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Το Διοικητικό Συμβούλιο της Εταιρείας Διερεύνησης της Αρχαιοελληνικής και Βυζαντινής Τεχνολογίας (ΕΔΑΒυΤ) ανέλαβε την ανάρτηση στην ιστοσελίδα της (www.edabyt.gr), σε ψηφιακή μορφή, των εργασιών του 3ου Διεθνούς Συνεδρίου Αρχαιοελληνικής και Βυζαντινής Τεχνολογίας (Αθήνα 19-21 Νοεμβρίου 2024).

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The papers had been subject to reviews and comments by the Scientific Committee. Additionally, further observations and comments were made during the discussion that followed their oral presentation at the Conference.

The papers are posted as submitted by the authors after the conclusion of the Conference. The authors are responsible for the content of their work, both in terms of their views and the accuracy and correctness of the data they present.

SPINNING TECHNOLOGY IN CLASSICAL ATTICA: THE ICONOGRAPHIC EVIDENCE

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Abstract. Vase painters from Classical Athens left us a rich repertoire of representations including spinning women. Between the late 6th and the early 4th c. BCE spinning scenes became increasingly popular in Attic workshops, adding to our knowledge of spinning as a form of labour rich in social meaning. In the past, these spinning scenes have been the subject of several detailed iconogra-phic studies. Those, however, focused almost exclusively on contextual analysis, with "who is spinning" as the main question to be answered.

Attic spinning scenes are not unknown in ancient textile studies and are often quoted as a precious source. Nonetheless, no detailed study was ever conducted on these scenes to investigate spinning itself rather than spinners. This study thus aims to fill in the gap, investigating these representations solely as evidence for spinning technology. Two fundamental questions are therefore raised: "how are the women spinning" and "what are they spinning with"? To answer the first question, a thorough gestural analysis was carried out in order to assess not only how the women are spinning, but also to what extent vase painters tried – and managed – to "accurately" represent this predominantly female task. The second question is more relevant for present and future research alike, as to this day very little is known about ancient distaffs and spindles. These fundamental tools are rarely attested in the archaeological record and recognizing them is not always an easy task. This paper presents a careful examination of the iconographic material, contextualised through comparisons with excavated tools from the Greek world as well as from the wider Mediterranean. It is thus suggested that vase painting is a reliable and fruitful source of information to (re)identify spinning tools in the archaeological record.

By investigating how the spinning craft was represented by Attic painters, alternating between verisimilitude and stylization, this study ultimately aims at a better understanding of spinning technology and spinning tools in Attica.

Keywords: Spinning, Attica, Classical, Textiles, Iconography

1 Introduction

This contribution stems from my Bachelor Dissertation at "Sapienza" University of Rome, dedicated to the technical aspects of spinning in Attic Vase Painting.[1]

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[1] I owe special thanks to prof. Marco Galli for his help and supervision during the early stages of this research. Unless otherwise stated, all dating is intended as "BCE".

While spinning scenes are not new to iconographic studies, most scholars in the past focused mainly, if not exclusively, on analysing the social significance of these scenes. In these studies, the main goal was attempting to understand why Attic vase painters were interested in a mundane chore such as spinning.[2] A summary of past scholarship was presented by M. Fischer not too long ago in a re-examination of the matter (Fischer 2013, 230–233. To her bibliography we can add Zahn 1925, 280–283, Bérard 1984, 85–87, Bundrick 2012; Larsson Lóven 2013). For the purpose of this paper, it will suffice to remember that spinning women on Attic pottery were alternatively interpreted as respectable wives, promiscuous *hetairai* or possibly an allusion to both at the same time.

To my knowledge, the only scholar adopting a more technology-centred approach was M. Vidale. In an analysis of the depiction of artisans in Greek figured pottery, he dedicated two extensive chapters to textile production that appear to have gone largely unnoticed abroad (Vidale 2002, 325–489). This paper aims to take a step further, evaluating what the work of Attic vase painters can tell us about that of contemporary spinners[3].

The use of iconographic sources for the study of this elusive craft is clearly not ideal. We must keep in mind that, while surely having witnessed spinning in person, vase painters were most probably not spinning themselves. Furthermore, the small scale of their work might have led to varying degrees of simplification and stylization. Despite these considerable limitations, we are left with so little direct evidence for spinning in ancient Greece that no road should be left unexplored.

This study focuses on a total of 80 representations (see Appendix). These were mostly collected through the Beazley Archive Pottery Database (BAPD. Keywords: distaff, spindle, spindles, spinning) as well as by consulting relevant literature.

2 Spinning and Spinning Iconography in Classical Athens: A Brief Overview

Spinning is the act of joining short and fragile fibres into much longer and durable threads by twisting them together.

Archaeological evidence suggests that a different technique, splicing, might have been preferred to produce extremely fine threads such as those found in a tabby excavated in Kerameikos (on splicing see Barber 1992, 44–51. Regarding its attestations in Athens, see Spantidaki 2016, 39–40). Nevertheless, spinning with a drop spindle remains the most frequently attested thread-making technique in the region. Textiles excavated in Attica provide a glance of thread production, which appears to have reached extreme levels of refinement (Spantidaki 2016, 40, figs. 4.20-21).

As K. Carr pointed out (Carr 2000), spinning is an extremely time intensive task, even more so than weaving. The scene of women spinning filled the daily lives of many, if not most people. It

[2] While this paper only focuses on Attic vase painting, it is worth remembering that spinning female figures, possibly goddesses, where already depicted on earlier Corinthian vases, see Kallipolitis-Feytmans 1970. Spinning women rarely appear on Attic gravestones as well, see Kosmopoulou 2001.

[3] The main focus of this paper is placed on the Classical era. As only a small number of Late Archaic vases featuring spinning scenes is known, a detailed analysis for this period cannot be carried out. These representations were, however, included in the study for a more complete picture.

therefore comes as no surprise that this craft acquired further social meaning, as previous papers have discussed.

In a careful diachronic analysis, Vidale (2002, 475-488) observes a progressive "semantic erosion of the technical moment". The earliest Attic representations, dated to the first half of the 6th c., feature scenes where groups of women work together, showing different stages of textile production, such as on the well-known *lekythos* attributed to the Amasis painter (BF 4, figs. 3, 9). These groups of women are not too different from groups of male artisans at work, as their female counterpart.

Towards the 5th c. group work becomes less frequent and a "lighter" vision of female work emerges. In this phase, a solitary spinner is often the only textile worker, in many instances surrounded by other women or by both women and men at the same time. The 5th c. is characterised by a progressively metaphorical representation of textile-work through spinning: some spinners show their tools without using them, others are not fully equipped, preferring to hold a flower instead of a distaff. As time progresses, spindle and/or distaff are not held by women anymore: they appear as minor details, protruding from the mouth of a *kalathos* (fig. 13). The wool basket itself will become, in the last stage, the only symbol of textile work associated to women (Trinkl 2014 on the iconograpy of the wool-basket).

Despite the apparently decreasing interest of vase painters for spinning, scenes rich in details are found in all the "stages" described above. Even when spinning is not directly performed, spinning tools are clearly characterised with minute details leaving no doubt regarding the importance of identifying the craft to fully grasp the meaning of the scene. This is not only true for the more skilful painters: those who were not as careful in their drawing also included those details, although with results less graceful to the modern eye.

It should not be too surprising that most spinning scenes are dated to the first half of the 5th c., when so-called genre scenes[4] became increasingly popular in Athens. It is also worth noting that vases with spinning scenes where not only intended for female consumption. While vase shapes central to women's lives – especially *hydriai* and *pyxides* - are the most common, shapes closer to the male sphere are also attested in the repertoire. Spinning scenes are particularly popular on *kylikes,* but other shapes related to wine consumption – most notably a *krater,* a *stamnos* and an *oinochoe* - are also attested. As previous studies suggested that at least some spinners should be identified as *hetairai,* a connection between female labour and male leisure is only natural.

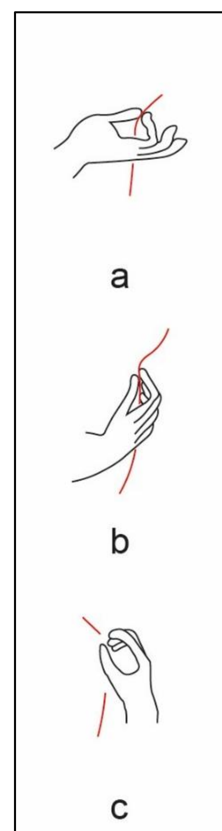

Figure 1. Hand position in spinning scenes

3 Spinning Gestures

The *corpus* of spinning representations provides iconographic evidence for all of the major moments this craft can be divided into.

Firstly, it should be noted that on many vases women are making rovings (cfr. fig. 6); for the purpose of this paper this activity – a sort of pre-spinning especially helpful to

[4] As G. Ferrari rightly pointed out, the "genre" label should bee used carefully, see Ferrari 2003.

spin fine and homogenous threads - will not be discussed in detail (on the subject see Vidale 2002, 371–386; Spantidaki 2016, 34–37). Seven vases (RF 2, 7, 8, 13, 28 ; WG 8) are too fragmentary for a gestural analysis. In the other vases not mentioned in this section, spinning is not directly depicted ("light work").

Three representations (BF 3 ; RF 19, 52, fig. 8) feature a woman holding distaff and spindle close to a *kalathos*, suggesting that spinning is either about to begin or just finished. In three other instances (RF 16, 17, 27) a woman is simply holding them, as to display their tools to the onlookers.

Moving onto spinning itself, spinners are represented both sitting on a *klismos* or standing. The first solution is surely ideal for long spinning sessions, although standing would have allowed for longer sessions of work before the spun thread would have reached such a length to force the woman to stop and wind it around the spindle. Standing spinners might also be considered and indirect iconographic parallel for a passage of the historian Herodotus, (*Hist.* 5:12.1-4) describing a woman spinning while walking.

Vase painters depicted four different hand gestures, more or less frequent. In the most common (fig. 1.b. BF 4 (figs. 3, 9), 5; RF 1, 3, 5, 9, 11-12, 18, 25-26, 33 (the second spinner), 35, 39, 40, 46, 49-51 55 ; WG 4, 8), the hand forms a slight angle and partially covers the thread; in most cases we can clearly distinguish the thumb and index finger coming together to draft fibres out of the bundle wound around the distaff. Less frequently (fig. 1.a. RF 14, 23, 33 (the first spinner), 44, 47; WG 12, fig. 10, 13) the hand is almost parallel to the arm, in a more graceful – although apparently less comfortable - manner. While not entirely unrealistic, this gesture seems more idealized than the previous, possibly hinting at depictions of women holding flowers. In one case (fig. 1.c. RF 32) the woman seems to be drafting the fibres with her whole hand; this is not at all unrealistic, especially if coarser threads are spun, but the drawing on the vase appears awkward and more likely the result of a mistake.

The other moments often depicted by vase painters are those right at the end of a spinning session, when the spindle is stopped and the thread wound around the spindle. Some women (BF 2, 6-8, fig. 11 ; RF 4, 15, 24, 36, 56, 59) are depicted touching the thread or spindle, while others (RF 10, 20, 33 (the third spinner), 39, 48, 54, fig. 6 ; WG 1-3, 5 (fig. 5), 9) are gently pinching the thread to bring the spindle closer to their hands. This second composition scheme appears especially suited to make a show of the thread's length. One representation, in particular (RF 60, fig. 4), stands out from this group. The spinner is holding the spindle in one hand, while the other holds a distaff. The thumb and index of this hand are pinching something, clearly the vanished thread, originally painted in added white colour. Given the position of the hands, we can safely assume this to be the only representation where the woman is actually winding the thread around the spindle rather than about to do so. In this context, pinching the fibres so close to the distaff is clearly meant to prevent the thread from breaking at its most fragile point, where it is not yet fully twisted.

Another unique representation, well-known in textile studies, is that on a red-figure *kylix* (RF 34, fig. 7). This famous spinner is also pinching the thread close to the distaff, while she is holding a small section between her lips. R. J. Forbes (1964, 163, fig. 16) argued that this spinner was using her saliva to wet the fibres; as E. Barber (1992, 70, fig. 2.36) later observed, however, this is unlikely as the shortness of the distaff points to wool being spun rather than flax. She therefore suggested that this vase might be depicting the action described by the Roman poet Catullus in a passage mentioning the *Parcae* spinning (64:311-319). In this vivid scene, the goddesses are

“evening” the thread by biting off excess fibres. The same view was expressed by C. V. Daremberg and E. Saglio (1873, 2, "fusus"), E. Gullberg and P. Åström (1970, 15). Vidale (2002, 410–411, n. 172) considers it a possibility, yet not the only acceptable one.

4 Spinning Tools

4.1 Distaffs

While distaffs are not essential, they were often used by spinners until modern times.

Using a distaff is a convenient way to keep at hand a supply of fibres ready to be spun, hence allowing to work without interruptions. (Barber 1992, 69–70). Distaffs consistently appear in all Attic spinning scenes, suggesting a widespread use of this tool Classical Athens. Less frequently, they are included in scenes where the craft is not directly portrayed but rather hinted at through spinning tools.

Given the simplicity of this tool, when the distaff is not used its identification cannot always be certain. Moreover, iconographic studies have already pointed out the ambiguity in the representation of mirrors and distaffs. Sometimes, as in a 5th c. red-figure *lekythos* in Karlsruhe (RF 45) a woman is holding both objects at the same time. such representations are an excellent portrayal of the male-centred idea of female values: sex and labour (see Keuls 1993, 229–230). When only one object is being held, however, it might ambiguously hint at both a mirror and a distaff. Distaffs holding raw fibres usually have a roughly oval shape, yet sometimes the oval is substituted by a sphere; mirrors on the other hand are not always painted frontally. E. Keuls (1983, 216 and 1993, 245) cleverly pointed out that such an ambiguity might have been purposely sought after by vase painters who were only interested in portraying a woman and the ideals associated with womanhood. Vidale (2002, 479–480) further observed how the mirror-distaff confusion became prominent only in later 5th c. vase painting, when all representations of artisans progressively abandon technical accuracy in favour of a “lighter” vision of work. Given the limited interest in spinning as a craft in such representations they were not considered in this study, focused only on clearly identifiable distaffs.

The tool is equal or slightly superior in size to spindles, as hand-held distaffs usually are.[5] As S. Spantidaki (2016, 42) observed, it is in fact possible that the same shaft might have served as a spindle or distaff alternatively. Unlike what previously stated, (Barber 1992, 69, Spantidaki 2016, 42) the Archaic stele from Priniàs (Barber 1992, 69, fig. 2.35) representing a spinner is not the only Greek example of a longer distaff. A black-figure *alabastron* dated to the late 6th c. ca. (BF 1) features a distaff equal in size to the Priniàs example. The drawing is not too careful, and the object is unusually depicted in the woman’s right hand. As a matter of fact, we might be looking at a slightly out of proportion hand-held distaff. On the other hand, if the representation is accurate, it might prove that medium size distaffs were also used in Attica.

No depiction of the long wooden stick stuck in the ground to spin flax (*gerōn*, see Spantidaki 2016, 42) known from ancient sources survive.

Carefully observing painted distaffs, three main typologies emerge. The first includes plain distaffs consisting of a simple rod (fig. 2.a: BF 2, 4, figs. 3, 9; RF 4, 13, 20, 31, 37, 39, 45?). These appear quite frequently: it might only be a result of the little effort necessary to paint them

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[5] Distaffs from Iron Age Italy are between 15 and 30 cm long. See Spantidaki 2016, 42, with prev. bibl.

but also reflect an actual trend in ancient Athens. A simple wooden rod is, after all, the simplest form a distaff can take. A silver and gold rod from with the Macedonian Lady of Aegae (500 ca.) is probably to be interpreted as a luxurious alternative to these simple objects.[6]

More frequently, the top and/or the bottom of a similarly simple rod show some sort of decoration (already observed in Spantidaki 2016, 42) The most frequent distaff type in vase paintings consists of a rod with spherical terminations (fig. 2.b1 : BF 1, 6, fig. 11 ; RF 1, 5, 10, 16, 17, 19, 21, 27, 33 (b-c), 34, fig. 7, 44, 48, 52, fig. 8, 55 (a-b) ; WG 1, 3-4). Less frequently, the spheres are substituted by ovals (fig. 2.b3 : RF 60, fig. 4 ; fig. 2.b4 : RF 24 ; fig. 2.b5 : RF 56 ; WG 2), rectangles (fig. 2.b6 : RF 32 ; WG 11) or a tear-shaped termination. (fig. 2.b2 : RF 18 ; WG 8) Only in rare cases more of these shapes are combined to create more elaborate extremities (fig. 2.c1 : BF 6 (second spinner, fig. 11) ; RF 30, fig. 13 ; fig. 2.c2 : RF 14).

These representations suggest the existence of distaffs with decorated extremities; this is not at all surprising, given that the rod itself would have been mostly hidden by the fibres. For the same reason, we should not exclude the presence of other similar, hidden decorations, elsewhere on the rod of the real distaffs these representations have originated from. Similarly decorated extremities appear frequently in distaffs excavated in Iron Age Italy (Gleba 2008, fig. 83) and in the Roman world (Facchinetti 2005, fig. 6): such distaffs were found, for example, in Italy (Busana et al. 2012, 391–5, fig. 5.2-4), Germany (Wild 1988, fig. 17.c), and Britain (Wild 1988, fig. 17.d-e).

Their presence in Greece can be safely hypothesized not only on an iconographic but also on an archaeological basis. Recently, it was suggested that an almost cylindrical pierced whorl from Aetolian Chalkis might have crowned a distaff or spindle to help containing the fibres/thread on the shaft (Houby-Nielsen and Dietz 2020, 428). Furthermore, The online collection of the British Museum lists a "Greek" silver distaff (1884,1017.9, see https://www.britishmuseum.org/collection/object/H_1884-1017-9 accessed on 27/07/2024): one extremity is tear-shaped, the other features two opposed human faces. No further information on the object is available. It might be one of the "Classical Greek and Etruscan" distaffs in the museum mentioned by Barber (1992, 69–70), although she provides no description.

Among the most intricate Roman distaffs are the so-called "*venuskunkeln*", crowned by a naked Venus figurine. Apart from being extremely fine objects, they might have also conveyed a strong symbolic message as the naked goddess would have initially been clad by the fibres, slowly undressing as spinning progressed (Houby-Nielsen and Dietz 2020, 429). *Venuskunkeln* are well known in Asia Minor (Trinkl 2002, with prev. bibl.), although a fragmentary example might have been recently excavated in the Aetolian Chalkis (Houby-Nielsen and Dietz 2020, 274, 425, 428, n°733, fig. 153). S. Houby-Nielsen also proposes to interpret as distaff elements the naked ivory figurines from tomb XIII (late 8th c.) in the Kerameikos cemetery (Houby-Nielsen and Dietz 2020, 428–429. On the tomb, see Brückner, and Pernice 1893, 127–131, Zosi 2012). To her preliminary interpretation, currently awaiting extensive publication, I would add that a decorated ivory disc listed among the finds might have also belonged to a distaff.

[6] The interpretation as a distaff follows Saripanidi 2020, 80, n. 6. As Dr. Saripanidi I believe the interpretation of three objects – distaff, spindle and container – as more convincing than the interpretation of these as elements of a singular object – distaff or spindle – as presented in Kottaridi 2012, 116, figs. 122, 251–252, n°412; 2012, 419.

One representation from this group stands out from the others. It was painted on a red-figure *pyxis* dated to 460 ca., (RF 54, fig. 6) where the lower extremity is shaped as a ring (fig. 2.d). The object is clearly reminiscent of finger distaffs: these are usually much shorter than hand distaffs and are held differently, by inserting a finger through the bottom ring. Finger distaffs made of bronze and ivory are sometimes documented from Roman contexts, although the latter have been alternatively interpreted as hairpins.[7] If we consider this representation to be fully accurate in portraying spinning, we could hypothesize the existence of hand distaffs with similar bottom rings. These could have served a different function such as allowing the tool to be hung on a wall; not only vase painting suggests this to be a popular way to store items in Athenian houses, but hanging a distaff could have also been a way to display the tool to those entering the room. Given the considerable time separating this representation and roman finger distaffs, we might also be looking at an earlier version of these tools, characterized by a longer rod. Lasty, as the object depicted appears to have no direct archaeological comparison, we should not exclude the possibility that the painter simply misrepresented the use of an actual finger distaff.

In the third group, the rod itself features decorative elements. The simplest among those feature one (fig. 2.e1: BF 5) or two (fig. 2.e2: WG 10) spherical elements towards the upper extremity, a third (fig. 2.e3, WG13) an enlarged handle terminating in a heart-shaped extremity. Four representations feature a sort of handle, terminating in what is probably to be identified as an inserted disc towards the middle of the rod (fig. 2.f1-2, 4, respectively: WG 12, fig. 10 ; RF 25 ; RF 6). These are clearly representations of middle-whorl distaffs, equipped with a whorl to help in keeping the fibres contained. Only in one case (fig. 2.f3 : WG5, fig. 5) a second whorl is depicted towards the bottom of the handle, perhaps for solely decorative reasons. One Archaic distaff of this type is known from the Acropolis of Lindos, alongside other finds which might be interpreted as fragments of the same type of object.[8] Part of another similar distaff, stratigraphically dated around the mid-7th c., was found in the Artemision in Ephesos (Klebinder-Gauß 2007, 189, kat. 963, taf. 96). These two finds corroborate the hypothesis that similar distaffs existed in Athens in Classical times, if not even earlier.

Once again, both Iron Age Italy and the Roman world offer excellent comparisons for our distaffs. (Wild 1988, fig. 17.c, e, Facchinetti 2005, 207, fig. 6, Gleba 2008, fig. 83). A particularly ornate silver distaff from ancient Bursa dated to the 1st c. CE (London, British Museum, 1913,0531.6, fig. 12). provides an example of the level of refinement such objects could reach.

A red-figure *pyxis* from Athens dated to ca. 490-480 (RF 52, fig. 8) features a peculiar distaff (fig. 2.g). It is the only instance where the rod is not straight but rather bent, turning at a right angle towards the top. This distaff appears strikingly similar to the objects often referred to as "temple keys". A. Quercia rightly observed how the interpretation of these objects as keys is not at all certain: only one ancient representation depicts one being used to open a door (Quercia and Foxhall 2012, 374, Quercia 2017). Conversely, our representation is the only one depicting its use as a distaff. As Quercia (2017, 128-132) points out, 25 "temple keys" were found in a

[7] E.g. NEW YORK, Metropolitan Museum of Art, 74.51.5692 (I c. ca.). On finger distaffs in general see Facchinetti 2005, 205, fig. 6. Similar objects were found, for example, in Northern Italy (Bianchi 1995; Busana et al. 2012, 393–4, fig. 7; Tricomi 2012, 592, fig. 3.2.) as well as in Asia Minor (Trinkl 1994; Cremer 1996; 1998; Trinkl 2007, 84.).

[8] Blinkenberg 1931, 135, pl. 13, n°333; n° 334, 340-341 as well as several bone and bronze discs might also have originally been part of middle-whorl distaffs.

votive deposit within the square building in the Heraion at Foce del Sele (Poseidonia, Southern Italy) where weaving surely took place; the deposit, however, surely precedes the construction of the building, dated around 400 (regarding weaving in the Square Building, see Ferrara and Meo 2017). It therefore appears that there is no strong connection between these objects and the textiles woven in the sanctuary.

More recently, one of these objects was found in Archaic Chalkis (Aetolia) in a house courtyard alongside other spinning tools (spindle whorls and fragmentary spindle shafts). The excavators observed that this object might also be interpreted as a key for a room on the upper floor reached by means of wooden stairs, hence suggesting a double function of the object. (Houby-Nielsen and Dietz 2020, 426–427. The possibility that these objects might have been used for different purposes was also proposed in Quercia 2017, 133). On the other hand, it might be possible that these objects were simply stored together. The pyxis from Athens, however, clearly supports the identification of “temple keys” as both keys and distaffs, if it is to be considered as technically accurate. We should not discard the possibility that the painter was not depicting the actual use of this object, but rather carefully constructing an image rich in symbolic meaning. The woman using a key as a distaff provides a vivid representation of two of the main roles associated with respectable women in classical Athens: custodian of the house and producer of textiles. For the exact same reason, keys or key-shaped distaffs might have been used by some Athenian women to spin their wool.

As a final remark, I would like to point out how most distaffs represented in Attic vase-painting feature some sort of decoration, as simple as it might be. As even the less skilled painters portrayed decorated distaffs, we can hypothesize that decorating distaffs was common practice in Athens for those who could afford it. As already mentioned, some of these “decorative elements” probably served a practical function as well, such as containing the fibres. Further symbolic meanings, as in the case of the *venuskunkeln* mentioned above, should also be considered.

One question therefore arises: where are all these richly decorated distaffs? Were they all made of perishable wood? To this day, only a few distaffs were identified in Greece; apart from those mentioned above, two fragmentary bone objects from a 4th c. tomb in the Kerameikos (fig. 14) necropolis are from Athens. Given their incompleteness, one or both objects might be rather interpreted as spindles (Kovacsovics 1990, 13-14, n°8, 9, fig. 12, pl. 29.1, Spantidaki 2016, 40, 42, fig. 4.22). These objects closely resemble another couple of bone implements currently at the Louvre Museum. They were first described as fragments of one object (spindle or distaff), although both the photos available on the Louvre website (https://collections.louvre.fr/en/ark:/53355/cl010253322 and https://collections.louvre.fr/en/ark:/53355/cl010253286, accessed on 27/07/2024) and the resemblance to the Kerameikos objects suggest otherwise. Their context of provenance is unknown, and they were initially dated to the Roman period, although the comparison with the Kerameikos finds might suggest an earlier chronology (Musée du Louvre, Paris, MNC 2202.1-2. Published in Michon 1897, 193–195, Héron de Villefosse and Michon 1897, 425, n°107 and mentioned in Robinson 1941, 374, n. 107). Two similar ivory distaffs were excavated in a 5th century tomb in Delphi (Perdrizet 1908, 163, fig. 680), while a different bronze object from the sanctuary with no iconographic comparison was also interpreted as a distaff (Perdrizet 1908, 117, fig. 427).

In the sanctuary of Athena Alea in Tegea a bronze object was reported as a spindle (Milchhoefer 1880, 67, pl. IV): it is constituted by a long rod with a richly decorated handle and a disc towards the middle, closely resembling the distaffs from Ephesos and Bursa (Blinkenberg 1931, 135 also prosed to identify the object as a distaff rather than a spindle). Two similar objects were found in later excavations (Dugas 1921, 380, figs. 41, n° 127, 129) and were interpreted alongside the first as votive dress pins by P. Jacobstahl (1956, 9–10, figs. 26–28).

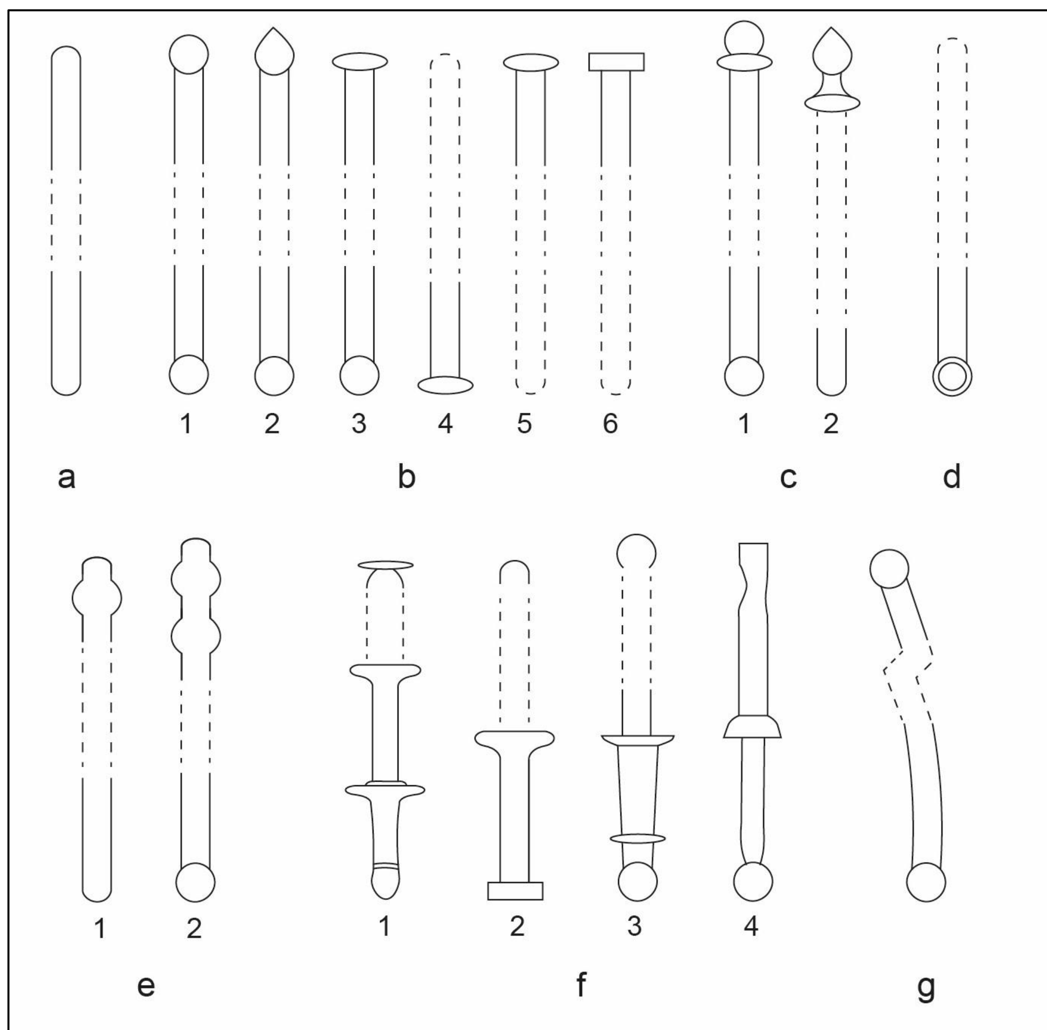

Figure 2. Distaff types in spinning scenes

An object similar in construction, was excavated quite recently in the Samian Heraion (Kyrieleis and Brize 2020, 48, cat. I.54, pl. 23.7); it was found in a pit located in the south-eastern area of the sanctuary containing material predating the 7th c., hence suggesting it is much older than the previously mentioned distaffs. The object was catalogued as a "big dress pin" (*Große Gewandnadel*), yet an extremely unusual one given the very long decorative head and the disk separating it from the shaft; the interpretation is motivated comparing the "pin" to the objects mentioned above. Moreover, I would add, no extremity appears to be as sharp as a dress pin ought to be. Given the iconographic evidence at our disposal, these oddities can be easily explained identifying the object as a distaff rather than a dress pin.

It is worth pointing out that none of the "group 2 Geometric pins" discussed by Jacobstahl (1956, 9, figs. 25–33a) are certainly identifiable as dress pins. Apart from the above-mentioned examples from Tegea, four "pins" were found in other sanctuaries dedicated to female deities, namely the Heraia in Perachora and Argos, the Ephesian Artemision and the sanctuary of Artemis Orthia at Sparta. Only two come from burials, but their position does not prove they were used to fasten garments. Two "pins" from Corinth were found on a shallow shelf connecting a male and female tomb, and were initially interpreted as spits (Morgan 1937, 544–545, Davidson 1952, 280, n°2258-2259). One silver "pin" was found in an incineration burial (Orsi 1906, 202, fig. 157). Reevaluating Jacobstahl's work goes beyond the purpose of this paper but given the available evidence it seems that the identification of these objects as dress pins should not be taken for granted.

If we are to reinterpret these finds as distaffs, it would mean that middle-whorl distaffs were used in Greece much earlier than Classical times.[9] Furthermore, it would partially explain why there are so little recorded distaffs from Greece: many bronze specimens might simply be hiding under the "dress pin" label.

Ivory and bone distaffs might also be hiding in plain sights. Archaeological excavations unearthed many "rods" and "handles", often fragmentary, decorated with elements clearly resembling those represented by Attic vase painters (e.g. in Delos, see Deonna 1938, 245–8, figs. 276–81) Centrally pierced discs made of bronze, bone and ivory might have also originally been part of distaffs constructed using different materials, both perishable and non-perishable (Houby-Nielsen and Dietz 2020, 428 suggests the interpretation of disc spindle whorls as distaff components. see in particular fig. 142).

4.2 Spindles

Unlike distaffs, spindles consistently appear as extremely simple objects on Attic vases.

Vase painters put very little effort into representing these tools, probably not without reason. An excellent example can be found in a well-known white ground oinochoe in the British Museum (WG 12, fig. 10), attributed to the Brygos Painter and dated to 490-470 ca. The spinner was painted with great care as was the distaff, the most elaborate among the repertoire. The spindle on the other hand appears very plain: the shaft, whorl and hook were all painted in the same colour as the fibres and no decorative element was added.

Other spinning scenes consistently portray plain spindles, regardless of the painter's mastery. When the simplicity is as extreme as in the Brygos Painter *oinochoe*, it might partially relate to the spindle being in function. As the tool rotates rapidly to twist fibres together, small details would be almost invisible to the onlooker.

Similarly, spindles survived from the ancient world are in most cases extremely plain, even when precious materials were used. Iron Age undecorated metal spindles were excavated in Olynthus (Robinson 1941, 375, pl. CXIX), Aetolian Chalkis (Houby-Nielsen and Dietz 2020, 429), Aegae (Supra, n.5), Syndos (Despoinē 2016, 278, figs. 555–6, Saripanidi 2020, 76. fig. 3, n.3) and Lindos (Blinkenberg 1931, 135, pl. 13, n°335. N°344-345 might also be spindles, although possibly non-functional). Earlier Bronze Age examples are attested in grave circle A at Mycene (Maran 2011, 287–8, fig. 21.1) and at Perati, (Iakovides 1969, 350–2, fig. 155, pls. 15α, 23β,

[9] As the excavators pointed out, the decorative elements fit well in the Geometric dress pin repertoire.

Tzachili 1997, 118, fig. 53 showing also spindles from Cyprus and the Near East), only the latter featuring incised decorations on the shaft. Similarly simple spindle shafts were recovered in Italy (Gleba 2008, 102, fig. 78), in the Near East (Barber 1992, figs, 2.19-20, 22, 24, 27-29, 31), as well as in Egypt, where plenty of wooden spindles are also known. (Rutschowscaya 1986, 44–8, n° 65-102; only a couple feature simple decorations. Further ancient comparisons are mentioned in Robinson 1941, 374, n. 107). Even in the rare cases where the shaft is fully visible (RF 33 (third spinner), 40, 52, 55, partially covered by the hand) no decorative element is added; only a slight enlargement of the lower part of the shaft, a common feature of spindles throughout history, is sometimes attested.

There are only three representations where the painters add an unusual element to the shaft. The first is the Amasis painter *lekythos* (BF 4, figs. 3, 9) featuring a thin disc placed just above the spindle whorl. In two other vases - a fragmentary black figure *pyxis* (BF 6, fig. 11) and a red-figure kylix (RF 25) – a similar disc appears towards the upper extremity. These representations might suggest the use of an additional, lighter spindle whorl, or perhaps the existence of spindles featuring inserted discs, similarly to distaffs. This element strengthens the reading of the Kerameikos finds as a functional distaff-spindle set; one of the two shafts features a slight enlargement towards the middle, another element fully compatible with spindle iconography. The same interpretation can easily apply to the finds from Delphi and the object in the Louvre as well.

4.3 Spindle Whorls and Hooks

Whorls are an extremely common spindle accessory, as their weight and shape provides additional tension and can improve rotation (Barber 1992, 43).

Although wooden spindle whorls must have been far more common than their attestations in archaeological records, clay whorls are a common find in excavations dating as far back as the Neolithic. Classical Athens makes no exception, as many of these tools were found throughout the city.

Attic vase-painters constantly represent the whorl towards the spindle's lower extremity, contributing to our association of Greece with the "low-whorl" spinning tradition. In other areas, such as Egypt, the "high whorl" tradition prevailed (Barber 1992, 43, 51–65 with several examples of both traditions in the ancient world). It should come as no surprise that the majority of spindle whorls is represented as conical or sub-conical, as this shape is the only attested in Classical Attica (Spantidaki 2016, 43–4, 173-179 with literature). Sometimes, when the drawing is not too careful, the whorl appears as almost spherical.

A smaller group of representations, however, features disc shaped whorls. These are surely identifiable on four vases (RF 5, 24, 36 ; WG 2), more tentatively on three other vases (RF 16, 20-21). In one case in particular (WG 5, fig. 5) the whorl is depicted so high up the shaft that it could be identifiable as a "disc" not too different from that featured on the Amasis Painter's lekythos. The presence of disc-shaped whorls in vase painting paired with their absence in the archaeological record possibly suggests that these objects were preferably wooden, perhaps to obtain extremely light whorls used to spin the finest threads.[10] The bone and ivory discs previously mentioned as possible distaff elements might also have functioned as spindle whorls.

[10] On the correlation between whorls' weight and diameter and thread fineness see Barber 1992, 52–3; Andersson Strand 2011, 12–5.

The other spinning implement frequently attested on vase painting is the spinning hook (BF 4 (figs. 3, 9), 6, fig. 11 ; RF 3, 10-11, 16, 27, 31, 40?, 48? 49, 54, fig. 6, 55?, 60, fig. 4 ; WG 1, 8?, 11).[11] The presence of a hook is easily justifiable, as it offers a simple way to secure the thread to the top of the spindle before it is set into motion. An even simple way to secure the thread consists in cutting a small groove in the shaft, a solution not uncommon in ancient spindles (Cfr. Barber 1992, figs. 2.7, 2.20, 2.22, 2.32. On spinning hooks see pp. 68-69). Barber (1992, 263) argued that spindle hooks were a Classical invention, possibly justifying their scarce presence in vase painting. As they are featured in two earlier black-figured vessels, their introduction should be dated at least to the second half of the 6th c.; a bronze hook from Lindos (Blinkenberg 1931, p. 135, pl. 13, n°343), which might well be Archaic, [12] provides a possible archaeological comparison of early hooks identical to later examples.

To my knowledge, no early spindle hook was found to this day in Attica. Classical comparisons are found, however, in Olynthus (Robinson 1941, 376–7, pl. CXIX) and Aetolian Chalkis (Houby-Nielsen and Dietz 2020, 235 n° 625, 429, 502), while these objects appear more commonly in late Roman and Byzantine contexts both in Athens itself (Acropolis Museum, inv. NMA 7561, found during the excavations for the Museum's construction) as well as elsewhere, such as in Corinth (Davidson 1952, 173, n° 1223-1228, pl. 78). Olympia, (Furtwängler 1890, 61, n° 422, pl. XXIII), Torone (Joyner et al. 2001, 748, fig. 173), Ephesos (Trinkl 2007, 84, fig. 13.5), Naxos (Bournias 2020, 133, pl. 157), and Samos (Jantzen 2004, 127, n°772-779, pl. 23). These hooks are crafted out of a thin sheet of bronze, folded onto itself and bent; sometimes, such as in Olynthus and Olympia, a small hole towards the open extremity suggests the use of a small nail or rivet to hold the hook in place.

Despite the lack of archaeological comparisons, vase painting proves that such objects were commonly used by some Attic spinners. Vase painting further shows how such use was not ubiquitous, probably limited by an unequal access to a not so cheap accessory that, although useful, was not essential for spinning.

5. Conclusion

The evidence presented in this paper proves the validity of Attic vase painting for the study of contemporary spinning.

Despite a variable degree of simplification, vase painters included many precious details in their works, allowing them to showcase their talent in a thoughtful representation of this female craft. This aspect should not be underestimated as the most frequent vase shapes are strictly connected to women. As discussed by L. Hackworth Petersen (1997), the female perspective on ancient art should not be overlooked. We must therefore keep in mind that many ancient viewers of these representations were spinners themselves, appreciating a thoughtful depiction of their work.

The most important contribution of iconography to textile archaeology in Greece is surely the depiction of spinning tools. As I have argued, we have no reason to believe this to be inaccurate,

[11] The list of vases includes only those where the presence of a hook is certain or almost certain. As high-quality pictures of many vases could not be obtained prior to this study, the list might be updated in the future.

[12] Most votive offerings date between the 8th and 6th c., see Blinkenberg 1931, 134.

albeit surely stylized in many instances. Vase painters dedicated particular effort in characterising distaffs with more or less “decorative” elements, proving the value of these objects as something more than purely utilitarian tools. Excavated tools with rich decorative elements made of bone, bronze and even silver prove the role of distaffs as status symbols, possibly hiding several levels of social meanings. The presence of decorative elements (incisions, added elements etc.) and the use of more or less expensive materials might have played a role in establishing a visible hierarchy not only *between* but also *within* households, separating the landlady from her servants. We might even speculate the role of differentiations related to age or marital status in dictating distaff choices.

As I have discussed, the iconographic evidence suggests the need to re-evaluate several ancient objects that might be better interpreted as spinning tools. At the current state of research such reinterpretations might not yet be definitive, but in light of the iconographic evidence they should at least be considered.

Fig. 3.BF 4. New York, MET, Public Domain.

Fig. 4. RF 60, detail. Chicago, Art Institute, Public Domain.

Fig. 5. WG 5, detail. Yale University Collection, Open Domain.

Fig. 6. RF 54, spinning scene. New York, MET, Open Domain.

Fig. 7. RF 34, detail, after Blümner 1876.

Fig. 8. RF 52, detail. After Heydemann 1870.

Fig. 9. BF4, details. New York, MET, Public Domain.

Fig. 10. WG 12, details. London, The British Museum, © The Trustees of the British Museum.

Fig. 12. Early 1st c. CE silver distaff from Bursa. London, British Museum. © The Trustees of the British Museum.

Fig. 11. BF 6. Drawing after Graef — Langlotz 1925.

Fig. 13. RF 30, detail. London, The British Museum, © The Trustees of the British Museum.

Fig. 14. Bone objects from Kerameikos. © DAI Athens, D-DAI-ATH-Kerameikos-12751; Photo: Gösta Hellner.

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[13] The abbreviations used for journals and series follow the Deutsche Archaeologische Institute directions.

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Appendix: A Catalogue Of Spinning Scenes

It seems necessary to close this contribution with a brief catalogue of the spinning representations examined in this study. Only those portraying clearly identifiable spinning tools, in use or not, have been listed. For the sake of concision, I am only providing the BAPD identification number, as the database provides relevant information with further literature on each object as well as, in most cases, pictures. When this is not available, the available bibliography is listed instead.[14]

Black Figure (BF)

1. *Alabastron*, early 5th c. Baltimore, Walters Art Gallery, 48.233.[15] BAPD 331201.

2. *Epinetron* fr., early 5th c. Palermo, Regional Archaeological Museum, 1910. BAPD 303425.

3. *Epinetron* fr., early 5th c. Paris, Musée du Louvre, MNC624. BAPD 303430.

4. *Lekythos*, 550-540 ca. New York, Metropolitan Museum of Art, 31.11.10. BAPD 310485.

5. *Pyxis,* 530-520 ca. Bochum, Sammlung Antiker Vasen Ruht-Universität, S1212. BAPD 9026914.

6. *Pyxis* fr., 575-525 ca. Athens, Acropolis Museum, 1.2202. BAPD 32316.

7. *Pyxis,* 580 ca. Laon, Musée de Laon, 37.1009. BAPD 12351.

8. *Olpe,* 500-490 ca. Turin, Museo di Antichità, 5768. BAPD 8730.

Red Figure (RF)

[14] The following abbreviations were used in this section: fr. (fragmentary), NAM (National Archaeological Museum).

[15] The vase does not appear in the gallery's online collection, but a picture was published in Keuls 1993, fig.235.a-b.

1. *Alabastron.* 500-490 ca. Athens, Kerameikos Museum, 2713. BAPD 352434.

2. *Alabastron,* 525-475 ca. Athens, NAM, CC1204. BAPD 200891.

3. *Alabastron,* 470-460 ca. Berlin, Staatliche Museen, F2254 (lost). BAPD 206367.

4. A*labastron,* 470 ca. New York, Metropolitan Museum of Art, 41.162.71. BAPD 208898.

5. *Amphora*, 485-480 ca. Cambridge, Fitzwilliam Museum, Gr.24.1937. BAPD 203806.

6. Column *Krater,* 480 ca. Baltimore, Walters Art Gallery, 48.70. BAPD 202694.

7. *Hydria* fr., 430 ca. Berlin, Staatliche Museen, F2395. BAPD 7011.

8. *Hydria* fr., middle 5th c. Braunschweig, Herzog Anton Ulrich Museum, AT680. BAPD 213772.

9. *Hydria*, 475-425 ca. Bruxelles, Musées Royaux, A73. BAPD 214566.

10. *Hydria*, 5th c., first half. Copenhagen, National Danish Museum, 5. BAPD 205652.

11. *Hydria,* 420 ca. Copenhagen, National Danish Museum, 153. BAPD 214971.

12. *Hydria* fr., 475-425 ca. Göttingen, Georg-August-Universität, K623. BAPD 213488.

13. *Hydria*, 440 ca. Harrow, Harrow School, 59. BAPD 211144.

14. *Hydria*, 475-425 ca. Heidelberg, Ruprecht-Karls-Universität, 64.5. BAPD 214832.

15. *Hydria*, 450-430 ca. London, British Museum, 1867,0508.1042 (E215). BAPD 214529.

16. *Hydria*, 460 ca. London, British Museum, 1867,0508.1138 (E193). BAPD 214571.

17. *Hydria* fr., 475-425 ca. Nafplio, Archaeological Museum, MN205. BAPD 214572.

18. *Hydria*, 430 ca. New York, Metropolitan Museum of Arts, 17.230.15. BAPD 216183.

19. *Hydria*, 470-460 ca. Oxford, Ashmolean Museum, V531. BAPD 205842.

20. *Hydria,* 475-425 ca. Rome, Museo Nazionale Etrusco di Villa Giulia, CSA4. BAPD 46561.

21. *Hydria* 5th c., first half. San Simeon, Hearst Historical State Monument, 9933. BAPD 206573.

22. *Hydria*, 475-425 ca. Toronto, Royal Ontario Museum, 362. BAPD 214274.

23. *Kalpis*, 470-450 ca. Stanford, Cantor Arts Center, 17.412. BAPD 275754.

24. *Kantharos,* 470-460 ca. London, British Museum, 1919,0620.14. BAPD 213355.

25. *Kylix*, 470-450 ca. Aléria, Musée Archéologique. BAPD 9449.

26. *Kylix*, fr., 5th c., first half. Athens, Acropolis Museum, ΠΡ27-4. BAPD 46660.

27. *Kylix*, 450 ca. Berlin, Antikenmuseum, 31426. BAPD 209808.

28. *Kylix* fr., 5th c., first half. Berlin, Antikensammlung, 3240. BAPD 204399.

29. *Kylix*, 460 ca. Boston, Museum of Fine Arts, 13.84. BAPD 211626.

30. *Kylix*, 470 ca. London, British Museum, 1864,1007.91 (E87). BAPD 9054990.

31. *Kylix*, 475-425 ca. Malibu, J. Paul Getty Museum, 68.AE.581.1-7. BAPD 213147.

32. *Kylix*, 470-460 ca. Munich, Staatlichen Antikensammlungen, 2687 WAF. BAPD LIMC I, 427, n°71, Wehgartner 1983, 70-71, n° 78.

33. *Kylix*, 5th c., first half. New York (NY), market, Christie's. BAPD 205374.

34. *Kylix*, 490-480 ca. Orvieto, Claudio Faina Museum, 105. BAPD 210001.

35. *Kylix*, 460-450 ca. Paris, Cabinet des Médailles, De Ridder.817. BAPD 209811.

36. *Kylix* fr., 490 ca. Paris, Musée du Louvre, G276. BAPD 205055.

37. *Kylix* 510-500 ca. Private, C. Koppermann. BAPD 788.

38. *Lebes*, 5th c., first half. Athens, NAM, 14505. BAPD 216202.

39. *Lekanis*, 4th c. St. Petersburg, State Hermitage Museum, ST1983. BAPD 230842.

40. *Lekythos*, 475-425 ca. Athens, NAM, E215. BAPD 207921.

41. *Lekythos*, 475-425 ca. Athens, NAM, 12778. BAPD 207765.

42. *Lekythos*, 420 ca. Bochum, Kunstsammlungen der Ruhr-Universität, S1004. BAPD 4929.

43. *Lekythos*, 475-350 ca. Bucarest, Museo Kalinderu, 0467. BAPD 14510.

44. *Lekythos*, 450 ca. Mannheim, Reiss Museum, Cg 190. BAPD 209052.

45. *Lekythos* 475-426 ca. Karlsruhe, Badisches Landesmuseum, 56.81. BAPD 1006329.

46. *Lekythos*, 480-470 ca. Palermo, Regional Archaeological Museum, V693. BAPD 203899.

47. *Lekythos*, 460-450 ca. Paris, Cabinet des Médailles, Froehner.1647. BAPD 207236.

48. Lid, 5th c., first half. Athens, NAM, BS58. BAPD 215607.

49. *Pelike* fr., 460 ca. Chicago, University, D. & A. Smart Gallery, 1967.115.343. BAPD 205412.

50. *Pelike* fr., 460 ca. Stanford, Cantor Arts Center, 17.410. BAPD 275752.

51. *Pyxis*, 5th c., first half. Athens, NAM, A1623. BAPD 275745.

52. *Pyxis*, 490-480 ca. Athens, NAM, 1584. BAPD 7898.

53. *Pyxis*, 430 ca. Bochum, Kunstsammlungen der Ruhr-Universität, S148. BAPD 213099.

54. *Pyxis*, 460 ca. New York, Metropolitan Museum of Art, 06.1117. BAPD 210088.

55. *Pyxis*, 470-460 ca. Oxford, Ashmolean Museum, 1965.130. BAPD 211377.

56. *Pyxis*, 5th c., first half. Private, Zurich, Mikro Roš. BAPD 250104.

57. *Pyxis*, 5th c., first half. Tampa, Museum of Art, 86.97. BAPD 250105.

58. *Pyxis*, 400 ca. Wien, Kunsthistorisches Museum, 1863. BAPD 12069.

59. *Pyxis*, 450 ca. Wien, Kunsthistorisches Museum, 3720. BAPD 213089.

60. *Stamnos*, 480-470 ca. Chicago, Art Institute,1916.410. BAPD 202937.

White Ground (WG)

1. *Alabastron,* 470-460 ca. Gießen, Antikensammlung der Justus-Liebig-Universität, KIII-41. BAPD 207249.

2. *Alabastron* fr., 470-460 ca. Heidelberg, Ruprecht-Karls-Universität, Z041. BAPD 208933.

3. *Lekythos,* 475-425 ca. Basel, market. BAPD 209084.

4. *Lekythos,* 475-450 ca. Naples, NAM, 86388. CVA Naples, Museo Nazionale V, Raccolta Cumana, 50, pl. 71.1-2.

5. *Lekythos,* 475-460 ca. New Haven, Yale University, 1913.118. BAPD 208940.

6. *Lekythos,* 475-450 ca. Palermo, Mormino Collection, 177. BAPD 275342.

7. *Lekythos,* 480 ca. Warsaw, National Museum, 198554. BAPD 203116.

8. *Lekythos*, 450 ca. Taranto, NAM, 143484. BAPD 23639

9. *Pyxis* fr., 460-450 ca. Athens, Kerameikos Museum, 5014. BAPD 7980.

10. *Pyxis,* 475-425 ca. Athens, Private, M. Vlasto. BAPD 211903.

11. *Pyxis,* 460-450 ca. Berlin, Staatlichen Museen, F2261. BAPD 212041.

12. *Oinochoe,* 490-480 ca. London, British Museum, 1873,0820.304 (D13). BAPD 204379

13. *Kylix* fr., 5th c., second half. Athens, Acropolis Museum, M 4346. Eleftheratou 2006, 125, n°358.

ΑΙΓΙΔΑ

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