, it appears that metal did not play a significant ritual role during that period at this site. It is mentioned here to highlight the association between a copper mine and ritual deposition

Zagros Mountains (table 5)

The Zagros region is located in a strategic place between the Iranian Plateau (rich in metallic resources) and the Mesopotamian Plain (an important consumer region). The communication routes connecting these two regions pass through the heart of the Zagros. Due to the abundance of natural resources, the Zagros was of significant economic and political interest. While cultural influences from neighbouring regions are evident, a distinct culture—shaped by the environment and lifestyle—appears to have developed in this area. One of the most famous expressions of this culture is a series of remarkable metal artefacts known as the Luristan Bronzes. Although many of these artefacts have been discovered in funerary contexts, sanctuaries were also favoured locations for their deposition. Surkh Dum-i Lori and Sangtarashan are two of the most significant sanctuaries in Luristan that contained these elaborate metal artefacts in votive deposits. At Surkh Dum-i Lori (Schmidt et al., 1989), nearly two thousand artefacts, predominantly ornaments and particularly pins, were discovered within the masonry of the walls and beneath the floors of a rectangular structure interpreted as a sanctuary. These findings are considered as construction deposits and are dated to the 9th–8th centuries BCE, though some artefacts may be from earlier periods.

Sangtarashan (Hashemi et al., 2023) is another Iron Age sanctuary located in the central Zagros, where approximately one hundred metal artefacts (mostly bronze, some iron), grouped in packages of 2 to 30 items, were placed beneath the floor of a circular building. These packages were deposited at various depths within an elongated pit. The two dominant categories of artefacts were vessels and weapons. The deposition likely occurred over an extended period, at varying intervals, involving multiple packages. Of the sixteen packages discovered, two were not found in the pit or beneath the floor but rather on the surface, with collapsed stones from the northern wall covering them. This suggests these packages were initially exposed and only later buried, possibly as favissae. This two-step offering practice shows similarities to Urartian traditions. On the other hand, the circular stone architecture, the pit-burial of artefact packages, artefact typologies, and chronological elements display strong parallels with Caucasian sanctuaries such as Shilda and Nazarlabi in Georgia. In a later phase at Sangtarashan, rectangular structures were constructed over the earlier circular building. More than one thousand artefacts—made from a wider variety of materials (bronze, iron, semi-precious stones, stone, terracotta, etc.) and representing diverse categories (weapons, vessels, jewellery, figurines, standards, tools, etc.)—were scattered throughout the site and embedded in wall masonry. These may have been deposited during construction or restoration (construction deposits) or thrown into the building at its abandonment (closure deposits). The damaged state of the architecture prevents more precise interpretations.

Further north in the Zagros, depositional practices align more closely with Urartian and Assyrian traditions. The Hasanlu IVB destruction level (ca. 9th century BCE) is a striking example: storage rooms and treasuries in temples and elite buildings contained assemblages of diverse materials and artefact categories, including many bronze and iron weapons and ornaments, some wrapped in textile bundles (Dyson, 1989, p. 120–126).

Further south, in the territory of the Elamite kingdom, the Kalmakareh Cave appears to have served as a repository for precious metal artefacts belonging to local elites or royalty. Numerous silver and gold artefacts—including vessels, masks, and ornaments, now scattered across various museums—are attributed to this cave. Unfortunately, they were recovered exclusively through illegal looting. However, testimonies from looters and workers, along with limited archaeological evidence, suggest that artefacts were placed in the natural cavities of the cave.[6] Some artefacts bear royal inscriptions, allowing them to be dated to the 7th–6th centuries BCE. They may have been dedicated directly to the cave as offerings or may have originally belonged to a primary sanctuary (favissa) or royal treasury, later transferred to the cave for reasons now unknown.

Across western Asia, caves appear to have been long-standing sacred spaces for the deposition of metal artefacts throughout history.

Arabian Peninsula (table 6)

According to both textual sources and archaeological evidence, the Arabian Peninsula was one of the principal source regions for raw materials during the Bronze and Iron Ages. Magan, identified as present-day Oman, is recognized as a major copper source (Cohen, 1975; Weeks, 2016; Giardino, 2019), while Dilmun, identified as present-day Bahrain, functioned as an important commer-

6. https://chaharrah.tv/events/kalmakare/

Site	Region	Content			Environement		Modality of action		Type of deposit
		Material	Categories	State	Nature	Context	Moment	Gesture	
Chaleh Ghar	Iranian Plateau	Metals, stones, potteries	Potteries, Ornements	Final products	Natural (Cave/mine)	Mine	During occupation	Put in a wet area inside a mine. Artefacts were also thrown inside from outside	Offering
Tepe Bazgir	Gorgan plain	Copper alloy	Vessels, Weapons, Tools	Final products	Anthropic	Unclear	Unclear	Put in a pit under the floor of a building. The building was filled up at the end of its occupation	Favissa/Treasure

Tables 4 – Iron Age deposits from the Iranian Plateau

Site	Region	Content			Environement		Modality of action		Type of deposit
		Material	Categories	State	Nature	Context	Moment	Gesture	
Nush-I Jan	Zagros	Silver	Scrap, Ornements	Final product, semi-final, fragments	Anthropic	Fortress / Temple	During occupation	Put in a jar and buried under the floor a fort, near a temple	Economic hoard
Sangtarashan	Zagros	Copper alloy, Iron stone, terracotta	Weapons, Ornaments, Vessels, Figurines, Tools	Final products	Anthropic	Sanctuary	Not clear (during construction or at the end of the occupation)	Put in the walls and/or thrown inside the building at the end of the occupation	Construction deposit / Closure deposit
Sangtarashan	Zagros	Copper alloy, Iron	Weapons, Vessels	Final products	Anthropic	Sanctuary	During occupation	Buried in a pit, beneath the floor	Favissa
Sangtarashan	Zagros	Copper alloy, Iron	Weapons, Vessels	Final products	Anthropic	Sanctuary	During occupation	Put on the floor	Offering
Surkh Dum-I Lori	Zagros	Metal	Variety of categories	Final products	Anthropic	Sanctuary	During construction/restoration	Put in the walls and also buried beneath the floors	Construction deposit
Hasanlu	Zagros	Different materials	Variety of categories	Final products	Anthropic	Temple	During occupation	Un clear (maybe put on the floor)	Offering?
Hasanlu	Zagros	Different materials	Variety of categories	Final products	Anthropic	Prominant building	During occupation	Unclear (fallen from second floor at the moment of destruction?)	Treasure?
Kalmakareh	Zagros	Silver + Gold	Vessels, Figurines, Masks, Ornaments	Final products	Natural	Unclear		Put in the natural cavities of the cave	Favissa? Treasure? Offering?

Tables 5 – Iron Age deposits from the Zagros.

cial hub for metal exchange (Pettinato, 1983, p. 77–78; Weeks, 2016). Thus, it is not surprising to find significant metal artefact deposits in various contexts, particularly those associated with metal production. Saruq al-Hadid (Weeks et al., 2017) in Abu Dhabi and As-Safah / Uqdat al-Bakrah (Genchi et al., 2007) in Oman are two remarkable early Iron Age examples. In both sites, numerous metal artefacts—including high-quality finished objects, semi-finished products, and production waste (slags)—were deposited on the desert surface, with little accompanying architectural evidence.

At Saruq al-Hadid, the finds include gold, copper alloy, and iron artefacts, along with slags, furnaces, and technical ceramics (see Franke et al. in this publication). In contrast, at As-Safah, the artefacts are primarily copper alloy, with few slags and limited technical ceramics. These sites are interpreted as ritual centres connected to metalworking activities, likely involving the participation of metalworkers themselves (Lehner et al., 2023). Deposits can thus be considered as offerings or favissae. The site of Mudhmar, also in Oman, provides another example, where metal artefact deposits—comprising only finished objects such as quivers, arrowheads, bimetallic daggers, snake-shaped figurines, and miniature weapons were placed, on the floor of a prominent building, possibly offering a ritual context (Gernez and Giraud, 2019; Jean et al., 2021)

The presence of raw materials and production waste in votive deposits in the Arabian Peninsula is also evidenced by jar deposits. At Masafi 1 (in the United Arab Emirates), more than one hundred metal masses—including complete and fragmented ingots, irregularly shaped metal fragments, and furnace debris—were placed in jars, sealed with plugs of raw earth, and buried in pits beneath the floors of communal buildings (Benoist et al., 2023). Similarly, at Bithnah (UAE), copper prills—likely recovered directly from the furnace—were deposited in a snake-decorated jar. This jar was accompanied by a small pile of slag placed in front of the snake's head, and everything was buried together beneath the floor of a building (Benoist, 2007, p. 38).

Levant (table 7)

In the Levant, jar deposits are among the most characteristic forms of artefact deposition during the Iron Age. These deposits generally consist of small, complete or fragmented artefacts placed inside ceramic vessels and buried beneath the floors of buildings. The tradition of ceramic jar deposits dates back to at least the 3rd millennium BCE and is attested throughout the western Asian region (Matthews, 1994; Moorey, 1994, p. 238; Peyronel, 2010). However, this practice became increasingly common and widespread during the Iron Age. Tel Dan provides an example of an Iron Age jar deposit containing bronze weapons, figurines, and jewellery (Ilan, 1992), which may be interpreted as a hidden treasure. While bronze and gold items are occasionally found in jars, silver appear to dominate in the Iron Age jar deposits. These deposits, composed exclusively of small silver items, are referred to as 'cut silver' or 'hacksilber' and typically include damaged or fragmented jewellery, ingots, and shapeless silver pieces—such as hacked sheets, tokens, wires, rods, coils, and bars. These items were commonly wrapped in textiles and buried beneath the floors of various buildings.

Silver jar deposits first appeared in the 3rd millennium BCE, but became increasingly common during the 2nd millennium BCE (Eshel et al., 2023), and particularly in the 1st millennium BCE. Several dozen examples have been identified in the Levant (Kletter, 2013). One example from Tel Dor (Stern, 2001) features silver pieces divided into several bundles, wrapped in textiles, with some bundles sealed with clay bullae. The jar was covered with a bowl before being buried under the building. At Ein Hofez (Alexandre, 2013), jars containing silver fragments were found leaning against the internal walls of a house, positioned between two floor levels. At Tel Keisan (Nodet, 1980, p. 325), a jar containing silver bundles wrapped in textiles was discovered in the courtyard of a domestic complex. In some cases—such as Tel Miqne-Ekron (Golani and Sass, 1998) and Beth Shean (Thompson, 2009)—assemblages of hacksilber were found beneath building floors without any ceramic jar containers.

Several scholars have investigated the function of hacksilber (Belmuth, 2001; Thompson, 2003; Kletter, 2013; Eshel et al., 2018; Heymans, 2021; Eshel et al., 2023). Some interpret these deposits as craft hoards, representing the metalworkers' stock for recycling. However, the dominant hypothesis views them as a form of currency, bullion, or transactional material, thus classifying them as economic hoards. The exclusive use of silver in these deposits is significant. There are no comparable hoards in gold or copper.

While the Levant remains one of the most important regions for hacksilber deposits, similar finds have been identified in other areas, including the Arabian Peninsula (Krauss et al., 1983) and the Zagros. For instance, at Nush-i Jan in the central Zagros (Bivar, 1971; Curtis, 1984), a ceramic jar containing silver scraps, ingots, and jewellery was found buried beneath the floor of an Iron Age fortress.

Levantine caves were also favoured places for concealing valuable objects. In Wadi el-Makkuk, gold, bronze, and silver jewellery and scraps were found buried just below the surface of a cave (Sass, 2002).

DISCUSSION

Metal artefact deposits played an important role during the Metal Ages of southwest Asia. Metal weapons as offerings and treasure are among the most representative deposits during the Chalcolithic period. In the Bronze Age, we see a diversification in the forms and contents of metal artefact deposition. Favissae, jar deposits, con-

Site	Region	Content			Environement		Modality of action		Type of deposit
		Material	Categories	State	Nature	Context	Moment	Gesture	
Saruq Al-Hadid	Arabian Peninsula	Copper alloy + Iron + Gold + silver+ Lead+ Stone + semi precious stone	Figurines, Weapons, vessels, Ingots, Ornaments, Tools	Final and semi-final products, Waste and tools of production	Unclear	Ritual/industrial place	Not clear	Speared on the surface of the desert over an area of 1km or buried within or beneath dunes up to 6m deep	Votive depposit?
As-Safah (Uqdat al-Bakrah)	Arabian Peninsula	Differents metals	Differents categories	Final and semi-final products, Waste and tools of production	Unclear	Unclear	Unclear	Speared on the surface of the desert with few architectural elements	?
Mudhmar 1	Arabian Peninsula	Copper alloy	Weapons, Figurines	Final products and unfinished artefacts	Natural	Unclear	Unclear	Put into karstic cavities along the slope. As water flowed down from the karstic system and cavities, the hidden deposits were transported along with colluvial sediments	?
Mudhmar 2	Arabian Peninsula	Copper alloy	Weapons	Final products	Anthropic	Unclear	During occupation	Put on the floor	Offering
Masafi 1	Arabian Peninsula	Copper alloy, Terracotta	Scrap, tools	Ingot (semi-final product), Tools of production, Fragments,	Anthropic	Collective building	During occupation	Put in a jar and buried in a pit under the floor of a collective building	Votive depposit?
Bithnah	Arabian Peninsula	Copper	Prils	Raw materials, Wastes of production	Anthropic	Unclear	During occupation	Put in a jar and buried in a pit under the floor of a building	Votive depposit?

Table 6 – Iron Age deposits from the Arabian Peninsula.

Site	Region	Content			Environement		Modality of action		Type of deposit
		Material	Categories	State	Nature	Context	Moment	Gesture	
Tel Akko	Levant	Silver	Scrap	Fragments, semi-products	Anthropic	Domestic / artisanal	During occupation	Put in a jar and buried in a pit under the floor of a building	Economic hoard
Ein Hofez	Levant	Silver	Scrap	Fragments, semi-products	Anthropic	Domestic	During occupation	Putt in jars. Jars were leaning against internal wall of a house, between two floors	Economic hoard
Tel Dor	Levant	Silver	Scrap	Fragments, semi-products	Anthropic	Unclear	During occupation	Contents was divided into several bundles, wrapped in textiles, put in a jar. Jar was covered by a bowl and buried under the floor of a building	Economic hoard
Tel Keisan	Levant	Silver	Scrap	Fragments, semi-products	Anthropic	Domestic	During occupation	Content, in four bundles, wrapped in textiles, was put in a jar. Jar was put in the courtyard of a domestic complex	Economic hoard
Wadi el-Makkuk	Levant	Silver, Copper, Gold, Stone	Scrap, ingots, Jewelry	Fragments, semi-products, final products	Natural	Unclear	Unclear	Buried beneath the surface of a cave	Economic hoard
Beth Shean	Levant	Silver + Gold	ingots and jewelry	Fragments, semi-products, final products	Anthropic	Temple	Unclear	Buried at the foundation level of a building	Economic hoard
Tel Miqne-Ekron	Levant	Silver	Brocken and damaged jewelry, scrap	Fragments, final products	Anthropic	Unclear	During occupation	Put in a jar and buried under the floor of a building	Economic hoard
Tel Miqne-Ekron	Levant	Silver	Brocken and damaged jewelry, scrap	Fragments, final products	Anthropic	Unclear	During occupation	On the floor of a building	?

Table 7 – Iron Age deposits from the Levant.

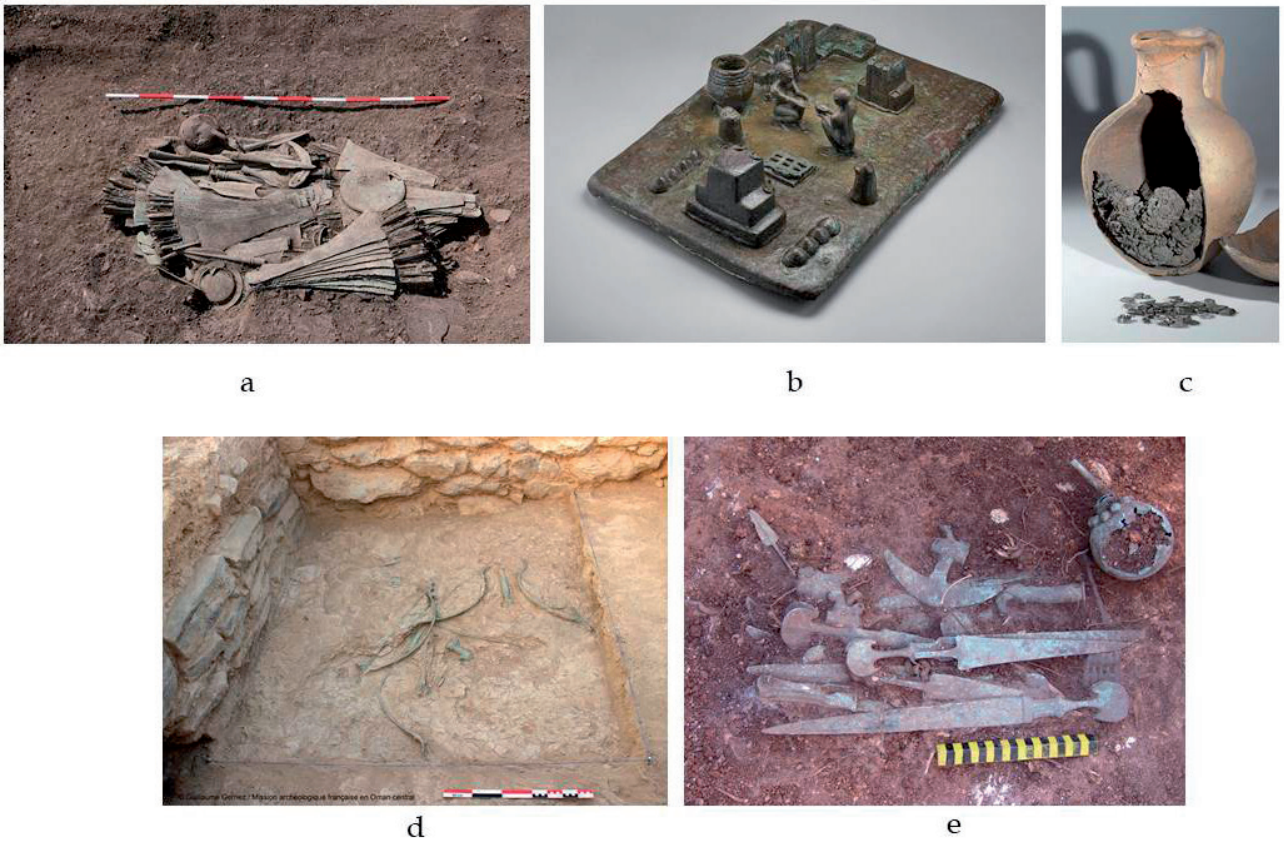

Fig. 5 – Examples of different deposits: a. Nazarlabi, Votive deposit (photo: Archive Prof. Dr. Felix Blocher); b. Susa, Construction deposit, Louvre Museum, SB 2743 (photo : Louvre site des collections) ; c. Tel Dor, Economic hoard , The Israel Museum (photo: Eshel et al., 2018, fig. 5a); d. Mudhmar East, Votive deposit (photo: Genez, Giraud, 2017, Fig. 7.9. Guillaume Gernez); e. Sangtarashan, Votive deposit (Photo: Archive of Sangtarashan's archaeological mission).

struction deposits, offerings, economic hoards, and craft hoards containing various categories of artefacts are all attested during this period.

However, during the Iron Age, there appears to be a significant increase in the density of metal artefacts across various contexts. Religion, economy, and craftsmanship were three major domains associated with the practice of metal deposition. Construction deposits, favissae, royal and elite treasures stored in storage rooms, and economic hoards in the form of hacksilber are among the most characteristic types of deposits of this era.

Generally, no consistent association can be found between the type of artefacts and the type of deposit. Final artefacts in circulation, such as weapons, jewellery, and vessels, make up the content of the deposits. However, in certain regions—such as Susiana and the Zagros—an association between vessels and weapons can be observed in votive deposits. Regarding the homogeneity of deposits, both multi-type and uni-type assemblages are attested. In some regions, the presence of semi-final products and production waste in votive deposits is noteworthy. Copper alloy is the most common material in votive deposits and craft hoards. Silver, mostly in the form of small fragments, is dominant in economic hoards. However, regional variations must be considered for a more nuanced understanding.

From a broader perspective, the end of the 2nd and the beginning of the 1st millennium BCE in western Asia coincided with the rise of powerful political entities, such as Assyria, Urartu, and Elam. Intense interactions—including peaceful trade, rivalries, and military confrontations—took place among these powers. Metal was not only a luxury material in both divine and royal contexts but also a fundamental resource for weapons, tools, and economic exchange. However, the uneven distribution of metal ores meant unequal access between different societies—and even within a society. Thus, trade and imperial expansion, through spoil, tributes, and taxation, greatly contributed to the movement of metal artefacts from source regions to consumer regions.

On the Mesopotamian Plain, during the Iron Age, Assyria, as a dominant political power, imported metal through tribute, tax, and war booty. In Assyria, royal and administrative treasures and arsenals formed the majority of metal deposits. While metal was not the principal material in votive deposits, it was nevertheless included—especially in construction deposits, a long-standing Mesopotamian tradition. The presence of metal fragments in these contexts underlines the intrinsic value of metal in a land where its natural occurrence was absent.

In the Caucasus, Anatolia, the Zagros, and the Arabian Peninsula, the ritual and votive nature of metal deposits

is especially pronounced. Deposits as offerings, favissae, and construction-related deposits are numerous. Except in the Zagros, where the picture is still unclear, other regions are clearly identified as important metal supply zones. There are striking similarities in architecture, artefact typologies, and deposition practices between the Caucasus and the Zagros. In both regions, ritual spaces with stone structures contain votive metal deposits buried beneath the floors of sanctuaries, functioning either as favissae or construction-related offerings. A further parallel lies in the multi-phase (two-step) ritual process: first, offerings are made visible on platforms or open surfaces, then they are hidden—either buried or stored.

In the Zagros, votive deposits typically consist of final artefacts—mostly weapons, vessels, and jewellery. These multi-type assemblages vary from sanctuary to sanctuary. In contrast, Caucasian sites also include ingots and semi-finished products, indicating a link between ritual and metalworking activity. A similar pattern is evident in the Arabian Peninsula, where industrial, administrative, and ritual practices often co-occur, making it difficult to clearly distinguish between their functions. It is plausible that in these metal-rich areas, metalworking and metalworkers held significant social status and were closely involved in religious activities.

The prevalence of votive deposits is not uniform across all supply regions. The Iranian Plateau, despite being a major copper-producing region, follows a different trajectory. Very little evidence exists for either votive deposits or hoards, and the reasons remain unclear. It appears that the practice of metal deposition was not a common ritual tradition in this area.

Susiana and the Zagros played an intermediary role between Mesopotamia and the Iranian Plateau. Some practices in these regions, such as favissae and construction deposits, resemble Mesopotamian rituals, while other practices—like the temple fillings at Nush-i Jan—follow traditions closer to those of the Iranian Plateau. However, the typology of deposit contents reveals a character specific to the Zagros. In the northern Zagros, near the Assyrian frontier, local elites seem to have adopted Assyrian royal traditions, with storage rooms housing treasures that include many metal weapons and ornaments influenced by Assyrian and Urartian styles.

In the Levant, metal votive deposits—once common in the 2nd millennium BCE—lost importance during the Iron Age. Instead, economic hoards, particularly hacksilber in domestic contexts, became more prevalent. The collapse of Bronze Age trade networks likely played a role. The absence of centralized political power in the Levant—unlike in Mesopotamia and Anatolia—may have led to a more localized and fragmented metal economy, where individual communities managed their own acquisition, storage, and recycling. Similar phenomena, albeit on a smaller scale, can be observed in peripheral regions such as the Zagros and the Arabian Peninsula, where jar deposits buried beneath building floors have been discovered. Although some of these jars contain bronze and gold, silver appears to dominate. This suggests that silver was the preferred metal for trade, with fragmented pieces functioning as pre-monetary exchange units.

To conclude, two main factors seem to have shaped the distribution and modality of Iron Age metal artefact deposits in different regions of southwest Asia: political authority and environmental conditions. In supply regions, metal and metalworking had a central role in religious contexts. In consumer regions governed by powerful states, the palatial and administrative sphere was dominant. While local traditions are more apparent in ritual deposits, the influence of empires is more visible in secular hoards and treasuries.

In terms of natural environment, unlike Europe, where metal deposits in wetlands and rivers are common, such practices have not been investigated in southwest Asia. Thus, the role of water-related deposition remains unresolved. However, it is certain that caves have been privileged natural settings for metal artefact deposition in the region—from the Chalcolithic period through the Iron Age.

Finally, this paper should not be seen as a conclusive study, but rather as an overview of the current state of research on metal artefact deposits in Iron Age southwest Asia. Interpretations are inevitably shaped by research focus and the quantity and quality of archaeological investigations across regions. Consequently, the typology of and motivations behind metal deposits are likely to evolve as new discoveries are made.

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