

A reassessment of spinning bowls: new evidence from Egypt and Levant

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ABSTRACT

Spinning bowls are known especially from Egypt, but several examples have also been found in the Palestine area; they are spread from the Middle Bronze Age to the Late period. According to the traditional view the most ancient spinning bowls are those from Egypt, which do not predate the Middle Kingdom, while the Palestinian specimens were derived from the Egyptians', but some evidence challenges this dating. A spinning bowl kept in the Museo Egizio in Turin was traditionally dated to the New Kingdom, but it shows several features which suggest an earlier dating. Study of Schiaparelli's excavation notes and comparison with similar objects from Tell el-Farkha suggest that a Predynastic date is more plausible. Egyptian spinning bowls were thus probably introduced at least in late Predynastic times. Excavations in Jordan have shown that in that area these items existed as early as the late Chalcolithic period. Different types of morphologies and specimens that are only partially preserved can make the identification of these bowls quite challenging.

KEYWORDS

Spinning bowls, Southern Levant, Egypt, Heliopolis, Museo Egizio in Turin

1. Introduction

A spinning-bowl is a bowl with loops inside it which serve to hold the ball of yarn and to keep the thread under tension during the process of spinning. It generally contains from one to four loops inside, which are attached to the bottom of the bowl on the inside. Some have just a single loop, while others, like those of Tell el-Amarna (fig. 1),¹ have loops both on the bottom and on the side of the bowl. They are frequently made of pottery but there are a few examples made of stone.² Bowls with loops inside have been known archaeologically since Petrie's excavations in Kahun (Egypt); there is also iconographic evidence, from several Egyptian representations in tomb paintings and wooden funerary models of Middle and New Kingdom date. In these scenes, the bowls are always associated with spinners and it is evident that threads are pulled through the bowl and spun or plied. It is on this basis that they have been recognised in archaeological contexts. Today, they are one of the most valuable indications of spinning activity. However, the traditional chronology which sees their appearance in Egypt during the Middle Kingdom is challenged by a series of discoveries, from Egypt and Southern Levant.

2. Egyptian spinning-bowls

In Egypt, spinning-bowls are found in a great number of sites,³ in both Upper and Lower Egypt, and the highest number comes from the worker's villages of Kahun, Deir el-Medina and Amarna. The oldest are those of Kahun⁴ and Abu Ghalib,⁵ which date to the Middle Kingdom, followed by those of the Late Middle Kingdom of Karnak North,⁶ South Abydos⁷ and Memphis.⁸ The largest corpus is that of

the New Kingdom, from Deir el-Medina,⁹ Amarna,¹⁰ Abydos and Deir el-Ballas. Lastly, a few bowls are also known from the Third Intermediate Period at Lisht and from the Late Period at Mendes.¹¹ Most of them come from domestic contexts and this is the reason for their high concentration in workers' villages. However, some of them also come from other contexts: a temple in South Abydos, which houses some domestic units, and a production area located in the same site north-east of the funerary temple of Senwosret III, far from the actual village.¹²

Spinning-bowls are known also from the Aegean world; the oldest one comes from Myrtos in Crete and is dated to the Early Minoan II (which corresponds to the last part of the Old Kingdom),¹³ which predates the Egyptian examples and challenges the theory of an Egyptian origin of this artefact.

3. Spinning-bowls from Heliopolis

In 2015, I conducted a study on textile tools kept in the Egyptian Museum of Turin, which houses an impressive collection of wooden spindles and spindle whorls, as well as two spinning-bowls originally dated to the New Kingdom. These bowls come from Ernesto Schiaparelli's excavations of the site of Heliopolis, 20 km north-east of Cairo. The site was a very important religious centre and was occupied from the Predynastic Period until the Late Period. Schiaparelli found the remains of several religious buildings, such as a naos of Sethi I and a chapel of Djoser, and in 1905 – 1906, traces of a Predynastic settlement.¹⁴

One fragmentary bowl (S. 4087)¹⁵ shows the typical features of a spinning bowl: two loops joining in the middle. The other one (S. 4086, figs. 3-4), of which only the lower part is preserved, is quite dif-

¹ KEMP, VOGELSANG-EASTWOOD 2001, p. 293.

² PETRIE 1890, p. 25, pl. XIII.58

³ See ALLEN 1997, p. 33 for a more complete inventory.

⁴ PETRIE 1890, p. 25, pl. XIII.58.

⁵ LARSEN 1941, Abb. 14.

⁶ ALLEN 1997, p. 33.

⁷ WEGNER ET AL. 2000, p. 108, fig. 16. SMITH 2010, pl. 256.

⁸ BOURRIAU, GALLORINI 2016, p. 190, fig. 102.

⁹ DOTHAN 1963, p. 103. NAGEL 1938, pp. 183-184.

¹⁰ KEMP, VOGELSANG-EASTWOOD 2001, pp. 291-306.

¹¹ ALLEN 1997, p. 33.

¹² SMITH 2010, p. 256.

¹³ WARREN 1972, pp. 153, 207, 209.

¹⁴ DEL VESCO, UGLIANO 2017, p. 232. For a revision of Schiaparelli's documents, see SBRIGLIO, UGLIANO 2015, p. 282.

¹⁵ L. 14x13 cm, Museo Egizio Torino.

FIGURE 1
Spinning bowl from Amarna
with loops on the bottom
and on the side
(KEMP, VOGELSANG-
EASTWOOD 2001,
293, fig. 8.16a)

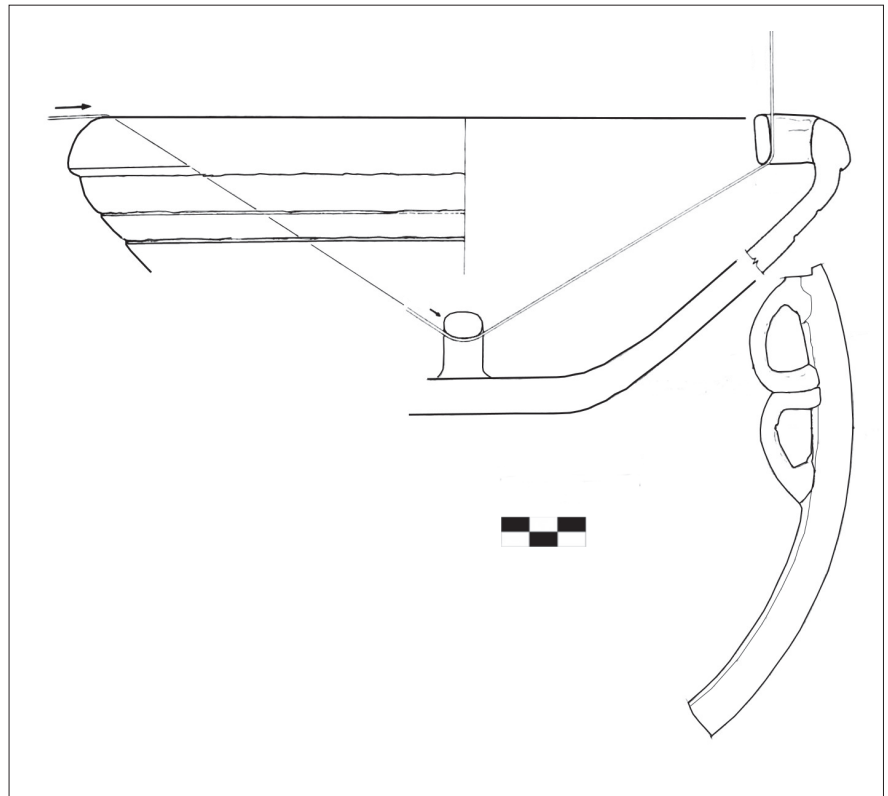


FIGURE 2
Different types
of spinning bowls
(selected from
DOTHAN 1963, fig. 1)

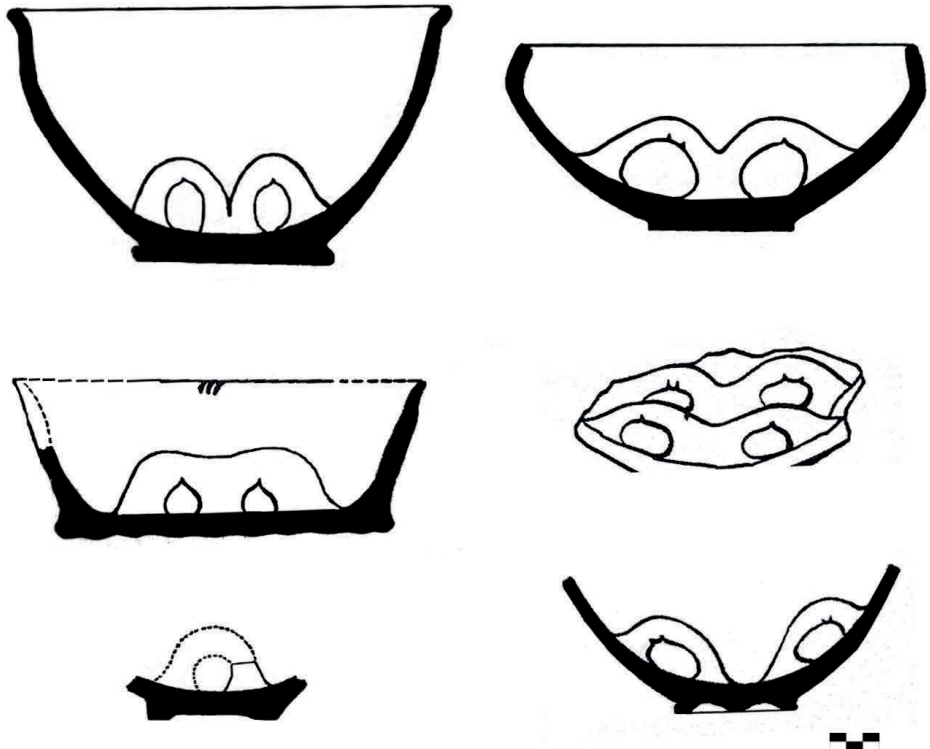


FIGURE 3
Drawing of S. 4086 from the Museo Egizio of Turin
(A. A. Rucco)

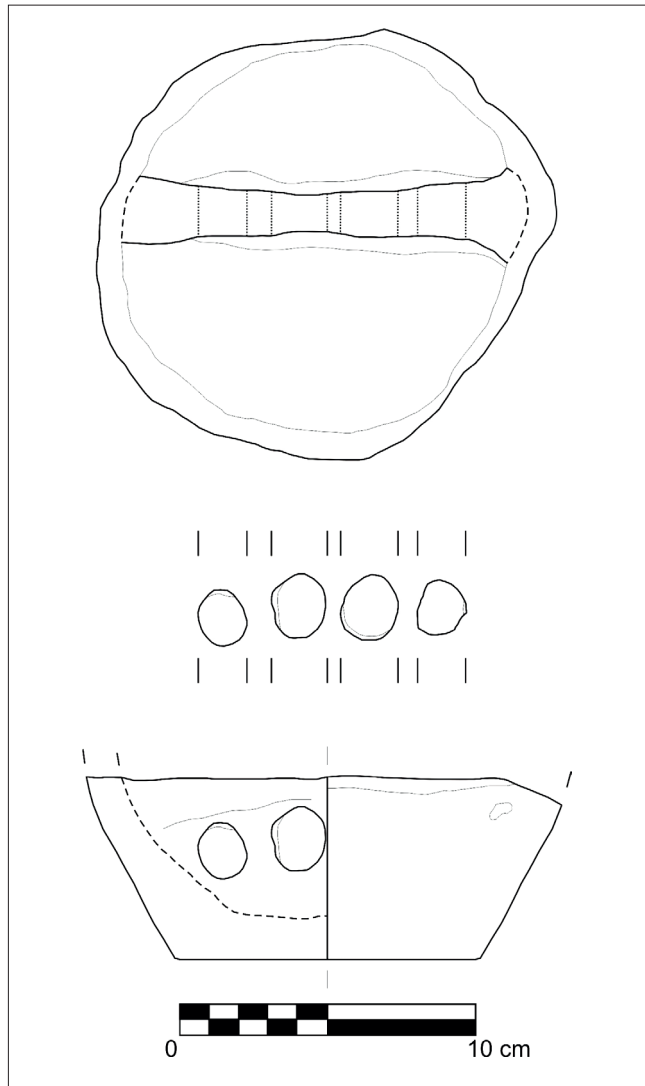
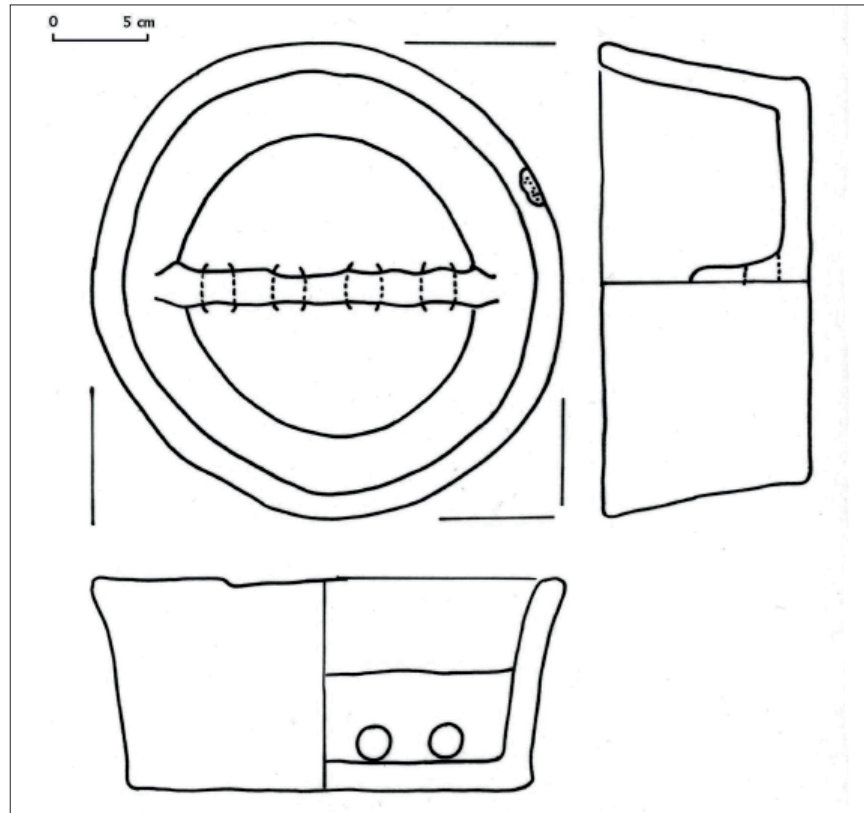


FIGURE 4
Photograph of S. 4086
(diam. 16.3 cm, h 5.9 cm,
Museo Egizio Torino)



FIGURE 5
Bowl from Tell el-Farkha
(MĄCZYŃSKA 2012, fig. 2)



ferent from the known examples of spinning-bowls because it has no loops inside, but instead a sort of large diaphragm with four holes. The diaphragm runs from side to side but it is not perfectly central, dividing two unequal parts. Inside, bowl, diaphragm and holes are highly polished, one side more carefully than the other. The holes are not at the same height, the two central ones are higher, and the other two lower. The bowl is hand-made; there are no signs of potter's wheel. All these features appear in contrast with the other spinning-bowls known from Middle and New Kingdom Egypt.

The closest parallels to this item come from a site in the eastern Nile Delta, Tell el-Farkha (fig. 5), where the artefacts were dated to the first part of the Naqada III period (Early Bronze Age Ib).¹⁶ They were found in various trenches from eastern, western and central Kom.¹⁷ The excavators were not sure about

their function because of various factors: first, the early chronology makes these spinning-bowls the earliest examples in Egypt – and apparently in the Mediterranean area. Second, their appearance is quite different from all the other known specimens. Third, only thirty fragments of spinning-bowls were found, a quantity too small for the entire settlement over two hundred years. Lastly, no textile tools were excavated except a very limited number of spindle-whorls.¹⁸

In my opinion, the first two elements of doubt are not matters for concern, since spinning-bowls vary a lot in morphology and the traditional chronology indicates their invention in the Middle Kingdom just because there was – until now – no other evidence from the preceding periods. There were no technical changes in weaving equipment or in textiles at the beginning of the Middle Kingdom which could justify their invention at that precise time. The small quantity seems actually a normal

¹⁶ MĄCZYŃSKA 2012, p. 66.

¹⁷ MĄCZYŃSKA 2012, p. 67, fig. 6, 10.

¹⁸ Pers. comm. C. CIAŁOWICZ.

condition of these discoveries, with the sole exception of Amarna. The only actual problem could be the scarcity of other textile tools at the site, but they might simply have not been preserved.

Even accepting that the bowls from Farkha were used in the spinning process, there is still the chronological gap with respect to the bowl from Turin to be explained. In the Manuscript inventory of Schiaparelli,¹⁹ it is stated that the bowl came from the strata below the Late Period temple, in trenches of the kom 5/6 metres under the modern level. Schiaparelli defines these materials as prehistoric. On the basis of its characteristics, the bowl may be dated to the Naqada III period and could be therefore contemporary with the Farkha bowls. The other spinning bowl kept in Turin (S. 4087), completely different with regard to morphology and manufacture, should instead be dated to the New Kingdom. Unfortunately, New Kingdom and Predynastic layers are in direct contact in Heliopolis and Schiaparelli might have missed the change of layers.²⁰

4. Levantine spinning-bowls

Thanks to the finds from Farkha and Heliopolis, an Egyptian origin of spinning-bowls would seem to be possible, but the Levantine corpus should also be rechecked. Spinning-bowls are well known in Southern Levant from several sites and they seem not to predate the Late Bronze Age I (fig. 2); the earliest examples come from Tell el-Ajjul, Beth Shean and Tell Jerishe. The largest number of them are known from the beginning of the Iron Age. The highest number comes from Beth Shean, but some examples are also known at Megiddo, Tel Qasile, Tel Jerishe, Tell Jemmeh, Tell Keisan and Ashdod. As Douthan's study pointed out, the loops can occur in a great variety of shapes, from one to three loops in a single line, to a bowl with two loops in two different lines. Fabric and morphology are usually local, but their late appearance led several scholars to suppose that they stemmed from Egyptian examples.

¹⁹ SCHIAPARELLI, E. Manuscript inventory, suppl. 4099-4188, stored in the State Archive.

²⁰ UGLIANO, F. pers. comm.

However, it turns out that items similar to spinning-bowls may be identified in Jordan from the Ghassulian Period,²¹ i.e. during the fifth millennium BCE, definitely more ancient than any Egyptian examples. One bowl comes from the site of Neve Ur, in the Beth Shean valley, the other from Safadi (Beersheba) and both were published by Perrot in 1967.²² They share a common feature, which is the shape of the loop: it is quadrangular, and attached to the bottom and to one side of the bowl, a form rarely attested in spinning-bowls but which does not compromise their functioning.

5. Spinning or plying bowls?

It is definitely tempting to connect the early appearance of spinning-bowls in the Levant with the contemporary production of linen. In fact, recent analysis of fibres found in the caves (Cave of the Warrior and Nahal Mishmar, for instance) and dated to the Chalcolithic period, strongly indicates the adoption of vegetable fibres, meaning flax, before wool.²³ Wool, on the other hand, seems to appear in the region only in the Bronze Age and its short fibres are not suitable for use with a spinning-bowl. This seems to link the early appearance of spinning-bowls in the Levant with the adoption of flax fibres as the essential raw material for textile production during the Chalcolithic period. There are, however, many aspects of this hypothesis that should be revised. First, spinning-bowls might be associated with the preparation of flax fibres, but there is no agreement between scholars.²⁴ It has been pointed out that the peculiar way that flax was prepared in both Egypt and the Levant, with the splicing of fibres, could have benefited greatly from the use of such bowls. Splicing means that the long flax fibres can be joined together by overlapping the two fibres for 5-10 cm and twisting this part (fig. 6); the fibres need to be wet to allow formation of a natural glue,

²¹ LEVY, GILEAD 2013, pp. 32-33.

²² PERROT, ZORI, REICH 1967, p. 223, pl. 42.

²³ SHAMIR 2014, p. 145.

²⁴ BARBER 1991, pp. 71-72. VOGELSANG-EASTWOOD 1989, pp. 85-86. ALLEN 1997, pp. 27-28.

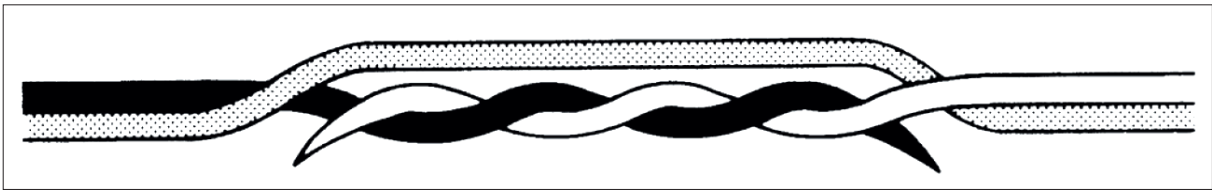


FIGURE 6
Example of splicing
(BARBER 1991, 47)

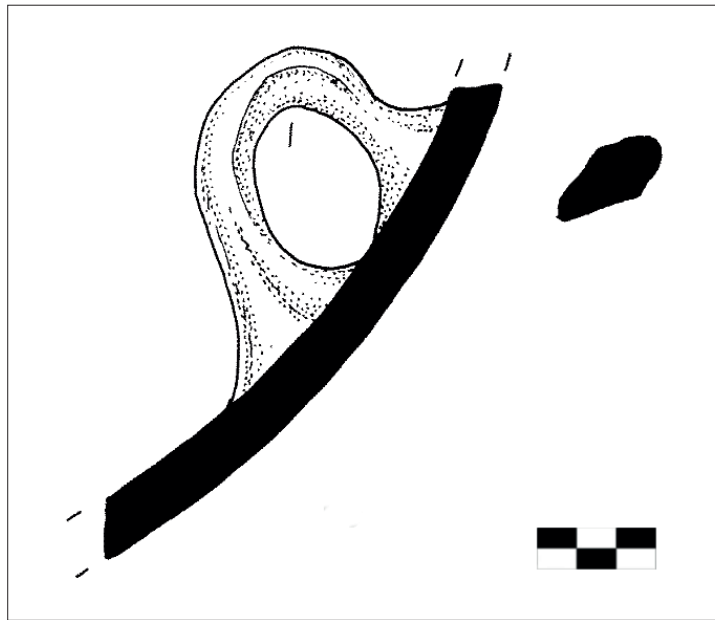


FIGURE 7
Fragment of a spinning bowl from Hazor
(BECHAR 2017, fig. 7.72)

which is present in the fibre and allows the creation of a long, continuous rove. The spliced points, however, are fragile and tend to come apart, so the thread needs to be properly spun or, better, plied. The spinning-bowls, as depicted in several occasions in Egyptian tomb paintings and wooden funerary models, might have helped this process by keeping the roves taught and separate and probably adding moisture from a liquid substance kept inside.²⁵ However, there are two problems with this interpretation.

²⁵ The choice of a bowl-shaped container seems to point directly to the use of liquids. Against this idea, see VOGELSANG-EASTWOOD 1989, pp. 85-86. Modern knitting bowls are not intended to contain liquid substances.

The first is that splicing is known from prehistoric European contexts too,²⁶ but so far, no spinning-bowl has been found in these areas. Even excluding an argumentation *ex silentio*, there is still an issue regarding Levantine textiles. There are several textiles preserved in caves that date to the Chalcolithic period, but very few Bronze Age textiles; in these few examples splicing seems to disappear in the Late Bronze Age.²⁷ It is especially at the end of the Late Bronze Age, however, that a sharp increase in the presence of spinning-bowls in the Levant is recorded, so the two phenomena seem not to be linked.

²⁶ LEUZINGER, RAST-EICHER 2011, p. 541.

²⁷ SHAMIR 2014, p. 147.

If not used in connection with splicing, these bowls might still have been used to ply yarns, as argued by G. Vogelsang-Eastwood,²⁸ and they may not necessarily have been tied to flax production, but used with any kind of fibre.

Since spinning-bowls might not be connected to a particular technique or a single fibre, I would also propose that we should not continue to seek for a single origin for these bowls. There are several areas where they were used in different periods, such as Egypt, Levant, the Aegean area and, in recent times, Japan.²⁹

Another aspect that should be kept in mind is the lack of continuity in the archaeological documentation. Hence it might be possible that in some periods other tools were developed as substitutes for spinning-bowls – or even different kinds of bowl that are more difficult to recognise.

For instance, only a few sites in the Levant have yielded evidence of spinning-bowls, while at most sites they do not seem to have been present. If we assume that spinning-bowls are not a product of Egyptian influence, we might expect to find some of them in other, more unusual contexts – such as in Late Bronze Age Hazor, where a sherd with an internal loop was found in a public building in area A1.³⁰

It is interesting to note the peculiar form of the loop, which closely resembles that of a handle (fig. 7). If the loop/handle had been found without the clear profile of the bowl, it would have been classified as an external handle, and the use of spinning-bowls in that site would have gone unrecorded.

6. Conclusions

In conclusion, spinning-bowls might have been connected with flax processing, but it is more probable that they were used to help plying threads. As is shown by the Ghassulian examples and those from Farkha and Heliopolis, they were in use since the Chalcolithic period in the Levant and since the final part of the Predynastic period in Egypt. They seem to disappear in the Early Bronze Age and in the Old Kingdom and to be in use once more in later periods. However, the two examples discussed here – the Heliopolis bowl and the Hazor sherd – show how difficult it is to recognize an item which can assume very different characteristics. It is probable that future excavations will find other examples of this tool in areas or periods in which its use is unknown today.

²⁸ VOGELSANG-EASTWOOD 1989, p. 86.

²⁹ BARBER 1991, p. 73.

³⁰ BECHAR 2017, p. 334

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