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SPICING WINE AT THE *SYMPOSION*: FACT OR FICTION? SOME CRITICAL THOUGHTS ON MATERIAL ASPECTS OF COMMENSALITY IN THE EARLY IRON AGE AND ARCHAIC MEDITERRANEAN WORLD

ALEXANDRA VILLING
*The British Museum**

Abstract: Interpretations of metal graters and pottery tripod bowls as *Leitfossils* of a trans-Mediterranean 'orientalizing' culture of spiced-wine consumption have of late become a staple of scholarship on sympotic banqueting, shaping our perception of ancient wine-drinking and its role in cross-cultural interaction in the first half of the first millennium BC. Yet a closer look at the evidence for spiced wine and the use of graters casts serious doubt on assumptions of a widespread practice of adding 'spices' to wine during the Greek *symposion* and of the use of graters or tripod grinding bowls for such a purpose in the Mediterranean and Near Eastern world. A more plausible scenario, it is argued, arises from the well-attested association of graters with cheese and other primarily culinary commodities. It sees the grater's prime function and symbolic significance shift from a use in Early Iron Age 'Homeric' hospitality to becoming a tool in the increasingly complex cuisines associated with the Archaic and Classical banquet – an indicator of evolving Mediterranean commensality with no less of an international horizon, but a commensality that involved interaction and shared consumption beyond the narrowly sympotic.

Keywords: Archaic Greece, *symposion*, grater, wine, spices

I. Graters: *Leitfossils* of trans-Mediterranean drinking practice?

Deducing social practice from material things is an undertaking invariably fraught with problems. The grater is a case in point.[1] In the ancient Greek world, graters were sheets of bronze or iron perforated by square punches, commonly around 7–10cm wide and 11–20cm long, though they could be as small as 5 × 7cm (fig. 1).[2] They were often nailed on to wooden frames or boxes, as suggested by nail holes along their edges and illustrated by ancient representations (fig. 2).[3] Of

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[1] On Greek graters, see especially Ridgway (1997); West (1998); Kistler (2009); (2014); Krapf (2009). Graters were first explicitly discussed and catalogued by Jacobsthal (1932), who took a passage in Aristophanes referring to 'Leaina on the cheese grater' as pointing to graters with lioness-shaped handles. A new interpretation of this passage by Prince (2009) removes the need to search for such graters in the material evidence, even if a late Archaic grater with a handle in the shape of a goat (a reference to goat's cheese?) is in fact preserved: Dayagi-Mendels and Rozenberg (2010) 254, fig. 4; *cf.* Hoffmann (1964); Ridgway (1997) 340 n.9. There are also graters with an arc-like handle on the back or a handle on the side: Pelagatti (1987) 174, no. 67 (Rome, Villa Giulia 51435, probably from Cerveteri). Finds of graters are listed in the (partly overlapping) catalogues of Ridgway (1997); Kistler (2009); Krapf (2009). Kistler (2014) also includes a distribution map. For the rare phenomenon of terracotta graters, see Quevedo (2011). On Greek cheese and cheese graters, see also LSJ s.v. *tyroknestis*; Kroll (1917); Bruns (1970) 2, 15, 37; Curtis (2001) 315–16, with further references; Schipporeit (2005) 338–39 nos 1186 (Perachora), 1187 (Philia); Haggis et al. (2007) 289–90, fig. 36.

[2] For example, those from Matelica (Silvestrini and Sabbati (2008) 184, 228, nos 225, 301) or Eleutherna (width 4.8cm, length 5.2cm (broken off); Stampolidis et al. (2018) 174 no. 43).

[3] Both of the illustrated examples are today in the British Museum. One (1975,0804.20; fig. 1a) is from the late fifth-century BC Trebbia tomb in Campania discussed further below (see fig. 8); the other (1856,1226.684; fig. 2b) does not have a recorded findspot but almost certainly also derives from Italy, having come to the museum as

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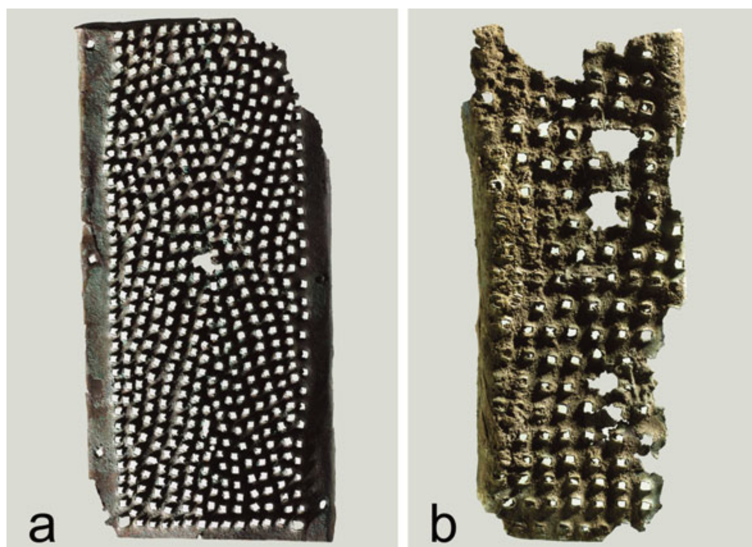

Fig. 1. Greek cheese graters in the British Museum: (a) from the Trebbia tomb, Campania, second half of the fifth century BC (British Museum 1975,0804.20), length 16.2cm; (b) from Italy, date uncertain, several nails are preserved along the edges that once attached the grater to a (probably) wooden frame (British Museum 1856,1226.684), length 12.7cm (photographs © Trustees of the British Museum).

late, these unassuming tools have become something of a celebrity in studies of ancient Mediterranean interaction. More than a mere kitchen utensil, the graters have been designated a *Leitfossil* for tracing networks of elite warrior societies and their inter-Mediterranean sympotic culture.

Graters were first placed in the spotlight by David Ridgway in 1997.[4] Ridgway suggested that the earliest archaeological evidence for graters[5] in rich, international warrior tombs at ninth-century BC Lefkandi needed to be seen in connection with the earliest textual sources for the grating of cheese in the making of a drink called *kyke[i]on* in Homer's *Iliad* (11.638–41):

> ἐν τῷ ῥά σφι κύκησε γυνὴ ἐϊκυῖα θεῇσιν
> οἴνῳ Πραμνείῳ, ἐπὶ δ' αἴγειον κνῆ τυρὸν
> κνήστι χαλκείῃ, ἐπὶ δ' ἄλφιτα λευκὰ πάλυνε,
> πινέμεναι δ' ἐκέλευσεν, ἐπεί ῥ' ὥπλισσε κυκειῶ.

> In that [cup] she mixed [it] for them, the woman like goddesses, with Pramnian wine, and she grated goat's cheese over it with a bronze grater [κνήστι χαλκείῃ], and sprinkled white barley flour [ἄλφιτα] over it; and when the *kykeon* [κυκειών] was prepared, she told them to drink. (tr. West (1998))

part of the collection of Sir William Temple. A third grater in the British Museum, not illustrated, is preserved only as a fragment and was excavated by Charles Newton on Kalymnos (1856,0826.526); it is of unusual asymmetrical shape, with smaller holes than the other two pieces, and is listed by Newton among a group of objects, 'nearly all Byzantine', mostly found in the area of the monastery in the precinct of the temple of Apollo (handwritten list of finds from Kalymnos held in the archives of the Department of Greece and Rome, British Museum).

[4] Ridgway (1997).

[5] Earlier graters are known from Minoan Crete, where pottery bowls with an integrated protuberance featuring a roughened surface suitable for grating have been found in habitation and ritual contexts, for example within the palaces of Hagia Triada and Phaistos: Girella (2005) 399, fig. 40; *cf.* Levi (1976) pl. 140; Levi and Carinci (1988) 222 fig. 49, pl. 95.e–k; see also Tzedakis and Martlew (1999) 97 fig. 68, for examples from Middle Minoan IIB Monastiraki.

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Fig. 2. Boiotian terracotta figurine: women grating cheese into a mortarium, early fifth century BC (Boston, Museum of Fine Arts 01.7783; photograph © 2020, Museum of Fine Arts, Boston).

Being prepared here for a wounded hero, other Greek sources confirm that *kykeon* had medicinal uses. Their heroic connotations and potential use in preparing analgesic or 'pleasurable' mixtures, Ridgway argued, made cheese graters popular also with elites in Italy, from the seventh through to the third century BC.[6]

The following year, in 1998, Martin West[7] concurred that cheese graters were used by warrior elites from the ninth century BC onwards, arguing that hard cheese was a nourishing foodstuff that a soldier on campaign could easily carry and use to grate over food, making the grater a useful part of a warriors' kit. In 2004, however, Susan Sherratt found it 'hard to believe that the bronze graters, of which ninth-century Euboian warriors appear to have been so proud, were regularly used only for the ceremonial grating of a mundane item such as cheese, which can just as effectively be scraped with a knife'.[8] Rather, taking the lead from Ridgway's discussion of the *kykeon* as an analgesic and possibly psychoactive mixture, Sherratt suggested that we have to imagine that 'cheese' here stands for something else altogether: 'One wonders whether these graters combined with some gratable narcotic substance might have been the equivalents of the morphine packs carried by First World War officers.'

[6] In the Aegean region graters seem to have fallen out of use at the end of the fourth century BC: Krapf (2009) 517.

[7] West (1998). West notes that the use of the contracted form of the verb 'to grate' suggests that the famous Homeric passage must go back to before 700 BC, probably to the ninth century BC, contemporaneous with the archaeological evidence from Euboea.

[8] Sherratt (2004) 328. The effectiveness of scraping cheese with a knife much depends, of course, on the type and quantity of cheese and the desired result.

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The next steps in the reappraisal of the grater were taken in 2009 and 2014 by Erich Kistler.[9] Analysing the Mediterranean-wide distribution of graters, and noting their spread between the seventh and fifth centuries BC across the East Greek world, mainland Greece, Italy and the coast of France, he highlighted especially their appearance in elite tombs containing banqueting equipment. Pointing to their occasional manufacture in precious materials (silver graters, for example, were found in the Tomba Bernardini at Praeneste and in the Montetosto tumulus at Caere), he proposed that cheese graters formed part of elite sympotic equipment. Their primary function in this context, he suggested, was to grate not cheese but spices into wine during a banquet, as part of a refined culture of spiced-wine consumption practised by a wide circle of trans-Mediterranean, multi-ethnic elites. According to Kistler, the spread of the cheese grater thus charts the spread of an 'epicurean' culture of indulging in wine enhanced with grated and boiled spices especially among Etruscans and Greeks, for whom commensality provided a key social space for contact and exchange. Alongside and in combination with similar arguments made by Massimo Botto and others in relation to pottery grinding bowls, this scenario has found widespread acceptance among scholars, falling on the fertile ground of current academic interest in commensality at drinking feasts such as the *marzeah* and *symposion* as important arenas of social competition and cultural interaction.[10]

The picture thus built up is seductive, but, I contend, the evidence adduced for some key arguments is largely circumstantial. Moreover, it oversimplifies the picture by constructing a single coherent practice, thus missing temporal and regional differences and variations. Especially graters found outside the Greek world cannot *a priori* be assumed to be part of the same cultural field of use as Greek graters. This is true, for example, for graters found in Egypt. Graters from the multi-ethnic Egyptian-Greek port of Naukratis, for example,[11] are of a very different, cone-shaped type that is attested also at other sites in Egypt, such as Tell Dafana (fig. 3) and Tell el-Yahudiyeh. While the 'rasps' at Naukratis lack a precise find context (and thus any assured sympotic association), the examples from Tell el-Yahudiyeh were found inside pottery jars together with vegetable matter; they may well represent a very different, 'Egyptian', cultural practice that need have nothing to do with a Greek drinking party.[12] In a similar vein, scholars such as Rebecca Martin have questioned the validity of linking Levantine with Near Eastern practices in far-reaching models of cultural transfer.[13] Yet also for Greek contexts a sympotic interpretation is often far from clear-cut. Donald

[9] Kistler (2009); (2014). The list of cheese-grater finds in Kistler (2009) is updated in Kistler (2014) 183–84 n.13. Independently of Kistler, Krapf charted the appearance of graters in Italy, from the rich princely tombs of the early Orientalizing period to their spread from the Tyrrhenian coast to the centre and the Adriatic coast and their apparent disappearance in the Hellenistic period: Krapf (2009) especially 510–11 figs 2–4. To the examples assembled by Kistler and Krapf we may add, for example, de Grummond (2009) 57 no. 18, fig. 19 (graters from a Hellenistic sanctuary at Cetamura in Etruria); Morgan (2012) 38–39 (sanctuary of Hyria on Naxos: grater among Late Geometric to early Archaic offerings redeposited after destruction of temple III); Prêtre (2016) 101–02 nos 722–28, pl. 28 no. 72 (Archaic to Hellenistic context in the Artemision on Thasos); Graells i Fabregat et al. (2017) 93 fig. 47, cat. no. 33 (sanctuary of Athena at Paestum); Stampolidis et al. (2018) 174 no. 43 (grater from Archaic cemetery at Eleutherna on Crete, dated to the seventh century BC; further grater fragments are reported to have been found at the site).

[10] *Cf.*, for example, Esposito (2010) 128–29, on the intersection of Phoenico-Cypriot and Greek customs of wine drinking in Italy, and Riva (2010) 145, 148, interpreting both tripod mortaria and 'Cypro-Phoenician' mortaria in Etruria as related to wine drinking and emphasizing the role of East Greek traders in their distribution, as part of a wider argument of technological innovation affecting foodways.

[11] Griffith (1888) 82; referred to by Kistler (2014) 184 n.13. Griffith explicitly describes the Naukratis finds as 'like those from Tel el Yahudîyeh'.

[12] Tell Dafana: British Museum, EA 23974; Petrie (1888) 78, 110, pl. 38.9; Leclère and Spencer (2014) 76–77. Tell el-Yahudiyeh: Naville and Griffith (1890) 46, pl. 15.20. Petrie (1888) describes these 'very curious rasps or borers' as 'made of a piece of thin sheet-iron, punched all over with holes like a modern grater, and coiled round into a cone; they have been found with string at the base, and fitted on to wooden handles, making a sort of rat-tail file or rasp'.

[13] Martin (2018).

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Fig. 3. Iron grater from Tell Dafana: made of a thin sheet of metal punched all over with small round holes and coiled round into a cone, and originally fitted on a wooden handle, sixth century BC(?) (British Museum, EA 23974; photographs © Trustees of the British Museum).

Haggis has recently reminded us, specifically in relation to sympotic practice, of the dangers of hypothetical constructs turning into normative metanarratives.[14] It is my aim in this article to review the evidence critically before proposing an alternative scenario that, I believe, more sensitively takes account of the diversity and changeability of ancient culinary customs, while also highlighting the problems with too narrowly linking material culture with cultural practice.

II. Cheese or spices? The ancient uses of graters and the question of spiced wine

The first point that needs making is that there is little concrete evidence for a practice of spicing wine during the *symposion* among Greeks and Etruscans. Certainly, adding substances to wine was not necessarily unusual in antiquity, as the evidence from residue analyses and perhaps also the existence of sieves and strainers indicate (see the discussion below). However, it is far from clear that these additions were made *during* the *symposion* and that spice graters were thus part of the actual drinking set. Second, it is questionable just how common deliberately spiced wine would have been – the ancient Greek sensorial experience and appreciation of wine, in as far as we can grasp it in the (admittedly mostly later) textual evidence recently examined by Thibaut Boulay, makes scarce reference to aromatics and instead focuses on the inherent qualities of particular

[14] Haggis (2018).

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wines.[15] Indeed, the only substance explicitly attested in Greek written sources as being *grated* into wine is cheese, in the above-cited passage of the *Iliad*, which, moreover, does not describe a *symposion*.[16] In fact, scholars arguing for a ground or grated spiced-wine culture have so far avoided engaging with the question of which 'spices' precisely might have been thus added to wine – a topic that is, however, crucial.

What, then, do we know of spicing wine in the Greek world? To address this question we turn to texts in the first instance. A certain level of aromatic 'flavouring' is likely to have been part of Greek wine manufacturing throughout the ages.[17] In the later fourth century BC, Theophrastos (*On Odours* 10) notes that 'perfumes and other fragrances [μύρον καὶ τἆλλα εὔοσμα] improve the taste of wine' and 'a pleasanter taste … is the object of flavouring wine with perfumes or of putting aromatics into it [μύρα τοῖς οἴνοις ἐπιχέοντες ἢ τὰ ἀρώματα ἐμβάλλοντες]'.[18] Flavoured or perfumed wine (μυρίνης οἶνος) is mentioned as an expensive luxury also by the New Comedy writers Diphilos and Poseidippos.[19] This brief flurry of textual references (on which later writers drew heavily) has led Douglas Olson to suspect that the practice of flavouring wine was 'a short-lived symposium novelty' of the early Hellenistic period.[20]

Aromatics, though, would have been added primarily because of a need to regulate acidity and aid fermentation and preserve, stabilize and clarify wine. It is largely in this context that authors of the Roman period, from Columella and Palladius to the (mostly late antique) passages cited in the Byzantine compilation on farm work, *Geoponika*, mention salt, gypsum (calcium sulphate), marble dust (calcium carbonate), flower and must, as well as pitches, tree resins and a range of other aromatics, from roasted and pounded fenugreek to sweet almonds, hellebore and black chick-peas.[21] Pliny, writing in the first century AD, cites additives including sweet rush, thyme, terebinth, mastic resin and, perhaps, myrrh (Plin. *HN* 14.105–12, 124). Columella (*Rust.* 12.20.3–6) lists leaves of spikenard, Gallic spikenard, Illyrian iris or sword lily, dates, cost, angular rush, sweet rush, sweet reed, cinnamon, balsam, saffron and *cripa* in a concoction of boiled must used to preserve wine, but notes that this should be administered sparingly so as not to be tasted 'for that will drive away the buyer'. Importantly these additives are mostly described as being applied to the wine or its vat before and during fermentation.[22] Thus, fenugreek, frankincense, aromatic reed,

[15] Boulay (2014); (2015); (2018); *cf.* also García Soler 2021; discussed further below.

[16] Other literary and iconographic references are circumstantial, such as an image on a northern Adriatic situla from Vače (Slovenia) adduced by Kistler (2014) 192 fig. 5d; whether this really shows the addition of aromatic substances to a krater full of wine can neither be proven nor refuted.

[17] Younger (1966) 130–33; Dalby (2003) 95; Boulay (2015) 276–77, 279; Dzierzbicka (2018) 209–26; Zinn (2018) 60–61.

[18] *Cf.* also Theophr. *On Odours* 32: 'It is thought that not only the smells of perfumes contribute to a pleasant taste, but also the qualities of pungency and heat which are found in some of them: accordingly some of these perfumes are also mixed with certain wines to give, as it were, "point" to them.' Aromatics are surveyed by García Soler (2001) 341–67.

[19] Diphilos *Apopilousa* (*Deserteress*) KA *fr.* 17 and Poseidippos *fr.* 36 (μυρίνης ὁ τίμιος); see Olson (2018). Wilkins (2000) 283 translates the term as 'myrrh-flavoured'. However, as Olson (2018) notes, both fragments derive from Athenaios, and, while many Athenaios manuscripts give μυρρίνης (presumably 'myrtle-flavoured' – from the Attic version, with double rho, of μυρσίνη, myrtle), modern editors, endorsed by Olson, generally assume a spelling with a single rho and thus a reference to μύρον, perfume. The common Greek term for myrrh appears to have been σμύρνα, though μύρρα is a less usual alternative, found already, besides cassia and frankincense (λίβανος), in Sappho *fr.* 44 (Lobel); along with κασία, κιν(ν)άμωμον and λίβανος, μύρρα is among the names of plants and plant products imported to Greece from the Near East that are generally agreed to be of Semitic origin (see the summary in Rosól (2018) 334–36).

[20] Olson (2018).

[21] Discussed by Boulay (2012); Thurmond (2017) 183–89; *cf.* also Kourakou-Dragona (2015) especially 74–75, 121–35 on the use of salt.

[22] As Olson (2018) argues, it is possible that Pliny's *vinum murrinam* is merely Latin for οἶνος μυρίνης, thus not referring to myrrh but merely to aromatic 'flavour'. Myrrh as a flavouring for wine might be hinted at also by Theophrastos (*On Odours* 32), though this passage, too, is problematic. On myrrh, see Dalby (2000) 117–20; (2003) 226; on myrrh in wine, see also van Alfen (2002) 38 n.29.

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malabathron (a cinnamon-like aromatic), aloe, iris, cost, cassia, melilot, schoinanthos, hyssop, Syrian rush, Indian or Celtic nard, and saffron are all listed as additives to the pitch used for coating wine vats.[23] In the *Geoponika* (7.13), Damegeron, having listed among others cassia, spikenard, frankincense and myrrh as spices for stabilizing wine, explicitly advises 'with all your wines, be sure to spice them while they are settling'.[24] Additions were also made so as to create potions with medical properties and to modify the taste especially of lower-quality wines. This is suggested not only by the passages in Theophrastos quoted above, but also by Pliny's note (*NH* 14.130) that 'so many poisons are employed to force wine to suit our tastes, and we are surprised that it is not wholesome'. Artemidorus (1.66.18–22), finally, notes that 'prepared wines' like myrtle wine or honeyed quince wine were appreciated by the wealthy for their luxuriousness, but drunk by the poor only if compelled to do so by illness.

Some flavours are reported to have been absorbed from herbs planted near the vines (Plin. *HN* 14.109–10, with reference to wormwood), but additions could also be made much later, though again sources suggest that they, too, required a significant period of maturation so that the wine could absorb the aroma of the flavourings. Numerous such 'medical' recipes are given by Pliny's approximate contemporary Dioskourides in book 5 of his *De Materia Medica*. One (5.39) is for an absinthe-flavoured wine that included Pontic wormwood, Syrian nard, cinnamon, cassia and various aromatic roots (kalamos, schoinanthos, perhaps ginger-grass and related species) and date spadix, all pounded in a mortar.[25] The mixture is described as needing to mature for a long period, in this instance two or three months, hence ruling out any link with *ad hoc* sympotic practice. Other recipes (such as Dioskourides *De Materia Medica*. 5.64, 65, for 'aromatic wine') required pounded fruits, roots and spices (including cassia) to be bound in a linen cloth and suspended in the wine, either to be left for several days, weeks or months, or boiled. *Geoponika* (7.20, 8.25) has recipes for flavoured wines that involve adding chopped ripe myrtle berries to wine for ten days, malabathron and fennel for 15 days and myrrh, cassia, cost, spikenard, pepper and honey for 40 days. Ingredients in such recipes are almost invariably pounded or chopped, rather than grated.[26] Much the same was the case also with spiced-wine preparations of more recent times, such as the popular late medieval and later *hippocras*, for which spices such as cinnamon and ginger were ground in a mortar and left to stew in the wine for a period lasting from several hours to a day or longer, before being removed or filtered out.[27] Also the wines containing honey and various aromatics (wormwood, cloves, sampsychum, myrtle, roses, styrax resin, quince and citron fruit) that are listed among wealthy households' or physicians' supplies in Byzantine papyri from Egypt clearly came ready flavoured.[28]

The only short-term preparation explicitly linked to a *symposion* known to me is described in a passage of Aristotle's *On Drunkenness* (*fr.* 672 Gigon, ap. Ath. 11.464c), but this refers only to the boiling and not to the grating or pounding of ingredients. It describes preparing a 'Rhodian chytra' by boiling myrrh, 'sweet rush' (*schoinos* – aromatic roots, perhaps ginger-grass), dill, saffron, balsam (a resin), *amomon* and cinnamon with water and adding the mixture to wine, with the aim of making it less intoxicating.[29] If any breaking down was necessary at all before boiling, only the roots and perhaps cinnamon would have lent themselves to being grated, while the rest

[23] See, for example, the passages cited in *Geoponika* 6.6–8 (Dalby (2011) 153–54).

[24] Dalby (2011) 166.

[25] Other possible flavourings for wine mentioned by Dioskourides and others include myrtle, thyme, roses, dill, anise, pear, quince and black hellebore.

[26] Explicitly, for example, in the *Geoponika*; see also Kourakou-Dragona (2015) 224–39; Dzierzbicka (2018) 209–26.

[27] Dalby (2000) 129–31; Weiss Adamson (2004) 89.

[28] Maravela-Solbakk (2009); Dzierzbicka (2018) 209–26.

[29] Kistler cites this passage as evidence for the 'Genuß fein abgestimmter Gewürzweine': Kistler (2014) 192 n.82. On the ingredients, see García Soler (2001) 363–64; see also van Alfen (2002) 53–55 (*schoinos*), 66–67 (*amomon*).

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would have been more effectively ground in a mortarium (I will return to this issue later). Indeed, if the ancient Greek preference, according to texts, for wine that was transparent and clear[30] was consistent across periods (and the existence of sieves would support this), wine mixed with spices during a symposion would have had to be filtered again before drinking, thus leaving little time for any mixing of flavours. Only liquid and possibly heated concoctions, such as pre-prepared mixes of aromatics pounded with water or wine as described by Columella or especially the boiled 'Rhodian chytra', would have stood a chance of flavouring the wine instantaneously; the note in Theophrastos (*On Odours* 8) that 'the method of … those who compound unguents or flavour wines is to mix liquid with liquid' (ὡς δ' οἱ τὰ μύρα κεραννύντες ἢ τῷ οἴνῳ ἐπιχέοντοες ὑγροῖς πρὸς ὑγρά) seems to refer to just such practices.[31]

Nor can the use of strainers or sieves in itself be taken as an argument for spices being broken down and added during the *symposion*. The existence of strainers,[32] as well as of mixing and pouring vessels with inbuilt strainers,[33] both in Etruria and the Greek world from the Archaic and through the Classical periods, certainly suggests the existence of substances that needed filtering. Yet these could well have been present in the wine already in the vat or amphora. That wine was not necessarily free of wine lees, pips, skins and other 'contaminants' is highlighted above all else in the dispute over the relative virtues of strained versus unstrained wine in one of Plutarch's *Table Talks* (*Quaest. conv*. 6.7 = *Mor*. 692B–93E), which probably refers to filtration of the 'new wine' after fermentation using coarse strainers, but also sack-cloth, a method attested by the fifth century BC.[34] The dialogue makes it clear that wine lees were associated with a wine's natural power and strength but also with danger of intoxication, and that they are the main reasons why wine would have been filtered before storage; however, it also mentions added colourants such as aloe or 'sweeteners' such as cinnamon or saffron, even if only later on in the debate, in a secondary position.[35] Strainers used at the *symposion* thus could have filtered out any lees or other substances that slipped through the main filtration, any further modifiers that were added before storage or indeed the full gamut of residues in entirely unfiltered wines, which the dialogue appears to suggest did exist.

This picture is supported by evidence from chemical residue and DNA analyses, which have detected spiced and resinated wines in trade amphorae and other containers from a number of different regions including the Aegean, Etruria and Greek Gaul. They also confirm that the picture painted by predominantly Roman sources has roots in earlier practices. Botanicals likely including rosemary, basil and/or thyme have been identified, for example, in resinated wine in fifth-century BC Etruscan amphorae at Lattara in southern Gaul,[36] while similar traces of lamiaceae herbs (mint, rosemary, thyme, oregano or sage) as well as juniper have been detected in DNA analyses of Classical to early

[30] Boulay (2015) 275.

[31] A passage in Athenaios 15.689d, quoting the first-century BC physician Hikesios, may have further bearing on the matter. It discusses perfumes for rubbing or pouring on (ἀλείμματα), listing several (made from roses, myrtles, apples, vine leaves, sampsychum, ground thyme and crocus, high-quality myrrh (στακτὴ), spikenard, fenugreek or white violets) that are good for the stomach (εὐστόμαχον) and for digestion (πεπτικόν), and that are πρὸς πότον ἐπιτήδειον. While generally assumed to refer to perfumes applied by diners in a sympotic feast (πότον), the context and phrasing raises the possibility that they may instead have been poured into the wine (ποτόν) for internal consumption. Even if ancient Greek 'perfumes' (which, as far as our evidence goes, were based on animal or vegetal fats) hardly seem a suitable addition to wine, recipes, for example, for myrtle wine advise the addition of myrtle oil: Maravela-Solbakk (2009) 131; see also above n.18. On spikenard in perfumes, see Dalby (2000) 86–88.

[32] *Cf.* Amyx (1958) 261–64; McPhee (2000) 480–83; Iozzo (2013) 561. Different types of strainers (for the krater or the cup) may have catered to individual preferences for strained or unstrained wine.

[33] Notably the so-called Falaieff-kraters: see McPhee (2000). It is noteworthy that northern Greek tombs that have yielded elaborate kraters with strainers seemingly contained no graters.

[34] On filtration, straining and clarification, see Kourakou-Dragona (2015) 70–83; Thurmond (2017) 190–94.

[35] As argued by Hitch (2017) 28–29, the term 'sweet' in such contexts probably has a more general meaning of pleasurable taste.

[36] McGovern et al. (2013).

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Hellenistic 'Corinthian B' type amphorae that were used for wine.[37] Residue analysis has also confirmed the addition of herbs (perhaps including rosemary, senna/cassia, savory and/or sage) to resinated wine in ancient Egypt as well as in Bronze Age Israel.[38] As noted by the scientists who conducted the analyses, such spices would have had 'strong antioxidant, antibacterial, and antifungal properties and would have protected amphora contents from spoilage during transit and storage'.[39]

If wine came ready spiced out of the amphora, having been spiced a significant time before intended consumption for whatever reason, any direct connection between the processing of aromatics and the *symposion* itself is lost. Of course, even if flavourings were not added *ad hoc* at the *symposion*, tools used in their preparation could still retain a symbolic link with their presence in wine and might, therefore, still be included meaningfully in a sympotic tomb assemblage. Nonetheless, the further removed in space and time the preparation of 'spiced wine' was from its consumption, the more problematic the notion of such tools as integral elements of a 'sympotic set' becomes.

Moreover, the concerns raised about the sympotic spicing of wine are further amplified by practical considerations. What kind of 'spices' would have required grating? Thinking of modern western cuisine (which, of course, is hardly a safe benchmark), but also of other cultures, graters are used only rarely in processing spices. The main exception is nutmeg;[40] but this is a spice so far not attested securely in ancient Greece. Nutmeg, the seeds or 'stones' of the fruit of the nutmeg tree, along with cloves, originates from the remote Indonesian Maluku islands. It has been suggested as potentially identical with Greek *komakon*, mentioned by Theophrastos (*Hist. pl*. 9.7.2) in the later fourth or early third century BC as an ingredient in the most refined perfumes; but the identification remains disputed and the term is otherwise hardly attested. Also, so far there is no archaeobotanical evidence for nutmeg in early Greece or other secure references to its presence in the Archaic or Mediterranean world. The spice was reportedly observed by 19th-century excavators in an Eighteenth Dynasty Egyptian tomb and has been suggested as a hypothetical source for some of the molecular assemblages, myristate derivates, detected by residue analysis in Iron Age II incense burners from Philistine Yavneh, where fragrant and hallucinogenic plant matter may have been evaporated on a burning fatty or oily bed.[41] It has also been suggested that Arrian's reference (*Anab*. 8.32.7) to cinnamon and other spices being imported from Muscat by 'Assyrians' could have included nutmeg.[42] Cloves, themselves unsuitable for grating, seem to have reached Syria already in the second millennium BC, even though we find them in classical literary sources (as *karyphyllon*) only from the first century AD.[43] Many scholars have suspected that South Asian spices may well have circulated in the Aegean/Mediterranean world more widely and well before they are attested in scant literary sources or rare scientific analyses, though others have made a good case against conclusions based on insufficient or problematic evidence.[44] On the basis of the present data, while it is not impossible that nutmeg was known to Early Iron Age and Archaic Greeks, we have no reason to assume that it was widely used.

[37] Foley et al. (2012); *cf.* Jerković et al. (2011), albeit with less instructive analysis results.

[38] McGovern et al. (2009); Koh et al. (2014) (discussed further below). See also McGovern (2003) 247, 262–65 for possible mixtures of wine, beer and mead in Phrygia and Minoan Greece, and for resinated wine in Minoan Crete.

[39] Foley et al. (2012) 9.

[40] The fact that in the mid-19th century Newton called the fragmentary grater he excavated on Kalymnos a 'nutmeg grater' (see above, n.3) underlines the close association between graters and nutmeg in modern European practice.

[41] On nutmeg and its trade, see Dalby (2000) 53–55; (2003) 89; van Alfen (2002) 59–60; Amigues (2016) 124–29. For nutmeg in Egypt, *cf.* Namdar et al. (2013) 14. The analyses at Yavneh are published in Namdar et al. (2010); (2015). I am grateful to Alan Johnston and Philipp Stockhammer for bringing some of this recent literature to my attention.

[42] van Alfen (2002) 59.

[43] Dalby (2000) 50–52; (2003) 89; Amigues (2016) 124–29.

[44] Gilboa and Namdar (2015); for a critical view, see Haw (2017).

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Certainly in use and, indeed, popular imports in the period, however, were cinnamon and cassia, which are mentioned as spices for wine by both Dioskourides and Plutarch, cited above; neither the distinction between the two spices nor indeed their identification with the modern spices known as cinnamon or cassia, however, is entirely clear.[45] Cassia is mentioned by Sappho (*fr*. 44 Lobel) and a flower of *Cinnamomum cassia* been identified tentatively in a seventh-century BC context in the Samian Heraion, though the identification is disputed.[46] Results from recent residue analyses of Phoenician pottery flasks have been taken to suggest a regional trade of cinnamon-flavoured liquids in Phoenician-Cypriot networks by the early Iron Age; cinnamon/cassia were certainly popular perfume ingredients.[47] Would they have been grated? As far as we know, in antiquity as today, the spices known as cinnamon and cassia were traded primarily in the form of cut-off quills of tree bark. While in principle suitable for grating, they are prone to splintering into chunks, especially on coarser graters, which is why a mortar and pestle are often preferred, and these are also the implements referred to by ancient sources such as Dioskourides (*De Materia Medica* 1.13, 5.49), who mentions ground or pounded (παρατρίψει) cinnamon.[48]

Other flavourings lend themselves more easily to grating. The highly prized silphium, for example, is mentioned by Aristophanes (*Av.* 1579–80) as being grated, alongside cheese, over birds, and in Hippokrates' *Internal Affections* (42 (271)) as being grated over lentil soup, even if sources more commonly refer to it ground or pounded; it features alongside a mortarium in what appears to be an early poetic reference to the making of an extravagant sauce (Solon *fr.* 39 West). Different parts of the plant (or of its cheaper variants) may have been processed in different ways, but the main and most valuable part, the dried 'juice' (for example Strabo 17.22), is likely to have been suitable for grinding to a limited extent only.[49] However, as a pungent flavouring not dissimilar to garlic, it hardly would have been used in wine, and no such use is in fact attested in the written sources. It is also unlikely to have been a major feature of wider Mediterranean and certainly Greek cuisine before the later seventh century BC, when it became a sought-after import from its Libyan homeland, and thus could not explain the early popularity of graters.

Generally it is fruit and roots such as radishes or bulbs that are most suitable for grating, though most of these are difficult to imagine as desirable high-status additions to wine, unless required for medicinal uses. Paxamos in *Geoponika* (7.23) recommends grating dried roots of marshmallow into wine so as to make it go further in mixing and serve a larger number of people, but this is hardly a practice that a host would have been proud to admit.[50] In the medical writings of Hippokrates, the use of a grater is recommended for a range of foodstuffs, including cheese, roots such as radish, centaury and dragon arum, as well as other medicinal plants; of these, dragon arum and centaury are explicitly mentioned as admixtures to wine for a remedy 'against tears' (*Internal Affections* 1 (172)). Also other roots with medicinal uses, such as valerian, nard or ginger, could have been grated.[51] On the whole, though, both medical texts and cookery books refer to grating

[45] *Cf.* Dalby (2000) 36–41; (2003) 87; Haw (2017). The context of Plutarch's *Table Talks* is the above-mentioned debate on the virtues of straining wine, which would imply that pieces of cinnamon and saffron were large enough to be filtered out (and thus perhaps not a fine powder), unless of course fine cloth was used for straining. On the question of the nature and origin of ancient cinnamon and cassia, see van Alfen (2002) 47–53; Haw (2017) (who argues for cinnamon and cassia as deriving not from the bark of South Asian trees, but that of the east African shrub *cassia abbreviata oliv*.).

[46] Kučan (1995) 53; but see the critical discussion in Haw (2017) 8–9.

[47] Namdar et al. (2013) (though see the sceptical remarks by Haw (2017)); Finkelstein (2016) 119–20.

[48] Judging from recommendations by modern cinnamon traders, successful grating requires a very fine grater and a consistency in the spice that is neither too moist nor too dry (https://cinnamonhill.com).

[49] On silphium, see Dalby (1996) 86–87; (2003) 303–04; Amigues (2004). Kneaded into larger bars and then dried, silphium would probably have been gratable.

[50] The plant was also used for its medical properties: see Kourakou-Dragona (2015) 232–34.

[51] *Cf.* Dalby (1996) 140. Foley et al. (2012) found traces of Zingiberaceae (the Ginger family, which includes, for example, ginger and cardamom) in Classical to Hellenistic Mendean and Corcyran amphorae which also displayed olive-oil traces. On ginger in antiquity and beyond, see Dalby (2000) 21–26.

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Fig. 4. Corinthian terracotta figure of a mule carrying a mortarium (grinding bowl): inside it are a pestle, a cheese grater, a round cheese and a bunch of garlic; said to be from Athens, *ca*. 350 BC (British Museum 1873,0820.576; photographs © Trustees of the British Museum).

less commonly than to grinding (in a mortarium), which appears to have been the standard way of processing herbs, spices and resins; if the grater is mentioned at all, it is most frequently in association with the grating of cheese.

This picture is supported by other literary genres and by representations, both of which associate the grater with the preparation of food and notably with the grating of cheese. Thus, in Greek comedy, the grater (usually explicitly called *tyroknestis*, 'cheese grater') repeatedly features in lists of kitchen tools[52] as well as in recipes, notably in relation to grated cheese (for example, Antiphanes *fr*. 131); the latter appears especially as an ingredient for sauces prepared in a mortarium (*thyeia* or *igdis*), a pottery grinding bowl with primarily culinary uses. Aristophanes' *Peace* (228–88) famously gives a 'recipe' for such a sauce called *myssotos* or *myttotos*.[53] Other ingredients to be grated include roots and bread, the latter in the preparation of yet another elaborate dish, the Lydian *kandaulos* (Ath. 12.516c–17a). Sauces such as *myttotos* are probably also alluded to in imagery, such as a group of Boiotian terracotta figurines of the early fifth century BC that depict cheese being grated into a mortarium or a Corinthian terracotta figurine of around 400 BC that shows a grater alongside cheese, garlic and a mortarium (fig. 4).[54]

Of course, we need to admit the limitations of our evidence, much of which comes from the Classical and later Greek mainland and the Roman world. In the light of this, Homer's early references to the grater (here simply called *knestis*, 'grater') deserve revisiting, both in the *Iliad* and in the *Odyssey*. Of special interest here is the description of the drug-spiked *kykeon* mixed by Circe: 'she stirred for them cheese and barley meal and yellow honey in Pramnian wine; but in the food [*sitos*] she mixed baneful drugs, that they might utterly forget their native land' (*Od*. 10.233–36).

[52] It features alongside a mortarium, pestle and brazier in a fragment by Aristophanes (*fr*. 7 Edmonds/KA, from *Aiolosikon*), a bowl, pestle, brazier and cooking pot in Aristophanes' *Wasps* 938 and a soup ladle, skewers, meat hook, handle(?), bowls, knife, cleavers, axe and frying pans in Anaxippos *fr*. 6 Edmonds/KA, from *Kitharoedist*, quoted in Ath. 4.169b–c.

[53] For *myttotos* and other mortarium-ground sauces, see Villing and Pemberton (2010). For Antiphanes *fr*. 313, see Wilkins (2000) 45 n.173.

[54] See the detailed discussion in Villing and Pemberton (2010) 604–06, fig. 27.

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While the *kykeon*, here as elsewhere, is drunk and hence must have been liquid, it is classed by Homer as *sitos*, the standard Greek term for a staple, usually grain-based food that was conceptualized as fundamentally distinct from the other key constituents of Greek cuisine, drink and *opsa*, i.e. supplementary non-grain foods.[55] Indeed, the *kykeon*'s key ingredients, wine, grain, honey and cheese, can be seen to represent the fundamental elements of agricultural wealth that underpinned social status in early Greece, wrested from nature through the progress of civilization, with cheese denoting plentiful herds of sheep and goats.[56] The exceptional position of the *kykeon* as something between liquid and solid food is matched by its uses, which straddled ritual (notably in the Eleusinian mysteries), medicine and ceremonial hospitality, and which, notably in the Homeric texts, largely fell into the sphere of female responsibilities.[57] As a nourishing, restorative drink it was offered by the host to a guest, as in the Homeric *Hymn to Demeter* (2.210), where the *kykeon* is offered by Metaneira, queen of Eleusis, to Demeter in the guise of an old woman; it is explicitly set apart from wine here and was clearly situated outside the sympotic context.[58] In the context of the Eleusinian mysteries the *kykeon* was a curative and restorative food consumed by initiates when they broke their ritual fast.[59] Winners of an Athenian footrace were offered a related fortifying concoction, called *pentaploa* as it was made up of the five ingredients of wine, honey, grated cheese, barley meal and olive oil, the latter of course of special Athenian significance.[60] In the Hellenistic period, king Seleukos is said to have enjoyed Thasian wine mixed with honey and barley meal as a draught offering 'a respite from the heat' (Ath. 10.432b–d). The *kykeon*'s restorative, medicinal function and its promise of offering both physical and spiritual comfort and relief as a *pharmakon* for human wretchedness also seems alluded to by the sixth-century BC Ionian poet Hipponax (*fr*. 39 West), who, like Homer, notes grain as a key ingredient.[61] That the *kykeon* could also play a part in symposia, at least in later periods, seems suggested by (Pseudo?-)Aristotle (*Problems* 3.12) when he asks 'Why do sweet wine and unmixed wine and *kykeon*, when consumed at intervals during a drinking bout, make people sober?' Again, though, it is primarily a medicinal role that is highlighted here, with the *kykeon* as an antidote to sweet and unmixed wines.

Summing up the evidence from text, images, botany and science, there is no explicit support for a use of the grater for spicing wine, and especially not during the *symposion*. While it is not impossible that graters were used for breaking down flavourings such as cinnamon and cassia, such a use is not actually attested. Nor do we as yet have any evidence for the use of nutmeg in ancient Greece. And while medical texts refer to a range of plant stuffs being grated, it is hard to imagine that, for example, centaury-infused wine would have had Greek or Etruscan aristocratic dining parties in raptures. Instead, it is predominantly cheese, as well as some roots and perhaps resins, that required a grater, in relation to, first, the *kykeon* and similar ceremonial potions, and, later, clearly culinary contexts.

Archaeology does not contradict this scenario. Of course, as scholars arguing for a practice of spiced wine have pointed out, graters are often found alongside drinking and mixing vessels,

[55] Davidson (1997) 20–26; Wagner (2008) 83–84. The Hippocratic corpus notes four different types of *kykeon*, based on water, wine, milk or honey: Delatte (1955) 28.

[56] The cultural significance of cheese and cheese-making in early Archaic Greece is highlighted by Guggisberg (2017); see also Auberger (2000).

[57] Delatte (1955); Sherratt (2004) 207–08; Bedigan (2009); *cf.* also Ridgway (1997) 327–29.

[58] The 'divine' character of the *kykeon* has been emphasized by Rahmani (2013). Delatte (1955) 40–41 argued that the role of the *kykeon* in the Eleusinian mysteries most likely derived from its role in human interaction; at any rate, in both the human and divine spheres it is the ceremonial, ritual aspect of the drink that determined its significance.

[59] As argued persuasively by Nelson (2014) 35–42, who critically reviews and dismisses suggestions that the *kykeon* had any hallucinatory properties, as well as effectively rejecting the theory that the *kykeon* was based on beer. On the *kykeon* as an invigorating potion, see also Auberger (2000) 4–5; Dourakou-Dragona (2015) 15–23.

[60] Ath. 11.495f; on the ritual context, see Parker (2005) 213.

[61] Rosen (1987); Hawkins (2016) 244–52.

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and in some instances the association with drinking wares is indeed demonstrably close.[62] In particular in ninth-century BC Euboea and eighth- to seventh-century BC Italy, they were also clearly elite items, as finds in rich tombs indicate. Also the later use of iron is strongly associated with high status, as good-quality raw materials and careful crafting were required to achieve suitable working properties.[63] But assemblages not infrequently also feature other objects relating to banqueting and funeral ritual, including vessels and tools related to the preparation of food or the use of perfumes and incense. In tomb 152 at Castel de Decima in Rome, for example, dating to the first quarter of the seventh century BC, a grater was placed next to utensils for roasting meat, rather than with the tomb's bronze and pottery drinking and serving vessels.[64] The consumption of food certainly played an important role in Archaic Etruscan and Italic banqueting, as seems confirmed also by the bronze basins with beaded rims (pearl-rim basins), high-status banqueting equipment, that in funerary contexts have sometimes been found to contain animal bones and for which Kistler has noted a similar distribution within Etruria to that of graters.[65] A wider horizon both in terms of status and functionality is suggested by finds of graters in domestic contexts. In a sixth-century BC Lydian house at Sardis, for example, an iron grater was found beside a cooking pot in a context associated with the preparation and storage of food.[66] Fragments of ten bronze graters have been unearthed from the Archaic (seventh- to sixth-century BC) domestic quarter of Miletos, which, though it yielded much drinking ware, was rich also in kitchen pottery, including an exceptionally large number of mortaria, probably put to use in the kitchen for preparing sauces such as *myttotos*.[67] A similar scenario is presented by the sixth-century BC kitchen contexts at Azoria on Crete, which yielded bronze and iron graters amidst a range of vessels for preparing and consuming food during communal dining.[68] Several graters were found in kitchen contexts at Olynthos, dating to the first half of the fourth century BC.[69] Also in Italy and Sicily some bronze graters come from domestic contexts, including the seventh-century BC Greek farmstead site at Punta Chiarito on Ischia, 12km from Pithecusae, the settlement at Locri and a late sixth- to early fifth-century BC house at Himera.[70] And in the early fifth-century BC

[62] For example, at sixth-century BC Bisenzio: Reusser (1993) 84 n.65.

[63] One of the technical challenges being that slag inclusions in bloomery iron make it difficult to produce thin sheets without risking cracking. I am grateful to Mathew Ponting and Lin Foxhall for this information.

[64] Ridgway (1997) 333 no. 7; Esposito (2010) 131. A more flexible interpretation also fits better the seemingly diverse gender associations of some tomb contexts with graters. While the majority of graters were found in contexts that can most plausibly be interpreted as male burials, a fifth-century BC tomb at Kameiros, for example, contained a mirror (Jacopi (1931–1939) 158 fig. 156), and also in Archaic Macedonia graters have been reported to occur in both male and female tombs (Saripanidi (2017) 103 n.234).

[65] Kistler (2009); (2014); for animal bones in pearl-rim basins, see Riva (2010) 155.

[66] Ramage (1986) 419–21; Kistler (2009) 751, no. 80; http://sardisexpedition.org/en/artifacts/latw-68. Carbonized organic material found in the kitchen area included garlic, barley, wheat and chickpeas.

[67] The excavated settlement area, close to the city wall, comprises several houses; interestingly, the contemporaneous sanctuary of Aphrodite yielded only 13 graters, even though it was rich in elaborate sympotic vessels: Donder (2016) 180–81, fig. 4. For mortaria at Miletos, see Villing (forthcoming a).

[68] Haggis et al. (2007) 289–90, figs 34.2 (mortarium), 36 (cheese grater); Kistler (2009) 751, no. 71. For a further cheese grater, perhaps originally fitted on a wooden block, from Azoria, see Haggis et al. (2011) 469–70.

[69] Robinson (1941) 191–93 nos 600–08, pl. 49; *cf.* Ridgway (1997) 340 n.3; Krapf (2009) 515. In Myrmekion on the Black Sea coast a grater was found in a Classical or Hellenistic context interpreted as having a commercial function: Sztetyłło (1976) 116 fig. 122.

[70] Punta Charito on Ischia (one bronze grater found in a coarse pottery basin and another in the centre of the house, in contexts including many cooking pots besides drinking vessels, amphorae, etc.): de Caro and Gialanella (1998) 343; Ridgway (1997) 331; Kistler (2009) 751 no. 46. Locri: Barra Bagnasco (1989) 26, pl. 6.3; Himera: A. Amico in Allegro (2008) 97–98, 128 no. 1843, pl. 41 no. 1843. An iron cheese grater was also found in the latest levels of a house at Malthi in Messenia, but the dating of this (tenth century BC?) is highly doubtful: Valmin (1938) 372–73 no. 994, pl. 30.18; Waldbaum (1978) 31; Ridgway (1997) 340 n.3; Krapf (2009) 523. For a bronze grater from a fourth-century BC domestic context in a rural house in the chora of Metaponto, see Trivigno and Mazzoli (2014) 361–64 (with references to further examples).

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House I at Monte Iato on Sicily, an indigenous elite residence with space for feasting, a grater was found in a room which contained a fireplace with a cooking pan *in situ*.[71] For such graters, broadly culinary uses, including for the rich dishes described in the classical sources, certainly appear possible.

The same is true also for finds in sanctuaries. As part of a wider refocusing of key social practices from tomb to temple, we now find graters especially in sanctuaries that played important roles in international maritime networks, such as Archaic Ionian sanctuaries at Miletos and Ephesos, but also sites such as the Thesmophorion for Demeter at Bitalemi, Gela.[72] In most instances there is little to indicate what precisely graters might have been used for here, though the find of a grater inside the temple cella at Zagora on Andros[73] suggests a possible role in ritual. Several 'cheese graters' are also listed in temple inventories: the Athenian treasure records of Poseidon Hippios of the late fifth century BC;[74] Delian temple inventories of the early third century BC;[75] and the fourth-century BC inventory of a Boiotian temple.[76] The graters appear among all kinds of metal vessels, forks, knives and furniture that would have been needed for the preparation of sacrificial meals and banquets; in the Boiotian inventory they have been interpreted as part of the equipment for a banqueting hall, *hestiatorion*, or its kitchen.[77] Again, there is no indication of a sympotic wine-related use, and graters could just as well have been used for other ceremonial or culinary functions at ritual feasts.

III. Spreading the Levantine banquet? Tripod bowls and the grinding of spices for wine

Not only graters but also pottery grinding bowls have been implicated in a scenario of trans-Mediterranean practices of drinking spiced wine, notably with regard to the eighth- and seventh-century BC central and western Mediterranean. The argument is linked to the appearance of tripod bowls of Phoenician/northern Syrian type, made from coarse ware, red slip or grey ware, which are one of the most characteristic forms of plain pottery in areas with a Phoenician presence or trading links during the 'Orientalizing' period. In the early first millennium BC they spread from eastern Syria to Phoenicia (Sidon), Anatolia and Palestine, reaching Etruria, Spain, Latium, Malta and Sardinia between the eighth and sixth centuries BC. In several important studies Massimo Botto has traced their distribution, arguing that their appearance in elite tombs alongside feasting equipment suggests a link with sympotic practice, notably the spicing of wine.[78]

[71] Kistler and Mohr (2015) 388; for the wider context, see also Kistler (2017) 116–19.

[72] Examples include: Mykale, sanctuary of Zeus Mykaleus, sixth century BC (Lohmann (2012) 118 fig. 5); Miletos, sanctuary of Aphrodite Oikous, seventh to sixth century BC (Donder (2002) 5; (2016) 180–81); Samos, Heraion (Gehrig (1964) 9–10, 97–98, nos 50–54; Brize (1989–1990) 323 fig. 3; Kistler (2009) 751 no. 3); Thasos, Artemision (above, n.9); Ephesos, Artemision (Klebinder-Gauss (2007) 186–87, nos 945–46); Lindos, Athena Lindia (Blinkenberg (1931) 215 nos 693–94, pl. 29; Kistler (2009) 751 no. 74); Zagora (see below, n.73); Perachora, Heraion (Payne (1940) 182 pl. 81, 11; Schipporeit (2005) 338–39, no. 1186; Kistler (2009) 751 no. 77); Pherai, Enodia sanctuary (Kilian (1975) pl. 94.33); Philia/Karditsa (Kilian-Dirlmeier (2002) 16, 212, pl. 11.213; Schipporeit (2005) 338–39, no. 1187; Kistler (2009) 751 no. 78); Olympia (Furtwängler (1890) 197 no. 1272; Kistler (2009) 751 no. 75); Paros, Delion (Rubensohn (1962) 70–71, no. 32, pl. 12 no. 18; Kistler (2009) 751 no. 76); Aegina, Aphaia (Maass and Kilian-Dirlmeier (1998) 99 nos 140, 141); Gela, Thesmophorion of Bitalemi (Albertocchi (2012) 68); Hyria on Naxos (Morgan (2012) 38–39); Paestum, Athena sanctuary (Graells i Fabregat et al. (2017) 93 fig. 47, cat. no. 33); Cetamura (de Grummond (2009) 57 no. 18, fig. 19).

[73] Cambitoglou et al. (1988) 167, pl. 280b; Kistler (2009) 751 no. 81; Krapf (2009) 515; Morgan (2012) 38–39.

[74] In the context of other vessels and banqueting equipment: *IG* I^3 405, line 11, 413/2–405/4 BC.

[75] A cheese grater (the material is not specified, though bronze is likely) is mentioned as being in the treasure of Neokorion in 296 BC in a list of various banqueting vessels and related equipment: *IG* XI.2.154 A, line 69.

[76] Thebes Museum, from Chorsiai in the area of Thespiai, 386–380 BC; *SEG* 24.361 line 18; *cf.* Kilian-Dirlmeier (2002) 202.

[77] Tomlinson (1980).

[78] Botto (2000); (2002). On tripod bowls and their spread in the Phoenician world, see also González Prats (2011) 375–94.

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Fig. 5. Assyrian relief from the North Palace of Ashurbanipal at Nineveh: the king is shown reclining and holding a wine cup, with a small tripod bowl placed on the table in front of him ('Garden Party' scene), *ca*. 645–635 BC (British Museum ME 124920; photographs © Trustees of the British Museum).

Two main types of tripod bowls can be distinguished: larger versions made from coarser fabrics and smaller fine-ware versions. According to Botto, both were used as grinding bowls in Etruscan contexts, as indicated by traces of use and sometimes deliberately roughened surfaces. Yet, according to Botto, while the former type, represented by Syrian and Punic imports, may have had a primarily domestic role in food processing, the latter, comprising both Punic imports and local products, exemplifies an 'oriental' custom of drinking spiced wine, which formed one element of a wider 'global' 'orientalizing' material culture that was adopted and adapted to suit local social competition.[79] Several arguments for a Near Eastern origin of such a custom have been adduced by Botto and others. One is the Assyrian relief from Ashurbanipal's North Palace at Nineveh that shows Ashurbanipal drinking wine at the banquet (fig. 5); a small tripod bowl (of which only two feet are shown) is placed on a table in front of him. This is of a shape broadly similar to actual ceramic or stone tripod bowls found at Nimrud and sites across northern Syria and the Levant, and dating from the Late Bronze Age onwards (fig. 6).[80] Further arguments concern the popularity, both in the Assyrian and Etruscan (as well as the Greek) realms, not only of wine strainers,[81] but also of carinated drinking bowls, which, it is argued, assisted the retention of sediments.[82] Wine had become popular in Assyria under Syrian influence from the ninth century BC, at first among court elites but developing into a widely accessible staple in the eighth.[83] Against this background,

[79] Botto (2000); (2002); Bellelli and Botto (2002); *cf.* also Nijboer (2013); Turfa (2014).

[80] The piece illustrated here, British Museum ME 126406 (1938,0108.49), diameter *ca.* 11.5cm, was excavated by Leonard Woolley at Alalakh (Tell Atchana). Woolley notes that vessels of this shape, generally carefully made and slipped or burnished, were common in level IV of the Palace, but he reports no traces of wear and nor is significant wear apparent on the British Museum example: Woolley (1955) 332 type 163, pl. 124.163a–b; *cf.* Botto (2000) 64. For later examples from Nimrud, see Mallowan (1950) 183, pl. 32; for further examples (including the appearance of the type in Sarepta) and discussion of imitations in late eighth-century BC Palestine, see Singer-Avitz (2007) 187–89; *cf.* also Botto (2000) 66–68.

[81] *Cf.*, for example, Stronach (1995) 185–87, who traces the spread of strainer jugs and filter funnels from Syria/Assyria (via Cyprus ?) to Greece and Italy; not all strainers, though, need necessarily have been used for wine, as other beverages, such as beer, were also common in some regions. On Greek strainers, see n.34.

[82] Botto (2000) 69.

[83] Powell (1995) 118–22; see also Stronach (1995).

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Fig. 6. Small red-slipped pottery tripod bowl from Alalakh (Tell Atchana): 14th–13th century BC; there are no traces of wear inside the bowl (British Museum ME 126406 (1938,0108.49); photograph © Trustees of the British Museum).

Botto proposes tripod bowls as a *Leitfossil* of a mode of drinking wine *alla siriana*, i.e. refined with expensive spices; he argues that this spread to Etruria at first, in the late eighth and early seventh centuries BC, carried by Phoenician-Punic traders, but soon, and indeed primarily, by Greek traders, who were increasingly active in the western Mediterranean from around the time of Ashurbanipal.[84] Indeed, this supposed Phoenician-Punic custom of spicing wine is seen as having coincided and overlapped, and perhaps even competed, with the equivalent alternative method of wine refinement using graters spread by Euboeans.[85] This scenario has been further developed, for example, for the Iberian peninsula by Jaime Vives-Ferrándiz Sanchez,[86] who takes the appearance of amphorae alongside tripod mortaria to indicate a practice of spicing wine that was spread by Phoenician traders increasingly engaged with indigenous communities from the mid-seventh century BC.[87] Extending the argument even further, Jean Turfa has proposed that across the central and western Mediterranean not only tripod grinding bowls but also mortaria of the flat-based variety were used to grind precious spices for wine; the driving force in this she holds to be urban populations engaged in international trade, who organized ‘orientalizing’ banquets to seal commercial deals.[88] Similar arguments have been made, finally, for southern France by scholars such as Anne-Marie Curé,[89] who suggests that Greek- and Etruscan-style mortaria were used for crushing herbs for wine, as one of several Mediterranean elements relating to wine consumption introduced into local culture in the sixth century BC; the vessels’ culinary role, she suggests, developed only later.

Grinding bowls were certainly better suited than graters to breaking down many of the kinds of substances that might have been appropriate for flavouring wine, from resins to green herbs and spices.[90] Indeed, in the Greek world mortaria are well attested as having been employed in

[84] Botto (2000) 84–90.

[85] Botto (2002) 243–44; Nijboer (2013); Turfa (2014); Kistler (2014) 191 n.81.

[86] Vives-Ferrándiz Sanchez (2007).

[87] Sardà Seuma et al. (2016) 41–42.

[88] Turfa (2014). The same scenario is considered by Santocchini Gerg (2013) 509–10.

[89] Curé (2015); *cf.* also Dietler (2010) 195, 237–38. The argument is based largely on the fact that it is primarily mortaria, transport amphorae and sympotic fine wares that were imported from the Greek and Etruscan worlds to southern Gaul, and should thus form a functionally coherent sympotic ‘set’.

[90] Dalby (2003) 315. Spices might also include the small fruits of the sumac shrub imported from Syria that are mentioned already by Solon (*fr.* 41 West).

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grinding these types of ingredients,[91] and on occasion recipes even explicitly refer to drinkable (medicinal) mixtures prepared in mortaria.[92] Archaeometric science has so far contributed only little to the question, but, as Botto notes, residue analyses conducted on one tripod vessel from Vulci yielded traces of vegetal resins.[93] This could make one think of the *murrinam vinum* that Pliny calls the finest of wines of the early days (*HN* 14.92). However, if Olson[94] is right and *murrinam* is merely a calque of the Greek μυρίνης, then this is, of course, no reference to the resin myrrh but merely to an unspecified flavoured wine. At any rate, there are a number of difficulties with the construction of a far-reaching scenario of grinding bowls being used in spicing wine *alla siriana* during banquets.

First, the scenario presupposes a Near Eastern, notably Phoenician and Assyrian custom of spicing wine at banquets. Yet, as Botto himself admits,[95] Near Eastern literary (and indeed iconographic) sources yield no secure evidence for a practice of mixing spices into wine as an integral part of a drinking party. A term denoting 'mixed wine' in some Ugaritic-Hebrew sources could perhaps be taken to refer to aromatic substances being added directly before or during a drinking party, but the argument is fragile.[96] Hittite texts refer to honey and 'fine oil' or 'tree oil' being added to wine, and in Assyria wine could be sweetened with grape syrup, but there is no indication at what point in time this took place, and all substances mentioned are liquid.[97] Extant references to spiced wine in Assyrian inscriptions relate to storage rooms,[98] and also at the Middle Bronze Age Canaanite palace at Tel Kabri recent residue analyses have identified spiced wine stored in magazines; a range of resin and herbal additives was detected here that likely included honey, storax resin, terebinth resin, cedar oil, cuperus, juniper and perhaps mint, myrtle and cinnamon, all infused in the wine well before consumption.[99] Indeed, as argued earlier, adding spices to wine just before consumption (indeed, the very moment before, if we take the argument regarding Ashurbanipal's relief literally) makes little practical sense and, especially if done without subsequent filtering, is likely to create an unbalanced, unrefined taste and texture.

Second, while slight traces of use and roughened surfaces suggest that in Assyria, as in Etruria, stone and pottery tripod bowls could be used for light grinding, such traces are not invariably present, or at least not pronounced, nor do we know what substances would have been ground and for what purpose.[100] Of course, there is good evidence from texts about the lavish banquets of the Assyrian kings and to the fact that herbs and spices were consumed there, including coriander, fenu-

[91] See, for example, the recipes in Dioskourides *De Materia Medica* book 5. For ground sumac, see Hippoc. *Nat. mul*. 428.23.

[92] One example is *trimma*, described by Athenaios (1.57) as a drink of the ancients made from aromatics. While it is possible that Athenaios here misunderstood his sources and took the well-known 'ground sauces' known as *trimmatia* for a drink, there are other recipes for drinks that did involve the use of mortaria. These include *ptisane*, the barley gruel drink or soup that had a medicinal function, especially when herbs and spices were added (Hippoc. *Acut*. 5–7). A related recipe consists of a mixture of liquids (milk, beet juice), unwashed sesame and three-month-old barley ground in a mortarium, squeezed through linen, mixed with honey and medlar, and drunk in dark wine in order to alleviate problems with the production of mother's milk (Hippoc. *Mul*. 1.44.16).

[93] Botto (2000) 84, 94 no. Vu1. More recently, a programme of organic residue analyses of Phoenician and Punic culinary vessels from Sardinia also included several tripod bowls and recorded very low lipid concentrations and some scant vegetal traces that would be consistent with a use for processing plant-based substances. The programme formed part of the doctoral research of Leonardo Bison at the University of Bristol, to whom I am most grateful for sharing unpublished information: Bison (2021); see also Bison et al. (2020).

[94] Olson (2018); *cf.* above, n.19.

[95] Botto (2000) 69.

[96] Loretz (1993); Zamora (2000) 507–14.

[97] Gorny (1995) 153–54 (Hittite); Powell (1995) 118–22 (Assyria). Hittites might also mix their wine with beer: Gorny (1995) 156.

[98] Gaspa (2012) 237–38, 241.

[99] Koh et al. (2014).

[100] Slight abrasion inside some stone and pottery tripod bowls of the first half of the first millennium BC from the region of Iraq (including small tripod double-rim bowls made of grey-ware pottery from Nimrud) is reported by Searight et al. (2008) 62–63. Oates (1959) 139, pl. 35.15–16, however, records no traces of use for seventh- to sixth-century BC tripod bowls from Fort Shalmeneser; *cf.* also above, n.80.

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greek seeds, saffron, ginger, mint and many others.[101] But precisely how these were consumed is not specified, and it could well have been in food not in wine; meat, for example, was eaten with condiments such as salt, which might have been broken down or mixed together with other spices in grinding bowls, as attested both for Assyria and Greece.[102] Assyrian kings, for example, are described as sprinkling salt on slaughtered sheep at victory feasts, the very type of feast represented on Ashurbanipal's relief.[103] Also on Ashurbanipal's 'garden party' relief (fig. 5) the function of the tripod bowl is not obvious. While the scene clearly references wine drinking, shaded as it is by a prominent vine, there is no indication that the small tripod bowl is a grinding bowl (no pestle is shown) nor even that it contained spices as opposed to some other food or substance. Nor do the other objects on the table beside the tripod bowl give any firm clues; they are a richly decorated pyxis and what has variously been interpreted as a brush, a bunch of onions or, more commonly, flat breads, though none of these ideas is especially convincing.[104] A second tripod bowl is carried towards the dining couple on a tray beside what appear to be rounded loaves of bread. The whole table is similar to an offering table in a relief from the same room in the palace with a libation scene, where the tripod bowl is replaced by a pile of meat joints on top of a shallow bowl.[105]

The arrangement on the table finds its closest parallels in reliefs on mortuary stelae erected in the ninth to eighth century in the Luwian and Aramaean polities of the northern Syrian-Hittite region. Here a male or female dignitary holds a drinking bowl while seated before a table carrying a standard set of objects and foods, usually comprising a plate with fish (generally for women), duck or meat (usually a leg), a bowl carrying what is usually interpreted as a stack of (curved) flatbread, a pyxis (sometimes suspected to have held spices or aromatics), as well as occasionally a seemingly empty small footed bowl.[106] Reminiscent in some of their details of Egyptian offering-table scenes (where bunches of lotus flowers offer a certain parallel to the strange Assyrian 'bread' bundles),[107] these images are clearly meant to depict the mortuary repasts of the dead. Their precise relationship with the imagery of Ashurbanipal's banquet remains unclear, yet they suggest that the latter, too, carries a more complex meaning than might be apparent at first glance. This fits in well with the image as a highly symbolic victory feast, in which, according to the accompanying inscription, the 'royal meal' is prepared and brought before the king by the Elamite royalty whom he has defeated. Intended as an expression of the king's power, the scene incorporates numerous appropriations from regions under Assyrian domination, such as the furniture and even, perhaps, the pose of reclining. Like the other constituent elements of this image, the tripod bowl, too, may thus have a deeper ceremonial or symbolic meaning, and one that might but need not be associated with drink.[108]

Third, it is important to distinguish tripod bowls of a northern Syrian and Punic tradition from the very different, larger, flat-based grinding bowls common in the Archaic and later Greek world. There is overwhelming evidence at least for the Greek world that the latter were used from the beginning primarily as culinary food processors (figs 3 and 4) and not as sympotic spice grinders,

[101] Gaspa (2012) 219–24; Ermidoro (2015) 196, 199–200; see also Winter (2016).

[102] Assyria: Marro and Michel (2013) 368–69 (AMT 24, 3:14; BAM 574:i10 (red salt); BAM 578:i31). Greece: Archestratos (*fr.* 14 Olson-Sens) mentions salt being ground with cumin for use on parrot fish; Olson and Sens (2000) 158 suggest that salt might have been pounded in a special salt-mortar. A spice mill called *hašimur*, a grinding stone used for black cumin and other spices, is mentioned in Babylonian sources of the sixth to fifth century BC: Radner (2014).

[103] Deller (1987) 234; *cf.* Alvarez-Mon (2009).

[104] Brush: Fehr (1971) 7; onions: Reade (2005) 16, 23 (with reference to further similar table settings); bread: Albenda (1976) 63–64; Postgate (2015) 167–69, n.44, figs 4–5. In several of the images the bundle is placed directly on the table, for example, Reade (1995) 46 fig. 13. For comparanda, see the discussion below.

[105] British Museum ME 124886.

[106] Several stelae from Zincirli/Samʾal are good examples: see Struble and Herrmann (2009); Herrmann and Schloen (2014); *cf.* also Searight et al. (2008) 63; Feldman (2014) 122–25, fig. 4.2. The additional bowl is present on the stela Berlin, Vorderasiatisches Museum VA2995.

[107] For example on Late Period stelae: Munro (1973) pls 34–35, figs 124, 128–29.

[108] A wider cosmic symbolism of the 'garden party' relief has been argued especially by Feldman (2014) 100–04.

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Fig. 7. Small tripod mortarium from Italy: late seventh to early sixth century BC (Campanari Collection, British Museum 1839,0214.64; photograph © Trustees of the British Museum).

with textual sources dating back to the sixth century BC associating them with the preparation of sauces and other *opsa* that were becoming popular in the period and that foreshadow the dominant uses of mortaria in later, including Roman times.[109] Well attested for the eastern Aegean, I would argue that a fundamentally culinary function should be assumed for mortaria at least in regions with strong links with eastern Greece such as southern France and (especially from the sixth century BC) Etruria, unless and until concrete evidence suggests otherwise.

What, finally, of organic remains preserved in actual tripod bowls? Apart from the resin observed in the tripod bowl from Vulci noted earlier, few other vessels are reported to have contained any visible remains: in one bowl at Cerveteri ferric traces were observed;[110] another was described as containing 'carbonised substances' as well as 'remains of food'.[111] Several tripod bowls, including an example today in the British Museum, preserve traces of burning (fig. 7).[112] As noted by Botto,[113] the use as a brazier in a tomb context may well have been secondary, though we should perhaps not exclude entirely the possibility of a related primary use such as the breaking down of incense or other aromatics for the purposes of smell rather than ingestion. The spread of the shape coincides, after all, with a period when the use of perfume and the burning of aromatics such as myrrh and frankincense during banquets and rituals gained widespread popularity, as shown not least by the spread of Phoenician or Cypriot thymiateria – even if the existence of these and other specialized censers casts doubt on assumptions that tripod bowls would regularly have acted as perfume braziers.[114] Other possible alternative uses might have included preparing substances for burials, as the possible remains of ochre in a tripod grinding bowl found at Les Casetes (la Vila-Joiosa, Alicante) might suggest.[115]

[109] The point is argued already in Villing and Pemberton (2010) and is set out more comprehensively in Villing (forthcoming a).

[110] Botto (2000) 93 no. C4.

[111] Ricci (1955) col. 331 fig. 66.13, col. 338; Botto (2000) 84, 93 no. C7.

[112] Tamburini (1997); for the British Museum example illustrated here, reg. no. 1839,0214.64, see Fabbricotti (1986) 185 no. 1, 192 fig. l.

[113] Botto (2000) 84.

[114] Xenophanes *fr.* 1 DK; *cf.* Morstadt (2008) 253–56; Ambrosini (2013); Davies (2016) 305–07. On Etruscan braziers, see Pieraccini (2006).

[115] Vives-Ferrándiz Sanchez (2007) 16, 23. Similar functions in funerary ritual or perfume production have been considered for Bronze Age Near Eastern (and Aegean) tripod bowls by Buchholz (1963) 62–66.

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To date, then, the tripod vessels themselves provide few concrete clues as to their uses, and certainly no secure evidence for a use relating to any spicing of wine. Also the overall picture from archaeological assemblages is inconclusive, as tripod bowls are usually found alongside diverse objects relating to drinking as well as eating, but also other activities such as the burning of incense. Contextual interpretations of finds, of course, are notoriously difficult, not only as find associations can be misleading but also because of the possibility of secondary use.[116] Tomb assemblages in particular are problematic, as they can hardly be taken as functionally coherent sets but more likely represent heterogeneous groupings of objects united by their relevance to the deceased and the funeral ritual. But questions are raised also by other assemblages. At the site of Sant Jaume in northeastern Iberia, for example, a small tripod bowl has been assumed to have served for preparing spices for wine,[117] even though the assemblage also contained numerous objects relating to the preparation and consumption of foods, notably roast meat. On what basis can we be sure it was not used, for example, for breaking down salt or spices for meat or other dishes, or even some other element of banqueting such as preparing incense or perfume?

IV. A case for cuisine: food and social relations

The notion of a widespread 'eastern Mediterranean practice of crushing spices in order to … enhance the taste of wine' derived from a 'practice [that] was common in the Syro-Mesopotamian area'[118] seems in the process of taking a firm hold in scholarly literature. Its popularity, and the lack of critical scrutiny applied to it, undoubtedly lies in its seeming plausibility within a scholarly framework that recognizes ritualized wine drinking as a constitutive element of diverse Early Iron Age and Archaic societies and their interactions.[119] Yet a closer look at the evidence has revealed that the case for spicing wine at the drinking party is far from conclusive; rather, it is based on a series of assumptions for which neither the Near Eastern nor the Greek (or Etruscan/Italic) realm provide concrete evidence. Of course, there can be no doubt that the consumption of alcohol, in the ancient Mediterranean world as elsewhere, had a special role in feasting and social life. However, not every aspect of ancient commensality and interaction needs to have revolved solely or primarily around wine (or other alcohol), and we need to take care not to prejudice interpretations of ancient evidence by adopting too narrow a focus on sympotic drinking alone. In banqueting, including also the Greek *symposion*, eating, too, played a role and often was not quite as separate as some texts seem to imply.[120] Spicing wine was undoubtedly one of the ways in which producers and consumers sought to stabilize or preserve wine, enhance or alter its taste, or achieve therapeutic effects. Yet neither pictorial nor textual sources clearly attest a practice of spicing wine as an integral part of the *symposion* or other, related banqueting occasions. If anything, archaeology and texts as well as practical considerations seem to argue against a widespread custom of grating spices (or some other unspecified analgesic or psychoactive substances[121]) into wine, favouring instead a predominant use of the grater for grating cheese and other, predominantly culinary, substances.

[116] Swift (2017).

[117] Sardà Seuma et al. (2016) 45, 54.

[118] Sardà Seuma et al. (2016) 54.

[119] See recently, for example, Węcowski (2018) with further literature. On the role of alcohol, see also Dietler (1990); (2018); Rabinowitz (2004) 114–15. As Davidson has cautioned, however, modern perceptions of the special nature of alcohol may skew our understanding of ancient practices: Davidson (1997) 36–40.

[120] This topic is explored further in Villing (forthcoming a); (forthcoming b).

[121] In general, the consumption of psychoactive substances in the ancient Mediterranean world, though often suspected, remains difficult to ascertain, as the case of the Bronze Age Cypriot base-ring 'opium' juglets illustrates. Long assumed to have contained opioid substances consumed for their psychoactive effect, recent analyses point rather towards poppy seed and other aromatic oils more suitable for medicinal applications: Bunimovitz and Lederman (2016); Chovanec (2018); Smith et al. (2018).

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The alternative scenario that I would like to propose harks back to Ridgway and tries to take greater account of the existing evidence, slim as it may be, while allowing for chronological and regional variations and temporal changes. It takes seriously the consistent and prominent association of the grater with grated cheese in both literary and iconographic sources, while acknowledging the implement's high social status as evidenced by archaeology and its role in ritualized social interaction as indicated in Homer. Seen against this background, there is no *prima facie* reason to dissociate the high-profile appearance of the grater in the early tombs of Lefkandi and the rich 'princely' tombs in the West, as well as in some early sanctuaries, from its use in preparing the *kykeon*, the ceremonial wine, barley and grated-cheese gruel that was implicated in the guest-host relations and ritualized practices of *xenia* that underpinned elite interaction.[122] Sherratt, pointing to the *kykeon*'s exclusive association in the epics with foreign (Trojan Hekamede) or exotic (Circe) women, considers it unlikely that such a mixed potion ever formed part of regular (male) Greek cultural practice or ethos.[123] However, this conclusion is not inevitable: in Homer, Trojans are hardly characterized as culturally different from Greeks; Circe's drugged *kykeon* is an obvious perversion of respectable practice; and the provision (and serving) of grain-based sustenance sits comfortably within the sphere of female responsibility in Greek culture through the ages.[124] Of paramount importance within Early Iron Age societies and their networks of contact and exchange, *xenia* and gift exchange remained central institutions also in the Archaic period as integral elements of 'primitive' market economies that fostered trust and reduced transaction costs. If, as is widely accepted, mythical narratives such as the Homeric poems, among other things, were a means of transmitting social values and models of behaviour including those essential for cross-cultural encounters,[125] then they may also have been one path along which 'ceremonial' practices relating to food were shared in wider networks of the Greek Mediterranean.[126]

The economic, political and social transformations that affected the Archaic and Classical Mediterranean and that included developments such as interpersonal relations giving way to more institutionalized international exchange, went hand in hand also with changes in the praxis and meaning of commensality, banqueting and the consumption of drink as well as food. Within the Greek *symposion*, a fundamentally social as well as ceremonial occasion, wine drinking retained a central role, but change is visible especially in the consumption of food, perfumes, adornments and entertainment that were its critical and inseparable complements.[127] In particular from the later seventh century BC onwards, in part inspired by Levantine and Anatolian practices and along with other elements of a 'luxurious' lifestyle, a new trend for a more complex cuisine spread through much of the eastern Greek world and its wider Mediterranean networks, including Etruria, and became available to increasingly wider sections of the population.[128] We can chart this first in the development of the *batterie de cuisine* which diversified and assumed a new significance, but later also in images and texts. It is from sixth- and fifth-century BC writers that we learn that, besides a fashion for elaborate sauces and new ingredients such as silphium, it was the use of (grated)

[122] As already argued by Ridgway (1997). On the importance of hospitality, see, for example, Kistler (2014) 214–15; (2017). Note also that trapezoidal sheet-bronze pendants, such as an example found in a Faliscan seventh-century BC tomb at Narce, have been interpreted as miniature bronze cheese graters: Philadelphia, University of Pennsylvania Museum, MS1097; Pieraccini (2014a) 818 fig. 43.7.

[123] Sherratt (2004) 207–08.

[124] On women serving drink to warriors in the funerary art of Bronze and Iron Age Europe, see Riva (2010) 101.

[125] As argued, for example, by Riva (2017); *cf.* also Guggisberg (2017).

[126] As suggested, for example, by Morgan (2012) 38–39.

[127] The history of the *symposion* is given in Węcowski (2014); (2018). I agree with Wilkins and Hill (2006) 77–78 that food consumption was never strictly separated from wine drinking even in the *symposion* and that much temporal and regional variation must have existed.

[128] This argument is made in detail in Villing (forthcoming a); (forthcoming b); *cf.* also Villing and Pemberton (2010).

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cheese that was one of the hallmarks of this development.[129] With changing cultural and social practice, driven by social competition, then food, foodways and the trappings and rules of commensality evolved; yet not all was necessarily made new. While the *kykeon* may have given way to elaborate dining, cheese remained a desirable, and widely available, ingredient, and, from Homer to Archestratos, it was the processing of cheese that remained the grater's predominant, even if undoubtedly not sole, use: *plus ça change, plus c'est la même chose*.

Of course, this broad-brush picture masks a more diverse reality: in the Greek and even more so the wider Mediterranean world, interconnected though it was, structures and practices were never uniform. Culinary customs and banqueting praxis, too, would have displayed regional diversity alongside shared elements. Assemblages in the indigenous tombs of late Archaic and Classical southern Italy and Sicily are a case in point: while reflecting close entanglement with Greek neighbours and wider Mediterranean networks, they also represent distinct local societies with their own structures and traditions. As noted earlier, graters here frequently occur alongside warrior equipment and banqueting paraphernalia indicative of wine and meat consumption. At the indigenous site of Serra di Vaglio in the interior region of Basilicata (Oenotria/Lucania), for example, a series of wealthy late sixth-century BC burials, both male and female, contained large, locally made ceramic bowls that presumably functioned as kraters, bronze cauldrons, basins, graters and strainers as well as iron spits and firedogs, with the male burials also yielding weapons and armour.[130] As argued by Adam Rabinowitz,[131] such grave goods may be suggestive of meat-rich (patron-role) feasts reminiscent of Homeric feasting within a local system of status display. Tombs with a similar range of offerings, including occasional bronze graters, from sixth-century BC Archontiko (Macedonia) have likewise been suspected of making a link with an idealized 'heroic' past.[132] Not dissimilar is the burial of two warriors at Montagna di Marzo in Sicily dated to just before the middle of the fifth century BC;[133] but here the two bronze graters were found deposited in large spouted mortaria, which also contained pottery vessels (jug, bowl and lamp). All three mortaria in the burial moreover held food remains: one eggs, another fish remains and the third the bones of young chicken. Eggs were also found in the Campanian Trebbia tomb of the later fifth century BC (fig. 8), which contained a cheese grater besides bronze and ceramic sympotic vessels, weapons and a strigil: a diverse assemblage exemplifying the deceased's social position.[134]

The ritualized food offerings in the tombs raise the possibility that graters, too, could have had a socially conspicuous and perhaps ceremonial significance related to the funerary context. Special drinks could have been prepared for the funeral banquet or for the deceased's journey to the Underworld, drinks that were modelled on the *kykeon* and that involved the use of a cheese grater. This is a scenario not unimaginable in a region such as Classical Sicily and southern Italy, where cults of Demeter and Persephone and related Orphic and Dionysiac beliefs were prominent. At the same time, as in contemporaneous mainland Greece, graters as well as mortaria were likely accorded status as utensils in an increasingly elaborate cuisine used in private and sacred feasting. From the Archaic period, the Greek cities of Sicily were renowned for their culinary culture, in close competition with their Aegean neighbours, and Sicily was a notable producer and exporter of fine cheese,

[129] The overuse of grated cheese in this cuisine is later criticized by Sicilian culinary poet Archestratos, writing in the 330s BC: see Olson and Sens (2000).

[130] Rabinowitz (2004) 355–57.

[131] Rabinowitz (2004) 355–57. Graters are not only found in tombs, however. For example, a likely religious context on the acropolis at the indigenous Peucetian site of Monte Sannace yielded a bronze grater in connection with a large building of the later part of the sixth century, destroyed by fire in the fourth century BC: Rabinowitz (2004) 349–50, 354–55, 587–91.

[132] Saripanidi (2017) 102. Besides vessels related to wine drinking, the tombs also contained food-related items including iron spits, knives and lekanides as well as perfume and ointment containers: Saripanidi (2017) 82–84.

[133] Cottonaro (2012) 136–41.

[134] Jenkins and Sloan (1996) 141–43 no. 25. On the significance of eggs in Etruscan funeral contexts, see Pieraccini (2014b).

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Fig. 8. Trebbia tomb: parts of the assemblage, second half of the fifth century BC (British Museum 1772,0304.6.1, 1772,0304.5.4, 1772,0320.1.+, 1772,0320.463, 1918,0101.12, 1918,0101.52, 1975,0602.1, 1975,0602.3, 1975,1109.3, 1975,0804.20; photograph © Trustees of the British Museum).

which, the Sicilian culinary writer Archestratos points out, was grated particularly over fish.[135] We cannot be sure about the precise reasoning behind the inclusion of graters in each of these funerary assemblages; the evidence is never more than circumstantial. Yet, in all cases, I suggest, rather than taking the find association with mixing and drinking vessels as an indication for the spicing of wine, an equally or often more plausible argument can be made for a broadly 'culinary' role within the context of social relations and banqueting when the assemblages are considered more widely.

V. Conclusion

The reassessment of archaeological and textual evidence has highlighted a number of problems with the idea of an all-pervasive trans-Mediterranean, 'orientalizing' culture of spicing wine at banquets in the first half of the first millennium BC. Not only is there no ancient evidence for using graters for grating 'spices', but such a use would have been practical for only a very limited set of aromatics potentially suitable for adding to wine, and, indeed, available at the time. And while a good number of the aromatics that could have been used to flavour wine (and which are attested to have been thus used) would have been suitable for grinding in a mortarium, it is highly implausible that this would have taken place during or in close association with the *symposion*, rather than well before. Finally, faced with a lack of relevant Near Eastern evidence, the idea that

[135] Dalby (1996) 108–11, 116–21.

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such spicing of wine constitutes an ‘oriental’ import is essentially conjectural, casting yet further doubt on a Mediterranean-wide scenario of interlinked traditions of spicing wine using graters (Greeks) and tripod mortaria (Levantines and Phoenicians). The evidence presently available to us thus all but precludes a uniform narrative of a Mediterranean-wide spiced-wine culture predicated on the use of graters and grinding bowls during banquets.

This is not the same, however, as denying a close link between the use of graters and grinding bowls and the rise of banqueting as a means of social, and intercultural, interaction and competition. Quite the contrary: evidence from texts and archaeology clearly demonstrates their use in cuisine and commensality, both quotidian and high-profile, in which drink, food and other ‘semi-luxuries’, local as well as imported, were consumed. But rather than as markers of a uniform elite custom of adding ground or grated exotic spices to wine based on supposed Near Eastern models, they are better explained from a wider perspective, as part of an evolving culture of socially significant commensality and interaction in which food and foodways, among other things, played a role, materially and symbolically, and which, at times, could involve considerable sections of the population. In such a framework we can see the grater’s use develop from Early Iron Age elite hospitality and guest-friendship (and concomitant ritual roles in sanctuary and funerary contexts) to an important role in the emerging and increasingly complex cuisines of the Archaic and Classical periods. This is a scenario that would be consistent at once with the grater’s ongoing association with grating cheese and with the evolving social (and economic and political) role of the *symposion* and other contexts of consumption and interaction.

Any reconstruction of human practice and its development, of course, can evoke but a highly simplified impression of far richer and more complex ancient realities, of which our scarce and often ambiguous data can supply only few glimpses and that new evidence is bound to modify and correct. There is a need in particular for further research in the field of organic residues and archaeobotany to provide a more robust context for scholars attempting to deduce social and cultural practices from material culture. It is always tempting to construct networks of practice from the distribution of object types, and the interconnected nature of the first-millennium BC Mediterranean world does indeed provide grounds for arguing that (social) function, to a certain extent, travelled with (utilitarian) form. Yet we also need to beware of the seductive power of sweeping narratives hinging on convenient *Leitfossils* that may restrict our field of vision and limit our desire for critical questioning.

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