Latin *glārea* ‘gravel’

Latin *glārea* ‘gravel’ is first attested in Cato *Agr.* 18.7.1: ‘de glarea et calce harenato primum corium facito’. The length of the vowel in the first syllable is guaranteed by Virgil’s *Georgics* 2.212, Tibullus 1.7.59, and Lucan 4.302. Its etymology has remained rather hazy: Ernout & Meillet (1985: 276) announce merely “seulement des hypothèses incertaines”, but Walde & Hofmann (1938-1954: I.605-6) connect it with the root of Lat. *grānum* ‘seed, grain’ (Goth. *kaurn*, OIr. *grán* etc.), Gothic *ga-krōtōn* ‘crush, break to pieces’ via dissimilation of the first *-r-. The same view is put forward by Feist (1939: 187) and IEW (390-1), who add a collection of more distantly related forms which will be discussed below. De Vaan (2008: 264, 271) is doubtful about the connection with *grānum* for semantic reasons.

Whether or not these etymologies are correct, another comparandum seems to have been missed up to now in discussions of the etymology of *glārea*. This is surprising, since the link is formally unproblematic and semantically identical. Middle and Modern Welsh *gro* ‘gravel, shingle’, Old Cornish *grou*, Middle Cornish *grow* ‘sand, gravel’ all go back to a preform *grāyā*, which probably also existed in Gaulish, on the basis of French *grève* ‘sand, beach’.3 It seems obvious that this is the closest form to which Lat. *glārea* must be connected.

As noted by the etymological dictionaries, *glārea* is derived with the material suffix *-eio-* (cf. Lat. *aureus* ‘of gold’. For this suffix see Leumann 1977: 286, Weiss 2009: 273). The dissimilation of the sequence *-r…r- to *-l…r- is a sporadic change which is found inscriptitionally in forms like *peregrinus* (e.g. CIL 11.6473) for *peregrīnus* ‘foreign’, giving Italian *pellegrino*, French *pèlerin* ‘pilgrim’ (Leumann 1977: 231, Weiss 2009: 155). Its occurrence in *glārea* may suggest a Vulgar Latin origin. Thus as the base form from which *glārea* was derived, we can reconstruct *grāro-* or *grārā*. If an Indo-European root lies behind this

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1 All references to texts as in the OLD.
2 Actually only attested in the 3sg. pres. pass. *ga-krotuda*.
3 Breton *grou* ‘sand, beach’ is not a direct descendant of this word, but is a loan word from Old Western French *groie* (Old French *groie*) ‘gravel, flat terrain made of gravel or sand’, a derivative of *grāyā* (Anders Jørgensen p.c.).
form it is quite plausible to reconstruct *grā-ro-<sub>*</sub>, beside *grā-yā in Celtic.

In addition, there is some evidence for a form in Latin even closer to that of Celtic. In the modern Italian dialects we find a number of words which reflect *grāyā, such as grava ‘gravel’ (Friulian), ‘landslide’ (Trentino). These are usually attributed to borrowing from Gaulish, but derivatives are found much further South in Italy than would be expected to be due to Gaulish influence, such as gravina ‘ravine’ (Apulia), ‘(pebbly) shore of a river’ (Sicily), gravara ‘rocky and gravelly material, carried by water; torrential flood’ (Abruzzo). For this reason, Celtic *grāyā was taken to be a borrowing from a non-Indo-European substrate by Campanile (1976: 133-4). However, since glārea proves the existence of a form derived from the same root as Celtic *grāyā in Latin, it is a possibility that Latin also had *grāyā itself (perhaps restricted to Vulgar Latin).<sup>5</sup>

In principle, it would be formally possible to derive glārea itself from a form rather closer to *grāyā. A preform *grāyārā/o-, which would be identical to Abruzzese gravara, would not have given glārea, because *-y- was not lost between like vowels when the second vowel was stressed (cf. seuērus). But *grāyōrā/o- would have given *grārā/o-, by loss of *-y- before *-o- followed by vowel contraction (Meiser 1998: 88, 92). However, it is difficult to see how we could motivate a preform *grāyōrā/o-<sub>6</sub>. A possible starting point would be *grāyo-, the singular to the collective *grāyā seen in Celtic and Italian, to which the denominative adjective suffix *-ro- was added (cf. luxuria ‘indulgence’ ← *lukusu-ro- ← luxus ‘extravagance; Weiss 2009: 285), with subsequent substantivisation. But this suffix does not seem to be added to thematic formations.<sup>7</sup> Alternatively, we could start from a root or stem *grāy- with the suffix *-ero-, which would give *grāyero- > *grāyoro- (*-qe- > *-ο-, cf. uomō ‘vomit’ < *uomh₁-e/o-; Meiser 1998: 82). But although *-ero- is found in Latin (liber ‘free’ < *h₁leyḍ*-ero-,

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<sup>5</sup>If this is correct, of course, French grève is no longer evidence for the existence of *grāyā in Gaulish, since it could have come from Latin.

<sup>6</sup>In principle, *grāyārā/o- would also be possible, but this is even harder to motivate.

<sup>7</sup>And in general thematic suffixes are seldom added to thematic stems in Latin. A possible exception is mortuus ‘dead’ if from *mr-to-uo- rather than *mr-tuo-, but this is usually explained as being due to interference from *mr-uo- (cf. OIr. marb ‘dead’) and/or *g’ih₁-uo- > Lat. uīuus ‘alive’ (Ernout & Meillet 1985: 415; de Vaan 2008: 389-90).
cf. Gk. ἐλεύθερος, miser ‘wretched’ < *mis-ero-, cf. maerēo ‘be sad’; Weiss 2009: 286), it is hardly productive. Consequently, *grā-ro- seems a more plausible preform for *glārea than *grāyo-ro-/grāy-ero-.

It remains possible that we should posit a substrate origin for both Lat. glārea and Celtic *grāyā, but since *grāyā may also have existed in Latin (dialectal Italian grava), and since the suffix alternation *grā-ūā ~ *grā-ro- is impeccably Indo-European, there is every reason to hope to find an Indo-European etymology.

What, then, is the most likely Indo-European root to which these words might belong? Since the link between Lat. glārea and Celtic *grāyā has not been previously identified, they have been attributed to different sets of cognates in the Indo-European languages, although occasionally with some cross-over, as we shall see. As noted above, the only close connections which have been previously suggested for glārea are Lat. grānum ‘seed, grain’, Goth. ga-krōtōn * ‘crush, break to pieces’, which are further attributed by IEW (390-1) to the same root as such forms as Ved. járanti (3pl.) ‘make old’, járanti- ‘old’, Arm. cer ‘old, old man’, Gk. γέρων ‘old man’, which go back to *ğerh₂- (EWAta 577-8; LIV 165-6). Formally this a possible origin for Lat. glārea < *ğerh₂-ro-, grānum < *ğerh₂-no-, and Celtic and Italian *grāyā < *ğerh₂-yêh2 (but see below for *CṛHu- in Latin). It is more problematic for Goth. ga-krōtōn* < *grā/ō-de/o-, since it is difficult to think of a plausible derivational reason for the Schwebeablaut which an original *ğerh₂-de/o- would require. Apart from this, it is on the semantic side that this etymology is difficult, since it requires the Indo-European root to mean both ‘grind down’ and ‘make old’. It is possible to understand a development ‘grind down’ → ‘make feeble’ → ‘make old’, but an argument might also be made for there originally having been two roots (LIV 165-6; de Vaan 2008: 264, 271), one being *ğerh₂- ‘make old’, the other meaning ‘grind down’, the zero grade of which might be found in Ved. jārvati ‘grind, wear away’ < *ğerH-uêo- alongside Lat. glārea and Celtic and Italian *grāyā. If the root had a full grade II we could also explain Goth. gakrōtōn* more easily from *ğerh₂-de/o-.

However, Celtic *grāyā has traditionally been connected with a different set of cognates. Thus IEW (460-2) collects it together with forms including Gk. χραύω* ‘scrape, graze, wound slightly’< *gr̥ray-e/o-, ON. grjón ‘groats, meal’, MHG. grien ‘coarse sand’ < *gr̥reyn-no-, and a

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8 Attested in the 3sg. aor. subj. χραύσι, and in the 3sg. impf. compound ἔνεχρασί.
series of Germanic and Balto-Slavic forms with a suffix or root-enlargement *-d- such as ON. grjót 'gravel, stone',9 Lith. grāstį 'stamp, trample, crush', Lith. grūdas, Latv. grāds, graūds 'grain', OCS. gruda, Serbo-Croatian grūda 'lump' which together point to *g'reyud- (and are also compatible with a laryngeal in the root).10 In all likelihood, however, Gk. γραύω* should be connected to Gk. ἔχραον (aor.) 'attack, assault' (Beekes 2010: 1646-7), although this is put under a separate heading by IEW (460). If, therefore, it is correct to maintain the connection of *grāyā (and hence glārea) with Gk. γραύω*, all these forms should go back to the same root. On the basis of Lith. grājuju ‘pull down, demolish’, Gk. ζηρηχός ‘attacking violently’, Lat. ingrūō ‘attack’, the root is reconstructed as *g’rehy- by LIV (202), with Gk. ἔχραν being explained as a super zero grade (following Peters 1980: 342). A root *g’rehy- is also possible, if the palatalisation in Lithuanian is secondary (which is preferred by Beekes 2010: 1645), but only if the Germanic and Balto-Slavic forms in *g’rey(d)- were to be kept separate from Lith. grājuju etc., since *g’rehy- is not compatible with ON. grjón and ON. grjót < *g’rey(d)-. If this were the case, both Lat. glārea and Celtic and Italian *grāyā would have to belong with Lith. grājuju etc. rather than ON. grjón etc., because they must belong to a root containing a laryngeal, in order to explain their long *-ā-.

There is surely room for further research on the derivational histories of the forms discussed above. However, the brief discussion here allows us to consider the etymological possibilities that arise for Lat. glārea. If we start from *g’reh₂- ‘grind down, make old’, or separate the ‘grind down’ meaning into a separate root *g’r(e)h₂-th we can set up *g’h₂(r)₂-th > *grārō- → glārea without difficulty. The change *g’h₂(r)₂-th > Vulgar Latin *grāyā > Italian grava may be more problematic, since *g’h₂(r)₂-th would have given ‘garūā according to Schrijver (1991: 293-301), cf. caluus ‘bald’ < *klH₂-y-. But caluus cannot come directly from *kaluo- if *-ly- gave -ll- in Latin, as argued by Nussbaum (1997: 190-92; accepted by Weiss 2009: 162), citing e.g. palleō ‘be pale’ beside Lith. pālvās ‘light yellow’. So the development *CrHy- > *CaRu- in Latin may not be correct, which means that

9 ON. grjót and its Germanic cognates are connected by Feist (1939: 187) with Lat. glārea, grānum (but without any mention of Celtic *grāyā). His attribution of Skt. grāvān- ‘rock used to press soma’ to the same root, separating it from Goth. -quairms (and OIr. bráu MW. breuan ‘quern’) < *g’reh₂-y-on- is incorrect.

10 However, the Balto-Slavic long vowels and acute tone do not prove the existence of a laryngeal, because both could be caused by following *-d- by Winter’s Law.
\[ *\text{grh}_{2(b)}-\text{yeh}_2 > *\text{grāyā} \] is possible. If the root is \( *\text{grēh}_2 \), \( *\text{grēh}_2-\text{yeh}_2 \) would also be a possible reconstruction.\(^{11}\) Since there is no completely reliable evidence for the outcome of \( *\text{C}\text{rH}_2 \) in Celtic (Zair 2012: 90-91, 94-101), it is open to reconstruct \( *\text{grh}_{2(b)}-\text{yo-} \) or \( *\text{gre}/\text{oH}_{2(b)}-\text{yo-} \) for \( *\text{grāyā} \).

Positing \( *\text{g}^b\text{reh}_1\text{u} \) as the root of both glārea and Italian and Celtic \( *\text{grāyā} \) is perhaps more satisfactory semantically, particularly given the preponderance of Germanic forms in \( *\text{g}^b\text{reh}_1\text{u}(d) \) with meanings ‘gravel, sand’. But it is formally more difficult. The reconstruction \( *\text{grāu-o-ro-} \) or \( *\text{grāu-ero-} \) for glārea discussed above would be easier to motivate from this root, but the more plausible \( *\text{g}^b\text{rh}_1\text{ro-} \) could also be justified by assuming the root was really \( *\text{g}^b\text{reh}_1(\text{u})\text{-} \), of the long diphthong type which sometimes appears without its final glide, as discussed by Mayrhofer (1986: 173-5) and Lindeman (1997: 118-21). In fact this is supported by Lithuanian \( \text{grūodas} 'frost, frozen mud' < *\text{g}^b\text{rōdo-} < *\text{g}^b\text{roh}_1\text{do-} \), which is linked with the other Baltic forms from this root by Fraenkel (1962-1965 I.173) and also lacks \( *_{-y} \).

Much more problematic is the question of whether \( *\text{g}^b\text{r-} \) would give Latin \( \text{gr-} \). The usual reflex of word-initial \( *\text{g}^b- \) in Latin is \( \text{h-} \) (e.g. \( \text{holus} 'vegetables' < *\text{g}^b\text{elh}_1\text{-os} \)), but there are differing opinions on its result before \( *_{-r} \) (and \( *_{-l} \)). According to one view (thus Meiser 1998: 103, Stuart-Smith 2004: 43), \( *\text{g}^b- \) gave \( \text{g-} \) before \( *_{-r} \) and \( *_{-l} \) (e.g. glaber ‘smooth’ < \( *\text{g}^b\text{h}_1\text{d}'\text{ro-} \), cf. ON. gladr ‘shiny’; grāmen ‘grass’ < \( *\text{g}^b\text{rh}_1\text{-s-m} \), cf. Goth. gras ‘grass’). But Weiss (2009: 163) takes the alternative view that it developed as usual to \( *\text{hr-} \) and thence to \( \text{r-} \), as in \( \text{rāuus} 'grey' < *\text{g}^b\text{rāu}_1\text{-o-} \) (cf. OHG. grāo, rūdus ‘broken stones, rubble’ < \( *\text{g}^b\text{re}d\text{-o-} \) (cf. ON. grjót ‘gravel, stone’).\(^{12}\) Meiser explains \( \text{rāuus} \) as due to borrowing from a Sabellian language (but does not discuss rūdus), while Weiss (2009: 156) explains glaber as due to a dissimilation of aspirates in \( *\text{glad}_1\text{ro-} < *\text{g}^b\text{lad}_1\text{ro-} \) (but does not discuss grāmen). Proto-Indo-European \( *\text{g}^b- \) would of course have given Celtic \( *\text{g}- \) before \( *_{-r} \) as in all other environments, and Celtic \( *\text{grāyā} \) could come from \( *\text{g}^b\text{rh}_1\text{-yeh}_2 \) or \( *\text{g}^b\text{roh}_1\text{-yeh}_2 \).

\(^{11}\) A reconstruction \( *\text{grēh}_2\text{-yeh}_2 \) might also be possible for Latin, since Schrijver (1991: 298-301) argues for delabialisation of \( *_{-h_2} > *_{-h_1} \) before \( *_{-y} \). But the evidence is not strong.

\(^{12}\) Derived, of course, from the root currently under discussion, if it does not somehow come from \( *_{h \text{reqb}} \) ‘red’ (de Vaan 2008: 527-8).
For those who take the view that *gʰr- gave r- in Latin, only a derivation from *gʰerh₂- or *gʰreh₂r- is acceptable. Otherwise *gʰreh₁(y)- remains a further possibility. Given the array of possible cognates, the wider Indo-European context of Lat. glārea ← *grāro- and Celtic and Italian *grāyā remains rather obscure, although to my mind a connection with *gʰreɪh₁(y)- is preferable on the basis of the semantics. Whatever the answer, glārea and *grāyā must be considered together as close cognates, rather than separately, as has been the case up to now.

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