MASt@CHS – Summer Seminar 2021 (Friday, July 23): Summaries of Presentations and Discussion

JANUARY 13, 2022 | Guest Post

2021.01.13 | By Rachele Pierini and Tom Palaima

§1. The Summer session of the MASt@CHS seminars represented a unicum within our series. Although we used the usual formula of the MASt@CHS seminars (two presentations, each followed by a debate session), we experimented with some variations.

§2. Another element made unique the Summer 2021 MASt meeting. Specifically, the tribute we paid to MASt co-founder Gregory Nagy to honor his 21-year service as Director of the CHS. Before moving forward with the report of the Summer 2021 seminar, we want to dedicate a personal note to celebrate our dear Greg's long and fruitful leadership at the CHS.

Tullio Serafin and Maria Callas, aka Gregory Nagy and CHS Fellow Researchers (2000–2021)

§3. In 1942 an unknown nineteen-year-old opera singer called Maria Anna Cecilia Sofia Kalogeropoulos successfully managed to make her debut at the Olympia Theatre in the title role of Puccini's *Tosca*, despite World War II and colleagues' hostility. Music critics marveled.

§4. Four years later Maria Anna Cecilia Sofia Kalogeropoulos had already simplified her name to Maria Callas, and she was about to make her Italian debut at the Arena di Verona in Ponchielli's *La Gioconda* under the baton of Maestro Tullio Serafin.

§5. After *La Gioconda*, Serafin, who was looking for a dramatic soprano to sing Isolde in Wagner's *Tristan und Isolde*, called on Callas. Callas replied that she had cursorily looked at the first act while at the conservatory and offered to sight-read the opera's second act for Serafin.

§6. Impressed, Serafin praised Callas for knowing the role so well. At that point Callas admitted to having bluffed and having sight-read the whole score.

§7. Even more impressed, Serafin thereafter served as Callas's mentor and supporter.

§8. According to George Lascelles, 7th Earl of Harewood, at that time "very few Italian conductors have had a more distinguished career than Tullio Serafin, and perhaps none, apart from Toscanini, more influence."

§9. Three years later, Callas was in Venice to sing Brünnhilde in Wagner's *Die Walküre* at the Teatro la Fenice. Serafin was in Venice as well to direct Bellini's *I Puritani* in the same theatre and in the same period. When the soprano singing Elvira in Bellini's opera fell ill, Serafin reached out to Callas to inform her that she would be singing Elvira in six days.

§10. To Callas's strong protests (she didn't know the role at all and, on top of this, had three more Brünnhildes to sing), Serafin simply replied "I guarantee that you can."

§11. Now, to truly understand Callas's reluctance, we have to understand the interstellar distance that separates the role of Brünnhilde from the role of Elvira. Serafin's "request" was like a trainer telling an Olympic 100-meters runner to compete, in the same Olympiad and without any specific training, in the high jump.

§12. We might say that Serafin was asking Callas to do the impossible. Actually, Serafin was able to accurately foresee what Callas was truly capable of: the unimaginable.

§13. Six days after that conversation, Callas sang Elvira in Bellini's *I Puritani* at the Teatro la Fenice in Venice under the baton of Maestro Serafin. The rest is history.

§14. "I guarantee that you can" is what Gregory Nagy (or simply Greg, for those who have had the pleasure of interacting with him) has tirelessly repeated to an incalculable number of CHS Research Fellows and CHS employees each and every year of the 21 years during which he served as Director of the Harvard's Center for Hellenic Studies. Simultaneously Greg acted primarily, I would dare to say, as talent-scout — on top of his duties as a Harvard Professor.

§15. "Yes you can" came up quite early in the MASt project, too. Actually long before MASt was even remotely a project. Thanks to Greg's trust and support, an ambitious idea has become the MASt project that we know. But this amounts only to a few pages of the first chapter. We have already drafted others and cannot wait to share with you all the great news. Prepare to be amazed.

§16. During the Summer MASt meeting we dove deep into our Aegean agenda after the tribute to Greg, and so we do in the report as well.

§17.1. The Summer meeting's first presentation, The Papyrus Dilemma, is a pilot study that we designed as such in response to the puzzling image on the Mochlos seal we dealt with in the Spring 2021 MASt@CHS seminar.

§17.2. To shed light on this obscure motif, we gathered, and Palaima coordinated, a team of specialists from different research areas.

§17.3. As such, The Papyrus Dilemma analyzes the Mochlos motif and compares it with (i) the Ayios Charalambos motif, (ii) frescoes from the Knossos and Pylos palaces, (iii) Egyptian representations of the lotus flower, and (iv) actual plants from structurally comparable plant families in the general Aegean area in Bronze Age and modern times.

§17.4. In addition, The Papyrus Dilemma proactively contributes to establishing a terminological protocol by providing a step-by-step guide to follow when it is not possible definitively to identify a motif.

§18. The second presentation is by Roger Woodard and focuses on the Mycenaean terms *du-ma* and *da-ma* and compares them with Luvo-Hittite *dammara-*.

§18.1. Woodard hypothesizes that Luvo-Hittite *dammara-* made its way through the Mycenaean vocabulary following a double path. He proposes that Luvo-Hittite *dammara-* is the ancestor of both Mycenaean forms, of which the spelling *du-ma* represents the orally acquired form and the spelling *da-ma* the scribal borrowing.

§18.2. Woodard's premise to these linguistic contacts is a background of Greek-Luvian cultural intermixing and Mycenaean scribes' exposure to Luvo-Hittite texts. To explain this exposure, Woodard uses a well-attested phenomenon in the ancient Near East and environs, i.e. the international transmission of scribal documents.

§18.3. By way of example, he examines a particular Ahhiyawa letter, a document showing evidence for a Hittite-Mycenaean scribal interface since the author of the Hittite text is a Hittite native speaker that translated the original Mycenaean document. Conversely, Woodard hypothesizes a Mycenaean translation of original Hittite documents when the Mycenaeans were at the receiving end.

§19. To discuss the exceptional amplitude of both presentations, we welcomed new guests to join the Summer 2021 MASt@CHS seminar. In addition to the regular members of the MASt@CHS network of colleagues and students who have already attended previous sessions, the following experts joined the Summer 2021 MASt@CHS meeting: Maria Anastasiadou, Harriett Blitzer, Janice Crowley, Yannis Galanakis, Alexander Herda, David Hillis, Sara Kimball, Ian Rutherford, Judith Weingarten, George Yatskievich.

§20. It is our pleasure to extend our thanks to all the specialists and institutions that have collaborated with us before, during, and after the seminar to provide high-resolution images and help analyzing the open questions we touched upon during the Summer live session of the MASt@CHS seminar.

§21.2. We thank Anne Chapin, Giorgos Gioutlakis, Carol Hershenson, Armin Jagel, Olga Krzyszkowska, Charles de Lamberterie, Susanne Lervad, Peter Liddel, Susan Mahr, Erica Martin, José Melena, Ambra Russotti, Andrew Shapland, Chiara Spinazzi-Lucchesi, Shari Stocker, Nicholas Turland, Agata Ulanowska, Peter Warren, and Elsa Yvanez for their significant help with images and key specialist information.

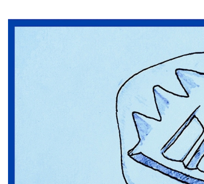
§21.3. We also thank the Ashmolean Museum Oxford, the Center for Textile Research at the University of Copenhagen, the Corpus of Minoan Seals at Heidelberg, the National Archaeological Museum at Athens, and the University of Cincinnati.

§22. Specifically, contributions to the seminar during the live discussion were made by Maria Anastasiadou (see below at §§80; 89), Natasha Bershadsky (§91), Hariclia Brecoulaki (§§100–107), Janice Crowley (§§81; 94–94.3), Michele Mitrovich (§§87.1–87.2), Sarah Morris (§97), Gregory Nagy (§§98.1–98.3; 159.1), Tom Palaima (§§86.1–86.13; 93.1–93.6; 96.1–96.5; 155.2; 158), Rachele Pierini (§160), Ambra Russotti (figure 0c), Morris Silver (§§90; 92.1–92.11), Brent Vine (§§155.1; 156; 157.1), Judith Weingarten (§§82.1–82.2; 84; 88; 95), Malcom Wiener (§99), Roger Woodard (§§155.3; 157.2; 159.2), George Yatskievitch (§§85.1–85.6).

Topic 1: Towards the definition of a standard artistic vocabulary in Aegean iconography: The Papyrus Dilemma as a pilot study

Introductory note by Rachele Pierini and Tom Palaima

§23. *Ceci n'est pas une pipe*. The painting by René Magritte perfectly describes the challenge at the core of the present seminar The Papyrus Dilemma. The image on the Mochlos seal *CMS* II.2 250a, which is referred to as "the 'papyrus' flower" in the reference edition (Anastasiadou 2011), is actually *not* a papyrus — as Anastasiadou herself stated during the Summer 2021 MASt@CHS seminar. She made clear that she used single quotation marks (i.e. 'papyrus') to indicate, rather, that (i) the 'papyrus' motif does *not* represent an actual papyrus and (ii) 'papyrus' is just one possible way to refer to this image.



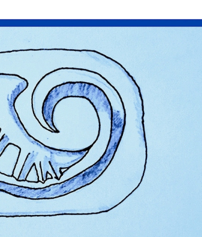


Figure 0a (above left). R. Magritte. *Ceci n'est pas une pipe*.

Figure 0b (above right). The Mochlos seal (CMS II.2 250a).

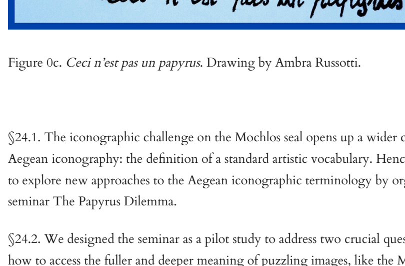


Figure 0c. *Ceci n'est pas un papyrus*. Drawing by Ambra Russotti.

§24.1. The iconographic challenge on the Mochlos seal opens up a wider challenge in Aegean iconography: the definition of a standard artistic vocabulary. Hence, we decided to explore new approaches to the Aegean iconographic terminology by organizing the seminar The Papyrus Dilemma.

§24.2. We designed the seminar as a pilot study to address two crucial questions. First, how to access the fuller and deeper meaning of puzzling images, like the Mochlos motif, within the iconographic repertoire of Aegean seals. Second, how to establish a terminological protocol when it is not possible to identify a motif.

§25.1. To undertake these tasks, we gathered a pool of specialists in an array of research area: Aegean iconography, Bronze Age Aegean scripts, linguistics, philology, ancient history, archaeology, and botany as well, since the Mochlos motif — though not a papyrus — is a vegetal motif, nevertheless. Palaima acted as coordinator of this team.

§25.2. In the following paragraphs, we present the results of our interviews, analyses, and comparisons, as well as some preliminary conclusions. Although not all our experts could attend the live discussion during the Summer 2021 MASt@CHS seminar, they all enriched thoroughly the discussion — and the accurate email exchange that Palaima offers below provides insights into particular contributions.

The Papyrus Dilemma, 1

Presenter: Tom Palaima

Background

§26.1. The topic of my part of the seminar developed from several scholarly undertakings:

> a. my close reading this past December and January as an outside reader of the first submitted version of Morris Silver's forthcoming CHS monograph on purple-dye in the Aegean Bronze Age;
> b. co-editing with Robert Laffineur in March and April the papers submitted for an *Aegaeum* conference monograph (Laffineur and Palaima 2021);
> c. co-authoring with Nicholas Blackwell a paper on the Hagia Triada sarcophagus and Pylos Tn 716 (Blackwell and Palaima forthcoming); and
> d. engaging in the lively discussions surrounding Morris Silver's two provocative presentations at MASt@CHS seminars (Winter 2021 MASt@CHS seminar and Spring 2021 MASt@CHS seminar).

§26.2. These all made me look closely for the first time in a long time at the Aegean iconographical evidence for such items as "enthroned or seated female figures," "dogs," "hounds," "lions," "double axes" and "fenestrated axes," "sacrificial animals," and the topic of this seminar session: what is called 'papyrus' or "'papyrus' flower" in Aegean glyptic and painted art, i.e. mainly in images on seals and sealings and wall paintings and some painted pottery. I came to realize that some identifications were disputed, ambiguous, contradictory, or seemingly downright wrong. I chose to pursue papyrus and papyrus flower because of the implications that will become clear as we proceed.

§26.3. What I present here is a distillation of my many question-and-answer sessions and discussions with Maria Anastasiadou, Harriet Blitzer, Anne Chapin, Janice Crowley, Yannis Galanakis, David Hillis, Olga Krzyszkowska, Rachele Pierini, Nicholas Turland, Peter Warren, Judith Weingarten, George Yatskievich, and, after the seminar, José Melena and Charles de Lamberterie. I thank them all for their generous spirits, their patience, and their continuing pursuit of answers to the many questions that forums for open and frank scholarly exchanges such as MASt@CHS raise. My thanks also to Armin Jagel, Giorgos Gioutlakis, Nicholas Turland, George Yatskievich, Susan Mahr, Shari Stocker, Carol Hershenson, Peter Liddel, Andrew Shapland, and Erica Martin for all their generously ready help with image rights and use.

Section 1: The Papyrus Flower *CMS* II.2 250a

§27.1. Having found an image on seal from Mochlos *CMS* II.2 250a referred to as a "papyrus flower," I was curious as to why it was so called.

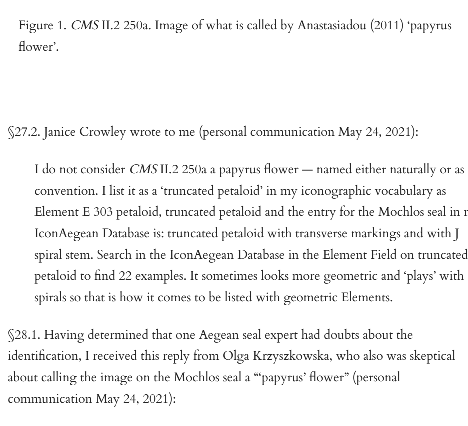


Figure 1. *CMS* II.2 250a. Image of what is called by Anastasiadou (2011) 'papyrus flower'.

§27.2. Janice Crowley wrote to me (personal communication May 24, 2021):

> I do not consider *CMS* II.2 250a a papyrus flower — named either naturally or as a convention. I list it as a 'truncated petaloid' in my iconographic vocabulary as Element E 303 petaloid, truncated petaloid and the entry for the Mochlos seal in my IconAegean Database is: truncated petaloid with transverse markings and with J spiral stem. Search in the IconAegean Database in the Element Field on truncated petaloid to find 22 examples. It sometimes looks more geometric and 'plays' with spirals so that is how it comes to be listed with geometric Elements.

§28.1. Having determined that one Aegean seal expert had doubts about the identification, I received this reply from Olga Krzyszkowska, who also was skeptical about calling the image on the Mochlos seal a "'papyrus' flower" (personal communication May 24, 2021):

> Maria Anastasiadou in her study of MM three-sided prisms, designates the motif as "'papyrus' flower" (in quotes). This is a purely conventional designation; it does not necessarily mean that the motif genuinely depicts (or was inspired by) papyrus. For a "naturalistic" rendering of papyri, see *CMS* VS1A 46 from Ayios Charalambos.

§28.2. We should take note that *Cyperus papyrus* is a tall, robust, *leafless* aquatic plant and can grow 4 to 5 m (13 to 16 ft) high. It also seemed curious to me to use a "conventional designation" that might not, or absolutely did not, imply any connection at all with the thing designated. In my own case, not being a seal specialist, I certainly took the identification as "'papyrus' flower" to mean at least a probable connection with the flower of *Cyperus papyrus* itself.

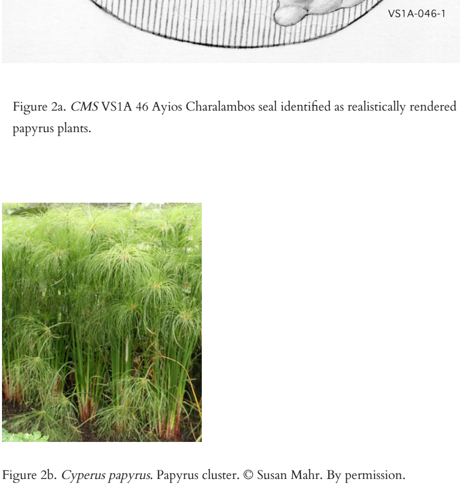


Figure 2a. *CMS* VS1A 46 Ayios Charalambos seal identified as realistically rendered papyrus plants.

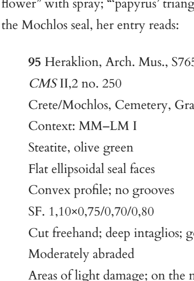


Figure 2b. *Cyperus papyrus*. Papyrus cluster. © Susan Mahr. By permission.

§29.1. Indeed, Maria Anastasiadou (2011, 1:429) lists 'papyrus' among many kinds of devices in the seal images and has created sub-categories: "'papyrus' blossom"; "'papyrus' flower" with spray; "'papyrus' triangle"; "unidentifiable motif" XXXVII (?). Concerning the Mochlos seal, her entry reads:

> **95** Heraklion, Arch. Mus., S765
> *CMS* II,2 no. 250
> Crete/Mochlos, Cemetery, Grave X
> Context: MM–LM I
> Steatite, olive green
> Flat ellipsoidal seal faces
> Convex profile; no grooves
> SF. 1,10×0,75/0,70/0,80
> Cut freehand; deep intaglios; good workmanship
> Moderately abraded
> Areas of light damage; on the motif on (a),
> break into the stringhole channel
>
> (a) 'Papyrus flower', spiral stem to the right,
> horizontally hatched blossom.
> (b) Whirl, left-facing.
> (c) Framed Saltire, linear rectangular Border.
> Malia/Eastern Crete Steatite Prism

§29.2. Her note 2532 cites Jasink (2009:138).

§30. My next move was to see what natural scientists thought about the image in question. David Hillis, a MacArthur fellow and colleague of mine at University of Texas at Austin, wrote (personal communication May 31, 2021):

> I would be very surprised if papyrus plants looked any different 3 or 4 thousand years ago than they do today. That is a very short time from an evolutionary perspective.
>
> The plant (*Cyperus papyrus*) is commonly used as an ornamental in wetlands and ponds around Austin, so you should have no trouble examining it in person. I know of no reason it would look substantially different from what it looked like in Egypt [in the second millennium BCE].

§31. George Yatskievitch, curator of the Plant Resources Center at University of Texas at Austin, reacted to images I had sent, some of which will be discussed later, and stated (personal communication June 24, 2021):

> It is easy to agree that the plants in question are not papyrus. Nor do the images represent some fanciful papyrus-reed hybrid, as suggested in some accounts. Papyrus and reed are both in the general plant group of monocots, which usually have parallel veins in their leaves and both plants have long, grass-like leaves (which I am not seeing in the images that you sent).
>
> That is the easy part. Most of the Minoan plants that artists portrayed seem to be fairly readily associated with modern species. If that were the case here, someone would have made the association long ago. That is what makes the one that has hidden under the name of papyrus so perplexing. I have been spending time with photographic guides to the regional flora without much success. There are actually relatively few plant groups in the region with inflorescences that are similar to those in the images.
>
> The best guide to the local flora is Fielding and Turland 2005.
>
> Based on its coverage, two plant families come to mind, but neither is a perfect fit. First there is the *Apiaceae* (aka. *Umbelliferae*), the carrot family. It has numerous members with generally similar inflorescence structure. The things that do not fit are that the leaves are mostly dissected, rather than entire, and the basal portion of the leaf petiole is usually inflated or at least expanded. The other potential family is the *Euphorbiaceae*, the spurge family. A number of species of the genus *Euphorbia* have superficially similar inflorescences, although they tend to be more ball-shaped rather than flat-topped. The leaves often do not have prominent side-veins.

§32. As mentioned above (end of §29), Anastasiadou (2011, 2:516) pinpoints the Mochlos seal and refers (note 2352) to Jasink (2009:138) as a precedent for calling the image on the Mochlos seal "'papyrus' flower." But, insofar as I could find, Jasink (2009:137–138, 13–14) never refers to this symbol as papyrus or as a flower, but always as a "scroll." Jasink cites Sir Arthur Evans as referring to it as a "trumpet" or "coil" (Evans 1909:230).

Section 2: Fresco Images from Pylos and Knossos

§33. Plants are also identified as papyrus in two fresco images from central and important areas (the so-called throne rooms) of the so-called Palace of Minos at Knossos and the Palace of Nestor at Pylos. These identifications are puzzling, too. The images of the plants as preserved and reconstructed are the images that Yatskievitch (above §31) states are not

as preserved and reconstructed are the images that Yatskievich (above §31) states are *not* papyrus and *not* papyrus-reed hybrids.

§34.1. We take up first the fresco fragment from the Palace of Nestor Room 17 (but clearly fallen into this room from the South-West wall of the megaron hearth-throne room Room 6).

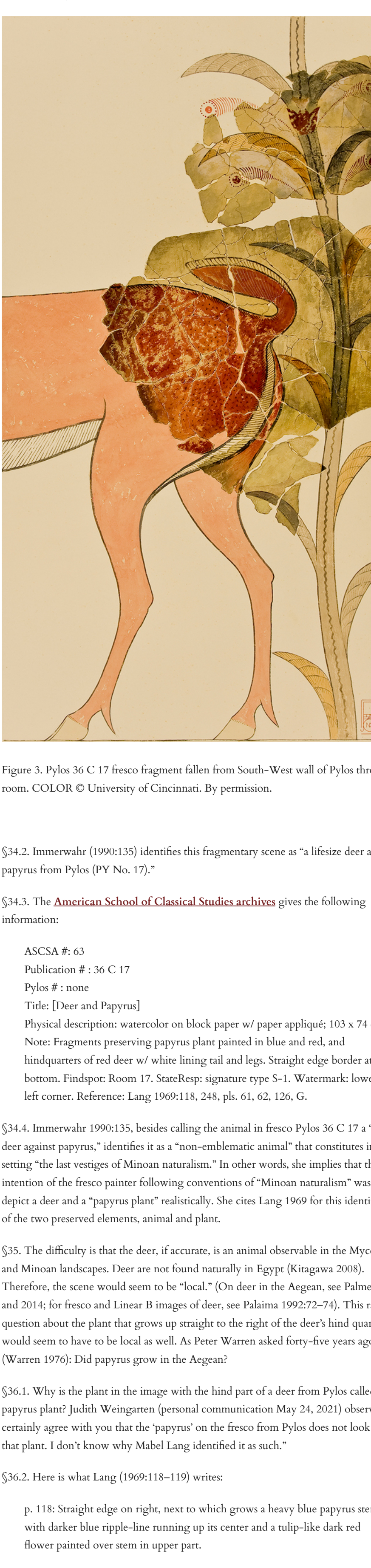


Figure 3. Pylos 36 C 17 fresco fragment fallen from South-West wall of Pylos throne room. COLOR © University of Cincinnati. By permission.

§34.2. Immerwahr (1990:135) identifies this fragmentary scene as "a lifesize deer against papyrus from Pylos (PY No. 17)."

§34.3. The American School of Classical Studies archives gives the following information:

> ASCSA #: 63
> Publication # : 36 C 17
> Pylos # : none
> Title: [Deer and Papyrus]
> Physical description: watercolor on block paper w/ paper appliqué; 103 x 74 cm
> Note: Fragments preserving papyrus plant painted in blue and red, and hindquarters of red deer w/ white lining tail and legs. Straight edge border at bottom. Findspot: Room 17. StateResp: signature type S-1. Watermark: lower left corner. Reference: Lang 1969:118, 248, pls. 61, 62, 126, G.

§34.4. Immerwahr 1990:135, besides calling the animal in fresco Pylos 36 C 17 a "lifesize deer against papyrus," identifies it as a "non-emblematic animal" that constitutes in its setting "the last vestiges of Minoan naturalism." In other words, she implies that the intention of the fresco painter following conventions of "Minoan naturalism" was to depict a deer and a "papyrus plant" realistically. She cites Lang 1969 for this identification of the two preserved elements, animal and plant.

§35. The difficulty is that the deer, if accurate, is an animal observable in the Mycenaean and Minoan landscapes. Deer are not found naturally in Egypt (Kitagawa 2008). Therefore, the scene would seem to be "local." (On deer in the Aegean, see Palmer 2012 and 2014; for fresco and Linear B images of deer, see Palaima 1992:72–74). This raises the question about the plant that grows up straight to the right of the deer's hind quarters. It would seem to have to be local as well. As Peter Warren asked forty-five years ago (Warren 1976): Did papyrus grow in the Aegean?

§36.1. Why is the plant in the image with the hind part of a deer from Pylos called a papyrus plant? Judith Weingarten (personal communication May 24, 2021) observes: "I certainly agree with you that the 'papyrus' on the fresco from Pylos does not look like that plant. I don't know why Mabel Lang identified it as such."

§36.2. Here is what Lang (1969:118–119) writes:

> p. 118: Straight edge on right, next to which grows a heavy blue papyrus stem with darker blue ripple-line running up its center and a tulip-like dark red flower painted over stem in upper part.
>
> What appear to be flowers spring from the stem below the upper leaves in a series of dots which gradually change to dashes and then concentric arcs before culminating in a dot rosette, all in dark red.
>
> p. 199: The papyrus which appears with the Throne Room Griffin in Knossos differs in having no flowers such as these: it has blue stems and feathery blue leaves which alternate with long red petals. Cf. [Furumark 1972] Motive 18 (C62) for papyrus on vases.

§37. The last image data come from the so-called throne room of the so-called Palace of Minos at Knossos. Here fortunately there is a recent, admirably comprehensive and exacting study of the wall imagery: Galanakis, Tsitsa, and Günkel-Maschek 2017.

§38. The image data from Knossos show griffins in settings that have plants. Galanakis, Tsitsa, and Günkel-Maschek (2017:52) explain:

> The painted fragments on the north-east wall show four plants with dark blue-grey stems and leaves with red flowers. The two tall ones in the middle look more like *papyrus-reed hybrids*, what Evans first identified as "*sedges or rushes*." They were perhaps similar to the other papyrus-reed plants found elsewhere in the room. The other two plants, on either side of the two taller plants, probably depicted some kind of *fern or hybridized papyrus-lotus*. They are similar to the 'waz' (papyrus) motif on the shoulder of the best-preserved griffin from the south part of the west wall (more below). Similar plants and "flowers" appear on both parts of the west wall. [Emphasis mine.]

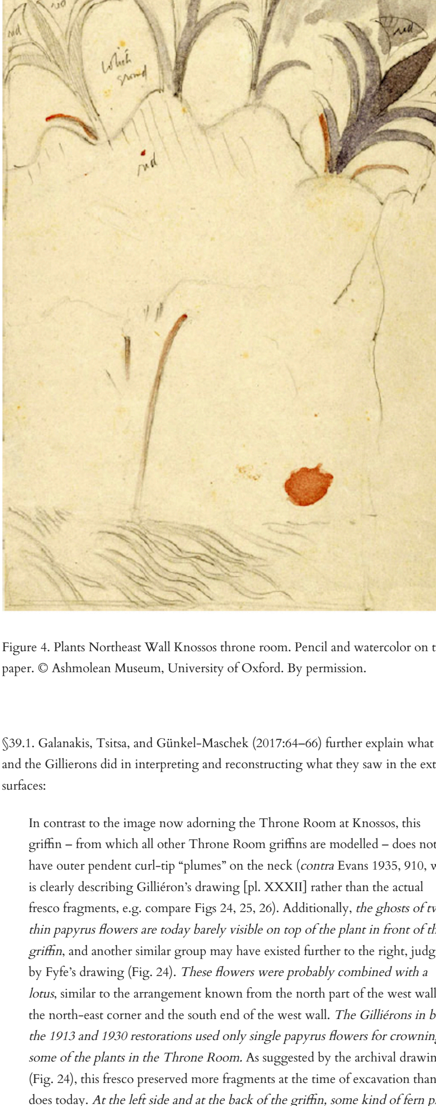


Figure 4. Plants Northeast Wall Knossos throne room. Pencil and watercolor on tracing paper. © Ashmolean Museum, University of Oxford. By permission.

§39.1. Galanakis, Tsitsa, and Günkel-Maschek (2017:64–66) further explain what Evans and the Gillierons did in interpreting and reconstructing what they saw in the extant wall surfaces:

> In contrast to the image now adorning the Throne Room at Knossos, this griffin – from which all other Throne Room griffins are modelled – does not have outer pendent curl-tip "plumes" on the neck (*contra* Evans 1935, 910, who is clearly describing Gilliéron's drawing [pl. XXXII] rather than the actual fresco fragments, e.g. compare Figs 24, 25, 26). Additionally, *the ghosts of two thin papyrus flowers are today barely visible on top of the plant in front of the griffin*, and another similar group may have existed further to the right, judging by Fyfe's drawing (Fig. 24). *These flowers were probably combined with a lotus*, similar to the arrangement known from the north part of the west wall, the north-east corner and the south end of the west wall. *The Gilliérons in both the 1913 and 1930 restorations used only single papyrus flowers for crowning some of the plants in the Throne Room.* As suggested by the archival drawing (Fig. 24), this fresco preserved more fragments at the time of excavation than it does today. *At the left side and at the back of the griffin, some kind of fern plant (most likely a hybridised papyrus–lotus flower) was preserved*, in a similar position to the plants on the north part of the west wall, and also on the north-east wall mentioned above (Figs 7, 17b). [Emphasis mine.]

§39.2. We can see here that restoration included some imaginative supplementation, but not too much. Furthermore, rather than look to what would have been the contemporary natural world for the Minoan fresco painters, the scholarly tradition relies on seeing the plants in these images as hybrid combinations (papyrus-lotus hybrids) or as generally in the manner of "some kind of fern plant."

§40. Turning again to our tame modern natural scientists, one key feature that rules out identifying the Knossos or Pylos frescoes or the Ayios Charalambos seal image as a papyrus plant is that all these images have evenly spaced leaves along both sides of the long stems of the plants. These are not found on papyrus.

§41.1. Nicholas Turland (personal communication July 15, 2021) states:

> While the Knossos throne room plants might depict *Lilium candidum* (figure 5) the Pylos megaron plant seems too tall, at least 1 m. tall, in relation to the deer.

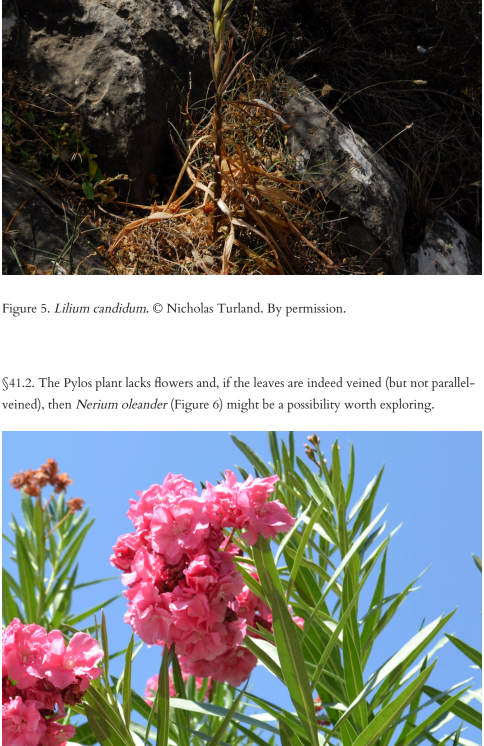


Figure 5. *Lilium candidum*. © Nicholas Turland. By permission.

§41.2. The Pylos plant lacks flowers and, if the leaves are indeed veined (but not parallel-veined), then *Nerium oleander* (Figure 6) might be a possibility worth exploring.

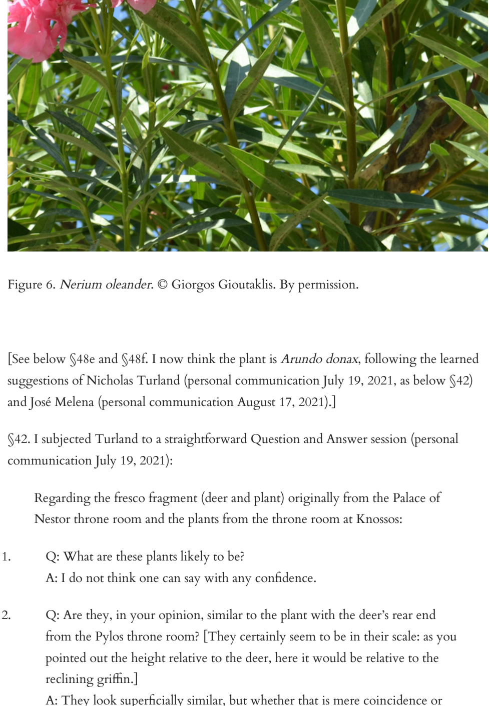


Figure 6. *Nerium oleander*. © Giorgos Gioutaklis. By permission.

[See below §48e and §48f. I now think the plant is *Arundo donax*, following the learned suggestions of Nicholas Turland (personal communication July 19, 2021, as below §42) and José Melena (personal communication August 17, 2021).]

§42. I subjected Turland to a straightforward Question and Answer session (personal communication July 19, 2021):

> Regarding the fresco fragment (deer and plant) originally from the Palace of Nestor throne room and the plants from the throne room at Knossos:

1. Q: What are these plants likely to be?
   A: I do not think one can say with any confidence.
2. Q: Are they, in your opinion, similar to the plant with the deer's rear end from the Pylos throne room? [They certainly seem to be in their scale: as you pointed out the height relative to the deer, here it would be relative to the reclining griffin.]
   A: They look superficially similar, but whether that is mere coincidence or because there is some relationship between them I cannot say.
3. Q: Is there any justification for speaking of papyrus-reed hybrids or hybridized papyrus lotus?
   A: It seems to me that they are fanciful plants, like the griffin is a fanciful animal. Yes, it seems plausible that they were inspired by lotus (Nelumbo) and reeds (Arundo or Phragmites).

§43.1. Turland's speaking of "fanciful plants," especially in the context of griffins, echoed what Galanakis had to say (personal communication July 19, 2021):

> Our effort was not to identify the plants (we are actually, all three authors, not certain if the plants are meant to directly 'imitate' exactly natural specimens – but of course, as above, we would be more than happy for your input on this matter!) I, personally, wouldn't have a problem if they are not 'papyri' as such! That's why we also speak of "hybrids," "papyrus-reed" etc. To denote uncertainty.

§43.2. Galanakis also clarifies that Evans seems to have changed his mind, calling the plants in early reports "rushes" or "ferns" or "sedges" (e.g. Evans 1899–1900:41) but later mentioning specifically "papyrus" (Evans 1935:892).

§44.1. The last data and ideas in this investigation are among the first in what we might call the modern period of new archaeology. Peter Warren (1976:89–95) argues from fresco images on the south and west walls of the Room of the Ladies at Thera (Figure 7) that the plants there *are* papyrus characterized by the following characteristics:

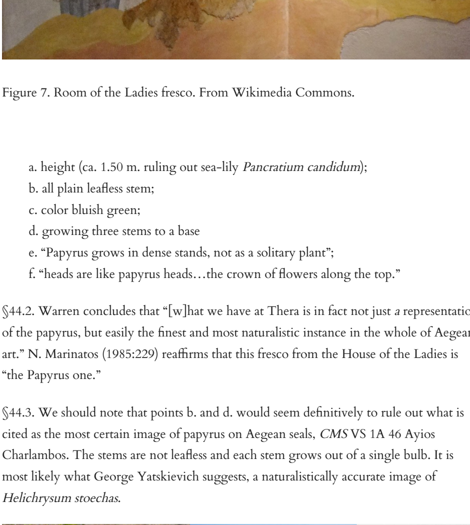


Figure 7. Room of the Ladies fresco. From Wikimedia Commons.

> a. height (ca. 1.50 m. ruling out sea-lily *Pancratium candidum*);
> b. all plain leafless stem;
> c. color bluish green;
> d. growing three stems to a base
> e. "Papyrus grows in dense stands, not as a solitary plant";
> f. "heads are like papyrus heads…the crown of flowers along the top."

§44.2. Warren concludes that "[w]hat we have at Thera is in fact not just a representation of the papyrus, but easily the finest and most naturalistic instance in the whole of Aegean art." N. Marinatos (1985:229) reaffirms that this fresco from the House of the Ladies is "the Papyrus one."

§44.3. We should note that points b. and d. would seem definitively to rule out what is cited as the most certain image of papyrus on Aegean seals, *CMS* VS 1A 46 Ayios Charlambos. The stems are not leafless and each stem grows out of a single bulb. It is most likely what George Yatskievich suggests, a naturalistically accurate image of *Helichrysum stoechas*.

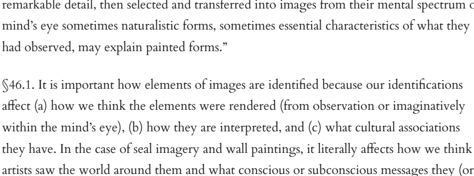


Figure 8. *Helichrysum stoechas*. Comparanda.

Figure 8a (above left). *Helichrysum*. © Giorgos Gioutaklis. By permission.

Figure 8b (above center). *Helichrysum*. © Giorgos Gioutaklis. By permission.

Figure 8c (above right). *CMS* VS 1A 46.

§45. Warren (2000:378) also later develops a theory that perhaps permits us to straddle to some degree the divide between fantastic plants or even non-existent hybrids and lifelike representations: "A theory of vision, namely that painters observed real world forms in remarkable detail, then selected and transferred into images from their mental spectrum or mind's eye sometimes naturalistic forms, sometimes essential characteristics of what they had observed, may explain painted forms."

§46.1. It is important how elements of images are identified because our identifications affect (a) how we think the elements were rendered (from observation or imaginatively within the mind's eye), (b) how they are interpreted, and (c) what cultural associations they have. In the case of seal imagery and wall paintings, it literally affects how we think artists saw the world around them and what conscious or subconscious messages they (or the elite patrons who commissioned their work) wanted to convey to individuals who had access to such places of prestige, power and perhaps even sanctity.

§46.2. Given the strong later Egyptian associations of papyrus, it is important to know whether an image is a borrowing or adaptation from Egyptian sources or a rendering of a plant that could grow, and be visible, in certain environments in the Aegean in the second-millennium BCE.

§47. I hope this sets the table well for Janice Crowley, Judith Weingarten, and our other discussants, especially George Yatskievich, who has kindly joined us today in order to share his perspectives as a botanist.

Addendum

§48.1. After the seminar on July 23, 2021 and in many email exchanges with José Melena, it has become clear to me that much more work needs to be done on this entire topic. Going back in time, it is clear to see that, early on, certain notions about the abilities of Aegean artists *both* to observe closely and represent carefully the natural world around them *and*, it was then argued, to "hybridize" elements in depicting the natural world, principally under Egyptian and near Eastern influence (Kantor 1947 and 1999; Möbius 1933), were put forward and became a standard way of dealing with images in various media. Inadvertently this opened a kind of iconographical Pandora's box in determining what artists were trying to represent and the nature of decorative motifs.

§48.2. Two key studies in regard to representations of plant were Möbius 1933 and Kantor 1945 (reissued 1999) and 1947, both scholars being in tune with and sensitive to — not to say, susceptible to — the possibility (and undeniable probability) of original and continuing Near Eastern and Egyptian influence within Aegean artistic traditions. One of the foundational citations is "the monkeys and *conventionalized* papyrus tufts on the panels of the House of the Frescoes" at Knossos (Evans 1928:361). Kantor (1947) speaks of papyrus motives as "characteristic" (1947:61) and "degenerate" (1947:22) and to the real difficulty of determining whether an element in Aegean painting results from contemporary influence or "convergent traditions." The real danger here, it strikes me, is divorcing the artistic process from real-life observation (or eidetic memory) and using "hybridization" as a default explanatory device for identifying a plant in an image. Cross-cultural hybrids also problematize the meaning of images. What meaning would a 'papyrus' element impart? That being said, it is undeniable that hybrid animals play a significant role in Aegean iconography (cf. most recently Anastasiadou 2021; Blakolmer 2021; Krzyszkowska 2021).

§48.3. Möbius (1933:2, 17–19) classifies the *Cyperus papyrus* as non-indigenous in the Aegean and only attested in Sicily in the Mediterranean. (But see Warren 1976, who argues for specific Aegean environs as suitable for papyrus.) He subjects canonical images such as the "Fresko mit dem Affen" at Knossos to botanical scrutiny, noting the leafless stem as a key feature that gets the papyrus right. Writing before the discovery of the frescoes from the House of the Ladies discussed by Warren (§44), Möbius (1933:18) concludes from his limited sample of images that the true characteristics of the papyrus in nature would have remained *fremd*, i.e. foreign and therefore unknown, to most Minoan artists (making exception for those who did travel to Egypt during their working careers), which is why they never really portrayed papyrus *naturgetreu*. But it would seem good to ask why palatial-level artists would construct toolkits of images and component motives that would be made up of misunderstood "wholes" and "degenerate," i.e. inaccurately rendered, "parts"?

§48.4. Besides Warren (1976 and 2000), a counteraction to hybridity is the close study by Vlachopoulos (2000:632–633) of the reed bed fresco from Xeste 3 at Thera, the varying details of individual plants being such that he concludes:

> Two kinds of reeds are depicted, yellow ones and grey-blue ones, a combination of a warm and a cold colour familiar in the Theran wall paintings. The yellow reeds were painted first and the grey-blue later, which sequence gives depth and perspective to the composition. Only a few of the yellow reeds

here tells that seem to be fairly evenly distributed in the composition.

The image of the ruler's pavilion. The painter has profited from knowledge of the plant and conveys details such as the way in which the leaf sheet overlaps the flower, the elegant curvature of the shoot and the convex or concave bulges of the vessel walls that seem to be fairly evenly distributed in the composition.

[§6.3. This being so hard, to our conclusion, to the cell plants with single walls and leaves accounted with gallus [§7.1.2]]
[§7.1.2]
[§7.1.2]
[§7.1.2

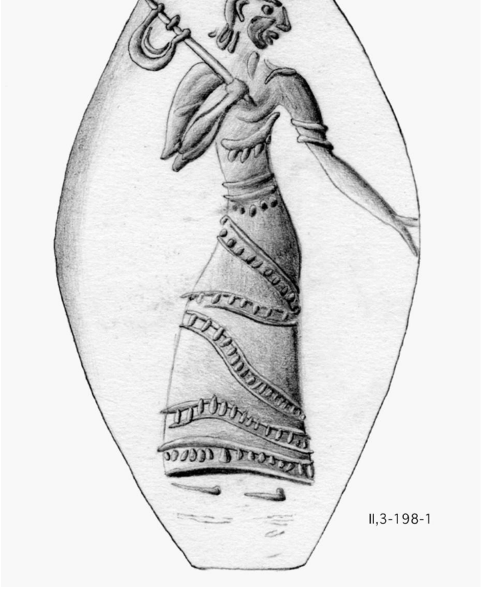


Figure 17. Single axe (fenestrated axe). *CMS* II.3 198 (LM I).

§61. Of all the floral/foliate motifs regularly used in Aegean seal images only the one labelled here by the artistic term, papyrus, seems to resemble the Egyptian botanical specimen, *Cyperus papyrus*. The question then is whether this is only a superficial similarity and the Aegean papyrus is a local plant or whether the Aegean papyrus is connected in some way to the Egyptian papyrus. Other speakers are pursuing the indigenous plant origin and to the ones already noted we should add the sea daffodil, *Pancratium maritimum*, which many have argued is the inspiration for the Aegean papyrus. However I turn to explore the possibility that the ultimate source is, indeed, the Egyptian papyrus.

Aegean Iconography: Interpreting the Images

§62. The source of the Aegean papyrus

§62.1. There is a strong case to be made that the Aegean papyrus came across to Crete as one of a raft of Egyptian/Eastern influences that entered Minoan art in EM and MM and which can be traced in the seals (see Crowley 1989 and 2021).

§62.2. These include the use of hippopotamus ivory for the seal material and the monkey and lion for the seal shape as well as the palm and palmette motifs and exotic animals and fantastic creatures. Of these latter, the monkey, lion, griffin, dragon and genius form a powerful group, which I have recently called the Fabulous Five (see Crowley 2021).

§62.3. By LM times, these creatures came to dominate the supernatural landscape which is regularly shown with Aegean papyrus plants as in Figures 18a and 18b.

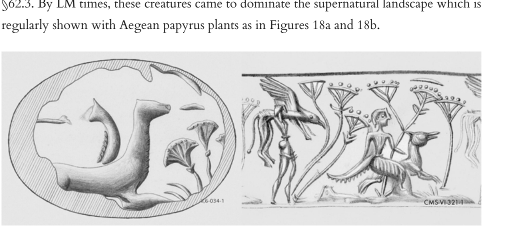


Figure 18. Papyrus landscape in Aegean art.

Figure 18a (above left). *CMS* II.6 34 (LM I).

Figure 18b (above right). *CMS* VI 321 (LM I–LM II).

§63. The Egyptian papyrus in nature and in art

§63.1. In Figure 19 a marshy thicket of the sedge plant *Cyperus papyrus* is shown with its characteristic tangle of flowering stalks.

Figure 19. *Cyperus papyrus.*

§63.2. However the Egyptian artist did not see the plant in this disordered effusion and even in Old Kingdom times has organized the natural forms into orderly rows and neat fan-shaped florets. When color was added, as seen in Figure 20, details were featured in pinkish brown.

Figure 20. Wall painting of a papyrus thicket in color.

§63.3. The basic shape is encapsulated in the papyrus hieroglyph in Figure 21.

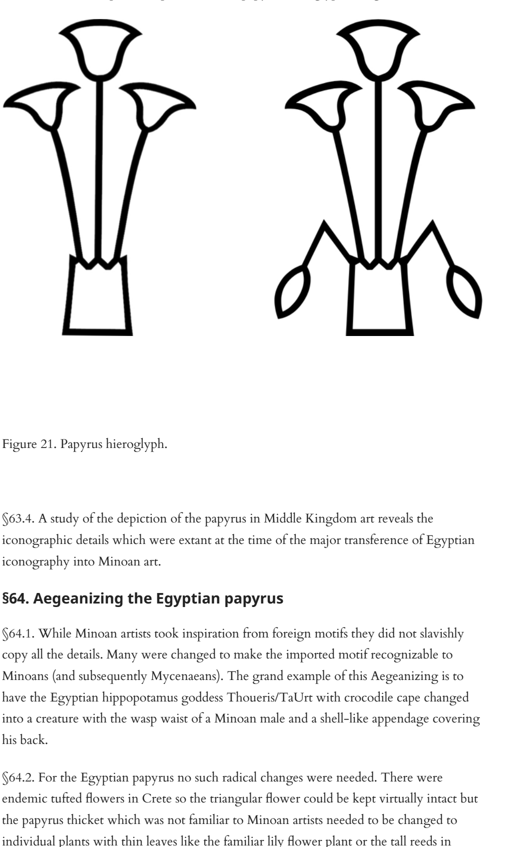


Figure 21. Papyrus hieroglyph.

§63.4. A study of the depiction of the papyrus in Middle Kingdom art reveals the iconographic details which were extant at the time of the major transference of Egyptian iconography into Minoan art.

§64. Aegeanizing the Egyptian papyrus

§64.1. While Minoan artists took inspiration from foreign motifs they did not slavishly copy all the details. Many were changed to make the imported motif recognizable to Minoans (and subsequently Mycenaeans). The grand example of this Aegeanizing is to have the Egyptian hippopotamus goddess Thoueris/TaUrt with crocodile cape changed into a creature with the wasp waist of a Minoan male and a shell-like appendage covering his back.

§64.2. For the Egyptian papyrus no such radical changes were needed. There were endemic tufted flowers in Crete so the triangular flower could be kept virtually intact but the papyrus thicket which was not familiar to Minoan artists needed to be changed to individual plants with thin leaves like the familiar lily flower plant or the tall reeds in Minoan streams. Some knowledge of the original marshy landscape in Egypt may have lingered in artistic/folk memory to aid in the creation of the Aegean papyrus and this remembrance is likely to have been strengthened by continuing Late Bronze contacts. Minoan artists employed the Aegean papyrus to create a fantasy landscape to be the home of supernatural beings as in Figures 18a and 18b (see above §62).

§64.3. Further elaboration by Aegean artists saw the papyrus made the focus of symbolic representations as in Figure 22.

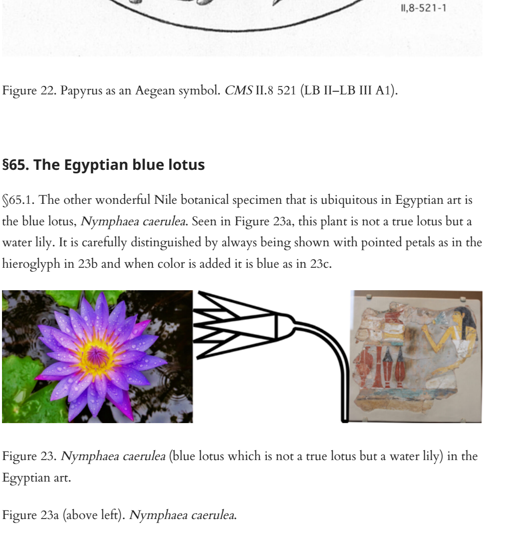


Figure 22. Papyrus as an Aegean symbol. *CMS* II.8 521 (LB II–LB III A1).

§65. The Egyptian blue lotus

§65.1. The other wonderful Nile botanical specimen that is ubiquitous in Egyptian art is the blue lotus, *Nymphaea caerulea*. Seen in Figure 23a, this plant is not a true lotus but a water lily. It is carefully distinguished by always being shown with pointed petals as in the hieroglyph in 23b and when color is added it is blue as in 23c.

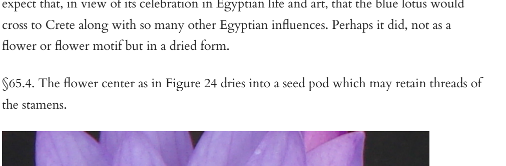


Figure 23. *Nymphaea caerulea* (blue lotus which is not a true lotus but a water lily) in the Egyptian art.

Figure 23a (above left). *Nymphaea caerulea.*

Figure 23b (above center). Blue lotus hieroglyph.

Figure 23c (above right). Wall painting showing a blue lotus in color.

§65.2. The Egyptians valued it for its perfume (this is the flower that is being held up to the face in many illustrations) and for its sedatory and other effects (the plant contains apomorphine and nuciferine).

§65.3. Dominant motifs in the East do not always transfer to the Aegean but one might expect that, in view of its celebration in Egyptian life and art, that the blue lotus would cross to Crete along with so many other Egyptian influences. Perhaps it did, not as a flower or flower motif but in a dried form.

§65.4. The flower center as in Figure 24 dries into a seed pod which may retain threads of the stamens.

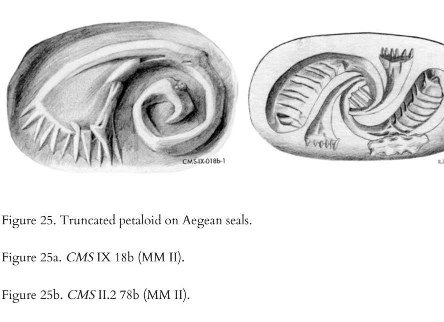


Figure 24. Blue lotus flower center.

§65.5. It is possible that this is the inspiration for the truncated petaloid which features in Minoan seal images in MM II as Figures 25a and 25b, as well as in the previously shown seals in Figures 14a and 14b (see above §58).

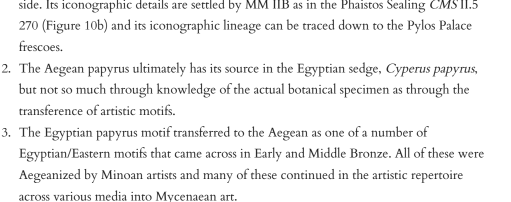


Figure 25. Truncated petaloid on Aegean seals.

Figure 25a. *CMS* IX 18b (MM II).

Figure 25b. *CMS* II.2 78b (MM II).

§66. Summary of the Aegean-Egyptian Papyrus Connection

1. The Aegean papyrus is a triangular shaped flower with a frilly/fuzzy curved top and, when shown as a plant, it has a long thin stalk with lanceolate leaves sprouting each side. Its iconographic details are settled by MM IIB as in the Phaistos Sealing *CMS* II.5 270 (Figure 10b) and its iconographic lineage can be traced down to the Pylos Palace frescoes.
2. The Aegean papyrus ultimately has its source in the Egyptian sedge, *Cyperus papyrus,* but not so much through knowledge of the actual botanical specimen as through the transference of artistic motifs.
3. The Egyptian papyrus motif transferred to the Aegean as one of a number of Egyptian/Eastern motifs that came across in Early and Middle Bronze. All of these were Aegeanized by Minoan artists and many of these continued in the artistic repertoire across various media into Mycenaean art.
4. In the case of the papyrus some knowledge of its marshy origin seems to have endured in the Aegean but, above all, it domiciled there as the landscape of the supernatural world in which anthropomorphic deities and exotic and fantastic creatures displayed their power.
5. Because of its origin in botany and in art as the Egyptian papyrus and in view of the Minoan adaptations made on its welcome into Crete, this motif can be termed, both for reasons of iconographic description and iconographic interpretation, the Aegean papyrus.

§67. Bibliography

Crowley, J. 1989. *The Aegean and the East: An Investigation into the Transference of Artistic Motifs between the Aegean, Egypt, and the Near East in the Bronze Age.* Jonsered.

Crowley, J. 2013. *The Iconography of Aegean Seals.* Leuven-Liège.

Crowley, J. 2020. "Reading the Phaistos Sealings: Taking the Textbook Approach of Iconographic Analysis." In *Current Approaches and New Perspectives in Aegean Iconography*, ed. F. Blakolmer, 19–46. Leuven.

Crowley, J. 2021. "The Fabulous Five: Monkey, Lion, Griffin, Dragon, Genius." In *ZOIA: Animal-Human Interactions in the Aegean Middle and Late Bronze Age: Proceedings of the 18th International Aegean Conference, originally to be held at the Program in Aegean Scripts and Prehistory, in the Department of Classics, the University of Texas at Austin, May 28–31, 2020*, ed. R. Laffineur and T. Palaima, 199–213, XLI–XLV. Leuven.

The Papyrus Dilemma, 3

Presenter: Judith Weingarten

§68. [Editors' note: During the Summer 2021 MASt@CHS seminar, Judith Weingarten presented an overview of the papyrus motif in Aegean art. For the report, Weingarten chose to summarize the three main points she addressed during the presentation and that, in her view, set the foundation of any serious study of papyrus in the Aegean. Her report uses first person.]

§69.1. In my opinion, the picture of papyrus originally came from Egypt, probably at much the same time as Taweret, Bes, the sphinx, and a host of other images, in (or not long before) MM IIB. If one agrees with this, it is imperative to begin any study in Middle Kingdom Egypt: how did they picture papyrus in different media at approximately that time?

§69.2. Egyptian iconography is neither monolithic nor unchanging; later examples will not do! Please note that the Middle Kingdom image was itself highly stylized: the sharp, triangular form with a fringe is not really how the plant looks as the umbel opens, which is the moment, I think, that they are depicting.

§69.3. There are a few Middle Minoan images among Anastasiadou's 'papyrus' plates that look quite close to how the Egyptians were then picturing the plant.

§70.1. From that moment on, the Minoans would make changes — if they were copying images rather than live plants (as I think they were), there were anyway few points of reference even if botanical accuracy was important to them.

§70.2. Such changes can be very quick — as with Taweret developing into the early Minoan Genius still within MM IIB. Some parts stay the same while those that make little sense to Minoan artisans will swiftly change.

§70.3. Hence, I find nothing strange in their picturing papyrus with leaves on the stalks. The essence remains the triangular head with fringes.

§71.1. Minoan artists also sometimes intentionally hybridized. I briefly discussed this tendency in Weingarten 1989: a "merging of categories — whether in birds, fish, plants, mammals, or in the ambiguities of the Zakro monsters — is typical of Minoan thinking, not of artistic license."

§72.2. And, on plants, I added a long footnote citing Peter Warren's *The Fresco of the Garlands from Knossos* (Warren 1985), of which Garland 4 (olive? myrtle? butcher's broom? or all three intermingled?) is in my opinion a good example of the phenomenon. This is still an understudied phenomenon.

§73. Bibliography

Warren, P. 1985. "The Fresco of the Garlands from Knossos." In *L'Iconographie minoenne. Actes de la table ronde d'Athènes (21–22 avril 1983)*, ed. P. Darque and J.-C. Poursat, 187–208. Athens.

Weingarten, J. 1989. "Formulaic Implications of Some Late Bronze Age Three-sided Prisms." In *Fragen und Probleme der bronzezeitlichen ägäischen Glyptik. Beiträge zum 3. Internationalen Marburger Siegel-Symposium*, ed. I. Pini, 299–313. Corpus der minoischen und mykenischen Siegel, Beiheft 3. Berlin.

The Papyrus Dilemma, 4: Comparing the Mochlos image with Egyptian lotus

By Rachele Pierini

§74. A tight iconographic connection between the Mochlos motif and the Egyptian representations of the lotus flower has vividly emerged during the The Papyrus Dilemma presentation. Hence, after the seminar I discussed this connection with the Egyptologist Chiara Spinazzi-Lucchesi, a Marie Skłodowska Curie fellow at the Center for Textile Research and my colleague at the University of Copenhagen.

§75. According to Spinazzi-Lucchesi, the Mochlos motif is not Egyptian or Egyptianising in its strict meaning. Rather, she is keen to assume that, whatever it represents, it has originated within the Minoan culture or it has been highly reinterpreted by Minoans.

§76. To hypothesize a comparison between the Mochlos image and Egyptian motifs, Spinazzi-Lucchesi proposed the lotus flower. She remarked that the lotus flower is a very common motif in Egyptian iconography. Its popularity is due to cosmogonic traditions identifying in the lotus flower a symbol of rebirth since they pass down that a lotus bud came to light from the original ocean and, once it opened, the god Ra was born from it, giving origin to life. Therefore — Spinazzi-Lucchesi continued — the lotus flower is commonly represented on funerary items, as well as everyday cosmetic objects, since the Old Kingdom (Guidotti 2005:99).

§77. Asked how to distinguish the lotus flower from other plants like papyrus, Spinazzi-Lucchesi drew attention to two points. First, the three or four triangular points coming out from a triangular large body are a key feature to identify the lotus flower in stylized representations. Second, lotus flower images usually include an extension that represent the stem of the plant. By way of example of both features, Spinazzi-Lucchesi provided two images, namely a schematic representation on a spindle whorl from the Museo Egizio in Turin (Figure 26) and the hieroglyphic sign M9 from the Gardiner sign list (Figure 27).

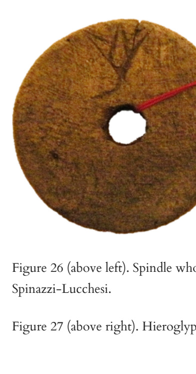
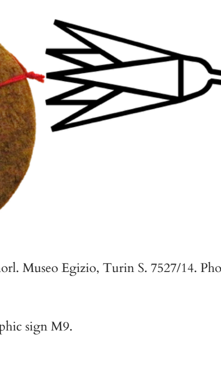



Figure 26 (above left). Spindle whorl. Museo Egizio, Turin S. 7527/14. Photo by Spinazzi-Lucchesi.

Figure 27 (above right). Hieroglyphic sign M9.

§78. Finally, I asked Spinazzi-Lucchesi what parts of the Egyptian lotus flower are supposed to represent the internal vertical and oblique lines on the Mochlos motif (Figure 28). She hypothesized that the internal lines are a cursive representation of lotus flower's petals, as shown on the seal from Tell el-Ajjul (Figure 29).

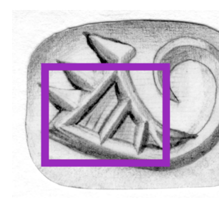
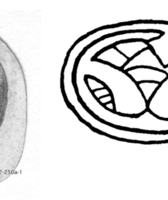



Figure 28 (above left).The Mochlos seal (*CMS* II.2 250a), with the internal lines highlighted.

Figure 29 (above right). The seal Tell el-Ajjul (from Keel 1997 n. 431).

§79. Bibliography

Guidotti, M. C. 2005. “Nefertum e Seshat, divinità legate alla bellezza.” In *Igiene e bellezza nell’antico Egitto*, ed. E. Bresciani et al., 97–101. Sansepolcro.

Keel, O. 1997. *Corpus der Stempelsiegel-Amulette aus Palästina/Israel: Von den Anfängen bis zur Perserzeit: Katalog Band I: Von Tell Abu Farağ bis ’Atlit*, Freiburg and Göttingen. https://doi.org/10.5167/uzh-142340.

Discussion following the Papyrus Dilemma presentation

§80. Maria Anastasiadou bridged the presentation part with the debate session by clarifying that she chose the single quotation marks, i.e. ‘papyrus’, as a device to convey the message that (i) the motif on the Mochlos seal does *not* need to represent an actual papyrus and (ii) ‘papyrus’ is *only one possible way* to refer to this motif [emphasis by the editors].

§81. Janice Crowley remarked two points: (i) particular seal images might have a long lineage, as all the above-mentioned analyses of the papyrus artistic reproductions show; (ii) it is important to see the early transfer of the papyrus iconography as having taken place by the end of MM II, on which Judith Weingarten agrees as well.

§82.1. Weingarten added onto Crowley’s observations by stressing that (i) Minoans did not know first-hand the papyrus plant but, rather, its Middle Kingdom Egyptian representations, which were not naturalistic; and (ii) Minoans minoanized imported images.

§82.2. Hence, Weingarten concluded that, by going through all these passages and re-interpretations, the papyrus became a fanciful motif, thus being coupled with fanciful creatures, such as the griffins.

The Ayios Charalambos seal (*CMS* VS 1A 46)

§83. A significant part of the discussion focused on the Ayios Charalambos seal (*CMS* VS 1A 46).

Figure 30. The Charalambos seal (*CMS* VS 1A 46).

§84. Weingarten remarked that the Ayios Charalambos seal shows a plant with leaves and the papyrus plant is leafless.

§85.1. George Yatskievich, the expert in botany to whom Palaima reached out, offered the following observations:

§85.2. First, the Ayios Charalambos seal with the stems having numerous alternate leaves is a different plant than appears in the frescoes. Helichrysum fits. It is an important Mediterranean genus with a long history of use for medicine, perfume, and a yellow dye.

§85.3. As for the frescoes, this is more difficult. However, a fanciful hybrid doesn’t seem to me in agreement with the Minoan “school of art.”

§85.4. Something like papyrus certainly appears to have become more stylized over time, but that abstraction is a simplification of the geometric shape, not the addition of naturalistic details, such as a stem angle or lateral veins on the leaves.

§85.5. Something else is going on that we have yet to elucidate. I had originally suggested a member of the *Apiaceae* (umbel family) or *Apocynaceae* (oleander family), but could not do any more than that.

§85.6. I also think that plant uses should figure into the discussion. For example, Minoans might not have grown papyrus, but they would likely have seen it.

§86.1. Tom Palaima particularly agreed with some of Yatskievich’s points and invited us to take them seriously and think about their implications. Specifically, Palaima drew attention to (i) the recognized importance of *Helichrysum* in a wide array of areas, which — Palaima added — increases the likelihood this plant would have been well known due to its utility; (ii) the doubts about the images on the frescoes as being fanciful hybrids; and (iii) the abstraction process as “a simplification of the geometric shape, not the addition of naturalistic details,” hence the hypothesis that the explanation relies somewhere else.

§86.2. Palaima also added the following observations (using first person):

§86.3. “Re the Ayios Charalambos seal, I agree that *Helichrysum stoechas*, as originally suggested I believe by Nicholas Turland and seconded by George Yatskievich, is the closest match. A further point in contrast to what I think is the one truest Aegean depiction of non-hybridized papyrus (those from the Room of the Ladies at Thera) is that if you look at the earth level on the Ayios Charalambos seal every plant is a singleton growing up out of the ground instead of the triplet as noted by Peter Warren and clear in Weingarten’s Egyptian images.

§86.4. “To me, lots of unnecessary either-or-ness seems to be going on here. Do we not all admit that Egyptian influence is undeniable?

§86.5. “Do we not all admit now that some of the fresco and seal images are likely to be hybrids derived either from a desire to create a fantastic realm in which to put fantastic creatures like griffins or from artistic license opened up by unfamiliarity with original Egyptian plants?

§86.6. “But does that rule out that some seal or wall painting artists would create images from autopsy and that papyrus might have grown in southern Crete or elsewhere in the Aegean and have been observed and rendered firsthand? As in the fresco from the Room of the Ladies or *Helichrysum stoechas* on the Ayios Charalambos seal? There are fresco images like those discussed from Pylos that *are* realistic: realistic animals, realistic plants, realistic objects.

§86.7. “These are real questions — pardon the pun, not rhetorical. So please chime in.

§86.8. “Likewise I understand now what Anastasiadou intended with ‘papyrus’.

§86.9. “I hope everyone sees that single quotes around a concept or object like papyrus is not the way to go in the future, especially when a citation leads to a source that, insofar as I have been able to find, does not use the word ‘papyrus’ or even ‘plant’ or ‘leaf’ to describe the motif. When non-specialists read such a designation they have no idea that the motif might not refer at all to a papyrus or any way of judging the degree of ambiguity implied by the single-quotes or the complexities of thinking involved in how to identify the motif.

§86.10. “As for the Knossos throne room wall frescoes with griffins and plants and the Pylos throne room fresco fragment, are we agreed that the flat identification as papyrus cannot stand?

§86.11. “Are we all agreed, too, that hybrid plants with features of x, y, z might be the way to go, at least for the Knossos throne room with the accompanying griffins: as gone already by Galanakis et al. in the 2017 *ABSA*. That is, unless George or Nicholas can come up with real life plants or would argue strongly for what I thought was their best option: *Nerium oleander*.

§86.12. “Keep in mind that the Palace of Nestor fragment has a lifelike, not fantastic, deer in it and the slides I excerpted address the non-Egyptian-ness of deer.

§86.13. “Crowley has pointed out the pitfalls of not having a centrally agreed upon vocabulary for identifying motifs on seals and sealings. Again this is not blame-casting. We all know this developed because of how the field developed and because of the many different contributors to the *CMS* over its long history. We are speaking here of refinements for the future. Nothing we have discussed should be construed as negative criticism of the truly fine scholars who have labored to bring us to the point where someone like me can make reasonably good use of truly excellent resources.”

§87.1. Mitrovich seconded Yatskievich’s comparison with the *Apiaceae* family, which include plants like dill, anise, fennel, carrot, caraway, and the inflorescence of which is characterized by its umbels, which look like the ribs of an umbrella and terminate with flowers on their ends.

§87.2. Mitrovich also observed that anise and dill leaves are pinnately divided into filiform or linear segments. She remarked that a simplified stylization in the depictions (especially on the tiny scale of glyptic) is not impossible and pointed out that the distinctive umbels of the *Apiaceae* plants might have a closer resemblance to the Ayios Charalambos motif than Helichrysum (*Asteraceae* family).

Figure 31a (above left). The anise plant (*Apiaceae* family).

Figure 31b (above right). The Charalambos seal (*CMS* VS 1A 46).

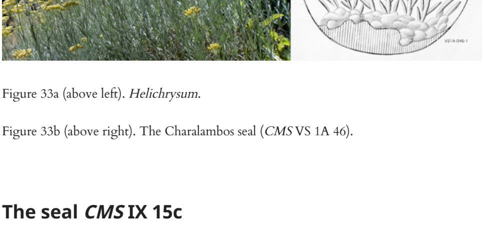


Figure 32a (above left). The dill plant (*Apiaceae* family).

Figure 32b (above right). The Charalambos seal (*CMS* VS 1A 46).

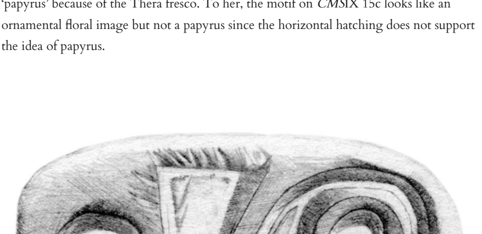


Figure 33a (above left). *Helichrysum*.

Figure 33b (above right). The Charalambos seal (*CMS* VS 1A 46).

The seal *CMS* IX 15c

§88. Weingarten pointed out that the motif on *CMS* IX 15c actually looks very much like a true papyrus motif and it is close to some Middle Kingdom Egyptian images.

§89. Anastasiadou replied that this is not certain and added that she chose the term ‘papyrus’ because of the Thera fresco. To her, the motif on *CMS* IX 15c looks like an ornamental floral image but not a papyrus since the horizontal hatching does not support the idea of papyrus.

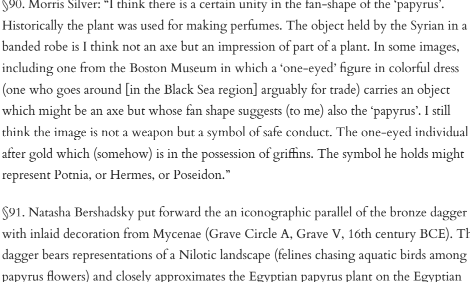


Figure 34. *CMS* IX 15c.

Thoughts on the papyrus plant and the papyrus motif

§90. Morris Silver: “I think there is a certain unity in the fan-shape of the ‘papyrus’. Historically the plant was used for making perfumes. The object held by the Syrian in a banded robe is I think not an axe but an impression of part of a plant. In some images, including one from the Boston Museum in which a ‘one-eyed’ figure in colorful dress (one who goes around [in the Black Sea region] arguably for trade) carries an object which might be an axe but whose fan shape suggests (to me) also the ‘papyrus’. I still think the image is not a weapon but a symbol of safe conduct. The one-eyed individual is after gold which (somehow) is in the possession of griffins. The symbol he holds might represent Potnia, or Hermes, or Poseidon.”

§91. Natasha Bershadsky put forward the an iconographic parallel of the bronze dagger with inlaid decoration from Mycenae (Grave Circle A, Grave V, 16th century BCE). The dagger bears representations of a Nilotic landscape (felines chasing aquatic birds among papyrus flowers) and closely approximates the Egyptian papyrus plant on the Egyptian representation of Nebamun hunting (and the rest of the composition). Bershadsky wondered whether the imitation could be extremely precise.

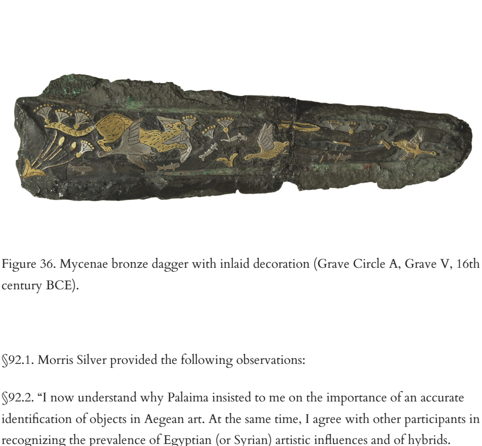


Figure 35. Fragment of a polychrome tomb-painting, with papyrus-thicket on the left side.

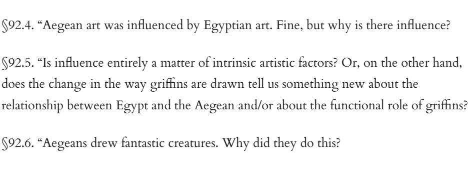


Figure 36. Mycenae bronze dagger with inlaid decoration (Grave Circle A, Grave V, 16th century BCE).

§92.1. Morris Silver provided the following observations:

§92.2. “I now understand why Palaima insisted to me on the importance of an accurate identification of objects in Aegean art. At the same time, I agree with other participants in recognizing the prevalence of Egyptian (or Syrian) artistic influences and of hybrids.

§92.3. “My concern is that considerations of this kind and especially of the latter variety should become ends in themselves to the extent that we do not use the artistic findings as a key to open up other aspects of Aegean society.

§92.4. “Aegean art was influenced by Egyptian art. Fine, but why is there influence?

§92.5. “Is influence entirely a matter of intrinsic artistic factors? Or, on the other hand, does the change in the way griffins are drawn tell us something new about the relationship between Egypt and the Aegean and/or about the functional role of griffins?

§92.6. “Aegeans drew fantastic creatures. Why did they do this?

§92.7. “Does the specific combination of bird of prey and lion reveal something about roles of these creatures in their societies? The Aegean ‘genius’ resembles Tawaret. It also resembles a dog. What was the role of Tawaret? What was the role of dogs? Are the known roles consistent with artistic depictions? Note the recent report that some Aegean gift-bearers in Egyptian tombs had griffin-like haircuts.

§92.8. “Aegean artists confused us by creating hybrids. If, with Tom, we can identify the separate types does this not provide new opportunities. Why did the Aegeans hybridize murex and triton (papyrus and lily)?

§92.9. “Are hybrids more likely to be observed in seals than in frescoes? in palace than in ‘villa’? Such variations would be revealing as to real life.

§92.10. “Putting aside the uncertainties, it appears that the Aegean palace placed artistic importance on both papyrus and palm. Both seem to be foreign plants (Egyptian and Syrian). Why did they make this kind of choice? Is it helpful to note shops on Madison Ave that say they have branches in Paris, Geneva….?

§92.11. “I have tried to illustrate some of the applications of Aegean art to the understanding of Aegean society. I am sure the experts considering The Papyrus Dilemma can very much improve on my examples.”

§93.1. Palaima added:

§93.2. “This even goes for Palace of Minos (PoM). If griffins are part of the power and religious iconography, what better than to have them in the very setting that the elites control and therefore to depict actual plants in the Minoan landscape rather than a fantastic realm?

§93.3. “In the Palace of Nestor (PoN) throne room complex, all the imagery seems local. In Room 5 the people bringing offerings, the suprascale bull, the priest at the altar, in Room 6 the seated figures toasting across a table, the singer with lyre out on the polished rocks (made smooth from frequent use as with the Areopagus) and the animal there is the fantastic winged bird, which we think symbolizes ϝέπεα πτερόεντα, and the lifelike deer and the *Nerium oleander*, *all these real-life elements* set in a real environment, real people, real animals, real altar, real table and real bard, real lyre and real polished rock outcropping.

§93.4. “Our natural scientists have proposed good candidates for two of the seal images and even for the throne room plants from the PoM and the PoN.

§93.5. “For *CMS* VS1A 46 *Helichrysum stoechas*; for PoN and PoM throne complexes *Nerium oleander*.

§93.6. “Keep in mind that the Palace of Nestor fragment has an accurate deer in it. Note: non-Egyptian-ness of deer and Room of the Ladies papyrus. Warren’s arguments about Aegean BA environments being conducive to papyrus as in Sicily seem sound to me.”

§94. Crowley added on Silver’s concern:

§94.1. “This is an extremely important issue and I trust that my strong arguments for establishing a standard terminology have not been construed as suggesting our scholarly research is complete with achieving accurate iconographic description.

§94.2. “The next step, into iconographic interpretation, is the ultimate aim. This move into interpretation addresses such questions, among others, as sources, local and exotic influences, societal depiction and the attempt to reveal the Minoan artistic vision.

§94.3. “The problem for Aegeanists is that we are well behind when we start our enquiries because we do not have a contemporary vocabulary in which to discuss the art — think of Classical or Egyptian or European Christian iconography which have descriptions provided and where interpretation can start almost immediately! However we do need to make our descriptions accurate even as we coin terms to use. Only then will our interpretations be true.”

§95. Weingarten: “I certainly didn’t suggest that the Minoans never wanted to portray the world around them. Of course they did. But they looked at the world somewhat differently from Egyptians, Syrians, Anatolians, and (needless to say) from us. If I may cite myself (Weingarten 2005) in my review of Olga Krzyszkowska’s *Aegean Seals: An Introduction* (Krzyszkowska 2005):

> I seriously doubt that any Minoan artist ever tried to make a literal representation or to reproduce anything as an exact portrayal of a given scene or object. Whether portraying human figures or bulls in flying gallop or butterflies and flowers, naturalism was not the Minoan artists’ aesthetic goal. Nor were they in any meaningful sense, “inspired by nature” …. One need only look at the Minoan male figure to see that they do not accurately represent the human body: wasp-waisted and wiry, the physical body is distorted in order to create an impression of youth and agility …. The image projects the focal point of the Minoan world view (not the world as it is). It also reflects the role and effects of social and cultural factors which it is our task to explore.

§96.1. Palaima:

§96.2. “If what you mean is that in general the Minoan artists in different media translated what they saw into images that distorted to greater or lesser degree the realities they observed according to what you and others categorize as conventions, that is hard to disagree with.

§96.3. “And their minds, knowing what we know about the neuroscience of seeing, may actually have ‘seen’ things differently than we do. There are conventions, like wasp-waistedness. But there are images with ladies turned frontally where wasp-waistedness is more or less abandoned.

§96.4. “But what we are then discussing here is images that are closer to and farther away from *our* ‘reality’.

§96.5. “And the three or four images we are focusing on come close enough to real life correlates to make the identifications proposed by Peter Warren and our natural science experts strike some of us as sensible.”

§97. Sarah Morris: “In answer to Silver’s question and several past comments, I remind all of the Thera frescoes conference on Santorini in 1997, when specialists in plants, insects, shells, and other natural phenomena were invited to comment on the species that appear in the frescoes (I remember a lively discussion on whether the sea lily we know from Aegean shores is the type that appears in art, and a wild silk moth cocoon from the site helped explain the diaphanous fabric represented in one of the frescoes). Meanwhile certain species of monkey in Aegean art are now being compared to those from South Asia, rather than Egypt: here an example. Many of the Thera conference papers were published in the volume of proceedings (Sherratt 2000), and let us hope that such conversations continue on the relationship between nature and art in the Bronze Age.”

§98.1. Gregory Nagy shared the following essays, which focus on some core issues here discussed.

§98.2. In his pieces “Echoes of a Minoan-Mycenaean scribal legacy in a story told by Herodotus” and “A Minoan-Mycenaean scribal legacy for converting rough copies into fair copies,” Nagy examines the use of the papyrus plant in the broader context of Minoan-Mycenaean scribal practices. Here the focus in on the papyrus as a support for texts written on perishable material. Examples like this show the deep knowledge that Minoans and Mycenaeans must have had of the papyrus plant — its parts and uses.

§98.3. The works by Nagy “The idea of ‘finders keepers’ as a signature for two sea-empires” and “Thinking comparatively about Greek mythology VI, A Mycenaean phase in the reception of myths about Hēraklēs” deal with the importance of seals as well as written documents and their support in the administration, economy, and political strategies of the Minoan and Mycenaean societies.

§99. Malcom Wiener praised Ulanowska’s work as a reference model for how to analyze seals and organize the information we obtain from them. By way of example, the database that Ulanowska created (to be found here) and a recent paper of hers (Ulanowska 2020) that focuses on how seal imprints help identify previously unknown types of textiles and explores the connection between textile impressions and Bronze Age Aegean administrative practices.

§100. Hariclia Brecoulaki provided some remarks concerning the depiction of papyrus in the PoN and PoM (using first person):

§101. “I agree with Weingartner that the Minoan version of the papyrus may have been inspired/transmitted through representations and not real visual contact with the plant itself. Indirect inspiration of the natural plant through its artistic reproduction has also been observed in the Theran paintings. While Doumas stressed that the arrangement of the plants in clusters of three stalks obscured its link to papyrus, Robert Ritner suggested that the source of the papyrus image for the Theran artist was probably Egyptian writing or small scale portable art works ‘employing the hieroglyphic symbol as an abbreviated

representation for a papyrus marsh.' Not true Egyptian wall paintings, nor nature itself (Ritner 2018).

§102. "The papyrus-lotus hybrids in the PoM most likely represent a minoanized image of the Egyptian plant, as has been suggested. The stems are blue with leaves veined in a feather-like fashion, alternating red and blue, very much alike the papyrus of PoN. Mabel Lang had observed the similarity between the papyrus in the Throne Room of the PoM and the papyrus with deer of Pylos. I quote: 'The stem and leaves on 36C17 are quite close in style, but flowers have been added to the plant which are schematic in the extreme; *they are stylizations not of papyrus flowers but of some generalized concept of a flower* [emphasis is Brecoulaki's], reminiscent of some flowers on vases. This seems to be a fairly clear indication not so much of a stylistic difference between the two paintings but of a difference in time sufficient to make complete a divorce already initiated: that is, the Knossian artist used the papyrus flowers to decorate the griffin (no flowers grow out laterally from the stem of the plant), but the connection was still sufficiently alive for him to associate closely the flower and plants; for the Pylian artist the papyrus had not only lost its own flower but has taken on a new bloom completely unrelated to the plant.'

§103.1. "In the PoN version of the papyrus the *tulip-like dark red flower* [emphasis is Brecoulaki's] painted over stem in its upper part is the only element that resembles the structure of the papyrus plant. 'What appear to be flowers spring from the stem below the upper leaves in a series of dots which gradually change to dashes and then concentric arcs before culminating in a dot rosette, all in dark red.'

§103.2. "This flower is not visible in the well-known fragment with papyrus and deer (36C17) but on another smaller fragment preserving more details of the plant (see Figures 37 and 38 below).

Figure 37. Detail of Pylos 36 C 17 fresco fragment fallen from South-West wall of Pylos throne room. COLOR © University of Cincinnati. By permission.

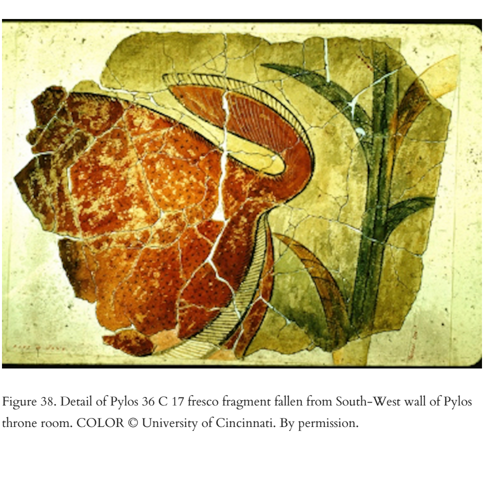


Figure 38. Detail of Pylos 36 C 17 fresco fragment fallen from South-West wall of Pylos throne room. COLOR © University of Cincinnati. By permission.

§104. "The link with the papyrus plant in the PoM example is mostly due to the depiction of papyrus flowers on the griffin's chest. The PoN plant seems to have been inspired by Minoan imagery; its link with the papyrus plant relies more on its similarity with the stem and leaves of the Knossian hybrid plant rather than with any Egyptian example.

§105. "The hypothesis of an inspiration coming from *Nerium oleander* does seem appealing to me. What mostly characterizes this plant is its flowers, totally missing in both cases. Unless there is a direct, obvious link with a natural plant/genus — like with palm tree or crocus for example — it a vain exercise, to my eyes, to try to identify in these depictions, possible sources of inspiration directly drawn from nature.

§106. "Aegean representations of papyrus draw their inspiration/influence from the context of Egyptian representational art, as we all agree. More we move away from the original source, more the motif gets de-constructed and re-constructed through eclectic practices, it acquires different forms according to the contexts in which it is employed, as is the case of Pylos. A visual "sign", an iconographic detail functioning as a visual marker of the *urpflanze* (triangular flower in Thera and Knossos, tulip like flower over stem in Pylos) was probably enough to the eyes of an Aegean spectator to activate visual or cognitive associations and identifications."

§107. Bibliographic references of the discussion session

Krzyszkowska, O. 2005. *Aegean Seals: An Introduction*. London.

Ritner, R. 2018. "Egyptian examples of the koine art style of the second millennium BC." In *Paintbrushes: Wall-painting and vase-painting of the second millennium BC in dialogue*, ed. A. Vlachopoulos, 67–75. Athens.

Sherratt, S., ed. 2000. *The wall paintings of Thera: Proceedings of the first international symposium; Petros M. Nomikos Conference Centre, Thera, Hellas, 30 August – 4 September 1997*. Piraeus.

Ulanowska, A. 2020. "Textile Uses in Administrative Practices in Bronze Age Greece: New Evidence of Textile Impressions from the Undersides of Clay Sealings." In *Redefining Ancient Textile Handcraft Structures, Tools, and Production Processes: Proceedings of the VIIth International Symposium on Textiles and Dyes in the Ancient Mediterranean World (Granada, Spain 2–4 October 2019)*, ed. M. Bustamante-Álvarez, E. H. Sánchez López and J. Jiménez Ávila, 413–424. Purpureae Vestes 7. Granada.

Weingarten, J. 2005. Review of Krzyszkowska 2005. *Studi Micenei ed Egeo Anatolici* 47:353–359.

Towards the definition of a standard artistic vocabulary in Aegean iconography: preliminary conclusions

By Rachele Pierini and Tom Palaima

§108. A standard artistic vocabulary is yet to be fully worked out in Aegean iconography. This state of the art raises problems in interpreting and analyzing images. Our MASt pilot study here The Papyrus Dilemma has shown this by examining as a specific case study the Mochlos seal and the motif on it — indicated as 'papyrus' in single quotation marks in Anastasiadou's edition.

§109. To help in defining an agreed terminology, we have explored new approaches to Aegean seal images by addressing two questions and following a corresponding twofold strategy.

§110.1. First, we have identified the macro-category to which the Mochlos motif and the Ayios Charalambos motif belong: the plant kingdom.

§110.2. The next step in this line was to compare Aegean plant representations on seals with actual plants by confronting data like inflorescence and the morphology and disposition of leaves. The premise validating such comparisons is Hillis's observation that the chronological gap "is a very short time from an evolutionary perspective."

§110.3. The other step was to compare the Mochlos motif and the Ayios Charalambos motif with other plants as represented in Aegean iconography to ascertain where on a scale from abstraction (or fantastic invention) to faithful reproduction of sample images of Bronze Age artists can be placed.

§110.4. We have also compared the Mochlos motif with Egyptian art, given that Aegean iconography experts have long argued and continue to argue for an Egyptian inspiration for the motif.

§111.1. The second part of our work during the The Papyrus Dilemma seminar aimed to establish a terminological protocol for how to name images when it is not possible to identify the motif. A crucial scholarly voice for this part has been that of Susanne Lervad, terminology expert at the Centre for Textile Research and Pierini's colleague at the Saxo Institute, University of Copenhagen.

§111.2. Asked about the use of 'papyrus' in single quotation marks to refer to the Mochlos motif, Lervad immediately identified a major issue, namely the definition strategy by means of a negative meaning. In addition to generating confusion and misinterpretations, the use of a negative definition — Lervad remarked — presents a major issue from a terminological perspective. Specifically, the mention of what a motif is *not* is helpful in areas like comparisons and identifying main features, but it is not an accurate approach for terminological protocols.

§111.3. By examining the Mochlos motif, we have seen at play two of the risks that Lervad mentioned. We have seen that the negative meaning that was implicit in the quotation marks was quite clear to iconography specialists but opaque to other Aegean Bronze Age experts, who more and more need to make use of specialist interpretations of the images. This is how Palaima, a Linear B expert generalist as an Aegean prehistorian, uncovered the problems we are addressing in this first place.

§111.4. However, Pierini and Palaima want to make clear that this fact is *per se* good news. On the bright side, it means that scholarship on Aegean iconography is now of significant interest not only for a particular niche of Aegeanists but also for a wider array of Bronze Age scholars. Hence, it becomes imperative to agree on a shared terminology that would be immediately intelligible even to those who do not work primarily in the area of Aegean iconography.

§111.5. To achieve this goal, we benefitted again from Lervad's expertise. She remarked that an effective strategy to name obscure images is to categorize elements like shape and structure (e.g. triangular), characteristic features (e.g. oblong left side), or general classes (e.g. plant).

§111.6. From this perspective, Crowley's definition of the Mochlos motif as 'truncated petaloid' offers some distinctive advantages. First, it is a positive definition. Second, it refers to the object by using two of its elements, namely the characteristic feature 'truncated' and the class 'petaloid'. Third, it is synthetic. Also, this definition is immediately intelligible for all kind of audiences and allows the use of single quotation marks to make the word stand out, as is often the case with definition, rather than to qualify it as a kind of placeholder identification.

§111.7. Lervad has here summarized the main points of terminological strategies but more information can be found in the proceedings of two conferences she organized and took part in, namely *TOTh* 11 and *TOTh* 2013.

§112.1. Summing up, the The Papyrus Dilemma pilot study contributes the following results towards the definition of a standard artistic vocabulary in Aegean iconography and the establishment of a terminological protocol:

1. establishing the characteristic features of the iconographic motif (e.g. three spikes on the left side);
2. when possible, identifying the macro-category to which the iconographic motif belongs (e.g. plants);
3. comparing the represented motif with coeval and corregional motifs presenting the same characteristic features and belonging to the same macro-category (e.g. Knossos and Pylos frescoes);
4. comparing the represented motif with motifs from other geographical areas that present the same characteristic features and belong to the same macro-category (e.g. the Egyptian lotus flower);
5. when possible, comparing the represented motif with contemporary potential correlates so as to gather more information to shed light also on the prehistoric specimen (e.g. *Apiaceae* family);
6. hypothesizing new interpretations in light of new analyses (e.g. *Nerium oleander*);
7. using the characteristic features initially established to offer a terminological approach that will be positive, exhaustive, synthetic, and descriptive but not interpretative.

§112.2. On this basis, Crowley's definition of the Mochlos motif as 'truncated petaloid' perfectly meets the requirements of synthesis and positivity. A definition like 'three-pointed and hunched-ending triangle' might be more accurate from the description and exhaustivity perspectives but will lack synthesis. Either way, 'truncated petaloid' and 'three-pointed and hunched-ending triangle' are more intelligible proposals for the contemporary audience, wider and made of non-specialists as well. It would avoid being misleading.

§112.3. We stress again that we all should be happy that the interest in Aegean studies has grown so much that we are now faced with the task of making all the highly specialized components of Aegean cultures more intelligible to other people interested in the subject. And we can only be grateful that iconography specialists have brought the subject to such a high level of documentation, explanation, and analysis that we can now discuss together details and plan what to do next.

Addendum

§113. When the Summer report was about to be published, Pierini had a chance to discuss the topic with Agata Ulanowska, who added the following remarks.

§114. First, Ulanowska pointed out that not only Crowley but also Anna Margherita Jasink has applied a descriptive terminology — the latter is for Cretan Hieroglyphic signs and other motifs associating inscriptions. This was also indeed her problem, when she works with Cretan Hieroglyphic.

§115. Also, Ulanowska drew attention to the broader context of Anastasiadou's work and terminology choices. According to Ulanowska, most likely Anastasiadou has used a terminology already circulating among seal specialists and quite commonly used by other seal scholars, so in the majority these terms were not Anastasiadou's inventions. It is equally likely, Ulanowska continued, that Anastasiadou used terminological "shortcuts" for motifs that, despite being termed without any specific system, had already some tradition with those names. In this context, Ulanowska praised Anastasiadou's use of single quotation marks to show her distance to the veracity of these terms.

§116. Finally, Ulanowska remarked that Anastasiadou coined a large part of the more neutral and descriptive terminology that appears in the latest version of the Arachne database — the previous version allowed to search through seals by single individual motifs.

§117. Bibliography

TOTh 11 = *Terminologie & Ontologie: Théories et Applications; Actes de la conférence TOTh 2011 – Annecy — 26 et 27 mai 2011*. Annecy.

TOTh 2013 = *Verbal and Nonverbal Representation in Terminology; Proceedings of the TOTh Workshop 2013 – Copenhagen — 8 November*. Copenhagen.

Topic 2: Linear B *du-ma/da-ma*, Luvo-Hittite *Dammara-*, and Mycenaean Dialects[1]

Presenter: Roger D. Woodard

Linear B *du-ma*

§118. What appears to be a particularly archaic expression of the conjunction of bee and bird in Greek cult occurs in the line of hexameter that Plutarch rehearses as he alludes to an early form of Apollo's Delphic temple (*De Pythiae oraculis* 402D) — that made of feathers and of wax — a verse that Plutarch suggests had been extemporaneously uttered in oracular performance at Delphi:

> Συμφέρετε πτερά τ', οἰωνοί, κηρόν τε, μέλισσαι.
>
> Bring together feathers, O birds, and wax, O bees.

§119. Earlier still is the evidence of cult bee affiliation that is provided by the Linear B documents in which we find Mycenaean cult personnel identified by the compound term *me-ri-du-ma-te*, term generally read as *meli-dumartes* — that is, 'honey-*dumartes*'.[2] Uncompounded *du-ma* (singular *dumar*) and *du-ma-te* (plural *dumartes*) are likewise attested (title of officials of important rank, probably also cult officiants) as well as an additional compound, *po-ro-du-ma-te*. A summary of the occurrences of these forms is presented here (all are nominative unless specified otherwise); Pylos scribal hands (which will become relevant further along) are as classified by Bennett and Olivier (1973):

	Knossos tablet	Pylos tablet	Pylos scribal hand
du-ma	**Cg 1030**	**An 192**	22
	Cg 1039		
du-ma-te		**Jn 829**	2
]du-ma-ti		**On 300** (dative singular)	C ii
me-ri-du-ma-te		**An 39**	C iii
		An 424	3
		An 427	3
		An 594	C iii
		Fn 50 (misspelled)[3]	C iii
me-ri-du-ma-ṣị		**Fn 867** (dative plural)	45
po-ro-du-ma-te		**Fn 50** (dative singular)	C iii

§120. In addition, the sequence *po-ṛọ-du[* occurs immediately before a break on a tablet in the Pylos Ep series (**Ep 613** Hand 1), and *me-ri-du[* appears on the very fragmentary Knossos tablet **X 1045**.[4]

me-ri-du-ma-te and *po-ro-du-ma-te*: bee and bird

§121. The recurring conjunction, and alternation, of bee and bird in Anatolian and Greek cult and myth may be taken to suggest the possibility that what we find in *po-ro-du-ma-te* is an avian counterpart of apian *me-ri-du-ma-te* — in other words, a form identifying cult officials who carry in their compound title an initial member that denotes a product of the bird, as *me-ri-* does a product of the bee (*méli* [μέλι] 'honey'). If so, a reasonable candidate for the identity of *po-ro-* would be an *o*-grade reflex of the Proto-Indo-European noun root **per-* (likely from the verb root **per-* 'to pass over'). Reflexes denoting 'feather' or 'wing' are well known and broadly distributed among early Indo-European languages. Most commonly preserved are noun stems produced with a *no*-suffix (pointing to a primitive etymon **per-no-*): thus, we find Sanskrit *parṇa-* 'feather, wing; leaf', Avestan *parəna-* 'feather', Lithuanian *spar̃nas* 'wing' (reflecting *(*s*)*per-*), Old English *fearn* and Old High German *farn* 'fern', with a semantic shift from faunal to impressionistically similar floral structures (much as with Sanskrit *parṇa-*). Other stem-forms occur. Balto-Slavic attests reduplicated stems, showing the same semantic shift as the West Germanic forms just cited: Lithuanian *papártis*, Russian *páporotŭ*, Slovenian *präprat* and *präprot* 'fern'. Old Church Slavic/Old Russian also shows a formation, *pero* 'feather'; compare Tocharian B *pār* 'plumage', beside *parwa* 'feathers'. [5] Hittite *par-tāwar* 'wing' (a collective [i.e. of feathers]) belongs here as well (attesting either *o*-grade or *ø*-grade root).[6]

§122. In post-Mycenaean Greek the comparable attested term is *pterón* (πτερόν) 'feather'. Some fifty years before the Linear B script was demonstrated to record Greek language, Herbert Petersson (1916:272) argued that *pterón* arose secondarily from an unattested **perón* (*περόν) that was of common origin with Slavic *pero*, Sanskrit *parṇa-*, and so on. Petersson draws *pterón* into that set of attested Greek forms which show alternation between word-initial *p-* and word-initial *pt-*: thus, *pólis* (πόλις) beside *ptólis* (πτόλις) 'city', and *pólemos* (πόλεμος) beside *ptólemos* (πτόλεμος) 'war'. Both *ptólis* and *ptólemos* occur in Homeric epic and may be attested in Mycenaean personal names.[7] As Petersson points out, and is now widely acknowledged, the *pt-* forms are Greek developments. With *pólis* compare Lithuanian *pilìs* and Latvian *pils* 'castle' and Sanskrit *pūr* 'fortress' and *puram* 'wall, fortress', all pointing to a Proto-Indo-European **pelh$_x$–* 'citadel, fortified high place'.[8] Moreover, in the instance of *pterón*, Petersson judges, the shift of initial *p-* to *pt-* occurred under the influence of *ptérux* (πτέρυξ) 'wing', a *ø*-grade Greek reflex of Proto-Indo-European **peth$_1$–* 'to rush, fly', etymon of, *inter alia*, Hittite *pittar*, *pattar* 'wing'; Latin *penna* 'feather'; and Old English *feðer*, Old High German *fedara* 'feather'.[9]

§123. With an hypothesized Mycenaean **por-o-* (in *po-ro-du-ma-te*) formal morphological comparison can be made to Greek *póros* (πόρος), an "action noun" (with accent on the root) denoting 'ford; passage; path through the sea', from a broadly attested ancestral noun stem **pór-o-* (from the above-noted verb root **per-* 'to pass over'), surviving also in Avestan *pāra-* 'bank, boundary', Old Norse *fọr* 'journey', Old English *faru* 'journey'.[10] Synchronically Greek *póros* finds a verbal counterpart in the derived *peráō* (περάω) 'to pass across, traverse'. Linear B *po-ro-* would represent the comparable so-called "agent" noun, *porós* (with accent on the thematic suffix) denoting the agent of the act of a passing over — that is 'wing' or 'feather'. Morpho-semantic parallels are provided by, for example, *trokhós* (τροχός) 'a wheel', from *trékhō* (τρέχω) 'to run (over)'; *klopós* (κλοπός) 'thief', from *kléptō* (κλέπτω) 'to steal'; *trophós* (τροφός) 'a feeder', from *tréphō* (τρέφω) 'to feed, bring up'; *aoidós* (ἀοιδός) 'singer', from *aeídō* (ἀείδω) 'to sing (of)'; *agós* (ἀγός) 'leader', from *ágō* (ἄγω), 'to lead'; *pompós* (πομπός) 'conductor, messenger', from *pémpō* (πέμπω) 'to conduct, send'. For compounds in which these agent nouns appear as initial members consider *trokh-ēlátēs* (τροχ-ηλάτης) 'driver of wheels', in other words, 'chariot driver'; *trokho-bólos* (τροχο-βόλος) 'one who works with a water wheel'; *aoido-kê̄rux* (ἀοιδο-κῆρυξ) 'herald who announces singers'. By this analysis the compound *poro-dumartes* would denote the 'feather/wing-*dumartes*', who serve alongside the *meli-dumartes* — that is, the 'honey-*dumartes*'.

du-ma/ *da-ma* variation

§124. *Da-ma*-variants of the compound forms of *du-ma* appear on documents from Pylos, as here summarized (forms are nominative), with the scribal hand noted on the right side:[11]

	Pylos tablet	Pylos scribal hand
me-ri-da-ma-te	**An 39**	C iii
	An 207	43
po-ro-da-ma-te	**An 39**	C iii

Pylos tablet **An 39** thus shows not only the spelling *me-ri-du-ma-te* (line 2) but also *me-ri-da-ma-te* (line 8), and *po-ru-da-ma-te* (reverse line 1):

PY An 39

.1	pu-ka-wo X VIR 16
.2	me-ri-du-ma-te VIR 10 X
.3	mi-ka-ta X VIR 3
.4	o-pi-te-u-ke-e-we VIR 4 X
.5	e-to-wo-ko X VIR 5
.6	ka-sa-to X VIR
.7	pu-ka-wo X VIR 23
.8	me-ri-da-ma-te , VIR 6
.9	o-pi-]te-u-ke-e-we , VIR 5 X
.10	mi-ka-]ta , VIR 6 X
.11	e-]ṭọ-wo-ko , VIR 4 a-to-po-qo VIR 3

verso

.1	po-ru-da-ma-te VIR 4
.2	*vac.*
.3	qa-ra$_2$-te , VIR
.4	pu-ko-ro , VIR
.5	a-ko-so-ta , VIR
.6	pi-ri-ja-me-jạ VIR
.7	e-ni-ja-u-si-jo VIR
.8	p̣ṭẹ-jo-ḳọ VIR qo-ta-wo ṾỊṚ[
.9	a-ta VIR te-o-po-q̣ọ[VIR
.10	*vest.*

On the obverse, lines 1–5 and lines 7–11 record identical lists of personnel, in nearly the same order (the entries of lines 3 and 4 are inverted in lines 9 and 10), with *po-ru-da-ma-te* appended to the second list (written in the first line of the reverse side): it is thus reasonably certain that *me-ri-du-ma-te* (line 2) and *me-ri-da-ma-te* (line 8) reference the same officiants using alternative terms.

§125. Of this duplicated set consisting of (1) *pu-ka-wo*, (2) *me-ri-du/da-ma-te*, (3) *mi-ka-ta*, (4) *o-pi-te-u-ke-e-we*, and (5) *e-to-wo-ko*, a subset of four (all but *pu-ka-wo*) occurs on Pylos tablet **Fn 50**, arranged in a third but minimally different order[12] — and similarly there *po-ro-du-ma-te* is added in. On tablet **Fn 50**, *me-ri-du-*[*ma-*]*te* (line 5) and *po-ro-du-ma-te* (line 7) surely answer to the *me-ri-du-ma-te/me-ri-da-ma-te* of the obverse of **An 39** and the *po-ru-da-ma-te* of the reverse of **An 39**. It thus would appear that the variant forms *po-ro-du-ma-te* (**Fn 50**; dative singular) and *po-ru-da-ma-te* (**An 39**; nominative plural) reference the same office.

§126. What sense can be made of the spelling *po-ru-da-ma-te* on tablet **An 39**, reverse. 1 — that is, of the use of the *ru* syllabogram to represent the second syllable? Most probably *po-ru-da-ma-te* is an aberrant spelling of what was intended to be **po-ro-da-ma-te*, as is suggested (1) by this scribe's writing of *me-ri-da-ma-te* just four lines earlier, on the opposite side of the tablet (line 8), and (2) by the parallel occurrence of *po-ro-du-ma-te* on tablet **Fn 50**. Did this scribe's mindfulness of the recurringly-attested variation between *-du-ma-te* and *-da-ma-te* result in the "hypercorrecting" transfer of the *u*-spelling to the second syllabic unit of *po-ro-* as he tried to get *-da-ma-te* "right"? And what of the contrast between *me-ri-da-ma-te* in line 8 and *me-ri-du-ma-te* in line 2? The two lists of personnel that appear on tablet **An 39** were executed by two different scribal hands (though both are assigned to Class iii; see Bennett and Olivier 1973, 1:57). There is therefore self-evidently some scribal connection between the choice of spelling of the *second* member of the compound forms on this tablet: list-one *me-ri-du-ma-te* (line 2) versus list-two (work of a different scribe) *me-ri-da-ma-te* (line 8) and *po-ru-da-ma-te* (reverse, line 1). The other instance of the spelling *me-ri-da-ma-te* (on **An 207**) is a product of Pylos scribal hand 43, as pointed out above.

Distribution of *du-ma/da-ma* variants

§127. The several occurrences of the spellings *du-ma* and *da-ma* at Pylos were written by a variety of hands. We can summarize the hands responsible for the spellings of the individual instances of the morpheme *du-ma/da-ma* at Pylos in the following way:

Pylos scribal Hand	Form *du-ma*	Form *da-ma*
1	*po-ro-du[*	
2	*du-ma-te*	
3	*me-ri-du-ma-te*	
	me-ri-du-ma-te	
22	*du-ma*	
43		*me-ri-da-ma-te*
45	*me-ri-du-ma-si*	
C ii	*]du-ma-ti*	
C iii	*me-ri-du-ma-te*	*me-ri-da-ma-te*
	me-ri-du-ma-te	
	me-ri-du-[ma]-te	
	po-ro-du-ma-te	*po-ru-da-ma-te*

§128. There is some complementarity in scribal practice here, to the extent that it is only scribal-hand Class iii that shows both *du-ma* and *da-ma* forms, and the *da-ma* forms produced by C iii, which are on tablet **An 39**, are limited to the second list of that tablet, seemingly the work of a scribal hand distinct from the hand that produced the first list on that tablet, in which *du-ma* occurs.

§129. Dialect variation can also be seen in these same data. The features distinguishing

Special Mycenaean dialect from Normal Mycenaean are summarized here:

> 1A. The consonant-stem dative singular ending *-i* (as opposed to Normal Mycenaean *-ei*);
>
> 1B. The development of a vocalic reflex *a* from a Proto-Indo-European syllabic nasal in the vicinity of a labial consonant (as opposed to an *o* reflex in Normal Mycenaean);
>
> 1C. The preservation of a mid-front vowel *e* in the vicinity of a labial consonant (as opposed to a raising to high front *i* in Normal Mycenaean);
>
> 1D. The preservation of the dental stop *t* when it occurs before a high front vowel *i* (as opposed to assibilation of the stop to *s* in Normal Mycenaean).

§130. The dative singular *po-ro-du-ma-te* (**Fn 50**), written by a hand of the class designated C iii, is formed with the dative singular ending that characterizes *Normal* Mycenaean — that is, feature 1A in the above list. This dative *po-ro-du-ma-te* stands in opposition to the]*du-ma-ti* of Pylos tablet **On 300**, which is formed with the dative ending that characterizes *Special* Mycenaean — and is a product of scribal hand C ii. As Risch (1966) points out in his foundational study of the Mycenaean dialects,[13] this same tablet (i.e. **PY On 300**) displays other Special Mycenaean forms. Another Special Mycenaean dative, *ko-re-te-ri* (a local governing official), appears twice on the tablet, along with a form preserving the unshifted vowel *e* (feature 1C): namely, the place name]*te-mi-ti-ja* (*Themistia*; beside an apparent ethnic adjective *te-mi-ti-jo* written by hands of the class C iii), as opposed to Normal Mycenaean *ti-mi-ti-ja* and *ti-mi-to* (hands 1, 2, 21, and C i).[14]

§131. In this instance, then, both the Special Mycenaean and Normal Mycenaean forms are products of the set of scribal hands that also produce forms of the type *du-ma*. Is there then *any* overlap between the categories of (1) Mycenaean dialect and (2) *du-ma/da-ma* variation? The following list of scribal hands at Pylos showing one or more of the four dialect features is constructed on the basis of Risch's (1966) *Tableau synoptique* (with updating, chiefly that of Nagy 1968).

Pylian scribal hands displaying Normal Mycenaean	1, 2, 3, 6, 11, 12, 15, 21,
	41, 43,
	C i, C ii, C iii
Pylian scribal hands displaying Special Mycenaean	1
	6, 11
	21, 23, 24
	41
	135
	C ii, C iii

§132. Whenever a single hand displays both Normal and Special isoglosses, as several of the above do, we can reasonably posit that the scribe entailed is a speaker of Special Mycenaean Greek dialect who typically intentionally suppresses use of Special dialect features (as shown by Nagy 1968) — features that occur with less frequency overall than the corresponding Normal Mycenaean features. With this linguistic realization in hand, we can modify the above list and identify Normal Mycenaean hands and Special Mycenaean hands at Pylos as follows:

Normal Mycenaean scribal hands at Pylos	2, 3,
	12, 15,
	43,
	C i, C ii, C iii
Special Mycenaean scribal hands at Pylos	1
	6, 11
	21, 23, 24
	41
	135
	C ii, C iii

§133. The scribal hands of Pylos are apportioned among three general classes, labeled C i, C ii, C iii. Class C i includes hands 1–6, 11–15; C ii includes hands 21–26, 31–34; and C iii includes hands 41–45.[15] The prototypical hand of each group (i.e. that one most distinctively representing the class) is the first listed in each of these ranges. In regard to dialect, C ii and C iii are heterogeneous groups. Scribal hands of C ii and C iii exhibit use of Special Mycenaean features, but assigning specific dialect status to the entire class is of course abrogated by the heterogeneity of the class. Hence, C ii and C iii appear above under both the heading "Normal Mycenaean scribal hands at Pylos" and the heading "Special Mycenaean scribal hands at Pylos."

§134. As we have observed, the hands showing *du-ma* forms are 1, 2, 3, 22, 45, C ii, and C iii. Those showing *da-ma* forms are 43 and C iii. These two parameters intersect as illustrated in the following table; again, a hand is identified as "Special Mycenaean" if it uses one or more of the Special Mycenaean dialect features and "Normal Mycenaean" if it displays the comparable Normal Mycenaean features. Forms written by hands of C ii and C iii are of course double counted:

	Normal Mycenaean Hands	Special Mycenaean Hands
du-ma	2, 3, C ii, C iii	1, C ii, C iii
	(seven forms total)	(six forms total)
da-ma	43, C iii	C iii
	(three forms total)	(two forms total)

§135. Any conclusions based on this distribution would need to be considered tentative. While the tokens are few, it may be interesting that the only intersection of a Special Mycenaean hand and a hand using *da-ma* forms is localized in the second list of tablet **An 39**: this is the work of the Class iii hand that produced the aberrant, hypercorrected, spelling *po-ru-da-ma-te* —and a hand that is, it appears, distinct from the Class iii hand that wrote the first list of that tablet. Do we see here a scribe who is particularly sensitized to the distinction between his native *du-ma* pronunciation and a learned *da-ma* spelling? This leads us to the next matter to be considered.

Luvo-Hittite *Dammara-*

§136. Cinyras is typically portrayed as a fabled Cypriot monarch and founder of Paphos, but Greek tradition places his birth in Anatolia — thus, Pseudo-Apollodorus *Bibliotheca* 3.181 describes Cinyras as son of a Sandocus, a descendent of Eos and a native of "Syria" who settled in Cilicia. Pseudo-Apollodorus reports that Cinyras left Anatolia and 'arrived in Cyprus together with a warrior horde' (ἐν Κύπρῳ παραγενόμενος σὺν λαῷ) and founded Paphos. Cinyras is the 'Lyre Man', having a name rooted ultimately in Northwest Semitic *knr*, term for 'lyre'. Cinyras serves as eponym of the Cinyradae, priestly musicians of the cult of Paphian Aphrodite.

§137. Borrowings of Northwest Semitic *knr* are attested in Anatolia. A Hurrian ritual tablet from the Hittite archives of Boğazköy (KUB 47.40 + 27.25) preserves a form *ki-na-ra-a-i*. A Hittite term ^{LÚ}*ki-nir-tal-la-aš* (*kinir-tallaš*) occurs in KBo 1.52 (a lexical text of uncertain date), denoting a man of the lyre. On the other side of the Aegean, two Linear B tablets from Pylos attest a form *ki-nu-ra*, commonly interpreted as spelling a man's name *Kinúras* (Κινύρας): *ḳi-nu-ra* occurs on tablet **Vn 865**, on which various individuals are linked to an unspecified commodity; and tablet **Qa 1301** records that an individual named *ki-nu-ra*, associated with a probable place called *me-nu-a₂*, is recipient of a commodity encoded by logogram **189*, perhaps an animal skin. Religious personnel are conspicuously present in the Qa series.

§138. Franklin (2006:46n21, 51) calls attention to the fact that the Cypriot Cinyradae played a prophetic role, to judge by Tacitus's remarks at *Histories* 2.3–4. The Roman historian digresses in his remarks on Vespasian's activities in the eastern Mediterranean to describe the rites of the priests of the cult of Paphian Aphrodite, including oracular performance, to which Vespasian's son Titus made recourse. Tacitus writes that the divinatory procedure (reading of entrails) had been introduced to the cult by Tamiras, a Cilician, and that, by Tacitus's own day, the oracular procedure was solely the purview of the Cinyradae. Tacitus continues: at an earlier time, however, the descendants of Tamiras had served equally as divinatory priests. Hesychius (τ107) knows the term *Tamiradae* (i.e. *Tamirádai* [Ταμιράδαι]), which he glosses as ἱερεῖς τινες ἐν Κύπρῳ 'certain priests in Cyprus'.

§139. The claimed Anatolian (Cilician) origin of the ancestor of the Cypriot Tamiradae has drawn the Luvo-Hittite term *dammara-* into discussions of the Cypriot Greek priesthood. The Hittite word is almost certainly borrowed from Luvian: it is attested with Luvian morphology (*dammaranza*; accusative plural; Tischler 1991:71); and Melchert[16] points out that Hittite texts in which the form *dammara-* occurs tend to have Luvian associations. More than fifty years ago, Neumann invoked *dammara-* in a discussion of Cilician lexemes evidenced in Greek and Roman texts, Cypriot *Tamira-* being one (Neumann 1961:36–37).[17] In his lexicographical treatment of Hittite *dammara-*, Tischler (1991:71, following Neumann) draws attention to *Tamiradae* and to the Hieroglyphic Luvian form *tamaruna* which occurs on one of the KULULU lead strips, accounting documents found at Kululu (perhaps Artulu or Tuna in antiquity) dating to the mid to late eighth century BCE (CHLI 2.510).[18] Into this Anatolian and Cypriot nexus, Linear B lexemes insinuated themselves as early as Morpurgo 1958, who argued that a proper accounting of Linear B *du-ma/da-ma* must take into consideration "l'ittito *dam-ma-ra-*."

§140. Luvo-Hittite *dammara-* is used to denote both male (^{LÚ}*dam-ma-ra-*) and, more often, female (^{MUNUS}*dam-ma-ra-*) cult functionaries. Among those documents in which they appear is one of the Ahhiyawa texts, the oracle text AhT 20[19] (CTH 570.1), assigned to the reign of Mursili II (ca. 1321–1295 BCE). This Hittite king is suffering from some persistent ailment, and the oracular inquiries reported in this document are designed to identify the agent of his illness through consultation with various deities. Among the gods who are invoked and queried (§24') are a 'god of Ahhiyawa' (DINGIR^{LIM} ^{URU}*Aḫ-ḫi-ya-wa*) 'and a god of Lazpa' (DINGIR^{LUM} ^{URU}*La-az-pa-ya*) — that is Lesbos; part of the query concerns the prospect of worshipping these gods in the manner of Hattusa. In the section just preceding this specification, we read that an oracle had determined that the Zawalli-deity of the city of Zithara was angry; *dammara*-women were sent to the city of Zithara so that they could 'take back their utterances' (EME.MEŠ EGIR-*pa a-ni-ya-an-zi*) 'and purify the temple' (É.DINGIR^{LIM}–*ya pár-ku-nu-wa-an-zi*). Concern over utterance produced by a *dammara*-officiant is registered elsewhere in letter AhT 20 (see §18').

Dammara– and Arzawa

§141. A clear picture of intercultural intimacy involving *dammara*-women is presented in the Hittite oracle text of KUB 16.16, obverse 23–30 (CTH 570). Reference is here made to *dammara*-women who were *habitually* having sexual intercourse (*še-eš-kiš-ke-eš-kán-zi*, formed with iterative affix *-ške-* used twice)[20] with men from Arzawa and neglecting to purify themselves afterward — a state of affairs about which the deity is queried as a possible source of divine anger.[21] Arzawa is that region of western Anatolia of which the capital was Apaša — that is, Ephesus, Iron-Age site of the great temple and cult of Artemis. It is a region with which a Bronze-Age Ahhiyawa alignment is well documented.

§142. The prominence of oracular practices in Arzawa is generally accepted. Bawanypeck (2005) concludes that the very beginnings of augury in Anatolia are closely bound to Arzawa: "the augurs' rituals must be considered a special feature of Arzawan ritual practice," offers Hutter (2003:237). It is the ^{d}LAMMA ^{KUŠ}*kuršaš*, god of the *kurša* (Hittite cult implement that appears to be of historical relevance to both the so-called "breasts" of Ephesian Artemis and the Golden Fleece), who is the tutelary deity of oracle birds. One of the surviving Luvian augural texts[22] is "The Ritual of the Augur Ḫuwarlu" (CTH 398), a member of a set of rituals that address *ḫatugauš* MUŠEN$^{\text{ḪI.A}}$ 'terrible birds' — that is, unfavorable auguries — in order to nullify the effects of the unfavorable auguries.[23] It is in this Arzawan text, "The Ritual of the Augur Ḫuwarlu," that the sole phonetic spelling of the Hittite word for 'bird' is attested: elsewhere the Sumerogram MUŠEN is used, but here (KBo 4.2 ii 32) the lexeme is spelled out as *wa-at-ta-e-eš* — a word of uncertain origin.

§143. However, in addition, this Hittite bird-word can with some confidence be restored in the opening lines of this text (KBo 4.2 I 2).[24] Two lines following we then find an occurrence of Hittite *par-tāwar* 'wing', which we encountered just above in the discussion of Linear B *po-ro-du-ma-te*. The 'wing' referenced is perhaps the wing of an eagle, used here in the performance of some iterative ritual act — seemingly one of 'wetting' (if the verb is rightly restored as *šaku*(*wa*)–, as seems probable).[25] In her discussion of the line, Bawanypeck (2005:38) draws attention to similar uses of an eagle's wing (or possibly feather in some of these cases, *pars pro toto*)[26] attested elsewhere. Expanding her list slightly (but not exhaustively), we can mention these instances: (1) in KBo 8.155 ii 8–9 a ^{LÚ}*purapši-* (a priest having a Hurrian name) sprinkles water three times with an eagle's wing; (2) in KBo 33.188 ii 4–6 the priest called a ^{LÚ}*šankunni* dips an eagle's wing into a cup and hands it to a *purapši*-priest;[27] (3) in KBo 15.48 ii 5–9, 32–35 a ^{LÚ}*palwattalla-*, ritual 'crier', sprinkles water three times in the direction of the king using an eagle's wing, cries once, and subsequently a priest takes the eagle's wing from the crier and places it into a wine-pitcher;[28] (4) in KUB 15.34. I 11–12 and 32–33 an eagle's wing is inventoried among several ritual items.[29] The type of bird whose wing is used ritually is at times unspecified, as in KBo 17.1 I 6, in which the king and queen are seated as a gesture is made with a wing.[30] It is this term *partāwar* 'wing' that is used of both the wings of the eagle (e.g. KUB 17.10 ii 35–36) and the wings of the bee (e.g. KUB 17.10 I 38) in myths of the disappearance of Telipinu.

Dammara-, *du-ma*, and *da-ma*

§144. There is a reasonable expectation that Anatolian Mycenaeans experienced, through assimilatory cultural interaction, elements of the cult matrix that are revealed by these considerations of Luvian religion in Arzawa. One element of this nexus is the cult officiant called the *dammara-*, another is the use of the bird 'wing' (*par-tāwar*) as a cult implement and of the bird as a divinatory instrument — an animal that exists in conjunction and alternation with the bee in Aegean myth and cult. One cult expression of the bee in the Mycenaean documentary record appears to be *meli-dumartes* — that is, 'honey-*dumartes*'; I have here proposed that a parallel cult office notionally entailing the bird may be that of the *poro-dumartes* — that is, the 'feather/wing-*dumartes*'. This is not to suggest that in the Luvian cult of Arzawa the *dammara*-women and/or men were necessarily involved in bird, or bee, divination but merely to suggest that the Luvo-Hittite term *dammara-* provided a cult loanword to Greeks in the context of Anatolian Mycenaean-Luvian interaction and intermarriage, and that in Greek cult structures the term found an application, in both simplex and compound forms, in the identification of particular Mycenaean cult officiants in the Late Bronze Age. For the transfer of terms from one cult to another, compare, for example, the Christian appropriation of Latin *pontifex* (plural *pontificēs*), naming a member of a pre-Christian Roman priestly college, for identifying the Bishop of Rome.

§145. Operating with this borrowing scenario, let us turn to the question of what we are to make of the variation between Linear B *du-ma* (*dumar*) and *da-ma* (*damar*)? The former (*du-ma*) departs *orthographically* from the Hittite spelling of *dammara-*, the latter (*da-ma*), *mutatis mutandis*, replicates the Hittite spelling (*dam-ma-ra-*). Given that borrowed words are subject to phonic accommodation by the borrowing language, the Mycenaean variant *dumar* would look to be, of the two variants, one acquired as a *spoken* form. For this kind of variation we can compare, for example, that seen in Greek *Labrandeús* (Λαβρανδεύς) beside *Labraundos* (Λαβραυνδος), *Labraiundos* (Λαβραιυνδος), and so on, epithet of Zeus (whose iconography depicts him with the breast-like appendages of Ephesian Artemis) built on the Carian place name that appears in Greek as *Lábranda* (Λάβρανδα), *Lábraunda* (Λάβρ<>span style="background-color: paleturquoise;"αυνδα). Consider too the forms of Greek place names borrowed from Anatolian sources, such as Greek *Lésbos* (Λέσβος) from Luvic *Lazpa*, *Éphesos* (Ἔφεσος) from Luvic *Apaša*, and so on.[31] Linear B *mo-ri-wo-do*, post-Mycenaean Greek *mólubdos* (μόλυβδος) and *mólibos* (μόλιβος) 'lead' compares to Lydian *mariwda-* 'dark, black', though presence of the term in Mycenaean requires a borrowing from a Bronze-Age language (rather than Iron-Age Lydian).[32] For a loan from Greek into Anatolian and variation between donor and recipient forms we can compare Mycenaean **Etewoclewas* (reflected in the patronymic *e-te-wo-ke-re-we-i-jo*), i.e. *Eteocles*, and the *Ta-wa-ga-la-wa-* of Ahhiyawa document AhT 4 (the "Tawagalawa Letter").

§146. Let us consider the case of Greek *dépas* (δέπας) 'bowl, beaker', which has long been judged to be a probable borrowing from Luvian (see, for example, Chantraine 1968:264). The word occurs already in Mycenaean, attested consistently with the spelling *di-pa* (that is, *s*-stem *dipas*), found five times on Pylos tablet **Ta 641**, five times on Knossos tablet **K(1) 875**, and once on **K(1) 740**.[33] The Mycenaean forms are used to identify vessels with and without handles; co-occurrence of logograms indicates that the implement is a type of jar (**202*^{VAS}, once **214*^{VAS}*+DI*),[34] rather than a bowl. The source word (also *s*-stem) has been identified with Cuneiform Luvian *tappaš-* 'heaven, sky' (from **nébhes-*),[35] beside Hieroglyphic Luvian *tipas-* (from **nebhes-*), and spelled with the CAELUM logogram (*182), which, in spite of its meaning, has the shape of a bowl. In Hittite iconography, the sky can be represented as a bowl.[36] Greek *dépas* can be used, for example, of the cosmic golden bowl in which Helios, the Sun, floats across Ocean into the depths of Night, as in Stesichorus fr. 8 Page (*Geryoneis*).[37]

§147. Watkins addresses the borrowing in a 2007 article. He points out (p.319, citing personal communications from Craig Melchert and Norbert Oettinger) that (1) since the fortis geminate bilabials of Cuneiform Luvian *tappaš* provide an approximate match for the single voiceless bilabial of Greek *dépas* (δέπας), and (2) since Luvian lacks the vowel *e*, then Cuneiform *tappaš-* is as likely a source of the Greek *dépas* as is the Hieroglyphic form *tipas-*. In regard to the Luvian *a*-vowel of the initial syllable beside the Greek *e*-vowel, Watkins offers the parallel borrowing outcome seen in *Apaša* beside *Éphesos* (Ἔφεσος), which we have just again encountered.

§148. There is, moreover, as Watkins goes on to discuss (2007:320–321), a Hieroglyphic Luvian *i*-stem **tapi* (CAELUM-*pi*) that occurs on a silver bowl and with which form Hawkins (1993) compares Hittite $^{\text{(DUG)}}$*tapi-šana-*, naming a type of vessel,[38] seemingly a bowl, used in ritual.[39] A second example of the Hieroglyphic Luvian form is seen on another silver bowl (Hawkins 1997) and in this case the inscription provides a bit of tantalizing context, placing it in the reign of a Tudhaliya at the time when he struck a blow against the place Tarwiza, a toponym that has been conjectured to identify Troy, but in any event seemingly a place belonging to the Assuwan Confederacy of western Anatolia.[40] Melchert (2002:299–300) suggests that what we see here orthographically could be a Hieroglyphic Luvian rebus spelling of this vessel-name, **tapi*, with the logogram that is used to spell the phonetically similar word for 'sky', catalyzed by notional associations of *sky* with *bowl*. The scenario that appears to emerge from these considerations is one which plausibly accords with the proposed Greek acquisition of *dépas* (δέπας) in Bronze-Age Anatolia.

§149. The borrowing of Greek *dépas* (δέπας) from Luvian is a matter that is also addressed by Yakubovich (2013:119). He proposes, however, that the donor system should be identified as specifically the particular dialect of Arzawa — that is, "Arzawa Luvic." Yakubovich's concern arises from the phonetics of word-initial stop consonants in Luvian proper. Luvian lacks word-initial voiced stops, it seems: while *d*-symbols are used in *spelling* word-initially, only voiceless *t* appears to be *pronounced* in this context. However, the use of Greek voiced *d* to express a Luvian loanword that begins with an initial dental stop is not necessarily a problematic matter for Mycenaean borrowings: given the Greek three-way phonemic contrast between voiceless unaspirated, voiceless aspirated, and voiced stops in word-initial position, it may simply be a consequence of the automatic acoustic and articulatory approximation of a voiced unaspirated Greek dental stop *d-* (in a contrastive system) for a Luvian (non-contrastive) word-initial dental stop (and allowing that phonetic conditioning created by the remainder of the borrowed word may come into play). Consider Watkin's (2007:319n26) succinct expression of the matter:

> It is clear that whatever the phonetic realization of the initial <t-> in Cuneiform Luvian in the second millennium or Hieroglyphic Luvian in the first millennium, the Mycenaean Greeks of the second millennium perceived it as [d-], which persisted unchanged into Classical Greek.

§150. Moreover, Rieken and Yakubovich (2020) have now shown that Luvian could preserve an initial voiced stop in technical borrowed vocabulary (relevant if *dammara-* were itself a *Wanderwort*). Beyond these considerations, it is unclear if stop devoicing had even occurred in Luvian at the time in which the Mycenaean borrowing would have taken place.[41] These various phonetic and phonological considerations apply equally to the Mycenaean acquisition of a Luvian *dammara-*.

Du-ma and *da-ma* and the mode of borrowing

§151. If Linear B *du-ma* spells a form that was acquired *orally* in a setting of Greek-Luvian cultural intermixing, *da-ma* looks to be a *scribal* borrowing — in effect, a learned acquisition. In other words, Luvo-Hittite *dammara-* was taken over as an *orthographic* entity (*dam-ma-ra-*), one that was then written in accordance with Linear B spelling practices. What was the pronunciation attached to this form? Aside from the nominative singular (*da-ma*, spelling *damar*), the word is attested (found only in compounds) with the spelling *-da-ma-te*, revealing that the orthographic loanword was assigned *the same Greek morphological accommodation* that we see in the conversationally-acquired *du-ma* form (accommodation accomplished, from a process perspective, by speakers automatically, analogically inserting a *t* before a vocalic ending). And this likely suggests that *dumartes* etc., native-dialect forms for a body of Bronze-Age Anatolian-Greek speakers, at some moment informed the morphology of *-damartes* etc. Presumably, for Mycenaean scribes who were not members of this Anatolian-Greek speech community, the *pronunciation* that was assigned to the *orthographic* borrowings *da-ma* and *-da-ma-te* would have been *damar* and *-damartes*, respectively (rather than *dumar*, *dumartes*) — a spelling pronunciation. [42] The phenomenon would not be so different from (though perhaps not identical to) that seen in Middle English by which variant forms of what was ultimately a single Latin word entered the English language — one form acquired by language learners as Norman French exerted its influence and the other borrowed directly from Latin, such as *roial* (i.e. *royal*) and *regalle* (i.e. *regal*), respectively.

§152. The scenario presented here would of course require Mycenaean scribal exposure to Luvo-Hittite texts at the moment in which *da-ma* and *-da-ma-te* entered the scribal lexis as orthographically-informed borrowings. How would such exposure have come about? The international transmission of scribal documents is a well-attested phenomenon in the ancient Near East and environs. A Hittite-Mycenaean scribal interface presents itself in Ahhiyawa letter AhT 6 (ca. first half of the thirteenth century), the fragmentarily-preserved Hittite document (seemingly) sent by an Ahhiyawan king to his Hittite counterpart (possibly Muwatalli II) concerning ownership of certain islands.[43] Melchert 2020 explores the nature of the scribal interaction that generation of this Hittite-language Mycenaean document, with its Luvianisms, would entail (especially in light of Hittite-Egyptian correspondence). Melchert demonstrates that the author of the Hittite text was almost certainly a native speaker of that language, and he develops plausible scenarios in which the Mycenaean original would have been delivered into the hand of a scribe in the service of the Hittite monarch, i.e. "translation took place at the receiving end." Conversely, when the Mycenaeans were at the receiving end of a Hittite transmission one must reasonably expect that some form of Greek linguistic equivalent would have been generated.

Standard and non-standard usage

§153. The picture that emerges from the examination of the distribution of *du-ma/da-ma* forms among scribal hands presented in the table of §§127–135 provides less clarity than we would like. Though we seem to be able to detect a hypercorrection in the production of a *da-ma* form, and this on the part of a scribe who is associated with a class of scribal hands among which are numbered Special Mycenaean users. This would be consistent with the view of "Normal" Mycenaean as the standard dialect of the Mycenaean chancellery:[44] Special Mycenaean forms were suppressed and could be corrected — that is, erased and rewritten as Normal Mycenaean.[45] The acquisition of *da-ma* forms of Luvo-Hittite *dammara-* appears to have been an orthographic phenomenon — that is, the Anatolian term was taken over by scribes among whose responsibilities was the translation of received Hittite documents into Greek. These could also have been locally-produced Luvian documents concerned with matters of cult. We have seen documentation of an issue of *dammara*-women having habitual intercourse with men of Arzawa, and the explicit mention of *dammara*-women and *dammara*-men in one of the surviving texts that make mention of the Ahhiyawa (AhT 20); we must possess only some portion of the total Ahhiyawa correspondence, and none of the actual documents that were taken into hand by the Mycenaean recipients. We can reasonably anticipate that Mycenaean scribes operating in Anatolia encountered Luvo-Hittite *dam-ma-ra-* in documents emanating from Anatolian-language sources. The Greek scribal activity of translating Hittite documents would presumably have been one conducted on the ground in Anatolia, but the *da-ma* forms would be transmitted to the Mycenaean scribal establishment at Pylos, at the least, in whose documentary handiwork the *da-ma* references have survived, thanks to the fiery destruction of the Palace of Nestor. The scenario that presents itself is one of movement of individuals trained in the scribal *tékhnē* from Anatolia to the Balkan Mycenaean homeland. It is these individuals who served as the conduit through which the learned spelling *da-ma* was introduced into the chancellery establishment. This scenario is consistent with other references in the Linear B documents of ideas imported from Asia to Hellas.

§154. On the other hand, it is the native Ahhiyawa community, the product of intermixing of Mycenaeans with local Luvic peoples, that acquired the *du-ma* forms through processes of language acquisition and cultural assimilation. And it is members of this Anatolian Greek community who introduced the dialect lexical item *dumar*, *dumartes* into Balkan Hellas as they moved back and forth across the Aegean. We could have every expectation, *ipso facto*, that some of these itinerant Anatolian Mycenaeans would themselves have been *dumartes*, and likely *meli-dumartes* and *poro-dumartes*, given that the cult office became established in Mycenaean palace society. We can thus speak meaningfully, I would suggest, of the *dumar* forms of this borrowed lexeme constituting a Mycenaean dialect feature. But does this lexical feature intersect with the Normal Mycenaean versus Special Mycenaean dialect distinction? No it does not, to the extent that it does not participate in any of the four isoglosses that have conventionally been used to distinguish Normal Mycenaean from Special Mycenaean. And no, again, it does not, to the extent that Normal Mycenaean scribal hands also utilize the *dumar* forms. If we were able independently to make the case that the Anatolian Mycenaean dialect equates to Special Mycenaean, utilizing linguistic features that are distributed between scribal hands in a complementary way, then the case of *dumar* would represent an example of a dialect lexeme that had spread into the standard language from Special Mycenaean.

Discussion following Woodard's presentation

§155.1. Brent Vine addressed three fundamental questions. First, he took up the word formation of *po-ro-du-ma-te* by comparing the term to the Mycenaean nouns *ko-re-te* and *po-ro-ko-re-te* and highlighting that (i) both are names of public officials, and (ii) in the latter — that is, *po-ro-ko-re-te* — *po-ro* means *pro*.

§155.2. Tom Palaima remarked that **PY Jn 829** sets a clear hierarchy between *ko-re-te* and *po-ro-ko-re-te* and, while *du-ma-te* is linked with *ko-re-te*, *po-ro-ko-re-te* is connected to *ka-ra-wi-po-ro*, (and not *po-ro-du-ma-te*).

§155.3. Roger Woodard pointed out that, although the spelling of *po-ro-ko-re-te* allows both the reading *pro-* and *po-r/lo-* for the first member, the contextual reasons that Palaima illustrated (§155.2.) make the former interpretation preferable.

§156. Second, Vine suggested that the Mycenaean boonyms *to-ma-ko* (/*stomargos*/) and *tu-ma-ko* may offer a partial comparison in terms of pre-labial vowel quality change regarding the vowel quality distinction between *da-ma* and *du-ma*.

§157.1. Third, Vine made observations on the morphological distinction between Luvian *dammara-* and Mycenaean *da-ma* by highlighting that Mycenaean *da-ma* (cf. alphabetic Greek δάμαρ) seems an athematic *r*-stem, an archaic type of form that does not match the Anatolian *a*-stem — and it is surprising that a borrowed *a*-stem would be turned into an *r*-stem.

§157.2. Woodard suggested in regard to this observation that the Luvian form is assimilated to the Greek morphology in mixed Mycenaean-Luvian communities.

§158. Palaima added that some scholars, himself included (Palaima 2011:113–127), suspect that Mycenaean scribes were of Minoan ethnicity. Therefore, the transmission of writing would have taken place through clan groups given the absence of scribal schools. Minoan bilingual scribes might have a natural predilection for spelling with *u* vs. *o* (e.g. *ku-ni-su* and *ko-no-so*).

§159.1. Gregory Nagy brought in Herodotus's story about Carian women who were the wives of Greek-speaking husbands and who persisted in using their Carian language. There could be a lot of transmission from one generation to the next through the wives. In Herodotus's account the women are to give up Carian and speak Greek. The background of this story could be similar to the case of Luvic-speaking women, who serve to introduce *du-ma/da-ma* forms to a mixed Greek-Luvian community. *Da-ma* may mean 'wife'.

§159.2. Woodard responded that he is not certain that the Homeric word for 'wife' (δάμαρ) is related to Linear B *da-ma*; a conventional etymology ties δάμαρ to δαμάζω.

§160. Rachele Pierini added that in Linear A there is a sequence of three signs of which the second is *pu*, the third *re*, and first might be *da* (Salgarella and Pierini forthcoming). According to Duhoux (1978), the Minoan language may indicate gender through prefixes. If so, the alternation between *du-ma-te* and *da-ma-te* might be a residual form of distinction between genders stemming from Linear A, which took on different meaning in Linear B.

§161. Bibliography

Arbeitman, Y. L. 2000. "Tamar's Name or is It?" *Zeitschrift für die Alttestamentliche Wissenschaft* 112:341–355.

Aura Jorro, F. 1985 and 1993. *Diccionario micénico*. 2 vols. Diccionario Griego-Español Anejos 1–2. Madrid.

Bawanypeck, D. 2005. *Die Rituale der Auguren*. Heidelberg.

Bawanypeck, D. 2013. "'Luwian' Religious Texts in the Archives of Ḫattuša." In Mouton, Rutherford, and Yakubovich 2013:159–176.

Beckman, G., T. R. Bryce, and E. Cline. 2011. *The Ahhiyawa Texts*. Atlanta.

Bennett, E. L., and J.-P. Olivier. 1973. *The Pylos Tablets Transcribed*. 2 vols. 2nd ed. Rome.

Bernabé, A., and E. R. Luján. 2008. "Mycenaean Technology." In Duhoux and Morpurgo Davies 2008:201–233.

Broida, M. W. 2014. *Forestalling Doom: "Apotropaic Intercession" in the Hebrew Bible and the Ancient Near East*. Münster.

Bryce, T. R. 2005. *The Kingdom of the Hittites*. 2nd ed. Oxford.

Bryce, T. R. 2006. *The Trojans and Their Neighbors*. Abingdon, Oxfordshire.

Bryce, T. R. 2009. *The Routledge Handbook of the Peoples and Places of Ancient Western Asia: From the Early Bronze Age to the Fall of the Persian Empire*. New York.

CHD = Güterbock, H., H. A. Hoffner, Jr., and T. P. J. van den Hout, eds. 2002–. *The Hittite Dictionary of the Oriental Institute of the University of Chicago*. Chicago.

Chantraine, P. 1968. *Dictionnaire étymologique de la langue grecque*. Paris.

Collins, B. J. Forthcoming. "Huwarlu's Ritual 'When Terrible Birds (Are Present)'." In *Hittite Rituals from Arzawa and the Lower Land*. Atlanta.

Duhoux, Y. 1978. "Une analyse linguistique du linéaire A." In *Études Minoennes 1*, ed. Y. Duhoux, 65–129. Louvain-la-Neuve.

Duhoux, Y. 2008. "Mycenaean Anthology." In Duhoux and Morpurgo Davies 2008:243–393.

Duhoux, Y., and A. Morpurgo Davies, eds. 2008. *A Companion to Linear B: Mycenaean Greek Texts and their World*. Vol. 1. Louvain-la-Neuve.

Durnford, S. 2010. "How Old Was the Ankara Silver Bowl When Its Inscriptions Were Added?" *Anatolian Studies* 60:51–70.

Egetmeyer, M. 2010. *Le dialecte grec ancien de Chypre*. 2 vols. Berlin.

Ehelolf, H. 1930. "Zum hethitischen Lexikon." In *Kleinasiatische Forschungen*, vol. 1, ed. F. Sommer and H. Ehelolf, 137–160 and 393–400. Weimar.

Ernout, A., and A. Meillet. 1959. *Dictionnaire étymologique de la langue latine*. 4th ed. Paris.

Franklin, J. C. 2006. "Lyre Gods of the Bronze Age Musical Koine." *Journal of Ancient Near Eastern Religions* 6:39–69.

Hawkins, J. D. 1982. "The Neo-Hittite States in Syria and Anatolia." In *The Cambridge Ancient History*, vol. 3, part 3, 2nd ed., ed. J. Boardman and N. G. L. Hammond, 372–441. Cambridge.

Hawkins, J. D. 1987. "The KULULU Lead Strips: Economic Documents in Hieroglyphic Luwian." *Anatolian Studies* 37:135–162.

Hawkins, J. D. 1993. "A Bowl Epigraph of the Official Taprammi." In *Aspects of Art and Iconography: Anatolia and Its Neighbors, Studies in Honor of Nimet Özgüç*, ed. M. Mellink, E. Porada, and T. Özgüç, 715–717. Ankara.

Hawkins, J. D. 1997. "A Hieroglyphic Luvian Inscription on a Silver Bowl in the Museum of Anatolian Civilizations, Ankara." *Anadolu Medeniyetleri Müzesi, 1996 Yıllığı*. Ankara.

Hawkins, J. D. 1999–2000. *Corpus of Hieroglyphic Luwian Inscriptions*. 2 vols. Berlin.

Herda, A. 2013. "Greek (and Our) Views on the Carians." In Mouton, Rutherford, and Yakubovich 2013:421–508.

Hutter, M. 2003. "Aspects of Luwian Religion." In Melchert 2003:211–280.

Mallory, J. P., and D. Q. Adams, eds. 1997. *Encyclopedia of Indo-European Culture*. London.

Melchert, H. C. 1993. *Cuneiform Luvian Lexicon*. Chapel Hill.

Melchert, H. C. 2002. "Covert Possessive Compounds in Hittite and Luvian." In *The Linguist's Linguist: A Collection of Papers in Honor of Alexis Manaster Ramer*, ed. F. Cavoto, 2:299–302. Munich.

Melchert, H. C., ed. 2003. *The Luwians*. Leiden.

Melchert, H. C. 2008. "Greek mólybdos as a Loanword from Lydian." In *Anatolian Interfaces: Hittites, Greeks and Their Neighbors*, ed. B. J. Collins, M. R. Bachvarova, and I. C. Rutherford, 153–157. Oxford.

Melchert, H. C. 2013. "Luvian Language in 'Luvian' Rituals in Hattuša." In *Beyond Hatti: A Tribute to Gary Beckman*, ed. B. J. Collins and P. Michalowski, 159–172. Atlanta.

Melchert, H. C. 2014. "PIE *-eh₂ as an 'Individualizing' Suffix and the Feminine Gender." In *Studies on the Collective and Feminine in Indo-European from a Diachronic and Typological Perspective*, ed. S. Neri and R. Schuhmann, 257–271. Leiden.

Melchert, H. C. 2018. Review of Payne 2015. *Journal of the American Oriental Society* 138:591–593.

Melchert, H. C. 2020. "Mycenaean and Hittite Diplomatic Correspondence: Fact and Fiction." *Classical Inquiries*. https://classical-inquiries.chs.harvard.edu/mycenaean-and-hittite-diplomatic-correspondence-fact-and-fiction/.

Miller, J. L. 2004. *Studies in the Origins, Development and Interpretation of the Kizzuwatna Rituals*. Wiesbaden.

Morpurgo, A. 1958. "ΔΑΜΑΡ in Miceneo." *La parola del passato* 13:322–327.

Mouton, A., I. Rutherford, and I. Yakubovich, eds. 2013. *Luwian Identities: Culture, Language, and Religion Between Anatolia and the Aegean*. Leiden.

Nagy, G. 1968. "On Dialectal Anomalies in Pylian Texts." In *Atti e memorie del 1° congresso internazionale di micenologia*, 2:663–679. Incunabula graeca 25. Rome.

Neumann, G. 1961. *Untersuchungen zum Weiterleben hethitischen und luwischen Sprachgutes in hellenistischer und römischer Zeit*. Wiesbaden.

Nussbaum, A. 1986. *Head and Horn in Indo-European*. Berlin.

Oreshko, R. 2018. "Anatolian Linguistic Influences in Early Greek (1500–800 BC)? Critical Observations against Sociolinguistic and Areal Background." *Journal of Language Relationship* 16:93–118.

Palaima, T. G. 1988. *The Scribes of Pylos*. Rome.

Palaima, T. G. 2002. "Special vs. Normal Mycenaean: Hand 24 and Writing in the Service of the King?" In *A-na-qo-ta. Studies presented to J. T. Killen*, ed. J. Bennet and J. Driessen, 205–221, Salamanca.

Palaima, T. G. 2011."Scribes, Scribal Hands and Palaeography." In *A Companion to Linear B: Mycenaean Greek Texts and their World*, vol. 2, ed. Y. Duhoux and A. Morpurgo Davies, 33–136. Louvain-la-Neuve.

Payne, A. 2015. *Schrift und Schriftlichkeit: Die anatolische Hieroglyphenschrift*. Wiesbaden.

Petersson, H. 1916. "Beiträge zur armenischen Wortkunde." *Zeitschrift für vergleichende Sprachforschung auf dem Gebiete der indogermanischen Sprachen* 47:240–291.

Puhvel, J. 2011. *Hittite Etymological Dictionary*. Volume 8. Berlin.

Rieken, E., and I. Yakubovich. 2020. "Ein lydisches Schmuckstück." In *Maiores philologiae pontes: Festschrift für Michael Meier-Brügger zum 70. Geburtstag*, ed. M. Fritz, T. Kitazumi, and M. Veksina, 215–223. Ann Arbor.

Risch, E. 1966. "Les différences dialectales dans le mycénien." In *Proceedings of the Cambridge Colloquium on Mycenaean Studies*, ed. L. R. Palmer and J. Chadwick, 150–157. Cambridge.

Salgarella, E., and R. Pierini. Forthcoming. "Off the top of Minoans' head: comparing Minoan figurines and Linear A signs 508–511." In *Sympozjum Egejskie. Papers in Aegean Archaeology 4*.

Simon, Z. 2016. "Zum hieroglyphen-luwischen Zeichen CAELUM (*182)." NABU 2016:159–162.

Simon, Z. 2017. "δέπας und die anderen: Spuren eines verschollenen luw(o)iden Dialekts?" *Revue d'études indoeuropéennes* 3:245–259.

Tischler, J. 1991. *Hethitisches etymologisches Glossar*. Vol. 3, part 1, with contributions by Günter Neumann and Erich Neu. Innsbruck.

van den Hout, T. 1998. *The Purity of Kingship: An Edition of CHT 569 and Related Hittite Oracle Inquiries of Tuthaliya IV*. Leiden.

Walde, A., and J. Pokorny. 1927. *Vergleichendes Wörterbuch der indogermanischen Sprachen*. Vol. 2. Berlin and Leipzig.

Watkins, C. 2007. "The Golden Bowl: Thoughts on the New Sappho and its Asianic Background." *Classical Antiquity* 26:305–324.

Watkins, C. 2011. *The American Heritage Dictionary of Indo-European Roots*. 3rd ed. Boston.

Weeden, M. 2018. "Hittite-Ahhiyawan Politics as Seen from the Tablets: A Reaction to Trevor Bryce's Article from a Hittitological Perspective." *Studi micenei ed egeo-anatolici*, n.s., 4:217–227.

Woodard, R. D. Forthcoming. *Aeolian Origins and Other Mycenaean Matters*. Washington, DC and Cambridge, MA.

Yakubovich, I. 2010. *Sociolinguistics of Luvian Language*. Leiden.

Yakubovich, I. 2013. "Anatolian Names in –*wiya* and the Structure of Empire Luvian Onomastics." In Mouton, Rutherford, and Yakubovich 2013:87–123.

Notes

[1] An extended treatment of this topic will appear in Woodard forthcoming.

[2] For bibliography see Aura Jorro 1985:439–440.

[3] *Me-ri-du-te* is written.

[4] Compare *da-ma*[on Knossos tablet **X 5904** and *ḍa-ma*[on **KN Xa 400**, both also highly fragmentary.

[5] Walde and Pokorny 1927:21; Mallory and Adams 1997:646; Watkins 2011:68.

[6] See, *inter alia*, Nussbaum 1986:13–14, 33–34; Melchert 2014:259.

[7] See Aura Jorro 1993:163–164 for discussion with bibliography.

[8] See, *inter alia*, Walde and Pokorny 1927:51; Chantraine 1968:926–927; Mallory and Adams 1997:210; Watkins 2011:66.

[9] See, *inter alia*, Walde and Pokorny 1927:19–21; Ernout and Meillet 1959:496; Mallory and Adams 1997:210; Watkins 2011:69.

[10] See, *inter alia*, Chantraine 1968:929; Mallory and Adams 1997:228–229; Watkins 2011:68.

[11] The form *da-ma-te* on Pylos tablet **En 609** appears to be unrelated, having a meaning of something like 'households'; the signification of the abbreviation DA is uncertain, but may represent this term. See, *inter alia*, the discussions of Duhoux 2008:307–308; 2011:26. Some have seen in *da-ma-te* the name of the goddess *Dēmḗtēr* (Δημήτηρ) 'Demeter'. For bibliography see Aura Jorro 1985:151–152.

[12] *Me-ri-du-te* (line 5), *mi-ka-ta* (line 5), *e-ro-wo-ko* (line 6), *po-ro-du-ma-te* (line 7), *o-pi-te-u-ke-e-we* (line 8).

[13] See Risch's page 155 for a synoptic table of his findings. See also Nagy 1968 *passim*.

[14] Risch's table on his page 155 is here updated with regard to identification of scribal hands and is expanded on the basis of Nagy 1968. Nagy identifies unassibilated *t* before *i* as a Special Mycenaean feature and assibilated *s* in the same context as a Normal Mycenaean feature (i.e. feature 1D above). The scribal hand of Pylos tablet **Vn 851**, who writes Normal Mycenaean assibilated *ka-pa-si-ja* is presently identified as hand 12 (and is incorporated into the chart below). An instance of unassibilated *ka-pa-ti-ja* also occurs on Pylos tablet **Un 443** (hand 6, [otherwise identified as a Special Mycenaean hand]); compare too at Thebes, on tablet **Uq 434**, *ḳa-pa-ṭi-ja*[. With unassibilated *ti-nwa-ti-ja-o* on Pylos tablet **Ad 684** (hand 23) compare the single and fragmentary form *ti-nwa-ti*[on **La 633** (perhaps hand 13).

[15] See Bennett and Olivier 1973, 2:11–20. For detailed discussion see Palaima 1988:33, 35–134.

[16] Personal correspondence; 28 January 2015.

[17] Neumann cites as earlier work on the cult office Sommer and Ehelolf 1930 (within which see Ehelolf 1930:152 and 155). See more recently, citing Neumann, Arbeitman 2000. See also Egetmeyer 2010:289.

[18] CHLI = Hawkins 1999–2000; Hawkins interprets *tamaruna* as an infinitive. For succinct discussion of the documents within the greater context of Luvian inscriptions, see also Hawkins 1982:438–439, with bibliography of earlier treatments. See also Hawkins 1987 and Bryce 2009:395.

[19] I am herein using the text identification system of Beckman, Bryce, and Cline 2011.

[20] From *šeš-* 'to sleep, have sexual intercourse with', and also 'to sleep for incubation'; see CHD Š:440, 443–444.

[21] See van den Hout 1998:138–145.

[22] For a helpful survey of Luvian religious texts preserved within the Hittite archives, see Bawanypeck 2013 (building upon Hutter 2003:232–254). On Luvian language in these rituals see Melchert 2013, with discussion of earlier work; of which see especially Miller 2004 and Yakubovich 2010.

[23] On the ritual see, *inter alia*, Bawanypeck 2005:21–248 and 2013:162–164; Broida 2014:116–138; and Collins forthcoming.

[24] See Bawanypeck 2005:22.

[25] See CHD Š 53.

[26] See CHD P 199, with bibliography.

[27] For both (1) and (2) see CHD P 384.

[28] See CHD P 199.

[29] See Puhvel 2011:175–176.

[30] See CHD P 199.

[31] See Herda 2013:470, with bibliography. A similar possible example may be that provided by the Lesbian Greek toponym *Mutil-ḗnē* (Μυτιλ-ήνη), if derived from Luvo-Hittite *muwa-talli-* 'mighty' via effacement and replacement of the Hittite suffix *-talli-* with a Greek *-ḗnē* (-ήνη), itself based on Luvic *–wann(i)-*; see the discussion of Yakubovich 2013:120, with references.

[32] See Melchert 2008.

[33] Compare *di-pa-te*[in line 2 of the highly fragmentary Knossos tablet **F 5079**.

[34] Knossos **K(1) 740** for **214*VAS*+DI*. For both logograms see Bernabé and Luján 2008:224.

[35] See Melchert 1993:208.

[36] See the remarks of Watkins 2007:320, with bibliography. Regarding a proposed Greek borrowing of the Luvian term see also Simon 2017:248–250; on the CAELUM logogram see also Simon 2016. Oreshko 2018:102–104 is hyper-negative.

[37] See also Stesichorus fr. 4.1 and 8.1 Page; Aeschylus fr. 69.4 and 74.4 TrGF; Pherecydes fr. 18a.3, 6, 8 Fowler.

[38] Perhaps 'that which has the shape of a tapi-vessel' (Melchert 2002:299).

[39] On Hittite (DUG)*tapi-šana–* and *kalmi-šana*, see Melchert 2002:298–299, with bibliography of earlier work.

[40] In addition to Watkins see also, *inter alia*, Bryce 2005:125–126 and 2006:108–109. For an attempt to date the Ankara silver bowl inscription to a post-Empire period see Payne 2015:79–98; for a critique see Melchert 2018:592, who notes that "Payne dismisses without argument the attractive solution of Durnford (2010) of a late inscription with an allusion to a much earlier famous historical event."

[41] H. Craig Melchert, personal correspondence; 27 July 2021. I wish to thank Professor Melchert for sharing his invaluable insight in matters discussed in this section.

[42] If the scribal borrowings *da-ma* and *-da-ma-te* were actually pronounced as *dumar* and *-dumartes*, then the spelling *da-ma* would be *non-phonetic* and the sequence of signs (*da-ma*) would in effect constitute what might be called a "Luvogram." The cuneiform scripts of Anatolia work in this fashion, utilizing both Sumerian and Akkadian orthographic symbols (Sumerograms and Akkadograms) non-phonetically to spell Hittite (etc.) lexemes, which would (presumably) be assigned a Hittite (and so on) phonetic value upon reading. The use of "Luvograms" in Linear B spelling has not been a topic of investigation so far as I am aware.

[43] For the view that the Ahhiyawan king is recipient of the letter see Weeden 2018.

[44] See the comments of Palaima 2002:208–210, in which he also discusses insightfully the necessary interaction of palace scribes, who aim to write in standard dialect, with "the 'extramural' dialect of the non-palatial segment of the population."

[45] As by Pylos hand 41: see Palaima 2002:217.

GUEST POST

Aegean iconography, Hittite language, Linear A, Linear B, MASt, Minoan-Mycenaean civilization, Mochlos seal, papyrus, scribal practice

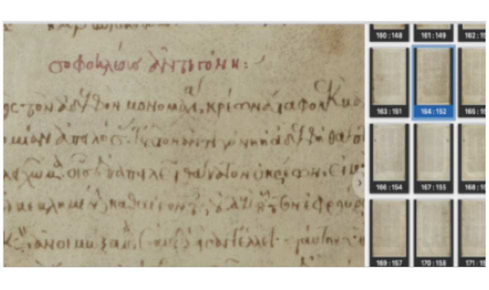
Continue Reading

The God and the goat, by Rowan Ricardo Phillips

Apollo and Marsyas Go. Go before I change my mind, Is all He would have thought, and said, If not…

Reverse Orpheus, reverse Eurydice, by Rowan Ricardo Phillips

Reverse Orpheus And saw his own death happen. But as a mending this time, a cleaning. They shoved his limbs…



Thoughts on Classical Studies in the 21st Century United States

: This paper consists of three complementary parts. The first section describes three instances where very technical scholarship on Greek…

CENTER FOR HELLENIC STUDIES HARVARD UNIVERSITY

EU/EEA Privacy Disclosures Cookie Policy