Asia Anteriore Antica
Journal of Ancient Near Eastern Cultures

Firenze University Press
www.fupress.com/asiana

Citation: Tucci, G. (2024). The Multifaceted Possibilities of Small Objects: Notes of the Potential of Southern Levantine Signet Rings. *Asia Anteriore Antica. Journal of Ancient Near Eastern Cultures* 6: 91-105. doi: 10.36253/asiana-2443

Data Availability Statement: All relevant data are within the paper and its Supporting Information files.

Competing Interests: The Author(s) declare(s) no conflict of interest.

The Multifaceted Possibilities of Small Objects: Notes of the Potential of Southern Levantine Signet Rings[1]

Giulia Tucci

Independent Researcher, Italy
giuliatucci@live.it

Abstract. Signet rings constitute a class of materials whose study lies at the intersection of ancient jewelry and glyptic. Traditional approaches to the study of this artifact class have focused almost exclusively on issues related to typology, iconographical apparatus, and art historical analyses, with little consideration to the cultural and social interconnections. Signet rings may constitute a case study in their fundamental importance for a more complete picture of the trade networks, people and material movements and interconnections between peoples, cultures, and societies in the world of the Southern Levant within the context of the Eastern Mediterranean basin.

Keywords: signet ring, Southern Levant, seals, jewelry, personal ornaments, trade and interconnections.

SIGNET RINGS IN THE SOUTHERN LEVANT: STATE OF THE ART AND RESEARCH PERSPECTIVES

A Brief State of The Art Summary

Signet rings – and rings more broadly – have long been restricted to plates at the end of excavation reports, resulting in their incorporation into rather basic catalogues at the expense of more systematic inquiries about their potential to study communities and society: the object itself, which is

[1] This publication was written within the framework of the research project "Stamp Seals from the Southern Levant," (SSSL) funded by the Swiss National Science Foundation (Sinergia project CRSIIS_La6426), a collaborative project between the universities of Zurich, Bern, and Tel Aviv. The directors of the project are Christoph Uehlinger (Zurich, coordinator), Silvia Schroer (Bern), Stefan Münger (Bern) and Ido Koch (Tel Aviv). The Author would like to thank the Swiss National Science Foundation for its financial support.

most often poly-material, provides the possibility to track movements of people, materials, motifs, trade, and production techniques.

Without detracting from the historical and artistic value of these artefacts, jewelry in general has been subject to mixed fortunes in the last 200 years of archaeological research.

The earliest approaches to this class of materials had a distinctly 'collecting' and 'antiquarian' attitude, while the first studies with a scientific semblance, or at least a cataloguing spirit – as the aim of ordering rings originated more from museums and private collections according to some parameter – have been conducted since the end of the 19th century (Newberry 1906 or Marshall 1907).

Between the two World Wars, even though this was the time of the first major archaeological expeditions, the 'small finds' are published in appendices, without adequate contextual specifications or technological studies. Interest in raw materials only became apparent from the second half/end of the 20th century with the publication of few specialized journals (e.g., *Art and Archaeology Technical Abstracts* and *Gold Bulletin*) and the publication of the first edition of Moorey's volume in 1994. As far as the Near East (and Egypt) is concerned, it is worth mentioning the year 1971, in which three reference works were published approaching several classes of jewelry (with sections devoted to finger-rings and signet rings), systematically studied, with a culturally holistic attempted approach (Wilkinson 1971; Aldred 1971 and Maxwell-Hyslop 1971). In the 1970-80s, publications flourished on specific classes of jewelry such as pendants (Platt 1976 or McGovern 1985), or ornaments studied by the context of discovery – e.g., to name just a few the Tell el-'Ajjul treasury, the Gezer treasury or the Beth Shemesh treasury (respectively Negbi 1970; Seger 1976 and Tadmor and Misch-Brandl 1970); for rings and signet-rings the Boardman's 1970 volume, with its various reprints, remains a milestone in terms of construction of the typology, and organization of the vast material covered. Although in the last years of the 1900s, there is no shortage of typological studies, an underestimation of what is now called 'anthropology of ornamentation' is visible. It is only in the last 20 years that the attention of archaeologist has turned to raw materials and their processing (e.g. Nicholson and Shaw 2000), as well as to the connection between the ornament and the person wearing it (e.g., Limmer 2007; Green 2007; Brody and Friedman 2007; Cifarelli 2014; and some contributions from a conference edited by Nosch and Laffineur 2012). Milestones for the study of Southern Levant jewelry to date are Golani 2013 and Verduci 2018, in which a section is devoted to rings.

The last decades of the last century is when signet rings also come under the lens of interest of those studying glyptic, with Keel's volumes (e.g., 1995 with the relevant chapter). Clearly the interest of those scholars was focused on iconographic motifs and little on the practices of ostentation, use and the role in society of the object itself.

Signet Rings in Context

The protagonists of this paper will therefore be, as mentioned, the signet rings, those rings that due to their decorated and engraved bezel could also be used in the practice of sealing to affix their own recognizable mark/signature to validate, authorize or close goods, documents, transactions or even palaces premises (e.g. warehouses or storage rooms – or tombs).

Those signet rings (also called three-dimensional rings or solid rings) were formed by hoop and bezel produced – at least in the initial phase of their circulation – in one solid piece, with a unique casting or hoop and bezel soldered together and commonly made of metals, such as gold, silver, and bronze. Only a few specimens are preserved in faience due to the fragile nature of this material, and very few examples carved in hard stones such as carnelian, steatite, hematite or quartz (Fig. 1).

So called tridimensional signet rings, are first attested in the Southern Levant during the Late Bronze II (1350-1150 BCE ca.) and likely spread from Egypt. Conceptually they echo the well-known scarab rings also of Egyptian provenance, which were already adopted and widespread in the Southern Levant by the Middle Bronze II (1700-1600 BCE ca.), partly retaining their original administrative function. Rings with bezels, of different shapes, soldered or formed in one piece with the ring may have an administrative, authentication, or control practice of use

Fig. 1. Signet rings from Southern Levant. Gold: Megiddo, Photo by C. Amit © IAA (Guy 1938: 173-174, Pl. 128:15). Silver: Deir el Balah, Photo by Unknown © Keel/BODO (Keel 2010: 452-453, No. 123). Bronze: Amman, Photo by Unknown © Keel/BODO (Eggler and Keel 2006: 23-24, No. 78). Faience: Ashkelon, Photo by Zev Radovan © The Leon Levy Expedition to Ashkelon (Keel 1997: 704-705, No. 42). Carnelian: Deir el-Balah, Photo by Unknown © Keel/ Bodo (Keel 2010: 454-455, No. 129). Ensteatite: Tell Zira'a, Photo by Ernst Brückelmann ©DEI/BAI (Vieweger 2011: 302, 350: Fig. 3.63-64, 3.145).

which was quite likely in Egypt, but this is difficult to prove in the Southern Levant due to the lack of recognized and recognizable impressions. The custom of tying a seal on the finger probably developed from the earlier use to wearing it around the neck or wrist, that made it possible to always have the seal handy on the body.

In Egypt, the first practice was to tie the seal (or the scarab) with a simple thread (Andrews 1990: 163) which has not been preserved. One of the first objects of this type retrieved in the Southern Levant, in which the simple thread is in gold is the specimen from Tomb 15 at Gibeon dated to the Middle Bronze Age II-III (Pritchard 1963: 154 no. 8 and fig. 70:22). (Fig. 2).

In order to begin exploring signet rings, during my experience in the 'Stamp Seals from the Southern Levant' Project the database has been queried (https://cssl.levantineseals.org), resulting the ability to quickly wade through thousands of excavated objects to meet my tailored search parameters. At the moment of the first writing of this paper, 118 signet rings are catalogued in the SSSL database. The earliest object dates to the middle of the 18th

Fig. 2. Gibeon ring with scarab in gold and ensteatite (or fired steatite), MB II-III. Tomb 15. Photograph by unknown, © Keel/BODO; drawings by U. Zurkinden (Keel 2013: 482-483, No. 43).

Dynasty with the most recent one dated to the beginning of Hellenistic period (5th-4th century BCE); only four percent of the objects remain undated. It is likely that not all the objects collected under the name 'signet ring' were conceived and used as seals, as many of them were too fragile and/or thin, or their bezels were too shallowly engraved to leave a clear image once impressed (e.g. Fig. 3).

How Can One Study Ancient Societies Through Finger Rings?

'As jewelry in the past functioned beyond just ornamentation, personal ornaments should thus be studied through their archaeological and cultural context in order to understand the social, religious and economic func-

Fig. 3. 'Signet ring' from Tell el Far'ah South, silver. Late Bronze Age IIB. © Institute of Archaeology, UCL London. (MacDonald, Starkey and Harding 1932: Pl. LXXIII:65).

Fig. 4. Nesperennub's mummy hands with rings. 23rd Dynasty, Luxor. British Museum. (Taylor 2011: 33).

tions of jewelry in ancient societies. Research of personal adornments from the ancient Near East has shown that they can be appreciated as objects transmitting information and reflecting social changes' (Golani 2020: 172).

More concretely, but summarizing, we can say that these objects can be an expression or manifestation of gender, age, cultural markers, symbols of rank, social role, status, but also a measure of wealth, or they can play a role in worship and religion.

Most of the signet rings found in the Near East originate from funerary contexts, intentional deposit less subject to exposure from natural or anthropogenic factors. The connection between communities and social dynamics is evident in the set of practices, codes of behavior, and associations of materials and bodies performed inside and around the tomb. Artifacts can also be created explicitly for the tomb, as the reference to the vulture-like pendant from a passage from the Egyptian Book of the Dead (Andrews 1990: 198). The Egyptian burials have in this case returned numerous rings: the hands of mummies are in this case precious evidence (Fig. 4). The depiction of rings on the hands of the anthropomorphic figures depicted on New Kingdom sarcophagi are indeed valuable evidence of the object in the stage of the use, as the Southern Levant is scarce in detailed human representations.

Different forms of ornamentation can differentiate roles and reinforce identity and perception of belonging to a specific community. Given overlap in categories, in remains such as personal ornaments – and jewelry – is extreme difficult discerning purely ornamental items from good-luck or apotropaic objects as also shapes and colors can take on a symbolic and protective power.

The creation of a multi-material object or the expression of different styles requires a variety of technical expertise ranging from simple stone roughed and drilled to jewelry techniques such as granulation and filigree, but also the management of operational chains, such as the creation of faience and at the same time the intersection of techniques in sharing workspaces. As noted by Dobres (2000: 135) 'In technical matters, there is always more than one way to get a job done. Why technicians work their material resources in some ways and others, therefore, becomes an important question.' As small portable objects resulting from various production techniques and materials, signet rings can reveal deep interconnections with the society or culture in which they were worn and used.

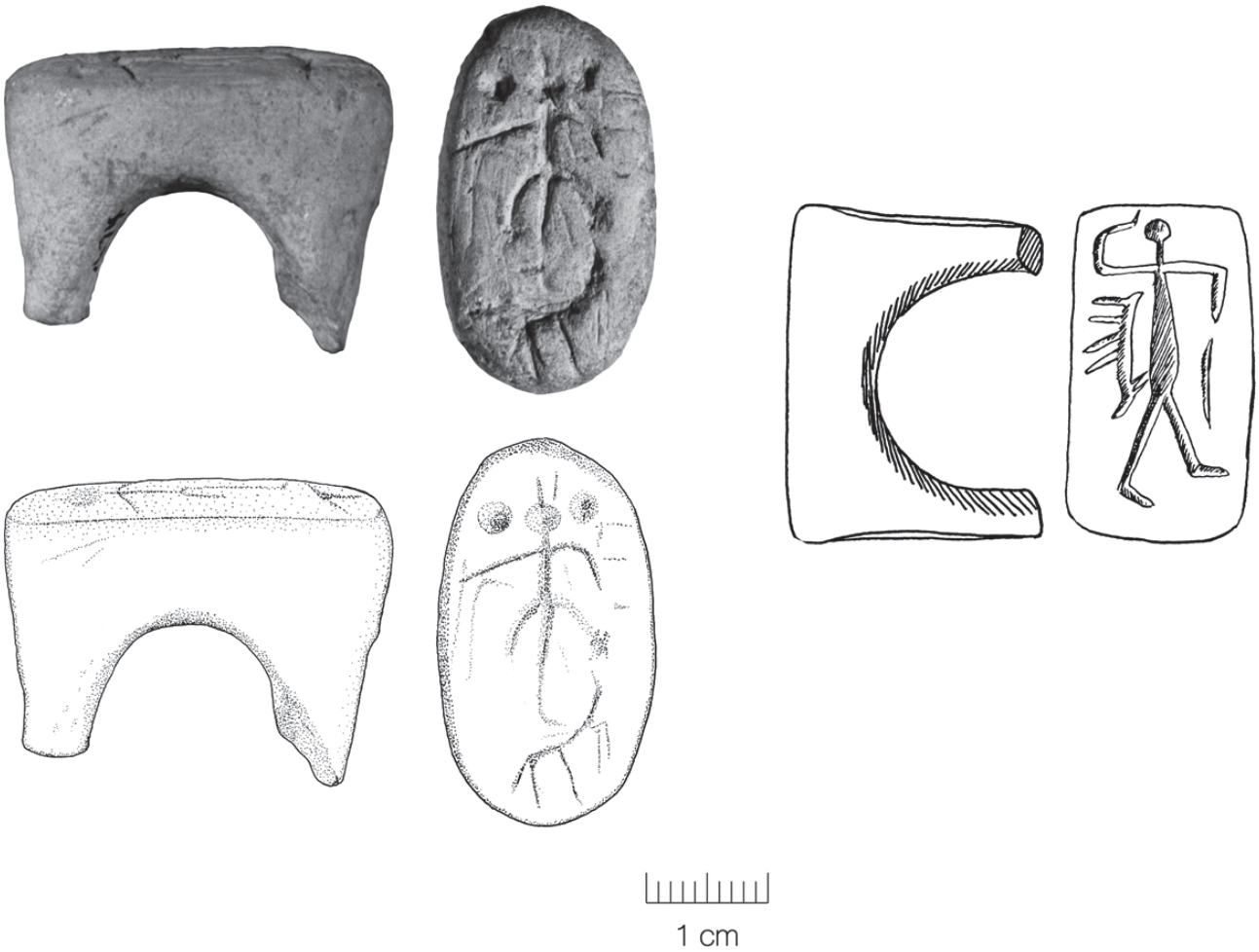

Fig. 5. Tell Beit Mirsim_39_compositeImage_BBCB7034-E306-49F9-9A5E-6D943E453148.png. © CSAPI/OBO, CSAPI/OBO (drawn by Ulrike Zurkinden) and Tell Beit Mirsim_42_compositeImage_67A1C239-82BF-4427-836F-56D25E9C1335.png. © CSAPI/OBO.

The study of typology[2] and production of signet rings can be very useful, once chronologically anchored, to learn about developments in jewelry techniques of manufacture.

As preliminary suggestions of the potential of these small objects in the SSSL Project database, among the rings dated to the Late Bronze and Iron Age (13th – 11st BCE century), my attention was caught by two objects, named Tell Beit Mirsim 39 and Tell Beit Mirsim 42 – after the name of the site where they were found (Albright 1938: No. 1674 and No. 1489). (Fig. 5).

Two reasons, in my opinion, make them noteworthy, the material in which they are made – limestone – certainly uncommon for the making of rings, but common for the making of other types of seals, and the iconographic apparatus that completes them with the engraving on the bezel in the same rather schematic style of an anthropomorphic figure on a quadruped.

[2] A new typologization is proposed by the author in a forthcoming article 'Between methodology and anthropology: research perspectives on signet-rings".

As for the use of limestone for production, this is easily available, and of preferred use due to the shortage of precious raw materials witnessed in the region after the Late Bronze Age system of lively trade went into crisis due to changing political conditions throughout the Mediterranean basin.

The genesis of the representation engraved on the bezel is as interesting as the production and probable history of the object's use itself. The combination between the use of limestone and stylized anthropomorphic iconographies is well defined by Keel in his group 'Philistine anchor-seals' (Keel 1994). In the rather large group collected by Keel, however, a further selection can be traced, based on the specifical iconography proposed and the truncated pyramid shape, halfway between the shapes known in the Late Bronze Age and the future "conoids" of the Iron Age. As already identified by Keel, Shuval and Uehlinger (1990: 388-389) the group defined here can be attributed to a specific region as can be seen from the map, with rare cases beyond the borders. The dating of the specimens is consistent, ranging from the 13th to the 10th century BCE as the final date (Fig. 6).

As regards this iconography that Keel describes as 'human figure on a rudimental animal' (Keel 1994: 30), various scholars have dealt with it (Keel *et al.,* 1990; Keel and Uehlinger 1998; Schroer 2018: 70-71), with the most accredited identification seeing Ba'al or Seth above the quadruped (lion?). In the decoration of the lunettes of the proposed rings, as well as of other seals, circular filling elements (stars?) are added. The similarity in the features and in engraving technique are surprising in all specimens.

Where does the tradition of these seals with such a particular shape come from? An explanation is also provided to us by Keel, who proposes that these small anchors are the miniaturization of the anchors that were offered as ex-votos in the Levantine sanctuaries (e.g. Ba'al temple in Ugarit) as thanks for a successful journey, maybe by sea (Keel 1994: 28 note 11).

From the practice of objects dedicated in temples, and therefore static objects, my hypothesis is that the passage could have been made to always have the object with you, with a given benefit as apotropaic value thanks to the representation of the divinity. For this purpose, the objects connected to the cultic sphere are miniaturized, perforated in the upper part to be suspended and used as a pendant. The rings presented here therefore fall, fully into the satisfaction of the desire to perceive the protective divinity next to oneself by wearing an object full of meaning, but according to a different custom, experimenting with a different form of ornamental accessory around a finger.

SIGNET RINGS IN THE MEDITERRANEAN SCENARIO: PORTABILITY AND INTERCONNECTIONS

Displacements: Raw Materials on the Move

Over the course of the Bronze and Iron Age, exploitation of the raw materials in the Mediterranean basin shifted alongside alternating power structures, influences, and empires. Most of the gold used in the Near East was native, either mined from gold veins or collected in the form of pebbles from alluvial deposits; in its native state it has impurities often reflected by the presence of silver in quantities ranging five to fifty percent. The most exploited gold mines for the supply of gold in the Southern Levant during the Late Bronze Age (ca. 1550–1200/1150 BCE) and early Iron Age (ca. 1150–950 BCE) was certainly those of Egypt and Nubia. The Turin Goldmine papyrus (Fig. 7) dated to the 20th Dynasty reveals the Egyptians defined three mining regions in the Eastern Desert (Ogden 2000: 161). Amongst the first evidence of the use of gold in the Southern Levant is the assemblage of objects found in the cave of Nahal Qaneh (modern Israel), dated to the fourth millennium BCE in which gold was likely imported from Egypt (Genz and Hauptman 2002: 151).

The second most common metal used in jewelry production is silver with its metallurgy, in which the metal was obtained through its extraction from lead ores such as galena (lead sulphite) or cerussite (lead carbonate), that also dates to the fourth millennium BCE. Recent research on the provenance of silver used in Southern Levant, based on the analysis of silver pieces from hoards, determined that those pieces dated to the Late Bronze Age origi-

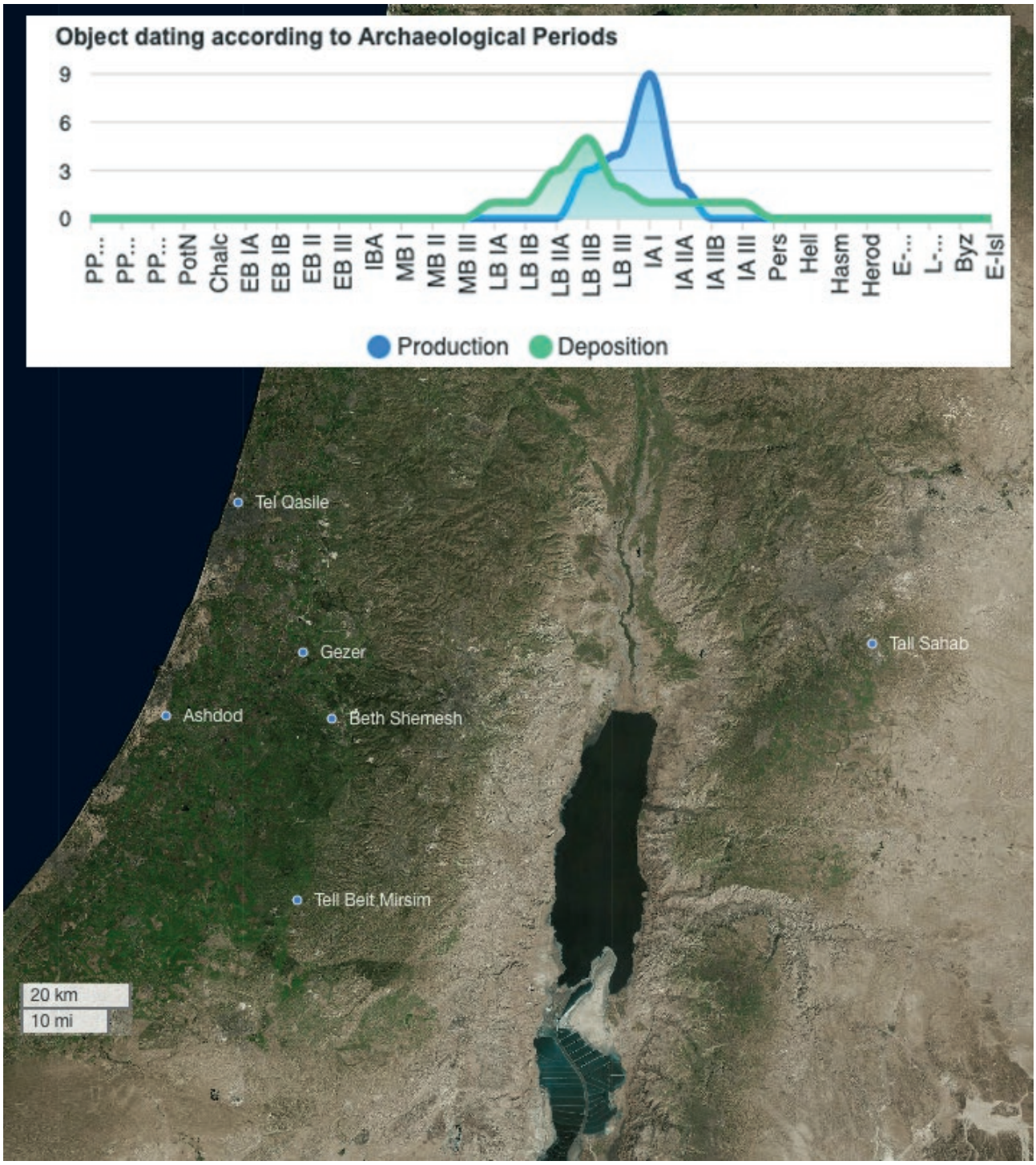

Fig. 6. Map of distribution of the seals in Fig. 5 and period of diffusion. https://cssl.levantineseals.org/#/

nated from a range of mines from Anatolia and the Aegean, whereas the ones dated to the later periods originated from Anatolia the Western Mediterranean (Sardinia and Iberia), and maybe Iran (Eshel *et al.* 2021; Gentelli *et al.* 2021; Wood *et al.* 2019).

Fig. 7. Turin Goldmine Papyrus. Museo Egizio Torino Cat. 1879 + 1969 + 1899. New Kingdom. https://collezioni.museoegizio.it/it-IT/material/Cat_1879_1969_1899

The procurement of semi-precious and hard stones (steatite, amethyst and carnelian in particular), which saw their greatest use in the making of stamp seals during the Middle Bronze Age to Late Bronze Age, originated mainly from the Eastern Desert of Egypt. It was probably a desire to imitate

the color and the shine of the stones that prompted the production of substitute materials: 'newly' produced and almost ubiquitously materials such as faience (and various glass products) and ceramics. With less effort and less manpower, but more technology, aesthetically competitive materials were obtained.

Southern Levantine Signet Rings: Portable and Interconnected Objects. A focus on the Late Bronze Age

The concentration of signet rings in the Southern Levant occurs, as mentioned, during the Late Bronze Age II. This historical period coincides with the strong Egyptian presence in the Levantine area and the circulation of Egyptian or Egyptian-style jewelry. Rings arriving from Egypt in the Levant could be both personal possessions of Egyptian personnel working in the territory (officers, military and specialized personnel) but also objects of trade or exchange, appreciated by the local populations as luxury and fashionable goods. The Late Bronze Age is also the most prosperous period for Levantine jewelry with a large percentage of finds, which easily connects with the stability and revival of production and trade to which the Egyptian presence contributed. From the point of view of the production technology, the increasing skills of craftsmen in handling, casting, modelling and decoration (see e.g. granulation) techniques of small objects emerges.

The Aegean Area returned in Late Bronze Age contexts about a thousand objects from Egypt and the Near East, and at the same time Mycenaean and Minoan pottery have been found in the Southern Levant. It seems, however, that jewelry from Mainland Greece, Mycenae and Crete was not particularly valued elsewhere in the eastern Mediterranean, as it does not seem to have been exported as massively as Egyptian jewelry.

As corridor between north and south, as well as a bridge to inland regions such as Mesopotamia, the Southern Levantine economy was certainly influenced by the needs and demands of the major political entities around the East Mediterranean Basin. The fall of the so-called 'great empires' at the end of the Late Bronze Age characterized a transition from a trade system supervised and conveyed by a central organization to a period characterized by 'personal' initiative, groups of merchants acting on their own behalf with relative financial autonomy. According to Zaccagnini (1987: 57). and Liverani (1987: 67) (see also Tucci 2018: 424 and Golani – Tucci forthcoming), the merchants of the Late Bronze Age operated under the status of employees of palace or temple-based institutions, assuming that most of their earnings were derived from high-level exchanges. When the social organization of the Late Bronze Age collapsed, however, some of these merchants managed to reorganize themselves by guaranteeing exchanges at a more restricted level.

In this framework, the circulation of metal seems to have continued, albeit in a minor tone throughout different trade networks, with copious use of recycled metal (Killebrew 2014: 601). As far as materials are concerned, the graph clearly shows us according to the different periods of the signet rings, which metals are used more and which less from the Late Bronze Age later on (Fig. 8). On the vertical axis is the number of signet rings and on the

Fig. 8. Selected materials used for the production of signet rings. X axis = years; Y axis =quantity; made on 118 items (made by the Author).

horizontal axis is the timeline from Late Bronze Age to the Hellenistic period. I argue that the trend of the data collected up to this point is perfectly anchored in the socio-cultural landscape of the time when these objects were in circulation. The use of different metals in producing rings fluctuate following market flows.

Treasures in the Holds of Wrecks: Trade and Contact in the Mediterranean Basin

The cargoes in the holds of ships wrecked in the Mediterranean provide insight into the nature of long-distance trade (Bachhuber 2020: 1091). Roughly six shipwrecks dated between the Late Bronze Age and the beginning of the Iron Age have been investigated (see Bachhuber 2020: Fig. 5.1.1 and for the Late Bronze Age wrecks see Arif 2016)[3]. While cylinder seals and scarabs were found in more than one wreck (e.g., Cape Gelidonya, Bass *et al.* 1967), only two massive rings were found in the Uluburun shipwreck, one fragmentary in gold, and one complete in silver. This shipwreck was discovered in the early 1980s, a few miles off the coast of South-Turkey in the Kas peninsula. The core of the cargo was typical for the Late Bronze Age, comprising copper, tin, and lead ingots, and ceramic containers (Bass *et al.* 1989) – unfortunately the content falls in the percentage of untraced perishable materials that reached the Aegean area from the Levant coast and from Egypt. The cargo also included 14 amber beads from the Balkan peninsula, attesting to the complex networks by which goods circulated. It is generally accepted that the ship's itinerary was from the east to the west with a port of departure identified on the coast of the Southern Levant (Bachhuber 2020: 1094).

With the exception of the cargo of raw materials (copper, tin, glass ingots, ivory), agricultural products (such as olive oil, terebinth resin and pomegranates), figurines, weapons, weight, balances, and jewelry, most of them with

[3] At the time of this article's revision, it was recently reported that another wreck had been found 90 km off the Israeli coast https://www.haaretz.com/archaeology/2024-06-20/ty-article/energy-company-finds-earliest-deep-sea-shipwreck-and-its-canaanite/00000190-30c6-d39e-a999-76ce580f0000.

Fig. 9. Uluburun gold signet ring (KW 603). (Weinstein 2008: 360 No. 225).

Fig. 10. Ring of Ramesses IV. Brooklyn Museum, Charles Edwin Wilbour Fund, 37.727E. Creative Commons-BY (Photo: Brooklyn Museum).

striking comparisons in the jewelry of the Tell el-'Ajjul site (see disc pendants and falcon earrings – KV1672, 138 and KV94), were identified as personal 'possessions' of the ship's crew, which seemed to be composed of various geographical origins (Syro-Canaanite, Mycenean and the north of the Greece, Pulak 2008: 300).

The two rings mentioned previously, one in gold (Fig. 9) and one in silver, are now stored in the Bodrum Museum of Underwater Archaeology (Turkey). The gold ring (KW 603) is actually composed of an alloy (gold and silver), similar to electrum, is dated to 1300 BCE ca. and would appear to have been produced in the Egyptian 18th Dynasty. Only the upper half of the bezel is preserved, on which three signs are recognizable: a feather of Maat, the Egyptian goddess of justice; the figure of a vulture in the center; and a human figure (seated?) holding an *ankh*, maybe wearing a crown. The exact reading of the signs remains unclear and proposed parallels are part of the bezel of a ring from Leiden (Newberry 1906: Pl. 31:34.) and a ring in silver alloy from Brooklyn Museum (Fig. 10). Both parallels are not exactly consistent.

As suggested by Pulak (1988: 27), however, the ring was part of a treasure trove of gold objects ready to be reworked. The ring was found near other pieces of cut or folded gold jewelry. Cut marks – 'intentional destruction' as mentioned by Weinstein (1989: 23) – are visible on the ring, which defunctionalized in order to achieve another use. Among these precious gold objects, a small scarab of Queen Nefertiti was also recovered (KW 772), made of gold and in excellent condition (Weinstein 1989: 17). The scarab could be kept both for resale as 'exotica' to be soldered onto a new ring, but also as a re-melting item.

A little further south of this small treasure of precious objects, with which tools and some weapons were also associated, a second ring in silver (KW 650), dated to the 15th or 14th century BCE, was found. The bezel of the ring is extremely worn and bears a series of vertically arranged hieroglyphics. Weinstein tentatively (1989: 22) recognized the signs as, from bottom to top: a *nb* sign; a pair of crossed arrows, likely the symbol of the goddess Neith; and a counterpoise.

Fig. 11. Beth Shemesh hoard, Rockefeller Museum, Jerusalem. Photograph by the author.

Both the rings here presented have been intentionally stored as a cargo to be sold probably because of the preciousness of their material. Either because ruined and fragmentary or because the symbolic value they probably had in their original context was no longer recognized, these small travelling objects no longer served as personal ornaments, but as in many other cases, as recycling material.

A TALE TO BE CONTINUED: SIGNET RINGS FROM ONE HAND TO HAND

The practice of hoarding small pieces of precious metal for re-smelting and processing is quite well known in the Southern Levant, several small treasures made from scraps – also with rings fragments – were found in the region site's such as Megiddo, Beth Shean, Beth Shemesh (see respectively Arie *et al.,* 2019; Thompson 2009; Tadmor – Brandl 1980) (Fig. 11), or near the coast of Yavneh-Yam in a shipwreck dated to the Late Bronze Age, the probable small personal treasure of a merchant was found (Golani and Galili 2015). The association between small scraps of jewelry, passed from hand to hand, defunctionalized from their ornamental use at the end of their life, and weighing instruments reoccurs, as seen also in the Uluburun wreck.

It is certain that the practice of hoarding was more frequent from the end of the Late Bronze Age, when the shortage of silver after the collapse of the main networks and, at the same time, the loss of the influence of the great powers have changed trajectories and practices, and additionally the role, during the Iron Age, of Phoenician merchants in this reorganization of trade in the Mediterranean is evident (Wood *et al.,* 2019: 24).

Determining the value of a luxury object therefore goes far beyond its mere economic value; at the same time, even a small object such as a ring, if made of a precious material such as gold or silver, can be treasured and take on currency value. What is certain is that in whatever way these objects circulated, they contributed to the community circulation of materials, technology, ideas and anthropological understandings.

REFERENCES

Albright, W.F. 1938, *The Excavation at Tell Beit Mirsim, Vol. II: The Bronze Age*, Annual of the American School of Oriental Research 17. New Heaven, American School of Oriental Research.

Aldred C. 1971, *Jewels of the Pharaohs*, London, Thames and Hudson.

Andrews C. 1990, *Ancient Egyptian Jewelry,* London, British Museum

Arie, E., Boaretto E., Martin M.A.S, Namdar D., Shamir O, Yahalom-Mack N. 2019, A new Jewelry Hoard from Eleventh-Century BCE Megiddo, *Near Eastern Archaeology* 82: 90-101.

Aruz J., Benzel K., Evans J.M. 2008, *Beyond Babylon. Art, Trade and Diplomacy in the Second Millennium B.C.*, New Haven – London, Yale University Press.

Arif R. 2016, Four Late Bronze Age Shipwrecks in the Mediterranean and the Aegean and their connections to Cyprus, *HART* 507.

Bachhuber C. 2020, Shipwreck, in I.S. Lemos, A. Kotsonas (eds), *A Companion to the Archaeology of Early Greece and the Mediterranean*, Hoboken, Wiley Blackwell: 1091-1106.

Bass G.F., Throckmorton P., Du Plat Taylor J., Hennessy J.B., Shulman, A.R., Buchholz H. 1967, Cape Gelidonya. A Bronze Shipwreck, *Transactions of the American Philosophical Society* 57: 1-177.

Bass, G.F., Pulak C., Collon D., Weinstein J. 1989, The Bronze Age Shipwreck at Ulu Burun: 1986 Campaign, *American Journal of Archaeology* 93: 1-29.

Boardman J. 1970, *Greek Gems and Finger-Rings. Early Bronze Age To Late Classical.* London, Thames & Hudson.

Brody A.J., Friedman E. 2007, Bronze Bangles form Tell en-Nasbeh: Cultural and Economic Observations on an Artifact Type from the Time of the Prophets, in R.B. Coote, N.K. Gottwald (eds), *To Break Every Joke: Essays in Honor of Marvin L. Chaine,* Sheffield, Phoenix Press: 97-114.

Cifarelli M. 2014, Personal Ornaments at Hasanlu, in A. Golani, Z. Wygnanska (eds.), *Beyond Ornamentation. Jewelry as an Aspect of Material Culture in the Ancient Near East,* Polish Archaeology in the Mediterranean XXIII/2, Warsaw, University of Warsaw Press: 297-316.

Dobres M.A. 2000, *Technology and Social Agency: Outlining a Practice Framework for Archaeology,* Oxford, Blackwell Publishers.

Eggler J., Keel O. 2006, Corpus der Siegel-Amulette aus Jordanien: Vom Neolitikhum bis zur Persezeit, Fribourg – Göttingen, Academic Press – Vandenhoeck.

Eshel T., Gilboa A., Yahalom-Mack N., Tirosh O., Erel Y. 2021, Debasement of silver throughout the Late Bronze – Iron Age transition in the Southern Levant: Analytical and cultural implication, *Journal of Archaeological* Science 125: 1-24.

Gentelli L., Blichert-Toft J., Davis G., Gitler H., Albarède F. 2021, Metal provenance of Iron Age *Hacksilver* hoards in the southern Levant, *Journal of Archaeological Science* 134: 1-10.

Genz H., Hauptmann A. 2002, Chalcolithic and EBA Metallurgy in the Southern Levant, in U. Yalcin (ed), *Anatolian Metal II*, Bochum, Deuthsches Bergbau-Museum: 149-158.

Golani A. 2013, *Jewelry from the Iron Age II Levant,* Orbis Biblicus et Orientalis Series Archaeologica 34, Fribourg – Göttingen, Academic Press – Vandenhoeck & Ruprecht.

Golani A. 2020, Beyond Ornamentation: Contextualizing Research of Personal Adornment in the Ancient Near East, in A. Otto, M. Herles, K. Kaniut (eds), *Proceedings of the 11th International Congress on the Archaeology of the Ancient Near East. Vol 1*, Verlag Wiesbaden, Harrassowitz: 172-185.

Golani A., Galili E. 2015, A Late Bronze Age Canaanite Merchant's Hoard of Gold Artifacts and Hematite Weights from Yavne-Yam Anchorage, Israel, *Journal of Ancient Egyptian Interconnections* 7: 16-29.

Golani A., Tucci, G. forthcoming, The Study of Ancient Jewelry. Regional and Inter-Regional Interaction in the Iron Age II Southern Levant.

Green J.D.M. 2007, Anklets and the Social Construction of Gender and Age in the Late Bronze and Early Southern Levant, in S. Hamilton, R.D. Whitehouse, K. Wright (eds), *Archaeology and Women- Ancient and Modern Issues*, Walnut Creek, Left Coast Press: 288-311.

Guy P.L.O. 1938, *Megiddo Tombs*, Oriental Institute Publication 33, Chicago, University of Chicago Press.

Keel, O. 1994, Philistine 'Anchor' Seals. *Israel Exploration Journal* 44: 21-35

Keel O. 1995, *Corpus der Stempelsiegel-Amulette aus Palästina/Israel: Von den Anfängen bis zur Persezeit: Einleitung,* Orbis Biblicus et Orientalis, Series Archaeologica 10, Fribourg – Göttingen, Academic Press – Vandenhoeck.

Keel O. 1997-2017, *Corpus der Stempelsiegel-Amulette aus Palästina/Israel. Katalog Band I-V.* Fribourg – Göttingen, Academic Press – Vandenhoeck.

Keel, O., Shuval M., Uehlinger C. 1990, *Studien zu den Stempelsiegeln aus Palästina/Israel III*, Orbis Biblicus et Orientalis 100, Fribourg – Göttingen, Academic Press – Vandenhoeck.

Keel, O., Uehlinger, C. 1998, *Gods, Goddesses, and Image of God in Ancient Israel.* Minneapolis, Fortress Press.

Killebrew A.E. 2014, Introduction to the Levant during the Transitional Late Bronze Age/ Iron Age I and Iron Age I Periods, in M.L. Steiner, A.E. Killebrew (eds), *The Oxford Handbook of the Archaeology of the Levant c. 8000-332 BCE*, Oxford, Oxford University Press: 595-606.

Limmer A. 2007. *The Social Function and Ritual Significance of Jewelry in the Iron Age II, Southern Levant*, Tucson, University of Arizona.

Liverani M. 1987, The Collapse of the Near Eastern Regional System at the End of the Bronze Age in Case of Syria, in M.J: Rowlands, M.T. Larsen, K. Kristiansen (eds), *Centre and Periphery in the Ancient World*, Cambridge, Cambridge University Press: 66-73.

MacDonald E., Starkey E.L., Harding. L. 1932, *Beth-Pelet II*, British School of Archaeology in Egypt 52, London, Quaritch.

Marshall, F.H. 1907. *Catalogue of the Finger Rings in the British Museum, Greek, Etruscan, and Roman*. London: British Museum.

Maxwell-Hyslop K.R. 1971, *Western Asiatic Jewelry c. 3000-612 BC,* London, Metheun & Co.

McGovern, P.E. 1985, *Late Bronze Age Palestinian Pendants. Innovation in a Cosmopolitan Age*, Sheffield, JSOT Press.

Moorey P.R.S. 1994, *Ancient Mesopotamian Materials and Industries*, Oxford, University Press.

Negbi O. 1970, *The Hoard of Goldwork from Tell el-'Ajjul,* Studies in Mediterranean Archaeology XXV, Göteborg, Södra Vägen.

Newberry P.E. 1906, *Scarabs; an Introduction to the Study of Egyptian Seals and Signet Rings,* London, Constable and Co. LTD.

Nicholson P.T., Shaw I. 2000, *Ancient Egyptian Materials and Technology,* Cambridge, University Press.

Nosch M.L., Laffineur, R. (eds) 2012, *KOSMOS. Jewelry, Adornment and Textiles in the Aegean Bronze Age. Proceeding of the 13th International Aegean Conference/ 13e Rencontre Égéenne Internationale, University of Copenhagen Danish National Research Foundation's Centre for Textile Research, 21-26 April 2010*, Leuven, Peeters Pub & Booksellers.

Ogden J. 2000, Metals, in P.T. Nicholson, I. Shaw (eds), *Ancient Egyptian Materials and Technology,* Cambridge, University Press: 148-176.

Pritchard J. 1963. *The Bronze Age Cemetery at Gibeon,* Museum Monograph 4, Philadelphia, University Museum, University of Pennsylvania.

Platt, E. E. 1976, Triangular Jewerly Plaques. *Bulletin f the American Schools of Oriental Research* 221: 103-111.

Pulak C. 1988, The Bronze Age Shipwreck at Ulu Burun. Turkey: 1985 Campaign, *American Journal of Archaeology* 92: 1-37.

Pulak C. 2008, The Uluburun Shipwreck and late Bronze Age Trade, in J. Aruz, K. Benzel, J.M. Evans (eds), *Beyond Babylon. Art, Trade, a d Diplomacy in the Second Millennium B.C.,* New York, The Metropolitan Museum of Art: 289-310.

Schroer, S. 2018. *Die Ikonographie Palästina/Israels und der Alte Orient. Eine Religionsgeschichte in Bildern. Band 4. Dien Eisenzeit bis zum Beginn der achämenidischen Herrschaft.* Schwabe Verlag: Göttingen.

Seger J.D. 1976, Reflection on the Gold Hoard from Gezer, *Bulletin of the American Society of Oriental Research* 221: 133-140

Tadmor M., Mish-Brandl O. 1980. The Beth Shemesh Hoard of Jewelry, *Israel Museum* 16: 71-82.

Taylor J.H. 2011, *Mummy: The Inside Story*, London, British Museum.

Thompson C.M. 2009, Three 20th Dynasty Silver from the Egyptian Garrison, in N. Panitz-Cohen, A. Mazar (eds), *Excavations at Tel Beth Shean 1989-1996. Volume III. The 13th-11st century BCE strata in Areas N and S*, Jerusalem, Israel Exploration Society: 597-608.

Tucci G. 2018, Workshops in the Southern Levant: The Case of Jewellers during the Late Bronze Age, in F. Höflmayer (ed.), *Proceedings of the 10th International Congress on the Archaeology of the Ancient Near East Volume 2*, Wiesbaden, Harrasowitz Verlag: 419-430.

Verduci J.A. 2018, *Metal Jewelry of the Southern Levant and Its Western Neighbours. Cross-Cultural Influences in the Early Iron Age Eastern Mediterranean,* Ancient Near Eastern Studies Supplement 53, Leuven – Paris – Bristol, Peeters.

Vieweger D. 2011, *Tall Zirā'a. The Gadara Region Project (2001-2011), Final Report, Vol. 2: Early and Middle Bronze Age (Strata 25-17),* Gütersloh, Gütersloher.

Weinstein, J.M. 1989, The Bronze Age Shipwreck at Ulu Burun: 1986 Campaign, Part 3: The Gold Scarab of Nefertiti from Ulu Burun: Its Implications for Egyptian History and Egyptian Aegean Relations, in G.F. Bass, C. Pulak, D. Collon, J.M. Weinstein 1989, The Bronze Age Shipwreck at Ulu Burun: 1986 Campaign, *American Journal of Archaeology* 93: 17-29

Weinstein, J.M. 2008, Ring fragment, in J. Aruz, K. Benzel, J.M. Evans J.M (eds.), *Beyond Babylon. Art, Trade and Diplomacy in the Second Millennium B.C.*, New Haven – London, Yale University Press: 360.

Wilkinson, A. 1971. *Ancient Egyptian Jewelry*. London: Meuthen.

Wood J., Montero-Ruiz, I., Martinón-Torres M., From Iberia to the Southern Levant: The Movement of Silver Across the Mediterranean in Early Iron Age*, Journal of World Prehistory* 32: 1-31.

Zaccagnini C. 1987, Aspects of Ceremonial Exchange in the Near East during the Late Second Millennium, in M.J. Rowlands, M.T. Larsen, K. Kristiansen (eds), *Centre and Periphery in the Ancient World*, Cambridge, Cambridge University Press: 57-65.