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# Did Ancient Greeks Drink Beer?

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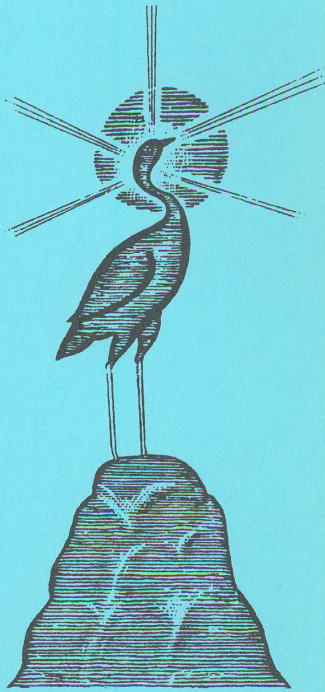
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# PHOENIX



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## DID ANCIENT GREEKS DRINK BEER?

MAX NELSON

SCHOLARS HAVE LONG BEEN IN AGREEMENT that ancient Greeks in general did not drink beer but used wine as their sole or at least main beverage and intoxicant. While a number of writers, particularly in popular works, but also in some more scholarly ones, have instead assumed that Greeks did indeed make and consume beer, and even passed on the Egyptian beer-making tradition to Europe, they have not proffered any evidence to defend such claims.<sup>1</sup> However, recently in this journal Janick Auberger (with Sébastien Goupil) provided a number of arguments in support of the contention that a large segment of the ancient Greek population drank beer.<sup>2</sup> I would like to review these arguments and in the end defend the *communis opinio*. For the sake of concision I will restrict my remarks mainly to evidence down to hellenistic times, at which point the opening of the East by Alexander the Great and the subsequent take-over by the Romans transform the picture.<sup>3</sup>

Auberger argues that while the Greeks purposefully constructed an image of themselves based on an ideal diet in opposition to that of others (the Greeks, for instance, drinking wine in contrast to the beer-drinking “barbarians”), in reality the Greek diet was not so different from anyone else’s.<sup>4</sup> She proposes that the real opposition was probably that between wealthy, city-dwelling Greeks, who tended to drink wine, versus the poor, country- or mountain-dwellers, who drank beer.<sup>5</sup> She also submits that Greek peasants might have drunk more beer

<sup>1</sup> See, for example, Unger 2004: xiv and 20; Alcock 2006: 90; Bamforth 2009: 25; Sewell 2014: 25.

<sup>2</sup> Auberger and Goupil 2010: esp. 55–57 and 63–72, which corrects and expands upon Auberger 2009: esp. 18 and 23–30 and 2010: 152–156. In what follows, for the sake of simplicity, I will refer to these ideas in the main text as Auberger’s alone without meaning any offense to Goupil. Goupil, in any case, has elsewhere expressed ideas divergent from those of Auberger on this issue (see below, n. 5).

<sup>3</sup> Later sources will be utilized when necessary. For a more comprehensive examination of beer in ancient Europe, including later Greek evidence, see Nelson 2005a.

<sup>4</sup> Auberger 2009: 15–16; Auberger and Goupil 2010: 52–54.

<sup>5</sup> Auberger and Goupil 2010: 76; Goupil (2007), however, makes no mention of beer when examining the food and drink of rural Greeks and regards it only as a foreign product. As Auberger and Goupil (2010: 63, n. 55) point out, it has been conceded by Nelson (2005a: 123, n. 18) and Wilkins and Hill (2006: 23 and 131) that some Greeks in remote regions, such as mountainous areas, might have drunk beer; on this, see also Lucia 1963: 160. The idea that beer was the drink of poor Greeks has other supporters: see, for example, Arnold 1911: 118; Hardwick 1995: 40; Hornsey 2003: 117; Bamforth 2009: 25; Hames 2012: 25; Huxley 2012: 749. Direct evidence for such a divide along socio-economic lines among certain non-Greek peoples first appears in post-classical sources (see the references in Nelson 2003: 110–111).

than wine<sup>6</sup> and that in general Greeks drank as much beer as “barbarians” did.<sup>7</sup> She points out that it would be fairly strange if, given that they had barley and that most of their neighbours drank beer, the Greeks themselves did not make or drink this beverage, particularly since it is nutritious and useful as a means of purifying water and storing cereal.<sup>8</sup> She further explains the silence of literary sources on Greek beer-drinking by claiming that surviving authors were upper class and biased and knowingly omitted references to Greek beer-drinking since they considered it uncivilized, low class, and effeminate.<sup>9</sup> Yet she apparently contradicts this explanation when she argues that references in ancient texts to *κυκεών* (a term to be explained below, 35–42) may be to beer.<sup>10</sup>

Auberger thus postulates a conspiracy of silence. To counter this claim, in what follows I will examine works by ancient Greek authors both for negative evidence (the lack of references to beer-making and beer-drinking among Greeks) as well as for positive evidence (the references to beer as a foreign product). I will then look at the evidence for *κυκεών* as beer.

#### NEGATIVE EVIDENCE

To explain the conspiracy of silence, Auberger suggests that Homer does not mention beer because his focus was on glorifying a heroic past.<sup>11</sup> This echoes ancient interpretations which postulated that there were no references to Homeric heroes eating vegetables, fish, or fowl because any food other than roasted red meat was somehow considered inappropriate to their dignity.<sup>12</sup> However,

<sup>6</sup> Auberger and Goupil 2010: 75.

<sup>7</sup> Auberger 2009: 26; Auberger and Goupil 2010: 57.

<sup>8</sup> Auberger 2009: 23–25 and 2010: 153–154; Auberger and Goupil 2010: 64–67. See Nelson 2011 for a refutation of the notion that beer was produced as a means of purifying water. Furthermore, cereal is better stored in dry form unless preservatives are added to beer; on such preservatives, see Nelson 2014: 16–18. Possible explanations as to why the Greeks did not have beer are provided by Engs (1995: 231 [brewing was too costly due to deforestation]; countered in Nelson 2014: 10) and Nelson (2005a: 33–37 [beer was considered a “cold” and “wet” substance which was unmanly and which was produced from rotten cereals]).

<sup>9</sup> Auberger 2009: 25–26 and 2010: 155–156; Auberger and Goupil 2010: 67–68.

<sup>10</sup> Auberger 2009: 28–29; Auberger and Goupil 2010: 71–72. Auberger (2009: 27) and Auberger and Goupil (2010: 70–71) further suggest that some hellenistic statuettes from Tanagra show Greek beer-making; however, since these can be interpreted as simply depicting the process of baking (as the authors point out), I will leave them aside.

<sup>11</sup> Auberger and Goupil 2010: 69. The traditional view that Homer did not mention beer because it was not drunk is explicitly stated, for example, by Ventris and Chadwick (1973: 131).

<sup>12</sup> See, for example, Pl. *Rep.* 3.404b–c; Aristarch. in *Schol. Hom. Il.* 16.747; Diosc. *FGrH* 594F\*8 (in Ath. *Deipn.* 1.8e–f and Suda s.v. “Ομηρος); Ath. *Deipn.* 1.13c, 18a, and 25d. On the lack of fish-eating in Homer, see also Eubulus (fr. 118.1–4 Kassel and Austin [in Ath. *Deipn.* 1.25c]), leaving the reason open; Meleager of Gadara (fr. 2 Riese [in Ath. *Deipn.* 4.157b]), attributing it to Homer’s Syrian background; and Plutarch (*Quaest. conv.* 8.8 [= *Mor.* 730c]), making fish-eating a matter of inappropriate, self-indulgent luxury. In any case, the heroes in fact do have fish, but only when they are starving and there is nothing else to eat (*Hom. Od.* 4.368–369 and 12.330–332).

as scholars have pointed out, such explanations betray the concerns of classical and later Greeks with the social status of comestibles and need not be accepted as representative of Homer's intention.<sup>13</sup> In any case, it is significant that the lack of beer in the Homeric poems is not mentioned in any of the ancient sources, and thus presumably was not considered odd or worthy of note.<sup>14</sup> In fact, at least some Greeks may have believed that beer did not exist in heroic times.<sup>15</sup> Furthermore, whereas beer-drinking Homeric heroes might be considered undignified by some critics, a different explanation would have to be given for Homeric plowmen and swineherds or Hesiodic farmers who opt to drink wine instead of beer.<sup>16</sup>

It is also doubtful that a conspiracy of silence could explain Aristophanes' lack of references to beer.<sup>17</sup> Though no doubt an upper-class Athenian, Aristophanes often presents in his plays sympathetic protagonists who are ordinary, poor, country-dwelling citizens,<sup>18</sup> and whose diet is in fact mentioned. Most notably in *Wealth*, the protagonist Chremylus describes in horrific detail the life of the poor who have rags for clothing, a rush mat full of bugs as a bed, a stone for a pillow, who eat mallow shoots rather than bread and dry radish leaves rather than barley-cakes,<sup>19</sup> and use thyme as a basic comestible rather than as a seasoning.<sup>20</sup> Chremylus is apparently not quite so poor at the time of

<sup>13</sup>Davidson 1996 (taken up again at 1997: 11–20, esp. 12–13 and 16–17); Garnsey 1999: 73–77. Sherratt (2004: 305–306) notes that readers may well have rightly assumed that when Homeric heroes are said to be eating food in general this could include vegetables and fish among other comestibles (for this point, see also Wilkins and Hill 2006: 257). For a survey of different ideas on the matter, see Beer 2010: 57–61.

<sup>14</sup>Eustathius (*Comm. Hom. Il.* 11.638 [871.53–54]) interestingly suggests that the lotus and beer (ζῦθος) may contain the same substance, but no other ancient author comments on any connection between Homer and beer.

<sup>15</sup>For different ancient ideas of beer as a divinely-provided or a man-made beverage, see Nelson 2005b.

<sup>16</sup>Homer: *Il.* 18.545 (plowmen described on the shield of Achilles) and *Od.* 14.78, 109, 113, 447, and 463 (Eumaeus the swineherd). Sherratt (2004: 323 and 324) notes that wine is the drink of all except mortal women in Homer. Hesiod: *Op.* 585, 589, 592, 674, and 744 (wine), with 570 and 572 (vineyards) and 596 and 724 (wine libations). Milk is also mentioned (590). The solid diet referred to is a simple one of mallow and asphodel (41), acorns (233), bread (442), barley-cakes (590), and meat (585 and 590–592).

<sup>17</sup>In the scholia it is suggested that Aristophanes' references to an Egyptian laxative or purgative at *Pax* 1254 and *Thesm.* 857 refer to beer (for which, see Nelson 2005a: 22, with 126, n. 28). Even if this were right, it remains a fact that no mention of Greek beer-drinking is to be found in what survives of Aristophanes' work.

<sup>18</sup>However, as Davidson (1997: 233) notes, there is some "class confusion" among the protagonists in Aristophanes.

<sup>19</sup>*Ar. Pl.* 540–544, and see also 763 on running out of barley meal. Dry leaves are also mentioned as food at *Ach.* 469.

<sup>20</sup>*Ar. Pl.* 253 and 283. For thyme as a food of the poor elsewhere (particularly in old comedy), see Dalby 1996: 26–27; Sommerstein 2001: 152, *ad* 253. For thyme also being a term for a type of garlic, see below, 42, n. 103.

the action in the play since his slave Carion can complain about being fed up with a diet of bread, snacks, flat-cakes, dried figs, barley-cakes, and lentils,<sup>21</sup> and the drink that Chremylus' wife has at home is wine, with which they are to celebrate (along with bread and snacks) the arrival of wealth.<sup>22</sup> Once they become wealthy, Chremylus' household partakes of white barley meal, olive oil, and dried figs, and the wine they drink is apparently of a superior kind, denoted as being dark and flower-scented.<sup>23</sup> Chremylus describes another newly wealthy man who used to eat anything that was available but now shuns lentils, a food typical of the poor.<sup>24</sup> Lentils are a comestible fully ignored in the nobler genres of epic or tragedy, and are associated, at least by Herodotus, with the semi-barbaric "Scythian Greeks."<sup>25</sup> In sum, in Aristophanes the poor have wine while the wealthy have better wine. Given that he did not shun mentioning the lowly lentil, it is difficult to imagine that Aristophanes would have ignored the supposed beer of the poorest (which he could have aptly contrasted with the wine of the better off) or substituted the beer of the marginally poor (like Chremylus and his household) for wine.<sup>26</sup>

Similar catalogues of the food and drink of the poor are found in other comic authors. Thus Poliochus, for example, has a character mention his lowly diet of barley-cakes, figs, mushrooms, snails, wild vegetables, and olives, and to drink, "a little doubtful wine" (οἰνάριον ἢ ἀμφίβολον).<sup>27</sup> Surely it was in the interest of the author to allude to the worst sort of drink for the poor, and yet no mention is made of beer.<sup>28</sup> The comic author Alexis states that the only ones who do not drink wine are Pythagoreans; instead they drink water.<sup>29</sup> The same

<sup>21</sup> Ar. *Pl.* 190–192.

<sup>22</sup> Ar. *Pl.* 644 (wine), 765 (bread), and 768 (snacks).

<sup>23</sup> Ar. *Pl.* 806 (barley meal), 810 (olive oil), 811 (figs), and 807 (wine). Their containers for fish are now silver (813–814, cited in Ath. *Deipn.* 6.229e–f), showing that they did have fish when they were poor.

<sup>24</sup> Ar. *Pl.* 1004–5. For lentils as a humble food in old comedy, see Wilkins 2000: 13–16.

<sup>25</sup> Hdt. 4.17.1. The earliest Greek reference to lentils is in Solon (fr. 38 West [in Ath. *Deipn.* 14.645f]), where, however, they seem to appear in the context of dessert at an upper class dinner party (see Noussia 2001: 355 and n. 17). In Athenaeus (*Deipn.* 4.156e–f) lines from tragedy are humourously adapted by inserting references to lentils (see also 4.158a).

<sup>26</sup> West (1969: 185) argues that the word βρῦ, said to have been spoken by baby Pheidippides when thirsty (Ar. *Nub.* 1382), is a short form of βρῦτοζ/βρῦτον (on which, see below, 34), and that his rustic father Strepsiades would have served him sips of beer; however, the word may have been nothing more than a suckling noise (see Golden 1995: 23, citing ancient scholarship). Perhaps considering it only logical, Roche (2005: 233 and 438) silently adds mentions of beer in his translations of two of Aristophanes' plays (at *Vesp.* 676 and *Lys.* 466); see Nelson 2009: 88.

<sup>27</sup> Polioch. fr. 2 Kassel and Austin (in Ath. *Deipn.* 2.60c–d).

<sup>28</sup> In fragments of the comic poets Cratinus (fr. 103 Kassel and Austin [in Hesych. *Lex.* s.v. βροτίνη]) and Antiphanes (fr. 47 Kassel and Austin [in Ath. *Deipn.* 11.485b]) beer is apparently alluded to, but the contexts are impossible to reconstruct with any certainty, and they do not seem to deal with Greek beer-drinking (see Nelson 2005a: 32).

<sup>29</sup> Alex. fr. 223 Kassel and Austin (in Ath. *Deipn.* 5.161b–c); their only food, he says, is bread. Diogenes Laertius instead states that wine was not drunk by Pythagoras during the daytime (8.19),

picture is provided by tragic authors. Thus, for instance, Euripides, who may have come from a lowly background,<sup>30</sup> has the chorus in the *Bacchae* say that Dionysus provides wine equally to the wealthy and the poor.<sup>31</sup> Furthermore, in a lost play Euripides mentions as the most basic comestibles cereal and water, which are satisfactory to no one;<sup>32</sup> beer, however, is not found anywhere in his work.

Another source in which beer might be expected to appear (if indeed it was a drink of the Greeks) is the Hippocratic corpus, which includes a number of works on diet. In *On Regimen*, for instance, which includes lists of food and drink and their effects, the author states explicitly: “I advise these things for the multitude of people” (ταῦτα μὲν παραινέω τῷ πλήθει τῶν ἀνθρώπων).<sup>33</sup> This clearly shows that the goal of the work is not simply to describe the diet of the wealthy, but of all, the poor included, and in fact the thoroughness of the work is remarkable.<sup>34</sup> Water and various types of wine (and vinegar) are discussed, as well as different sorts of cereal products, yet there is no explicit mention of beer.<sup>35</sup> The situation is the same in the proscriptive (rather than descriptive) Hippocratic works on diet. Thus in the work *On Regimen in Health*, which is explicitly addressed to “the common person” (ἰδιώτης), wine is the only drink suggested for the healthy (even infants).<sup>36</sup> *On Regimen in Acute Diseases*, which instructs the reader to take into account the patient’s habitual diet, mainly recommends drinking wine, with the occasional substitution of water, or a mixture of honey with water or honey with vinegar.<sup>37</sup> On the

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while also mentioning that Pythagoras promoted the drinking of plain water only (8.13). Iamblichus says that Pythagoras never drank wine (*Vit. Pyth.* 3) and ordered his followers also to abstain from it (16, 24, and 31), but also that though they did not drink it during the day they did at dinner (21). Note also the list of water-drinkers in Athenaeus (*Deipn.* 2.44b–f), which, however, does not include Pythagoras.

<sup>30</sup>Euripides’ mother Cleito was reputedly a greengrocer (*Ar. Ach.* 457 [with *schol.* = T9 Kovacs] and 478, *Eq.* 19, *Thesm.* 387 and 456, and *Ran.* 840; *Com. Adesp.* 421 Kassel and Austin [in Hesych. *Lex.* s.v. σκάνδιξ]; Anon. *Vit. Eur.* 1 [= T1 Kovacs]). Philochorus, however, claimed that she was of the upper class (*FGrH* 328F218 [in *Suda* s.v. Εὐριπίδης] [= T2 Kovacs]).

<sup>31</sup>*Eur. Bacch.* 421–423.

<sup>32</sup>*Eur.* fr. 892 Kannicht (in *Ath. Deipn.* 4.158e).

<sup>33</sup>*Hipp. De diaet.* 69 (and see also 68). Galen says that following in the tradition of Hippocrates, physicians should travel widely and treat even the poor from small towns (*Quod opt. med. sit quoque phil.* 3 [= 1.58 Kühn]).

<sup>34</sup>In terms of food typical of the poor as found in the sources mentioned above, note lentils (45), radish leaves, thyme, wild vegetables (54), and acorns (55).

<sup>35</sup>*Hipp. De diaet.* 52 (water, wine, and vinegar) and 40–45 (cereal products). For wine in Hippocratic medicine, see Jouanna 1996 and 2012; for cereal products in Hippocratic medicine, see Amouretti 1993.

<sup>36</sup>*Hipp. De diaet. salubr.* 1 (address), 1 and 5–7 (wine), and 6 (infants).

<sup>37</sup>*Hipp. De diaet. in morb. acut.* 38 (habitual diet), 6, 12, 37, 50–53, 56, and 63 (wine), 37, 50, 56, and 62–63 (water), 6, 12, 19, 50, 53–57, and 62 (honey and water), and 19, 50, and 57–62 (honey and vinegar). *Hipp. De humid. usu* 1 also mentions water given to patients to drink.

other hand, milk is considered inappropriate for the diet<sup>38</sup> and again no explicit mention is made of beer, whether as a usual or unusual, or for that matter appropriate or inappropriate, beverage. While these works are generally dated to the late fifth or the fourth century B.C., the author of a later, perhaps hellenistic work, entitled *On Nutriment*, notes that “for some wine is a nutriment and for others not . . . due to place and due to habit”;<sup>39</sup> unfortunately, as often, the Hippocratic author is frustratingly vague and no specific alternatives to wine-drinking are provided.

While nowhere in the Hippocratic corpus is beer specifically mentioned,<sup>40</sup> certain cereal-based liquids can be found that are at first glance reminiscent of beer. Erotian in his Hippocratic glossary interpreted μπτωτός (a type of dish made with various ingredients) as beer,<sup>41</sup> and Hippocrates repeatedly referred to χυλός (“juice”), which is specified as coming from barley, as a good comestible for the sick.<sup>42</sup> It is evident from later sources that both “juice” (χυλός) and “barley juice” (κριθῆς χυλός) could be used to describe beer, though clearly they could also refer to products other than beer.<sup>43</sup> Even more intriguing is the single reference to “the barleyed” (κρίθινον).<sup>44</sup> It is found listed along with other drinks made from cereals, herbs, and fruit, but unfortunately its nature and uses are not mentioned. It may be little more than a generic term for any barley-based beverage or a short form for “barley water” (ῥόδωρ κρίθινον), but it is interesting that Aristotle, as quoted in Athenaeus, uses the term κρίθινος in reference to beer, perhaps as a short form of the attested οἶνος κρίθινος (“barley wine”).<sup>45</sup>

<sup>38</sup>Hipp. *De diaet. in morb. acut.* 2–3.

<sup>39</sup>Hipp. *De alim.* 33: ἄλλοισι δὲ οἶνος τροφή, καὶ ἄλλοισιν οὐχὶ . . . καὶ κατὰ χώραν καὶ ἐθισμόν.

<sup>40</sup>Nelson 2005a: 33.

<sup>41</sup>Erot. *Voc. Hipp. coll.* s.v. μπτωτός, equating it with ζῦθος (on this passage, see Nelson 2005a: 33, doubting this interpretation). A far more unlikely candidate is μᾶζα, which Auberger (2009: 29) and Auberger and Goupil (2010: 72) improbably suggest could be fermented; on the nature of this barley-cake, see Braun 1995: 28–32. Trumper (2008: 131) takes Hippocratic κριθίδιον to be a type of beer, but in its only appearance in the corpus (*Nat. mul.* 53) it is to be drunk, after mutton has been boiled in it, to clean the uterus.

<sup>42</sup>Hipp. *De diaet. in morb. acut.* 6, 7, 18, 20, 25, 27, 40, and 68, with 15 specifically on it being made from barley; see also *Epid.* 5.19–20 for its effect on patients. At *De diaet.* 54 “juices” (χυλοί) of various plants are mentioned, including barley; compare ps.-Diosc. *De simpl. medic.* 2.44.1.

<sup>43</sup>For beer as “juice,” see Theophr. *De caus. plant.* 6.11.2; Dion. Hal. 13.11.1. For beer as “barley juice,” see Man. Phil. *Brev. expos. de eleph.* 140 (a Byzantine author who may be indebted to a much earlier source; see the parallel text in Pliny *HN* 8.24.8). Note Galen’s treatise on good and bad χυλοί (6.749–815 Kühn), in which beer is not mentioned.

<sup>44</sup>Hipp. *De diaet. in morb. acut.* 64.

<sup>45</sup>For barley water, see Hipp. *De diaet. acut.* 30 (a hellenistic appendix to *De diaet. in morb. acut.*). For κρίθινος, see Arist. fr. 106 Rose<sup>3</sup> (in Ath. *Deipn.* 1.34b, and compare 10.447a–b). For barley wine, see Xen. *Anab.* 4.5.26 (translated below, 35) and Plb. 34.9.15 (in Ath. *Deipn.* 1.16c, where it is quoted, interestingly enough, amid a discussion of food in Homer).



In any case, no indication is made in the Hippocratic corpus that such concoctions as “barley juice” or “the barleyed” are intoxicating; furthermore, they are not mentioned as regular beverages drunk by Greeks but as medicinal formulations for the sick. It would be perverse to suggest that mentions of beer (at the least as a common Greek beverage) are lacking in the Hippocratic corpus because of some ideological distaste for the drink.<sup>46</sup> The actual reason for the omission of beer seems clear: the readers addressed in the works, whether physicians or commoners, would not be expected to encounter beer as a beverage either among the rich or the poor. Many hundreds of years later, writing for physicians living in the Roman empire, Galen does mention beer, obviously since by this time it was available to and drunk by at least some of his patients.<sup>47</sup> In fact, in his commentary on the Hippocratic work *On Regimen in Acute Diseases* Galen writes that one should know how to prepare barley “as those who now make beer from it,” suggesting that the preparation of beer from barley is a novelty.<sup>48</sup> Galen’s only explicit indication as to who drinks it in his day makes no mention of the poor, but rather of the young, specifically in Alexandria, once again in the context of supplying a reference to beer in a commentary on a Hippocratic text in which it is lacking.<sup>49</sup>

In sum, it seems implausible that references to Greek beer-drinking were suppressed in, for example, Homer, Hesiod, Aristophanes, Euripides, and the Hippocratic corpus,<sup>50</sup> simply because it was considered a drink unworthy of Greeks.

#### POSITIVE EVIDENCE

Not only is beer not mentioned in any of our ancient sources as a drink of archaic or classical Greeks, it is in fact consistently and explicitly connected to foreigners.<sup>51</sup> While there was no Greek term equivalent to the word “beer” (in its definition as any alcoholic beverage made from malted cereal), there were

<sup>46</sup>Indeed, some odd and improper comestibles are included. Note, for example, hedgehog meat (Hipp. *De diaet.* 46; this is not the sea urchin [also ἐχῖνος], since the latter is mentioned among seafood at 48). Nevertheless, Hornsey (2012: 616–617) suggests that Hippocrates “almost entirely overlooked” beer because it was thought to have undesirable qualities.

<sup>47</sup>See the description of ζῆθος in Galen’s list of medical simples (*De simpl. med.* 6.6.3 [= 11.882 Kühn]), which was copied in Oribas., *Coll. med.* 14.10.10 and 15.1.6.6; Aët. Amid., *Libr. med.* 1.54; Paul. Aegin., *Epit. med.* 7.3.6. For beer in Galen as well as other Roman era physicians, see Nelson 2005a: 71–74, to which should be added Ruf. Ephes. fr. 197.1 Daremberg and Ruelle (in Al-Rāzī, *Kitāb al-ḥāwī* 11.1).

<sup>48</sup>Gal. *Comm. Hipp. de diaet. acut.* 30 (= 15.850 Kühn): ὅς οἱ νῦν ἐξ αὐτῶν τὸν ζῆθον ποιοῦντες (my emphasis).

<sup>49</sup>Gal. *Comm. Hipp. aphor.* 2.20 (= 17b.492–493 Kühn).

<sup>50</sup>Many more sources could be cited. For instance, it is recorded that both the wealthy and the poor drank wine in the communal messes in Sparta (Ath. *Deipn.* 4.140e–141f) and Crete (143a–f).

<sup>51</sup>See the overview in Nelson 2003: 102. For the known distribution of beer in ancient Europe, based on both the literary and material evidence, see Nelson 2014.

many Greek words for types of beer.<sup>52</sup> The earliest attested term, used from the seventh to the fourth century B.C., was βρῦτος or βρῦτον. Archilochus speaks of a Thracian or Phrygian drinking this through a reed; Hecataeus says that Paeonians drink it made from barley; Aeschylus in his *Lycurgus* has a man (probably the title character, the Thracian Lycurgus) drink it; Hellanicus says that the Thracians drink it made from barley while some others from roots or rye (depending on how one restores the text); and Sophocles mentions it in a fragmentary context.<sup>53</sup> Clearly βρῦτος/βρῦτον was a Thracian (and Phrygian and Paeonian) beer, but interestingly in none of these instances is the term explained, and when it is further defined, this is done only to indicate the type of cereal used to make it. This tends to show that, despite what many lexicographers have believed, βρῦτος/βρῦτον is not a Thracian word, but a Greek one readily understandable as a descriptor of a foreign product, meaning no doubt in essence “a brewed beverage.”<sup>54</sup> Although Hecataeus uses this term to refer to Paeonian barley beer, when he speaks of the Egyptians he says instead that “they grind barley for a drink” (τὰς κριθὰς ἐς τὸ πῶμα καταλέουσιν) and similarly Aeschylus, who uses the term when presumably speaking of a Thracian, mentions Egyptians as “drinkers of the inebriant [made] from barley” (πίνοντες ἐκ κριθῶν μέθυ).<sup>55</sup> Herodotus too says that Egyptians “use wine made of barley” (οἶνον δὲ ἐκ κριθέων πεποιημένον διαχρέωνται).<sup>56</sup> These periphrases would be very odd ways of describing beer if indeed the Greeks used it, as Auberger claims. In fact, Egyptian beer is first given its own Greek term by Theophrastus, who calls it ζῦθος, and who otherwise still speaks of beers generically as “wines made from barley and wheat” (τοῦς οἶνους ποιοῦντες ἐκ τῶν κριθῶν καὶ τῶν πυρῶν), again demonstrating the preeminence of wine.<sup>57</sup>

Perhaps the best piece of evidence that beer was not well known to Greeks comes from Xenophon. During their difficult march in 401/400 B.C. to Byzantium, while fleeing the Persians, Xenophon and his men reached an Armenian

<sup>52</sup> See Nelson 2005a: 24.

<sup>53</sup> Arch. fr. 42 West (in Ath. *Deipn.* 10.447b); Hecat. *FGrH* 1F154 (in Ath. *Deipn.* 10.447d); Aesch. fr. 124 Radt (in Ath. *Deipn.* 10.447c); Hell. *FGrH* 4F66 (in Ath. *Deipn.* 10.447c); Soph. fr. 610 Radt (in Ath. *Deipn.* 10.447b). See further the references in Cratinus and Antiphanes cited above, 30, n. 28. Two other early attested terms for beer are παραβίη (Hecat. *FGrH* 1F154 [in Ath. *Deipn.* 10.447d]), linked to Paeonians, and πῖνον (Arist. fr. 106 Rose<sup>3</sup> [in Ath. *Deipn.* 10.447a–b]), the drinkers of which (Thracians and/or Macedonians?) are not mentioned.

<sup>54</sup> For this suggestion, see Nelson 2005a: 20.

<sup>55</sup> Hecat. *FGrH* 1F323a (in Ath. *Deipn.* 10.447d), and slightly differently at *FGrH* 1F323b (in Ath. *Deipn.* 10.418e); Aesch. *Suppl.* 953 (with *schol.*). The contrast in terminology may be due to the fact that Egyptian beer was not actually brewed but made by fermenting malted loaves (see Nelson 2005a: 23).

<sup>56</sup> Hdt. 2.77.4. Note the similar periphrasis also in Pyth. fr. 7 Roseman (in Str. 4.5.5) concerning beer in the far north; later examples could also be cited (see Nelson 2003: 112).

<sup>57</sup> Theophr. *De caus. plant.* 6.11.2. He also mentions βρῦτος/βρῦτον at *Hist. plant.* 4.8.12. For the meaning of ζῦθος, see Nelson 2005a: 23.

village where they were amiably treated, and given food and drink.<sup>58</sup> He says that there was

barley wine in mixing bowls. The barley itself was on top, at lip-level, and in [the bowls] were reeds, some larger and some smaller, that did not have joints. Whenever someone was thirsty he had to take these in his mouth to suck. And it was very strong unless one poured in water. And the drink was very good to the one used to it.<sup>59</sup>

Auberger notes that this is one of the few passages that mentions Greeks drinking beer.<sup>60</sup> More than that, Xenophon's detailed description makes it clear that he did not expect his readers to understand quite how straws were used or even what barley "wine" even tasted like, since they were not used to drinking it.<sup>61</sup>

Thus the way that beer is explicitly mentioned by Greeks—as a drink of foreigners, secondary to wine, using a variety of terminology (including explanatory circumlocutions), and with its qualities even being carefully described—reinforces the suggestion that Greeks did not normally make or drink the beverage.

#### KYKEON

Finally, I will attempt to demonstrate that there is no good evidence to consider *κυκεών* a type of beer. *Κυκεών* simply means "a mixture" in Greek but it is clear that the term was used for a specific type of drink in which a number of ingredients were mixed together.<sup>62</sup> *Κυκεών* is first mentioned in the Homeric poems. In the *Iliad*, Hecamede makes *κυκεών* for Nestor and Machaon by placing in a cup Pramnian wine with grated cheese and white barley meal sprinkled over it, though she also provides them with an onion, pale honey, and (more) barley meal as extra additives.<sup>63</sup> In the *Odyssey*, a similar scene unfolds in which Circe makes *κυκεών* for Odysseus' men by mixing into Pramnian wine cheese, barley meal, and pale honey, as well as a magical potion.<sup>64</sup> It is clear from both descriptions that the usual Homeric drink of wine is being served with some supplements, which are determined according to the house

<sup>58</sup>Xen. *Anab.* 4.5.24–36.

<sup>59</sup>Xen. *Anab.* 4.5.26–27: οἶνος κρίθινος ἐν κρατῆρσιν. ἐνήσαν δὲ καὶ αὐταὶ αἱ κριθαὶ ἰσοχειεῖς, καὶ κάλαμοι ἐνέκειντο, οἱ μὲν μείζους οἱ δὲ ἐλάττους, γόνατα οὐκ ἔχοντες· τούτους ἔδει ὅποτε τις διψήη λαβόντα εἰς τὸ στόμα μύζειν. καὶ πάλυ ἄκρατος ἦν, εἰ μὴ τις ὕδωρ ἐπιχέοι· καὶ πάλυ ἤδὲ συμμαθόντι τὸ πῶμα ἦν.

<sup>60</sup>Auberger 2009: 25 and 2010: 155; Auberger and Goupil 2010: 67.

<sup>61</sup>Auberger and Goupil (2010: 66) point out that Archilochus (cited above, 34, in n. 53) already mentioned the use of a straw to drink beer, but the use of straws clearly remained a practice that was considered bizarre by Greeks and Romans (see Nelson 2003: 109).

<sup>62</sup>The standard scholarly account is that of Delatte (1955: esp. 23–40), who does not even mention the possibility that *κυκεών* is beer.

<sup>63</sup>Hom. *Il.* 11.624 (*κυκεών*), 638–641 (wine, cheese, and barley meal), and 630–631 (onion, honey, and barley meal). For the grated cheese here, see West 1998.

<sup>64</sup>Hom. *Od.* 10.290 and 316–317 (*κυκεών* with a magical potion) and 234–236 (ingredients).

recipe at the discretion of the host and/or by the drinker's tastes. The barley meal is not used to make a fermented product but is added to an already fermented beverage at the time of serving, as is especially clear in the first passage.<sup>65</sup> Later evidence suggests that barley meal was used in *κυκεών* because it was considered to be restorative,<sup>66</sup> and many ancient commentators believed that in Homer Hecamede served *κυκεών* to Machaon to help him recover from his wounds, even if this was considered a misguided cure by some.<sup>67</sup>

Whereas the Homeric texts provide no evidence to support the contention that *κυκεών* was a type of beer, it has recently been suggested that vessels dating roughly from 1600 to 1100 B.C. and found in a number of sites on Crete and on the Greek mainland point to this interpretation. These contained traces of wine (frequently resinated), barley beer, and honey, often all together, thus reminiscent of the Homeric references to *κυκεών* being made with wine, barley meal, and honey (among other ingredients). This has led Patrick McGovern and others to posit not only that these remains point to the use of a beverage mixing wine, barley beer, and mead, but to suggest that *κυκεών* was such a drink too.<sup>68</sup> Thus McGovern has stated that the Greeks "did not drink barley beer pure and simple, but mixed it with other fermented beverages."<sup>69</sup> There are a number of problems with this interpretation. First, it is very odd that wine, beer, and mead would be separately fermented and then mixed together and drunk, a practice unattested anywhere in antiquity. Indeed, it would make much more sense that grapes, malted barley, and honey would be fermented together to make a beverage, and the archaeochemical evidence does not seem to preclude this possibility.<sup>70</sup> Second, it has been acknowledged that the archaeological

<sup>65</sup>Indeed, based on the first passage, Athenaeus (*Deipn.* 11.492c) notes that *κυκεών* is "produced" (*γίνεται*) in the cup. Thus the drink is not simply served in a cup but is formed by mixing the various ingredients right in the drinking cup. Nevertheless, Dalby and Grainger (1996: 40–41) and Grant (1999: 81) provide tentative recipes for *κυκεών* in which it is to be cooked as porridge. On the other hand, Kaufman (2006: 117) suggests adding grated cheese and barley flour in a bowl of wine which has been brought to a boil with dried mint then cooled.

<sup>66</sup>Thus Hipponax (fr. 39 Gerber [in *Anecd. Ox.* 3.308.30 Cramer]) seeks barley to make some *κυκεών* as a remedy.

<sup>67</sup>Pl. *Ion* 538b; *Schol. vet. Hom. Il.* 11.624; Ath. *Deipn.* 1.10a–b; Porph. *Quaest. Hom. Il.* 11.623. For *κυκεών* as a misguided cure, see Pl. *Rep.* 3.408b; Maxim. Tyr. *Dial.* 18.8; Ath. *Deipn.* 1.24f.

<sup>68</sup>See Tzedakis and Martlew 1999: esp. 166, 174, and 207–208 (partly by Martlew and partly by McGovern); McGovern *et al.* 2008: 202–203; McGovern 2009: 187. See also Tzedakis and Martlew 1999: 166 and 171 and Evans and Garner 2008: 126–127 for a rhyton from Midea containing barley beer and wine. For *κυκεών* as a beverage including beer, see McGovern 1999: 208; McGovern *et al.* 1999: 864; McGovern 2003: 267–268 and 276–277; McGovern *et al.* 2008: 202–203, and 212; McGovern 2009: 188–189.

<sup>69</sup>McGovern 1999: 208, repeated almost verbatim in McGovern *et al.* 2008: 204. Stevenson (2011: 359) is skeptical of McGovern's idea that *κυκεών* is a type of beer.

<sup>70</sup>For this point, see Nelson 2005a: 14, with 2. For early evidence for beverages arising from various products fermented together, see Nelson 2005a: 12–13 and 2014: 10, to which can be added the possibility that grapes and figs were fermented together at the Neolithic site of Dikili Tash in

finds might not point to a mixed beverage at all, but to the successive use of the vessels for wine, beer, and mead.<sup>71</sup> Third, while the supposed mixture was detected in four or five small conical cups (from Chania) as well as a larger mug (from Mycenae) and a kylix (from Armenoi), along with what seems to be a baby's feeding bottle (from Midea), it was also discovered in cooking vessels from various places, though, as we have seen, Homeric κικεών was produced in a cup.<sup>72</sup> Indeed, not only is it not possible definitively to prove that the vessels found were used for a mixed beverage, there is also no compelling reason to connect their contents to the Homeric κικεών. On the other hand, what these finds (as well as others which simply point to beer) do tend to show is that Minoans and Mycenaeans drank beer in one form or another,<sup>73</sup> a notion now accepted by many scholars.<sup>74</sup> However, it is uncertain whether or not there was a continuous tradition of beer-drinking from Minoan times through the Mycenaean, archaic, and classical ages in Greece, as Auberger suggests.<sup>75</sup>

An argument for interpreting κικεών as beer has also been made using yet another source. In the *Homeric Hymn to Demeter*, Demeter, in sorrow from

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Macedonia (Valamoti 2007: 97) and that fruits, honey, and barley were commonly mixed together in drinks in ancient Scandinavia (McGovern *et al.* 2013).

<sup>71</sup>Tzedakis and Martlew 1999: 166 (by Martlew) and 183 (by Martlew and Beck); McGovern *et al.* 2008: 201. In these sources, however, it is argued that the range of finds, both in time and location, speaks against this. Nevertheless, Isaakidou (2007: 6) has emphasized the possibility of the “palimpsest” nature of the evidence.

<sup>72</sup>For the cups, see Tzedakis and Martlew 1999: 166–168 and 207; McGovern *et al.* 2008: 193–194. For the mug, see Tzedakis and Martlew 1999: 166, 168, and 207; McGovern *et al.* 2008: 195. For the *kylix*, see Tzedakis and Martlew 1999: 174, 176, and 207; McGovern *et al.* 2008: 194. For the feeding bottle, see Tzedakis and Martlew 1999: 169, with 166 on the oddness of the find (and see also Auberger 2009: 27; Auberger and Goupil 2010: 69). For the cooking vessels, see Tzedakis and Martlew 1999: 170–171; McGovern *et al.* 2008: 195. McGovern (in Tzedakis and Martlew 1999: 170, and see 208) even suggests that a cooking pot from Chamalevri contained the ingredients not to make a beverage but rather some unnamed food.

<sup>73</sup>Note, for example, the beer found in vessels in Myrtos from around 2200 B.C. (Tzedakis and Martlew 1999: 159–161; McGovern 2003: 265–266; McGovern *et al.* 2008: 181). Barley beer has been detected also in thirteenth-century B.C. vessels in Thebes (Tzedakis and Martlew 1999: 184–186, and see Nelson 2005a: 27). For the possibility of beer in Bronze Age Cyprus, see Steel 2004: 166–167.

<sup>74</sup>See Nelson 2005a: 13–15, to the references in which should be added (aside from sources already cited above) Wilkins and Hill 2006: 7–8 and 132; Tzedakis and Martlew 2008: xvii–xviii; Auberger 2009: 26–27; Auberger and Goupil 2010: 68–70 (positing that beer-making came to Crete from Egypt); Weilhartner 2014. Megaloudi (2006: 38) has doubted the evidence saying that the “mere presence of a barley product” does not signal beer; however, it is not barley that has been found but calcium oxalate, also known as beerstone, a yellowish residue which comes from beer (for which, see especially McGovern in Tzedakis and Martlew 1999: 29; McGovern *et al.* 2008: 201). Remnants of phosphoric acid and dimethyl oxalate may also point to beer (Tzedakis and Martlew 1999: 162 and 183).

<sup>75</sup>Auberger and Goupil 2010: 70. This is denied in Nelson 2003: 102, 2005a: 15 and 16, and 2014: 10. McGovern (2009: 188–189; cf. McGovern *et al.* 2008: 202) assumes that wine replaced beer (or at least the beer “mixture”) as a drink among Greeks due to Phoenician influence.

having lost her daughter Persephone, will not eat or drink. When served red wine by Metaneira she refuses it but orders instead that *κυκεών* be made for her as a sacral drink by mixing barley meal with water and pennyroyal.<sup>76</sup> Furthermore, initiates of Demeter's mysteries also drank *κυκεών* after having fasted, as is known from a ritual formula quoted by Christian authors.<sup>77</sup> Following suggestions by previous scholars, Karl Kerényi posited that malted barley was fermented in water to make Demeter's *κυκεών*, and that pennyroyal added hallucinogenic properties to this beer.<sup>78</sup> Others have further suggested that other hallucinogenic drugs, particularly fungi (such as ergot), were used in the drink at Eleusis, whether or not that drink was beer.<sup>79</sup> There are many problems with

<sup>76</sup> *Hom. Hymn. Dem.* 47–50 and 200–201 (neither eat nor drink), 206–208 (wine refused), and 208–211 (*κυκεών*). In Ovid, when Demeter asks for water (*Met.* 5.449), she is given a sweet drink made with roasted barley (450, 454).

<sup>77</sup> Clem. Alex. *Protr.* 2.21.2, copied in Arnob. *Adv. nat.* 5.26 (in Latin) and Euseb. *Praep. ev.* 2.3.35. For a discussion of this ritual formula (*σύνθημα*), including the meaning of what is said to follow after the drinking of the *κυκεών*, see Mylonas 1961: 294–303. While wary of using evidence from a Christian context (316), Mylonas still believes that *κυκεών* was probably drunk at the Greater Mysteries of Eleusis after a short period of fasting, likely as a remembrance of Demeter's act rather than as a form of communion (259–260). This is accepted by, among others, Richardson (1974: 22–23 and 213), Burkert (1983: 269–273), and Sourvinou-Inwood (2003: 31). For older scholarship on the use of *κυκεών* at Eleusis, see Delatte 1955: 40–56 and Richardson 1974: 346. Ovid (*Fasti* 4.535–536) says that the initiates' meal after the fast occurred at night in imitation of the time when Demeter broke her fast. Moreover, Eupolis (fr. 92 Austin [from papyrus fragments]), in which an Epidaurian is said to have had money extorted from him because he had drunk *κυκεών* as evident from the barley in his moustache, seems to refer to the drink of the Eleusinian mysteries (Delatte 1955: 36–37; Kerényi 1967: 62). Rosen (1987: esp. 420–421) suggests that Hipponax (cited above, 36, n. 66) also alludes to the use of *κυκεών* after fasting in the Eleusinian mysteries.

<sup>78</sup> See Kerényi 1965: 62–64 and much more fully at 1967: 178–180 (with previous scholarship cited at 214, n. 6), followed by Auburger (2009: 28) and Auburger and Goupil (2010: 71). Kerényi (1976: 24) also believes that opium may have been added to *κυκεών*. Bedigan (2008: esp. 11 and 16) assumes that *κυκεών* was probably intoxicating and connects its use at Eleusis with presumed initiatory intoxication in the Kabeiric mysteries. Bookidis (1990: 93, with n. 41) suggests that fourth-century B.C. spouted feeders with coarse strainers found in the sanctuary of Demeter and Kore in Corinth might have been used for beer (without explicitly referencing *κυκεών*), though she also says that they might have been used to feed children or, less likely, as oil cruets; she also shows (92–93) that despite the lack of wine in Demeter's *κυκεών*, wine was certainly drunk at this site. For hellenistic filter jugs in general, the exact function of which is uncertain, see Rotroff 1997: 180–182, with the comment at 181, n. 19 that it is unlikely that they were used for beer.

<sup>79</sup> See, for example, Salverte 1817: 91–92 (drugs could have been mixed into the *κυκεών* to provoke the desired visions); Graves 1964: 105–106 (*κυκεών* connected with mushrooms in passing), followed by McKenna 1992: 136 (suggesting the use of psilocybin-containing mushrooms); Wasson *et al.* 1978: esp. 25–33 (ergot, a type of parasitical fungal growth [*Claviceps purpurea*] found on cereals, including barley, which contains the soluble hallucinogenic alkaloid lycergic acid which is related to LSD) and 47–49 (at Eleusis), summarized in Wasson *et al.* 1986: 33 and Webster 2000: 1–2, and accepted, for instance, by Hillman (2008: 208–210) and Rinella (2010: 86–87 and 132–136), who further believes that its effects are alluded to in Pl. *Phaedr.* 251a–c. Walton (2001: esp. 67–70) calls *κυκεών* “ergotized beer” while Devereux (2008: 98) speaks of “ergotised beer”; however, Ruck emphasizes his belief that *κυκεών* was made with ergot (2006: 166) but was not beer (65; cf. 2000: 21).

such interpretations. To begin with, no ancient source mentions that Demeter's *κυκεών* had any sort of intoxicating, narcotic, or hallucinogenic effect and in fact its composition speaks against this. The use of barley meal fits with the Homeric examples discussed above (35–36), where it is added straight to the cup. Moreover, later evidence shows that *κυκεών* was normally made with barley meal.<sup>80</sup> Although it is possible that barley was malted in the making of *κυκεών* (and indeed for most of its uses by Greeks) as Kerényi states,<sup>81</sup> Demeter's instructions are for the beverage to be mixed directly for her and this does not provide for any time for mashing and brewing (adding the ground malted barley to hot water and allowing it to steep) or fermentation (allowing yeast to convert into alcohol the sugar from the wort, that is, the hot water and malt mixture).<sup>82</sup> Kerényi anticipated such an objection by suggesting that Demeter, as a goddess, can make her *κυκεών* ferment immediately with no wait,<sup>83</sup> however, if the *Hymn* was meant to explain why and how the *κυκεών* was used by her initiates one would expect that if it were beer its transformation (even spontaneously) into such an intoxicating substance would be mentioned.<sup>84</sup> Auberger attributes the lack of such a mention yet again to a conspiracy of silence, this time due to the secrecy imposed upon the mystery initiates.<sup>85</sup> As for fungus, not only does no ancient source mention this as an ingredient in *κυκεών*, but scholars have shown that ergot, for example, would have been required in an unmanageably large quantity for all the Eleusinian initiates and, furthermore, that its reliability as a hallucinogen is highly questionable, as it often can lead to painful convulsions and even death.<sup>86</sup>

<sup>80</sup> See, for example, Plut. *Quaest. conv.* 7.1 (= *Mor.* 698b). Palladius (*Comm. Hipp. Epid.* 6.6.3) for one defines *κυκεών* as a mixture of wine and barley meal. Delatte (1955: 23–24, followed by Richardson 1974: 344) considers *κυκεών* fundamentally a barley drink.

<sup>81</sup> Kerényi (1967: 178) cites Pliny (*HN* 18.14.72), who says that Greeks typically soak barley in water, dry it for one night, roast it the next day, then grind it. The only step of malting not mentioned here is germination during the soaking, but this is explicitly mentioned in no ancient source; thus elsewhere Pliny (*HN* 14.29.149) speaks of beer simply being made with steeped grain. Galen says that the best barley meal is that which is roasted (*De alim. fac.* 1.11 [= 6.506 Kühn]), and André (1961: 57–58) provides many other Greek and Roman sources as evidence for regular malting. This shows that archaeological evidence for Greek malting, such as at Argissa Magula in Thessaly, should not necessarily be taken as evidence for beer-making, as is done by Auberger and Goupil (2010: 64, n. 57, citing Hopf 1976: 530). Stika (2011: 56) also notes that finds of malted grain could simply point to malt being eaten directly or being used as a funerary gift.

<sup>82</sup> For skepticism concerning Demeter's *κυκεών* being brewed, see Richardson 1974: 345 (followed by Nelson 2005a: 14); Amouretti 1992: 70; Foley 1994: 47; Bowden 2010: 37.

<sup>83</sup> Kerényi 1967: 178.

<sup>84</sup> Thus Dionysus' power to produce wine and vines spontaneously is prominently described in the *Homeric Hymn to Dionysus* (35–41).

<sup>85</sup> Auberger 2009: 28; Auberger and Goupil 2010: 71.

<sup>86</sup> For the large quantity, see Burkert 1987: 108. For the reliability, see Burkert 1987: 108; Valencic 1994 (who still believes some other, unknown psychoactive plant was used); Bowden 2010: 43. Webster responds to such objections by suggesting that Eleusinian priests could have been involved in large-scale agriculture (2000: 5) and could have known how to process ergot to make

The use of water rather than wine suggests that we are dealing here with an unusual *κυκεών*,<sup>87</sup> one attested mainly in medical sources. Thus, in the Hippocratic work *On Regimen* *κυκεών* made with water and barley is contrasted with that made with wine: while both are said to be nourishing, the former is viewed as cooling while the latter is heating and astringent.<sup>88</sup> Elsewhere in the corpus, water-based or “thin” *κυκεών* is recommended before eating solid foods after vomiting.<sup>89</sup> This is strikingly similar to the context in the hymn, in which Demeter drinks the *κυκεών* after her fast.

It is doubtful that pennyroyal in small quantities would have any significant intoxicating properties,<sup>90</sup> and its use in *κυκεών* is otherwise attested mainly in medical contexts.<sup>91</sup> In Aristophanes’ *Peace* *κυκεών* with pennyroyal is recommended by Hermes to Trygaeus, evidently as a cure for indigestion, an unthinkable suggestion for a beer.<sup>92</sup> For Nicander Demeter’s *κυκεών*, made with river water and pennyroyal, is a good antidote to poisons.<sup>93</sup> This evidence indicates that water-based and pennyroyal-infused *κυκεών* was seen as a curative drink (with the barley meal also perhaps being considered restorative, as in the cases discussed above), and presumably its main function for Demeter’s initiates was to soothe and replenish them when they broke their ritual fast.<sup>94</sup> Those who

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its effects consistent and safe by producing ergine and isoergine through alkaline hydrolysis (6–7, followed by the chemical analysis of Perrine [2000]).

<sup>87</sup>In the pseudo-Aristotelian *Problems* (3.12 [872b]) it is wondered why ὁ γλυκὺς καὶ ἄκρατος (“the sweet and unmixed”) and *κυκεών* (“the mixture”) sometimes make men sober rather than drunk, showing that *κυκεών* was normally thought of as intoxicating, and also, presumably, wine-based.

<sup>88</sup>Hipp. *De diaet.* 41; also mentioned are types made with honey and various sorts of milk. References in the corpus sometimes specify wine-based *κυκεών* (such as *De affect. inter.* 4) or do not mention its make-up (such as *De diaet. in morb. acut.* 39); Delatte (1955: 28) proposes that when the composition is not indicated it is water-based.

<sup>89</sup>For “thin” (λεπτόν), see Hipp. *De morb.* 2.15. For the contrast with “thick” (παχύ), see Hipp. *De nat. mulier.* 16 and 38 and *De mulier. affect.* 53, 64, and 129; see Delatte (1955: 28–29), who does not explicitly connect “thin” *κυκεών* with water-based *κυκεών* as I do. For its use after vomiting, see Hipp. *De morb.* 2.43.

<sup>90</sup>See Richardson 1974: 345 and Ruck 1986: 162, n. 4, with the general doubts of Delatte (1955: 45) and Burkert (1983: 287).

<sup>91</sup>However, there was a story that Heraclitus made and drank a *κυκεών* with barley-meal, water, and pennyroyal to show that people should be satisfied with simple things (A3b Diels and Kranz [in Plut. *De garr.* 17 (= *Mor.* 511b)]; Themistius in his version (*De virt.* 40) leaves out the pennyroyal. Foley (1994: 47) suggests that the concord of the mystery initiates is being alluded to here.

<sup>92</sup>Ar. *Pax* 712 (with *schol.*). Beer was thought to be harmful to the stomach at least by the Roman era (ps.-Gal. *De affect. ren. insid. dign. et curat.* 7 [= 19.693 Kühn]).

<sup>93</sup>Nic. *Alex.* 128–132. Beer is elsewhere prescribed as an emetic to get rid of snake venom (Philum. *De ven. anim. eor. rem.* 16.8, copied by Aët. *Amid. Libr. med.* 13.22), but it is difficult to imagine that Nicander is speaking of Demeter’s *κυκεών* as an emetic. I will leave aside the general use of pennyroyal in medicine (on which, see the useful summary in Pliny *HN* 20.54.152–157).

<sup>94</sup>Delatte 1955: 48; Richardson 1974: 345; Foley 1994: 47. For Eitrem (1940: 139) the *κυκεών* marks a transition to a new, pure life after the fast.



assume that Demeter's *κυκεών* was a mind-altering beverage usually divorce it from its secure connection to fasting and instead suggest that its consumption was part of the central rites for initiates and even the cause of their mystical revelations, though there is no evidence to support this.<sup>95</sup>

More general objections could also be brought up against the idea that Demeter's *κυκεών* was beer. One must ask, for instance, whether Demeter would be likely to substitute wine with beer. Demeter refuses the offer of wine by saying that it is not right for her to drink it but without explaining why.<sup>96</sup> Is her objection to wine that it does not contain cereal (the product under her purview), in which case beer would seem to make a perfect substitute,<sup>97</sup> or rather that it is too festive for the occasion of mourning, in which case a non-intoxicating drink would presumably be more appropriate?<sup>98</sup> The latter explanation seems most likely since *κυκεών* itself could be made with wine (as we have seen) and Demeter's *κυκεών* is explicitly lacking this ingredient, thus seemingly making it a non-alcoholic, simpler, and perhaps, as we have also already seen, medicinal version of the beverage, one made with water.<sup>99</sup> One must also ask whether beer would have been deemed an appropriate beverage after the fast and purification of the initiates. Porphyry states that at Eleusis it was forbidden to eat domestic fowl, fish, beans, pomegranates, and apples, since they were considered as im-

<sup>95</sup>For Epiphanius (*Fid. exp.* 10 [= *PG* 42.800B]), obscene rites are central to the Eleusinian Mysteries, while musical instruments and other ritual objects, as well as the *κυκεών*, are mere accessories. On the other hand, Wasson, Ruck, and Hofmann (1978: 36–37) simplistically posit that the existing descriptions of the main revelation of Eleusis could only be explained through the initiates' use of some sort of drug. For the main revelation at Eleusis, see the standard account by Mylonas (1961: 228 [the few vague and tantalizing descriptions] and 261–278 [a plausible reconstruction of events with no mention of drugs]), with the reassessment of Sourvinou-Inwood (2003: 29–40). However, Burkert (1983: 274–275, with 291) does suggest the possibility that the *κυκεών* may indeed have been drunk during “the secret central portion of the festival.”

<sup>96</sup>*Hom. Hymn. Dem.* 207–208.

<sup>97</sup>However, elsewhere in Greek sources beer is described as a substitute for wine only when wine is unavailable (*Hdt.* 2.77.4 [in Egypt], and the later sources cited in Nelson 2003: 112, n. 54). Also, while cereal is often associated with Demeter or Ceres, beer is nowhere connected to her in ancient sources, though it is in some medieval ones (e.g., *Isid.*, *Etym.* 20.3.17; *Sedul. Scott.*, *Carm.* 9.8, 12, and 17 and 49.6; *Geoffr.*, *Prompt. parv.* s.v. ale). Auberger (2009: 27–28; cf. Auberger and Goupil 2010: 71) implausibly makes Demeter a Greek counterpart to the beer goddesses of Mesopotamia and Egypt.

<sup>98</sup>Notice that in Clement of Alexandria's account (*Protr.* 2.20.3–2.21.1, copied in Euseb. *Praep. ev.* 2.3.33 [= *Orph. fr.* 52 Kern]), Demeter is not offered wine but *κυκεών* right away by Baubo and she refuses even that drink at first because she is in mourning. Other sources also explain that Demeter refuses wine because of her grief (*Schol. Nic. Alex.* 130) or because of the afflictions suffered by her daughter (*Schol. Eur. Or.* 964). For further versions of the story of Demeter receiving *κυκεών*, see Delatte 1955: 31–35.

<sup>99</sup>In this way, the preparation of Demeter's *κυκεών* contrasts with that of the beverage in the *Iliad* and the *Odyssey*. It is interesting, however, that in all three instances a woman serves *κυκεών* in a ceremonial way, and thus Watkins (1978: 13–17) links these passages together and believes that they are representative of an Indo-European “soma” ritual.

pure as a dead body,<sup>100</sup> and other sources make it clear that beer fermentation was considered a putrefaction of cereals because of the role of yeast in it.<sup>101</sup> Although these ideas likely postdate the use of *κυκεών* in Demeter's rites, they reinforce the notion that Demeter's *κυκεών* was not beer. For if beer had in fact been a traditional, sacral beverage it would presumably not have been viewed so negatively.

Finally, Auberger also presents one new theory to back up her claim that *κυκεών* was a type of beer drunk by Greek commoners. In Theophrastus' *Characters* the boor is said to be the sort of person who drinks *κυκεών* before going to the assembly and who claims that myrrh smells as good as thyme.<sup>102</sup> While this is usually taken to refer to the strong smell of thyme from the boor's *κυκεών*, which is offensive to others,<sup>103</sup> Auberger says rather that what is offensive is the boor's alcohol-laced breath (and presumably his claim about thyme is somehow separate).<sup>104</sup> However, even if this idiosyncratic reading were correct, there is no need to invoke beer as an explanation, since, as we have already seen, wine was normally used in *κυκεών*.<sup>105</sup>

All the surviving evidence shows that *κυκεών* was typically wine, mixed to taste with barley meal and various herbal or other ingredients, including pennyroyal, just prior to drinking. Demeter's *κυκεών* was presumably an unusual, quasi-medical, non-alcoholic version, based on water rather than wine.

#### CONCLUSION

Did ancient Greeks drink beer? Minoans may have passed down beer-drinking to Mycenaean Greeks. As for Greeks in the archaic and classical eras, some of course tried beer: Xenophon, for instance, mentions the beer he and his troops were served when in Armenia. However, he needed to describe to his readers what beer was, speaking of it as a type of wine. All the other early

<sup>100</sup> Porph. *De abst.* 4.16.

<sup>101</sup> For beer made through putrefaction, see Theophr. *De caus. plant.* 6.11.2; Dion. Hal. 13.11.1; Tac. *Germ.* 23.1; Gal. *De simpl. med.* 6.6.3 (= 11.882 Kühn, copied by Orib. *Collect. med.* 15.1.6.6; Aët. *Amid. Libr. med.* 1.154; Paul Aeg. *Epit. med.* 7.3.6). For the putrefactive effect of yeast, see Nelson 2005a: 36, with references at 133, n. 25, to which can be added that yeast was said to have "putrefactive heat" (σηπεδονώδους θερμότητος) in Gal. *De simpl. med.* 6.6.4 (= 11.882 Kühn; cited in Orib. *Collect. med.* 15.1.6.8 and *Libr. ad Eun.* 2.1.6; Aët. *Amid. Libr. med.* 1.155; Paul Aeg. *Epit. med.* 7.3.6).

<sup>102</sup> Theophr. *Char.* 4.1–3. *Κυκεών* with thyme also seems to be alluded to in Ar. *Pax* 1169 (with *schol.*). For *κυκεών* as a rustic drink, see Delatte 1955: 27; Richardson 1974: 344; Amouretti 1992: 70.

<sup>103</sup> See, for example, Diggle (2004: 20), who further shows that myrrh was a general term for perfume and that thyme was a term for a variety of garlic (208–209).

<sup>104</sup> Auberger 2009: 28; Auberger and Goupil 2010: 72.

<sup>105</sup> Compare Martial's poem (1.87) on a woman who unsuccessfully eats pastilles to cover up her wine-laced breath.

Greek writers who mentioned beer in their works did so as a drink of foreigners. Even the poorest Greeks are portrayed as wine-drinkers in sources that have no reason to make this up (such as Aristophanes or the Hippocratic corpus). All this strongly supports the traditionally held belief that the vast majority of Greeks, whether rich or poor, city- or country-dwellers, did not regularly drink beer.

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