

## Latin *glārea* ‘gravel’

Latin *glārea* ‘gravel’ is first attested in Cato *Agr.* 18.7:<sup>1</sup> ‘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’<sup>2</sup> 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 *\*grāuā*, which probably also existed in Gaulish, on the basis of French *grève* ‘sand, beach’.<sup>3</sup> 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 *\*-ejo-* (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 inscriptionally in forms like *pelegrinus* (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

<sup>1</sup> All references to texts as in the OLD.

<sup>2</sup> Actually only attested in the 3sg. pres. pass. *ga-krotuda*.

<sup>3</sup> Breton *groa* ‘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 *\*grāuā* (Anders Jørgensen p.c.).

form it is quite plausible to reconstruct \**grā-ro-*, beside \**grā-ūā* 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 \**grāūā*, 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).<sup>4</sup> For this reason, Celtic \**grāūā* 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 \**grāūā* in Latin, it is a possibility that Latin also had \**grāūā* 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 \**grāūā*. A preform \**grāūārā/o-*, which would be identical to Abruzzese *gravara*, would not have given *glārea*, because \*-*ū-* was not lost between like vowels when the second vowel was stressed (cf. *seuērus*). But \**grāūrā/o-* would have given \**grārā/o-*, by loss of \*-*ū-* before \*-*o-* followed by vowel contraction (Meiser 1998: 88, 92). However, it is difficult to see how we could motivate a preform \**grāūrā/o-*.<sup>6</sup> A possible starting point would be \**grāūo-*, the singular to the collective \**grāūā* seen in Celtic and Italian, to which the denominative suffix \*-*ro-* was added (cf. *luxuria* ‘indulgence’ ← \**luksu-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-* > \**grāūoro-* (\*-*yē-* > \*-*yo-*, cf. *uomō* ‘vomit’ < \**uēm<sub>1</sub>-e/o-*; Meiser 1998: 82). But although \*-*ero-* is found in Latin (*liber* ‘free’ < \**h<sub>1</sub>le<sub>ud</sub><sup>h</sup>-ero-*,

<sup>4</sup> See Giammarco (1969: 899), Cortelazzo & Marcato (1998: 228-9). I am grateful to Elda Morlicchio for advice on the Italian dialect forms.

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

<sup>6</sup> In principle, \**grāūārā/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 \**m<sub>1</sub>-to-yo-* rather than \**m<sub>1</sub>-tyo-*, but this is usually explained as being due to interference from \**m<sub>1</sub>-yo-* (cf. OIr. *marb* ‘dead’) and/or \**g<sup>w</sup>ih<sub>3</sub>-yo-* > Lat. *uīuus* ‘alive’ (Ernout & Meillet 1985: 415; de Vaan 2008: 389-90).

cf. Gk. ἐλεῦθερος, *miser* ‘wretched’ < \**mis-ero-*, cf. *maereō* ‘be sad’; Weiss 2009: 286), it is hardly productive. Consequently, \**grā-ro-* seems a more plausible preform for \**glārea* than \**grāuo-ro-/grāu-ero-*.

It remains possible that we should posit a substrate origin for both Lat. *glārea* and Celtic \**grāuā*, but since \**grāuā* 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 \**grāuā* 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. *jāranti* (3pl.) ‘make old’, *jārant-* ‘old’, Arm. *cer* ‘old, old man’, Gk. γέρων ‘old man’, which go back to \**ġerh<sub>2</sub>-* (EWAia 577-8; LIV 165-6). Formally this a possible origin for Lat. *glārea* < \**ġrh<sub>2</sub>-ro-*, *grānum* < \**ġrh<sub>2</sub>-no-*, and Celtic and Italian \**grāuā* < \**ġrh<sub>2</sub>-ueh<sub>2</sub>* (but see below for \**C<sub>1</sub>H<sub>1</sub>-* 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 \**ġre/oh<sub>2</sub>-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 \**ġerh<sub>2</sub>-* ‘make old’, the other meaning ‘grind down’, the zero grade of which might be found in Ved. *jūrvati* ‘grind, wear away’ < \**ġrH-ue/o-* alongside Lat. *glārea* and Celtic and Italian \**grāuā*. If the root had a full grade II we could also explain Goth. *gakrōtōn*\* more easily from \**ġreh<sub>2/3</sub>-de/o-*.

However, Celtic \**grāuā* 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’<sup>8</sup> < \**g<sup>h</sup>rau-e/o-*, ON. *grjón* ‘groats, meal’, MHG. *grien* ‘coarse sand’ < \**g<sup>h</sup>reu-no-*, and a

<sup>8</sup> Attested in the 3sg. aor. subj. χραύση, and in the 3sg. impf. compound ἐνέχραυε.

series of Germanic and Balto-Slavic forms with a suffix or root-enlargement *\*-d-* such as ON. *grjót* ‘gravel, stone’,<sup>9</sup> Lith. *grūsti* ‘stamp, trample, crush’, Lith. *grūdas*, Latv. *grūds*, *graūds* ‘grain’, OCS. *gruda*, Serbo-Croatian *grūda* ‘lump’ which together point to *\*g<sup>h</sup>reūd-* (and are also compatible with a laryngeal in the root).<sup>10</sup> In all likelihood, however, Gk. *χράω\** 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 *\*grāuā* (and hence *glārea*) with Gk. *χράω\**, all these forms should go back to the same root. On the basis of Lith. *griáuju* ‘pull down, demolish’, Gk. *ζαχρηής* ‘attacking violently’, Lat. *ingruō* ‘attack’, the root is reconstructed as *\*g<sup>h</sup>reh<sub>1</sub>u-* by LIV (202), with Gk. *ἔχραον* being explained as a super zero grade (following Peters 1980: 342). A root *\*g<sup>h</sup>reh<sub>2</sub>u-* 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<sup>h</sup>reū(d)-* were to be kept separate from Lith. *griáuju* etc., since *\*g<sup>h</sup>reh<sub>2</sub>u-* is not compatible with ON. *grjón* and ON. *grjót* < *\*g<sup>h</sup>reū(d)-*. If this were the case, both Lat. *glārea* and Celtic and Italian *\*grāuā* would have to belong with Lith. *griáuju* 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<sup>h</sup>erh<sub>2</sub>-* ‘grind down, make old’, or separate the ‘grind down’ meaning into a separate root *\*g<sup>h</sup>(e)h<sub>2/3</sub>-* we can set up *\*g<sup>h</sup>rh<sub>2(3)</sub>-ro-* > *\*grāro-* → *glārea* without difficulty. The change *\*g<sup>h</sup>rh<sub>2(3)</sub>-ueh<sub>2</sub>* > Vulgar Latin *\*grāuā* > Italian *grava* may be more problematic, since *\*g<sup>h</sup>rh<sub>2(3)</sub>-ueh<sub>2</sub>* would have given *\*garuā* according to Schrijver (1991: 293-301), cf. *caluus* ‘bald’ < *\*k<sub>l</sub>H-uo-*. But *caluus* cannot come directly from *\*kaluo-* if *\*-lu-* gave *-ll-* in Latin, as argued by Nussbaum (1997: 190-92; accepted by Weiss 2009: 162), citing e.g. *palleō* ‘be pale’ beside Lith. *paľvas* ‘light yellow’. So the development *\*C<sub>r</sub>Hu-* > *\*CaRu-* in Latin may not be correct, which means that

<sup>9</sup> ON. *grjót* and its Germanic cognates are connected by Feist (1939: 187) with Lat. *glārea*, *grānum* (but without any mention of Celtic *\*grāuā*). His attribution of Skt. *grāvan-* ‘rock used to press *soma*’ to the same root, separating it from Goth. *-quairnus* (and OIr. *bráu* MW. *breuan* ‘quern’) < *\*g<sup>v</sup>reh<sub>2</sub>-u-on-* is incorrect.

<sup>10</sup> 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.

\* $\hat{g}^h h_{2(3)}-ueh_2 > *grāuā$  is possible. If the root is \* $\hat{g}^h reh_2-$ , \* $\hat{g}^h reh_2-ueh_2$  would also be a possible reconstruction.<sup>11</sup> Since there is no completely reliable evidence for the outcome of \* $C\check{r}Hu-$  in Celtic (Zair 2012: 90-91, 94-101), it is open to reconstruct \* $\hat{g}^h h_{2(3)}-uo-$  or \* $\hat{g}^h re/oh_{2/3}-uo-$  for \* $grāuā$ .

Positing \* $\hat{g}^h reh_1u-$  as the root of both *glārea* and Italian and Celtic \* $grāuā$  is perhaps more satisfactory semantically, particularly given the preponderance of Germanic forms in \* $\hat{g}^h reh_1u(d)-$  with meanings ‘gravel, sand’. But it is formally more difficult. The reconstruction \* $grāu-o-ro-$  or \* $grāu-ero-$  for *glārea* discussed above would be easier to motivate from this root, but the more plausible \* $\hat{g}^h r̥h_1-ro-$  could also be justified by assuming the root was really \* $\hat{g}^h reh_1(u)-$ , 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 *grúodas* ‘frost, frozen mud’ < \* $\hat{g}^h rōdo-$  < \* $\hat{g}^h roh_1do-$ , which is linked with the other Baltic forms from this root by Fraenkel (1962-1965 I.173) and also lacks \*- $u-$ .

Much more problematic is the question of whether \* $\hat{g}^h r-$  would give Latin *gr-*. The usual reflex of word-initial \* $\hat{g}^h-$  in Latin is *h-* (e.g. *holus* ‘vegetables’ < \* $\hat{g}^h elh_3-os$ ), but there are differing opinions on its result before \*- $r-$  (and \*- $l-$ ). According to one view (thus Meiser 1998: 103, Stuart-Smith 2004: 43), \* $\hat{g}^h-$  gave *g-* before \*- $r-$  and \*- $l-$  (e.g. *glaber* ‘smooth’ < \* $\hat{g}^h l̥h_2d^h-ro-$ , cf. ON. *gladr* ‘shiny’; *grāmen* ‘grass’ < \* $\hat{g}^h r̥h_1-s-m̥$ , cf. Goth. *gras* ‘grass’). But Weiss (2009: 163) takes the alternative view that it developed as usual to \* $hr-$  and thence to *r-*, as in *rāuus* ‘grey’ < \* $\hat{g}^h rāuo-$  (cf. OHG. *grāo*), *rūdus* ‘broken stones, rubble’ < \* $\hat{g}^h reud-os$  (cf. ON. *grjót* ‘gravel, stone’).<sup>12</sup> Meiser explains *rāuus* as due to borrowing from a Sabellic language (but does not discuss *rūdus*), while Weiss (2009: 156) explains *glaber* as due to a dissimilation of aspirates in \* $glad^h-ro-$  < \* $\hat{g}^h lad^h-ro-$  (but does not discuss *grāmen*). Proto-Indo-European \* $\hat{g}^h-$  would of course have given Celtic \* $g-$  before \*- $r-$  as in all other environments, and Celtic \* $grāuā$  could come from \* $\hat{g}^h r̥h_1-ueh_2$  or \* $\hat{g}^h roh_1-ueh_2$ .

<sup>11</sup> A reconstruction \* $\hat{g}^h reh_3-ueh_2$  might also be possible for Latin, since Schrijver (1991: 298-301) argues for delabialisation of \*- $h_3-$  > \*- $h_2-$  before \*- $u-$ . But the evidence is not strong.

<sup>12</sup> Derived, of course, from the root currently under discussion, if it does not somehow come from \* $h_1reud^h-$  ‘red’ (de Vaan 2008: 527-8).

For those who take the view that *\*g<sup>h</sup>r-* gave *r-* in Latin, only a derivation from *\*ġerh<sub>2-</sub>* or *\*ġreh<sub>2/3-</sub>* is acceptable. Otherwise *\*g<sup>h</sup>reh<sub>1(y)</sub>-* remains a further possibility. Given the array of possible cognates, the wider Indo-European context of Lat. *glārea* ← *\*grāro-* and Celtic and Italian *\*grāuā* remains rather obscure, although to my mind a connection with *\*g<sup>h</sup>reh<sub>1(y)</sub>-* is preferable on the basis of the semantics. Whatever the answer, *glārea* and *\*grāuā* must be considered together as close cognates, rather than separately, as has been the case up to now.

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