The term has previously been translated as "grate" and "carrier," and its Greek original, $\phi \delta \rho \tau a \xi$, certainly indicates that some sort of support for carrying loads is implicit in its meaning. It is therefore surprising that R. Goujard, the Budé editor and translator of Cato, has chosen to link the Latin with $\phi \delta \rho \tau o s$, meaning "charge," and his translation is incorrect in identifying fortax with the arched material load placed in the kiln for firing. A better understanding of the term comes from study of the archaeology of lime-burning kilns.

In plan, Roman lime kilns were generally either circular or oval and often squat and squarish in section. A ledge usually ran round the interior either as a freestanding feature against the kiln side or as a recess in the wall. The charge would be bedded from this and thereby kept away from direct association with the fire. Experimental firings in a restored kiln at Iversheim, West Germany, indicate this might have been best facilitated by forming a dome of the limestone or other material to be calcined over a wooden framework which rested on the ledge. More stone would then be added to fill the space above with the result that as the frame burnt away during firing, the charge would settle and become self-supporting.⁶

Cato's use of the term *fortax* occurs in that section of his chapter dealing with the design of the lime kiln and ahead of his directions for loading and firing, so it would appear to refer to a permanent structural feature. We might therefore translate the relevant passage as "Build the kiln well, ensuring that a ledge (*fortax*) goes round the entire kiln chamber at the bottom."

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- 1. W. D. Hooper and H. B. Ash, Marcus Porcius Cato on Agriculture and Marcus Terentius Varro on Agriculture, Loeb Classical Library (London and Cambridge, Mass., 1934), p. 55. I. A. Richmond also translated fortax as meaning grate; see F. G. Simpson (ed. G. Simpson), Watermills and Military Works on Hadrian's Wall (Kendal, 1976), p. 154, p. 86.
 - 2. N. Davey, A History of Building Materials (London, 1961), p. 100.
- 3. As Oxford Latin Dictionary, s.v. "fortax," which gives the English equivalent as "a support, base."
 - 4. Caton, "De l'Agriculture" (Paris, 1975), p. 42 and p. 212, n. 3.
- 5. B. Dix, The Production of Lime and Its Applications in the Roman World (B.A. diss., University of London, 1973), abstracted as "Roman Limeburning," Bull. Inst. Archaeol. Univ. London 12 (1975): 214; idem, "Roman Lime-Burning," Britannia 10 (1979): 261-62.
 - 6. W. Sölter, Römische Kalkbrenner im Rheinland (Düsseldorf, 1970), pp. 20-22 and p. 17, fig. 4.

COLUMELLA DE RE RUSTICA 3, 2, 24

Inerticula [sc. uitis] tamen nigra, quam quidam Graeci amargion appellant, potest in secunda quasi tribu esse, quod et boni uini est et innoxia, quoniam nomen traxit, quod iners habetur in tentandis neruis, quamuis gustu non sit hebes.

So S. Hedberg.¹ As F. R. D. Goodyear pointed out recently,² quoniam, which is the primary MSS reading,³ gives no satisfactory sense and must be corrupt. The editio princeps (1472) has *etiam*, which is no better. The celebrated Veronese architect G. Giocondo (Iucundus), who was entrusted with preparing the Aldine

- 1. L. Iuni Moderati Columellae "Rei rusticae" libri III-V (Uppsala, 1968).
- 2. "Notes on Columella, RR 2-3," LCM 3 (1978): 192.
- 3. As usual, some of the R MSS write quom (or cum) instead of quoniam; cf. Hedberg, Columellae . . . libri III-V, p. 9.

edition of the scriptores rei rusticae (1514), obviously improved the text by printing unde etiam, but this emendation, which was accepted by all the subsequent editors up to H. B. Ash (1941), is rather far from the manuscript tradition. Therefore Goodyear prefers to read a quo instead of quoniam, urging that quo was easy to mistake for $q\bar{u}o$, an abbreviation for quoniam very common in early MSS.⁴

Fortunately, we can test the validity of this conjecture, since the passage before us is quoted, without mention of the author's name, in the chapter of Isidore's Etymologies dealing with the different varieties of grape. Isidore writes: "inerticula nigra est, quam Graeci amaracion uocant, boni uini et leuis; a quo etiam nomen traxit, quod iners in tentandis neruis habeatur, quamuis gustu non sit hebes."6 This text, to which Goodyear did not refer in his paper, though it is recorded in the testimonia of the Uppsala edition, shows (1) that Goodyear was right in adding a—it is hardly worthwhile pointing out that the omission of this letter after innoxia is a trivial mistake; (2) that quoniam is not a misreading for quo, as assumed by Goodyear, but most likely the corruption of quo etiam.⁷ The objection might indeed be raised that etiam in the text of the Etymologies belongs to Isidore, but -iam of the De re rustica codd. inclines us to believe that Isidore actually found it in his own copy of Columella. As regards syntax, it should be observed that etiam here has the same structural function as Greek καί: like this particle, it "emphasizes the fact that the relative clause contains an addition to the information contained in the main clause."8 It is a use of which both Latin grammars and dictionaries generally make no mention,9 and translators often misunderstand. Several examples of it are found in Columella: 3. 9. 4 "nihil enim dubium est quin ipsa natura subolem matri similem esse uoluerit, unde etiam pastor ille in Bucolicis ait 'sic canibus catulos similes, sic matribus haedos' "; 3. 18. 1 "pastinum autem uocant agricolae ferramentum bifurcum quo semina panguntur, unde etiam repastinari dictae sunt uineae ueteres quae refodiebantur"; 6. 27. 3 "id praecipue armentum [...] libidinis exstimulatur furiis, unde etiam ueneno inditum nomen iππομανές, quod equinae cupidini similem mortalibus amorem accendit."10 From other authors, let us quote only Cicero De fato 7 "Athenis tenue caelum, ex quo etiam acutiores putantur Attici"; Horace Ars poetica 251-54 "syllaba longa breui subiecta uocatur iambus, / pes citus, unde etiam trimetris accrescere iussit / nomen iambeis, cum senos redderet ictus / primus ad extremum similis sibi"; Vitruvius 1.

^{4.} See W. M. Lindsay, Notae Latinae (Cambridge, 1915), pp. 263-69.

^{5.} Isidore of Seville seems to have had a firsthand knowledge of Columella's treatise. The borrowings he made from the *De re rustica* are recorded in the notes of J. Grial's edition of the *Etymologies* (1599), which have been reprinted by F. Arevalo in his own edition of Isidore's works (Rome, 1797-1803 = *PL* 82-83 [Paris, 1850]). However, Grial's list is not complete: e.g., he overlooked that *Or.* 12. 1. 7 derives from Colum. 6 praef. 3. R. Martin's assertion that Isidore confused Palladius with Columella (*Recherches sur les agronomes latins et leurs conceptions économiques et sociales* [Paris, 1971], p. 243, n. 1) is based on a misinterpretation of *Or.* 17. 1. 1 "Aemilianus siue Columella," where *siue* means "and," according to late Latin syntax.

^{6.} Or. 17. 5. 24. I quote from Lindsay's edition (Oxford, 1911).

^{7.} For examples of eliam corrupted to iam in MSS, see Cic. Caec. 104; Sen. Epist. 102. 21. See also R. H. Rodgers, An Introduction to Palladius (London, 1975), p. 139, n. to Pall. 12. 7. 4.

^{8.} J. D. Denniston, The Greek Particles2 (Oxford, 1954), p. 294.

^{9.} Cf. however TLL 5/2: 940, 39-66 (also 5/2: 939, 31-33). I found no remark about this use in the chapter of F. Hand, Tursellinus seu de particulis latinis commentarii, vol. 2 (Leipzig, 1829-45) dealing with etiam.

^{10.} Cf. also 6 praef. 3.

4. 10 "ita eam herbam [sc. h. quae lienes pecorum imminuit] colligendo curant lienosos hoc medicamento, quod etiam Cretenses asplenon uocitant"; Quintilian Institutio oratoria 12. 4. 2 "sciat ergo [sc. orator] quam plurima, unde etiam senibus auctoritas maior est, quod plura nosse et uidisse creduntur." In all these cases, adverbs like "just, precisely" seem most suitable to bring out the emphasis given by etiam to the subordinate clause. At all events, "also, too" would be a mistranslation.

Read therefore "a quo etiam nomen traxit" in the Columella passage, and translate "and it is from this very fact that it takes its name."

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11. The instances from Columella (except 6. 27. 3), Horace, and Quintilian quoted above are not recorded in the *Thesaurus* list (see n. 9). With regard to Virg. Aen. 7. 778-80 "unde etiam templo Triuiae lucisque sacratis / cornipedes arcentur equi, quod litore currum / et iuuenem monstris pauidi effudere marinis," Conington, as well as Forbiger in his fourth edition (1875), considered that etiam here is equivalent to etiamnum (cf. Aen. 2. 292, 6. 485), but it would be better, in my opinion, to join etiam with unde, since unde etiam is a phrase which occurs more than once, as we can ascertain by consulting the TLL (5/2: 940, 56-59). Cf. Greek διδ καί (Pl. Phd. 81D, Phdr. 258E, Soph. 232A, etc.).