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\*-lǵh- > \*lǵ > ll: with an excursus on Greek λάχνη,  
ἀμφιλαχάινω and cognates**

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# Latin *follis* and *vellō* as evidence for a sound change $*-lg^h-$ > $*ly$ > *ll*

with an excursus on Greek λάχνη, ἀμφιλαχαίνω and cognates

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## Abstract

Handbook treatments of Latin historical phonology do not discuss the fate of the consonant clusters  $*lh$  and  $*rh$  (or, rather, Proto-Italic  $*ly$ ,  $*ry$ ) that would reflect Indo-European  $*-lg^h-$  and  $*-rg^h-$ . Indeed, no secure examples of such reflexes have been identified thus far. In this paper I argue that  $*-lg^h-$  >  $*-ly-$  was assimilated to Latin *-ll-*, adducing two plausible examples (*follis* ‘skin bag’ < PIE  $*b^holg^h-i-$ , *vellō* ‘to tear out, pluck’ < PIE  $*uelg^h-e/o-$ ) and a possible example (*fel fellis* ‘gall bladder’). In addition, I suggest that the demonstrative pronoun *ille* may reflect  $*ol-$  plus the pronominal stem  $*ho-$  that underlies *hic*. In an excursus, Greek λάχνη ‘down, fluff’ and (ἀμφι)λαχαίνω ‘to weed’ are also derived from the PIE root  $*uelg^h-$  underlying *vellō*.\*

## Keywords

Latin phonology – Latin sound change – Latin and Greek etymology –  
Indo-European reconstruction

The organization of this paper is as follows. Section 1 presents Latin *follis* ‘skin bag’ (cf. Goth. *balgs* ‘id.’) and *vellō* ‘to tear out’ (cf. Ved. *varh* ‘id.’) as evidence for a change PIE  $*-lg^h-$  >  $*-ly-$  > Lat. *-ll-*. Section 2 argues that such a develop-

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ment is, indeed, plausible from a phonological or phonetic point of view. Possible counterevidence is discussed in sections 3 and 4, which deal with the clusters *\*-lg<sup>h</sup>-* and *\*-rg<sup>h</sup>-*, respectively.<sup>1</sup> In section 5 it is suggested that Latin *fel* ‘gall (bladder)’ and *ille* ‘this’ are further possible (though more uncertain) evidence for the posited sound change. Finally, the excursus in section 6 proposes to trace back Greek *λάχνη* ‘down, fluff’, (*ἀμφι*)*λαχαίνω* ‘to weed’ and further cognates to the root of *vellō*. A brief summary of the main conclusions is provided in section 7.

## 1 Evidence for *\*ty* > Latin *ll*

### 1.1 Latin *follis*

Lat. *follis* m. can refer to various sorts of leather sack, especially those that are airtight (bellows, leather ball) or watertight, and hence also to a purse or pouch. Its reconstruction is debated.

In *EDL*, *follis* is compared with OIr. *ball* m. (*o*-stem) ‘member, limb’ and Welsh *balleg* ‘basket, fishing net; purse’.<sup>2</sup> The pre-forms are supposed to be *\*b<sup>h</sup>l̥ni-*, *\*b<sup>h</sup>l̥no-*, respectively. Walde-Hofmann and Ernout-Meillet also compare Germanic words of various shapes and similar meanings (e.g. OHG *ballo* ‘ball’, *bolla* ‘bowl’), and sometimes Greek *φάλλος* ‘penis’ is also drawn into the equation.<sup>3</sup> The root would be *\*b<sup>h</sup>el-* ‘inflate’ as in Latin *flō* ‘id.’

However, the semantic connection with the Celtic words is weak: the Irish word denotes any ‘Glied’ (cf. *DIL* s.v. *ball*) and notionally corresponds to Greek *ἄρθρον* and Latin *articulus*; it certainly has nothing to do with inflatable animal skins.<sup>4</sup> As for Welsh *balleg*, the meaning ‘pouch, purse’ is attested late; the

1 Here and in what follows, I write *\*g<sup>h</sup>* as a shorthand for an aspirated velar or palatovelar stop in PIE. I will, of course, use the notation *\*ǵ<sup>h</sup>* in specific cases where cognate words point to an Indo-European palatovelar.

2 De Vaan (*EDL* s.v. *follis*), citing the *Lexique étymologique de l'irlandais ancien* by Vendryes, also mentions Welsh *dyrn-fol* ‘glove’ (with first member *dyrn-* ‘hand, fist’) and *ar-folli* ‘to become pregnant’ as deriving from the alleged root *\*b<sup>h</sup>el-*. However, in *dyrn-fol*, *-fol* must be related to MW *boly* ‘belly, paunch, bag, etc.’ which reflects Proto-Celtic *\*bolgo-* (on which see below).

3 Cf. Frisk (*GEW* s.v. *φάλλος*), who skeptically refers to Pokorny (*IEW* 120) and Walde-Hofmann. Chantraine (*DELG* s.v. *φάλλος*) cautiously refrains from mentioning any concrete cognates and merely refers to Pokorny’s enumeration.

4 In Latin lexis, I have not been able to retrace the meaning ‘scrotum; testicles’, which *follis* would have according to certain etymological dictionaries (*LEW*, *EDL*). If it had this meaning, it must have secondarily developed from ‘(leather) sack’. This development is clearly attested for the diminutive *folliculus* in the 5th c. CE physician Caelius Aurelianus (*Acut.* 3.17.165; also *folliculum genitale*, *Acut.* 3.8.104).

oldest retraceable referent was probably an object of wickerwork (fishing net, basket), and I therefore doubt that it is etymologically related to OIr. *ball*.

The root etymology, too, rests on weak foundations: Latin *flō* is usually connected with OHG *blāen* ‘to blow’ and other verbs in Germanic and Balto-Slavic meaning ‘to blow’ (*LIV*<sup>2</sup> 87); this root is *\*b<sup>h</sup>leh-*, ending in a laryngeal, and there is no clear independent evidence for a laryngeal-less verbal root *\*b<sup>h</sup>el-*.<sup>5</sup>

A more promising etymology for Latin *follis* appears when we consider words from Germanic and Celtic languages meaning ‘skin bag; bellows’ and reflecting *\*b<sup>h</sup>olǵ<sup>h</sup>-i-* and *\*b<sup>h</sup>ólǵ<sup>h</sup>-o-*, *\*b<sup>h</sup>olǵ<sup>h</sup>-éh<sub>2</sub>-*, respectively:

- Goth. *balgs* m. ‘skin bag’, ON *belgr* m. ‘skin; skin bag; bellows’, OE *belig* m. ‘bag; bellows’, WFri. *bealch* c. ‘trunk, belly; bulge’, OHG *balg* m. ‘skin, tube, pod’, all from *\*b<sup>h</sup>olǵ<sup>h</sup>-i-*;
- OIr. *bolg* m. (*o*-st.) ‘bag; belly; bellows’, MW *bol*, *boly* ‘belly, paunch, bag, etc.’ < *\*b<sup>h</sup>ólǵ<sup>h</sup>-o-*;
- OIr. *bolg* f. (*ā*-st.) ‘blister; ball; pouch’, perhaps Gaul. *bulga* (in *bulgas Galli sacculos scorteos appellans*, *P. ex Festo* 31.25) < *\*b<sup>h</sup>olǵ<sup>h</sup>-éh<sub>2</sub>-*.

These words clearly derive from an inherited verbal root *\*b<sup>h</sup>elǵ<sup>h</sup>-* that is retained in Germanic, in the strong verb *\*belgan-* ‘to swell, inflate (intr.); become angry’ and the pertaining causative *\*balgian-* ‘to inflate (tr.); make angry’.<sup>6</sup> Perhaps, traces of this verb are left also in Indo-Iranian: Vedic *barh* in the sense ‘be strong’ (as opposed to the meaning ‘to raise’ reflecting PIE *\*b<sup>h</sup>erǵ<sup>h</sup>-*).<sup>7</sup>

The reason for reconstructing the root-final stop as a palatovelar *\*ǵ<sup>h</sup>* (rather than *\*g<sup>h</sup>*) is not so much the relatedness of this Indo-Iranian verb, but mainly the existence of further Indo-Iranian and Balto-Slavic words meaning ‘pillow, bolster’ that seem to have *\*b<sup>h</sup>olǵ<sup>h</sup>-i-* as a common element:

- Ved. *barhís-* n. ‘bundle of straw’, *upabárhaṇa-* n. ‘pillow, bolster’, Av. *barəziš-* n. ‘pad, pillow’ (and various other Iranian forms), as if reflecting PIE *\*b<sup>h</sup>olǵ<sup>h</sup>’is-*;
- OPru. *balsinis* ‘pillow’ < *\*b<sup>h</sup>olǵ<sup>h</sup>’i-no-*; *pobalso* ‘bolster’;
- OPr. *balgnan* (EV) ‘saddle’, Lith. *balnas* ‘id.’ < *\*b<sup>h</sup>olǵ<sup>h</sup>-no-* (see *EDBIL* s.v. *balnas*).

5 An etymological connection between Old Irish *ball* and Greek *φάλλος* as reflecting *\*b<sup>h</sup>lno-* ‘member, Glied’ is perhaps possible, though not more than that, as the root etymology of *\*b<sup>h</sup>lno-* would remain unclear. On this etymological connection, cf. also van Beek 2022: 455.

6 For the attested words, see the entries *\*belgan-* and *\*balgian-* in *EDPG*; further cognates are cited s.v. *\*bulǵjōn-* f. ‘wave; bag’.

7 See *EWAla* II, 212–213 (s.v. *BARH*) and II, 213 (s.v. *barhānā*). Note, however, that the forms *pári ... babrhānā*, *pári bṛṇhathi* and *paribṛdhá-* show a meaning ‘fortify’ that is highly suggestive of an etymological connection with Greek *φράττω* ‘to fence in’, perf. mid.-pass. ptc. *πεφραγμένος* and *ἄ-φρακτος* ‘without a fence’: see van Beek 2022: 406–408.

There are various problems connected with these words. For one thing, it is possible that the suffix of Ved. *barhís-* and Av. *barəziš-* was taken from the pre-form of Av. *stairiš-* ‘straw (strewn as a seat)’ (cf. *EWAia* II, 214 s.v. *barhís-*). This renders a direct comparison with the *i*-stem reflected in Latin *follis* and Germanic *\*balgi-* uncertain. Secondly, the meanings of Ved. *barhís-* and YAv. *barəman-* n. ‘grass bundle, strewn grass’ cannot at first sight be so easily explained from ‘swell’. Nevertheless, the meaning ‘bolster, pillow’ seems common to various Balto-Slavic and Indo-Iranian items, and if the original referent was a puffy bag filled with straw (assuming that the meaning ‘strewn grass’ of Ved. *barhís-* is secondary), this meaning can be derived from the root meaning ‘swell’.

Another problem is that in various Balto-Slavic languages there is a homonymous word meaning ‘crossbeam’, e.g. Lith. *balžienas*, with a cognate in PGmc. *balkan-* ‘beam’.<sup>8</sup> Oddly, Sln. *blazína* means both ‘roof-beam, cross-beam’ and ‘pillow, bolster’ while SCr. *blázina* f. only means ‘pillow, bolster’. The relation between these two meanings is unclear, and it seems to me that two etymologically distinct words merged in form at some early stage. Assuming that the homonymy is old would explain why Slovene *blazína* has both meanings, while the other languages eliminated the homonymy.

These issues need not be resolved here: what is important is the connection between the Latin, Germanic and Celtic words for ‘skin bag’, and their clear appurtenance to the verbal root *\*b<sup>h</sup>elǵ<sup>h</sup>-* ‘to swell’. In fact, these words had already been tentatively compared to Latin *follis* by previous scholars, but as reflecting an enlargement in *\*-ǵ<sup>h</sup>-* of the root *\*b<sup>h</sup>el-* allegedly underlying *follis*.<sup>9</sup> This is no longer necessary: considering the meanings of Gothic *balgs* and related Germanic words, and given the general phonetic plausibility of a change *\*ly > ll* in Latin (see section 2), it is highly attractive to posit a pre-form *\*b<sup>h</sup>olǵ<sup>h</sup>-i-* also for Latin *follis*.<sup>10</sup>

It appears that the pre-form (including its stem formation and gender) and meaning of *\*b<sup>h</sup>olǵ<sup>h</sup>-i-* are shared by the Latin and Germanic words, while Celtic has evidence for masculine *\*b<sup>h</sup>ólǵ<sup>h</sup>-o-* and feminine *\*b<sup>h</sup>ólǵ<sup>h</sup>-éh<sub>2</sub>-*. It is attractive

8 For the Baltic and Slavic forms, see the respective entries in *EDBIL* and *EDSIL*.

9 Thus *LEW* and *DELL* (both s.v. *follis*).

10 In fact, Holger Pedersen (cf. *LEW* s.v. *follis*) connected *follis* to the root *\*b<sup>h</sup>elǵ<sup>h</sup>-* by reconstructing *\*b<sup>h</sup>olǵ<sup>h</sup>-ni-*, thus apparently trying to account for the absence of a reflex of *\*ǵ<sup>h</sup>* in Latin. According to *LEW* this is “lautlich vlt. möglich aber ohne weitere Parallelen”. In Baltic there is perhaps evidence for *\*b<sup>h</sup>olǵ<sup>h</sup>-no-* if OPr. *balgnan* ‘saddle’, OLith. *balgnas*, Lith. *bañnas* ‘saddle’ reflect this form, with depalatalization of the palatovelar before *n* (*EDBIL* s.v. *balgnas*). However, as we will see below (section 1.2), *\*b<sup>h</sup>olǵ<sup>h</sup>-ni-*s would probably have yielded Latin *\*folnis* rather than *follis*; moreover, the Baltic words have different meanings, and they are not *i*-stems. Therefore, reconstructing *follis* as *\*b<sup>h</sup>ólǵ<sup>h</sup>-i-* is preferable by far to Pedersen’s *\*b<sup>h</sup>olǵ<sup>h</sup>-ni-*.

to analyze  $*b^h olǵ^h í-$  as a substantivizing *i*-stem derivative of a  $\tau\acute{o}\mu\acute{o}\varsigma$ -type thematic adjective  $*b^h olǵ^h \acute{o}-$  ‘that swells, billowing’. The Celtic forms reflect productive  $\tau\acute{o}\mu\acute{o}\varsigma$ -type and  $\tau\acute{o}\mu\acute{\eta}$ -type nouns originally meaning ‘(act of) swelling or billowing’; they may have been derived from the verb at any moment after PIE.

## 1.2 Latin *vellō* and Vedic *varh*

Furthermore, I propose that Latin *vellō*, *vellī*, *vulsus* ‘to tear (out), twitch, pluck’ reflects  $*\mu elǵ^h-e/o-$  and is related to the Vedic Sanskrit root *varh*, which equally means ‘to tear out’.

There has been a tendency, over the past decades, to compare *vellō* to verbs in other Indo-European languages that have in common a root shape  $*\mu elH-$ , but display divergent meanings: Hittite  $\mu alh_{-zi}$  ‘to strike’, Greek  $\acute{\alpha}\lambda\acute{\iota}\sigma\kappa\omicron\mu\alpha\iota$ , aor.  $\acute{\alpha}\lambda\acute{\omega}\nu\alpha\iota$  ‘to be captured’ (also active  $\acute{\alpha}\nu\alpha\lambda\acute{\iota}\sigma\kappa\omega$  ‘to consume’, with sigmatic aorist  $\acute{\alpha}\nu\acute{\eta}\lambda\omega\sigma\alpha$ ), Toch. A *wälläštär* ‘dies’. On the basis of these forms, LIV<sup>2</sup> reconstructs a root  $*\mu elh_{3-}$ , noting that  $*\mu elh_{2-}$  would be possible too if the Greek verbs are unrelated. This etymology of Latin *vellō* assumes that it reflects a nasal present to a laryngeal-final root, and that its *ll* spread from the *infec-tum* stem to the perfect *vellī*. Another relevant form is *vulnus -eris* (n.) ‘wound’, which is now usually reconstructed as  $*\mu elh_{2/3-nos}$ , but for which alternative reconstructions have been proposed.<sup>11</sup>

Against the appurtenance of *vellō* to a root  $*\mu elh_{3-}$ , it can be said that the meanings of the other verbs subsumed under the LIV<sup>2</sup> entry are quite heterogeneous: ‘to die’ in Tocharian could reflect various metaphors, and ‘strike’ in Hittite is not particularly close to ‘tear out’ in Latin or ‘get caught’ in Greek. From a semantic perspective, Latin *vellō* and Greek  $\acute{\alpha}\lambda\acute{\iota}\sigma\kappa\omicron\mu\alpha\iota$ ,  $\acute{\alpha}\nu\alpha\lambda\acute{\iota}\sigma\kappa\omega$  are candidates to be related. The restriction of  $\acute{\alpha}\lambda\acute{\iota}\sigma\kappa\omicron\mu\alpha\iota$  to its passive interpretation and its semantic specialization to captives could well be secondary from ‘to be drawn off’. Moreover, the meaning of the compound  $\acute{\alpha}\nu\alpha\lambda\acute{\iota}\sigma\kappa\omega$  ‘to consume’ can have arisen from ‘to tear’ (cf., among other parallels for this development, German *verzehren*).

This does not mean, of course, that they must be related. Even if we were to limit the connection to Latin *vellō* and Greek  $\acute{\alpha}\lambda\acute{\iota}\sigma\kappa\omicron\mu\alpha\iota$ ,  $\acute{\alpha}\nu\alpha\lambda\acute{\iota}\sigma\kappa\omega$ , it remains quite problematic that the stem *vell-* appears also in the perfect *vellī*. Schrijver (1991: 180–181) notes that in the 3 other verbs with *-ll-* from an original nasal present stem, *pellō pepulī* ‘to strike, drive’, *tollō tetulī* ‘to raise’ and *per-cellō per-*

11 In principle, *vultur -uris* ‘vulture’ could also belong to *vellō* as the animal ‘that tears off (carriion meat)’ if *tur-* represents the agent noun suffix  $*-t\acute{o}r$ , *-tor-*. DELL (s.v. *uoltur*) notes that vultures are a symbol of rapaciousness, but that an Etruscan origin has also been considered. In any case, its *u*-vocalism (as in, e.g., *augur -uris*) is somewhat problematic if we start from an agent noun in  $*-tor-$ .

*culi* ‘to strike, cast down’, *-ll-* did not spread from the *infectum* to the *perfectum* stem. He therefore tentatively concludes that *vell-* reflects a root *\*uel-*.<sup>12</sup> A related problem is posed by the neuter noun *vellus -eris* ‘fleece’. Its derivation from *vellō* is generally accepted – and with good reason, as the verb may refer to tearing out hairs or plucking wool and feathers.<sup>13</sup> This proves that *-ll-* belonged to the verbal lexeme itself when *vellus* was derived; this, in turn, suggests that *-ll-* did not spread from the nasal present stem.

It also raises the issue of the origin of the PIE word for ‘wool’. This has been reconstructed as *\*ulh<sub>1/2</sub>-neh<sub>2</sub>* or, less likely in my view, *\*h<sub>2</sub>ulh<sub>1</sub>-neh<sub>2</sub>*.<sup>14</sup> This has been seen by various scholars as derived from the root of Latin *vellō*, and is directly compared to *vellus* ‘fleece’.<sup>15</sup> On the other hand, in the words of Ernout and Meillet (*DELL* s.v. *uellō*), “le caractère de la racine rend malaisé le rapprochement avec *lāna*, tentant par lui-même”. As we have just seen, Schrijver (1991) rejected this identification for the same reason: *vellō* is unlikely to originate from a nasal present. Moreover, the reconstruction of ‘wool’ is incompatible with the (now widely-accepted) reconstruction of the root of *vellō* as *\*uelh<sub>3</sub>-* on the basis of Greek ἀλίσκομαι (see above). While I do consider it plausible that *\*ulh<sub>1/2</sub>neh<sub>2</sub>* ‘wool’ is a (substantivized) deverbal adjective in origin, I suspect that evidence for the underlying verb may have been lost.

As for the perfect *vellī*, which has been the main obstacle to reconstructing a nasal present, Meiser (2003: 214–215) has proposed to reconstruct it as a root aorist *\*uelh<sub>3</sub>-* > *\*uela-*, the vocalism of which first influenced the nasal present *\*ul-n-h<sub>3</sub>-* (that existed *ex hypothesi*). After this, the aorist itself would have been reshaped as an *s*-perfect *\*uela-s-* (or even *\*uel-s-*), which according to Meiser yielded the attested perfect *vellī*.

However this may be (I will return to *vellī* below), the present proposal that *\*ll* can reflect *\*lǵ<sup>h</sup>* opens up a new and evidently attractive possibility: *vellō* could reflect *\*uelǵ<sup>h</sup>-e/o-* and thus be related to the Vedic Sanskrit root *varh*, which has an almost identical meaning ‘to tear out’. In the *Rigveda* the verb

12 A reconstruction *\*uels-e/o-* as proposed by Walde-Hofmann (*LEW* s.v. *vellō*) would also explain the geminate *-ll-*, but as Schrijver notes, this reconstruction lacks motivation as there are no parallels for an *s*-present.

13 Barber (1991: 261) notes that “pulling the wool off of the molting sheep ... was done before shears were invented in the Iron Age.”

14 The reconstruction *\*h<sub>2</sub>ulh<sub>1</sub>-neh<sub>2</sub>* has been proposed in order to account for the vocalisation of Old Irish *olan* ‘wool’ and related Celtic forms, and for Hittite *hulana-* (of which the appurtenance is not quite certain: see the doubts in *EDHIL* s.v. *hulana-*).

15 Thus Meiser (1998: 111), Weiss (2020: 307, but with a question mark). Cf. *DELL* s.v. *lāna*: “sans doute apparenté à lat. *uellus*”; *LEW* s.v. *lāna*: “da von *vellus* nicht zu trennen”.

is exclusively attested with preverbs;<sup>16</sup> we mostly encounter the present stem *vrhāti*, alongside a perfect *vavárha* and an *s*-aorist *ávṛkṣam*. The combination *úd varh* means ‘to eradicate’; for the semantics, compare the following examples from the *Rigveda* (translations are from Jamison and Brereton): *úd vrhá rákṣaḥ sahámūlam* ‘tear out the daemonic power, root and all’ (3.30.17a); *má kākambīram úd vrho vánaspátim* ‘don’t tear out the Kākambīra tree’ (6.48.17a). The combination *ví varh* ‘to draw out, tear apart’ can be used literally: *mésá ví varhi má yugám ví sári* ‘let the chariot pole not be torn off, nor the yoke be broken off’ (3.53.17b); but it can also metaphorically refer to the ‘extraction’ of a disease (*yákṣma*-) from all body parts (10.163.1–6, where Jamison and Brereton translate “I tear out the disease”).

Thus far, Vedic *varh* remained without clear cognates itself, though it has repeatedly been suggested (as one among various options) to be an extension of a root *\*uel-* also underlying *vellō*.<sup>17</sup> As already noted, a reconstruction *\*uelǵ<sup>h</sup>*- makes it much easier to derive the perfect *vellī* and the noun *vellus* ‘fleece’ directly from the root. The simple perfect *vellī* could represent a root aorist (an *s*-aorist *\*uelǵ<sup>h</sup>-s-* would have yielded *vulsī*, the form which arose by analogy with the ppp. *vulsus* within Latin). Another possibility would be that *verrō*, *verri*, *versus* ‘to sweep, drag’ (which has original *\*-rs-*) served as a model for *vellō*, *vellī*, *\*velsus* (later > *vulsus*). The two verbs are semantically and phonologically close; according to Meiser (2003: 215), *verri* reflects an inherited root aorist *\*uers-*.<sup>18</sup> Finally, given that the compounds *ā-vellō*, *ē-vellō*, *dē-vellō* and *per-vellō* are attested as early as Plautus and/or Terence, it is conceivable that the original simplex verb had *vellō* *\*vevelli*, and that dereduplicated *-vellī* spread from compounds to the simplex verb (just as in the well-known case of *tulī*, which spread from compounds and eventually ousted the older form *tetulī*).

The slight divergence in present stem formation between Sanskrit (zero-grade *vrhāti*) and Latin (*e*-grade *vellō*) is not detrimental for the proposed etymology. Not only is the origin of Vedic class VI presents of the type *tudāti* still

16 This verb used to be cited as *barh*, but in the oldest Vedic texts *varh* (with *úd*, *prá*, and *ví*) was kept separate from *barh* (with *ní*, meaning ‘throw down’). For this point, see the literature references in *KEWA* III, 252.

17 Cf. *KEWA* III 252, and already Böhtlingk and Roth (*PW* s.v. *barh*): “Es ist nicht unwahrscheinlich, dass die ältere Form der Wurzel die mit *va* ist; vgl. *vellere*.” Words for ‘hair’, ‘grass’ or related meanings reflecting a root *\*uelk-* (Ved. *válsa-* ‘twig’, Russ. *vólos* ‘hair’) have also been drawn into the comparison (cf. *IEW* 1139), but there was, thus far, no clear evidence for a bare root *\*uel-* with a suitable meaning. Under the present analysis, one might perhaps speculate that *\*uelk-* and *\*uelǵ<sup>h</sup>-* are root variants, in which the different articulation of the final stop was originally phonologically conditioned (only *\*uelǵ<sup>h</sup>-* being retained as a verbal root).

18 I do not understand the suggestion of Leumann (1977: 603), “*vellit* wohl nach *refellit*”.

contested, but there is also the possibility that *vellō* adapted its root vocalism to that of the perfect *vellī*, or even that we are dealing with an original ablauting athematic root present, of which different ablaut grades were thematized in Italic and Indo-Aryan.<sup>19</sup>

It must be noted, in addition, that *vulnus* n. ‘wound’ can also derive from *\*uelǵʰ-nos* (or even from *\*uelǵʰ-no-*, if the neuter *s*-stem arose as the substantivization of an earlier adjective): a velar consonant is regularly lost in Latin between liquid and nasal (see e.g. Meiser 1998: 122).<sup>20</sup> There is, moreover, no objection to the idea that the assimilation of original *\*ln > ll* was chronologically prior to the loss of the velar fricative in *\*lyn*. This is, in fact, a plausible assumption as *\*ln > ll* must also have preceded the loss of *\*s* in the same position (cf. *alnus* ‘alder’ from *\*alsnos*) and the syncope of vowels in short open syllables (cf. *ulna* ‘elbow’ beside Gr. ὠλένη). As for the semantic connection with ‘tear out’, it is unproblematic to assume that an older meaning of *vulnus* was ‘rip, gash’. The widely accepted reconstruction *\*uelh<sub>2/3</sub>-nos* remains possible from the viewpoint of phonology and semantics, but in my view an inner-Italic connection of *vulnus* to the root of *vellō* is preferable to a distant connection with Hittite *ualh<sup>-zi</sup>* ‘to strike’.

If this new reconstruction of Lat. *vulnus* is correct, we must note that not only *vulnus* but also Greek λάχνη ‘down, fluff’ (on the appurtenance of which see section 6 below) can reflect a PIE adjective *\*uelǵʰ-nó-*. It would also mean that Greek οὐλή ‘scar’ can no longer be related to *vulnus*. This is no big loss; note that the connection was doubted by Chantraine (*DELG* s.v. οὐλή), who noted: “Les rapprochements que l’on propose [pour οὐλή, LvB] ne sont satisfaisants ni pour la forme, ni pour le sens”. I tentatively propose to compare οὐλή to the adjective οὐλος (Att. ὅλος) ‘entire, whole’, of which it could be a substantivized form (a scar is a wound that has healed). This would presuppose that the word was borrowed into classical prose from Ionic, but this seems a distinct possibility: οὐλή is not a frequent word in Attic, occurring only once in Euripides, Xenophon and Demosthenes, and twice in Plato. In Homer, on

19 The Hittite verb *ualk(ije/a)<sup>-zi</sup>* and the noun *ualganu-* derived from it could also be related to this new root. As these forms occur mostly in broken contexts and hence are of uncertain meaning, Kloekhorst (*EDHIL* s.v. *ualk(ije/a)<sup>-zi</sup>*, with references to earlier literature) refrains from proposing an etymology. However, if the verb indeed describes a negative consequence or a form of destruction, as has been deduced from the contexts by previous scholars, a connection with *\*uelǵʰ-* would be possible – and certainly more plausible than the connection with Skt. *vālgati* ‘jumps’ and OE *wealcan* ‘roll’, OHG *walkan* ‘move to and fro’ proposed by Oettinger (1979: 234) and Kimball (1994: 81–82).

20 Compare Ernout and Meillet (*DELL* s.v. *uolnus*): “on admet que quelque élément s’est amui entre *l* et *n* (...) mais on ne sait lequel”. Walde-Hofmann (*LEW* s.v. *volnus*) etymologically connect *vulnus* with *vellō*, but they reconstruct the latter as *\*uels-e/o-*.

the other hand, οὐλή is a thematic word, occurring eight times in the *Odyssey*; οὐλή is also the regular technical term in the Hippocratic corpus. Both Homeric epic and Ionian medical science would be plausible sources for a borrowing into the Attic authors mentioned above.

Another word that has generally been connected to the root of *vellō* is Armenian *getmn* ‘wool’, but the details of its reconstruction are debated. In spite of Martirosyan (*EDAIL* s.v. *getmn*) it can hardly be connected to PIE  $*u_{\text{h}}lh_{1/2}\text{-neh}_2$  (or  $*h_2u_{\text{h}}lh_{1/2}\text{-neh}_2$ ) ‘wool’, as there is no evidence for root ablaut in that form. Schrijver (1991: 181) reconstructed the pre-form as  $*uel\text{-}m\eta$ , but this can now be modified to  $*uel\text{g}^h\text{-}m\eta$  ‘what is torn/plucked’ under the assumption that *getmn* can reflect  $*getjmn$ . This is plausible given that *j* was lost between *r* and *n* in Arm. *barnam* (aor. *ebarj*) and *darnam* (aor. *edarj*), and cf. further Beekes (2003: 206) on the loss of stops between two consonants more broadly.

Although we have seen only two etymological equations involving the development  $*l\text{g}^h >$  Latin *ll*, both etymologies are attractive because the correspondences in phonology, morphology and semantics are very precise. Before considering further possible evidence and counterevidence, let us now first ask whether the proposed sound change is plausible from a phonological point of view.

## 2 Latin phonology and the expected reflexes of $*l\gamma$ and $*r\gamma$

Since handbooks on Latin historical grammar do not treat the environments  $*r\gamma$  and  $*l\gamma$  explicitly,<sup>21</sup> I will focus on what is known structurally about Latin phonology and its prehistory.

Although the reflex of word-internal  $*\gamma$  between vowels is spelled *h* in verbs like *vehō*, *trahō*, *praehendō*, it is widely agreed that the corresponding sound must have been lost early on.<sup>22</sup> As is well known, *diribeō* ‘to separate, put apart’ from  $*dis\text{-}habeō$  presupposes that the onset *h*- had been lost (even in compositional sandhi) before the occurrence of rhotacism, i.e. as early as the 4th century BCE. One therefore does not expect the reflex of  $*\gamma$  after liquids,

21 Sommer and Pfister (1977), in their chapter about clusters  $C_1C_2$  in which  $C_2$  is a spirant, talk only about the case  $C_2 = s$  or *f* and make no mention of  $C_2 = h$ . Similarly, Weiss (2020: 185–187) and Meiser (1998: 116).

22 In the words of Meiser (1998: 105), “schon vor Einsetzen des Rhotazismus im 4. Jh., jedoch nach Etablierung einer orthographischen Tradition is *h* in Wortan- und -inlaut geschwunden”.

i.e. in the clusters  $*r\gamma$  and  $*l\gamma$ , to have been retained as Lat. *h*. But if such clusters occurred at an early stage, how could they have developed?<sup>23</sup>

On the one hand, we could compare the reflexes of liquid plus  $*s$  (another fricative) as a parallel. Since  $*s$  assimilates completely to a preceding *r* or *l*,<sup>24</sup> no doubt via a voiced allophone [z], a similar assimilation to *rr*, *ll* would not be unexpected (or: could be expected) as the outcome of  $*r\gamma$  and  $*l\gamma$ . Moreover, assimilation of  $*\gamma$  to a preceding glide may in fact be attested in the verb *meiō* ‘to urinate’, which is usually taken to reflect a thematic root present  $*h_3meiǵ^h-e/o-$ , “mit Beibehaltung der Silbentrennung ... und dem zweiten *i* als Übergangslaut” (Sommer and Pfister 1977: 147), i.e. [mejjō].<sup>25</sup>

On the other hand, from a phonetic viewpoint it would not be impossible to assume (as has been done) a fortition of  $*\gamma$  specifically after liquids:  $*r\gamma$ ,  $*l\gamma$  > Lat. *-rg-*, *-lg-*. One could point to the fact that pre-Latin underwent a fortition of voiced velar (and labiovelar) fricatives after nasals, i.e. in clusters  $*-n\gamma-$ ,  $*-n\gamma^w-$  reflecting  $*-ng^h-$ ,  $*-ng^wh-$ .<sup>26</sup> However, this parallel is only apparent: the fortition of  $*\gamma^{(w)}$  is clearly connected with the allophonic velar pronunciation [ŋ] of the preceding nasal; it cannot be used to support a similar development for  $*\gamma$  after liquids, as these did not have velarized allophones.<sup>27</sup>

Another environment for which fortition of  $*\gamma$  has been assumed is the position *before* liquids, i.e.  $*\gamma r$  > Lat. *gr* and/or  $*\gamma l$  > Lat. *gl*. However, none of the evidence for such a fortition is secure. For instance, for word-internal position, *figulus* ‘potter’ (PIE root  $*d^heig^h-$  ‘to knead, shape’) has been alleged to directly reflect  $*d^heig^h-lo-$  (e.g. EDL s.v. *figō*), but as now noted by Weiss (2020: 87) it must rather reflect  $*figelos$  with an original medial vowel in view of the 5th c. form FICOLOS (found on an inscription from the Palatine hill discovered in 2013), cf. also FIGEL (*CIL* 10.423, Volcei). This means that *figulus* is to

23 It is now generally thought that the sign *h* in the Sabellic languages represented a voiced velar or laryngeal fricative, i.e. [ɣ] or [ɦ]. For Faliscan, a general word-internal hardening of [ɣ] to [g] has been assumed on the basis of the spellings *ffiked* and *lecet* (from the roots  $*d^heig^h-$  and  $*leig^h-$ , respectively), but this view is criticized in Bakkum (2009: 75; see there for further references).

24 Cf. well-known examples like *torreo* ‘to dry, roast’ and *terra* ‘earth’ from PIE  $*ters-$ , and *collus* ‘neck’ beside Goth. *hals* ‘id.’ from  $*kolso-$ .

25 The reconstruction as a yod-present  $*h_3meiǵ^h-je/o-$  is phonetically possible, but implausible morphologically.

26 Cf. *angō* ‘to tie, strangle’ < PIE  $*h_2emǵ^he/o-$  (cf. Gr. ἄγγω ‘squeeze, strangle’), and also the nasal presents *lingō* ‘to lick’ (PIE  $*leig^h-$ ), *figō* ‘to knead; shape, form’ (PIE  $*d^heig^h-$ ), and *ninguit* ‘it snows’ ( $*sni-n-g^wh-eti$ ).

27 It is true that  $*r\beta$  (also  $*r\bar{\beta}$ , which merged with  $*r\beta$  by dissimilation) and  $*l\beta$  underwent a fortition to Lat. *rb*, *lb*. However,  $*\beta$  is normally reflected as Lat. *b* also in other environments, whereas  $*\gamma$  developed to *h* and was then lost. From the viewpoint of Latin phonology, then, the reflexes of  $*\beta$  do not offer a reliable parallel.

be analyzed, like *figūra* ‘shape’, as an analogical creation displaying the *-g-* that originated in the nasal present stem *finġō*. As for the highly-disputed reflexes of word-initial *\*g<sup>h</sup>r-* and *\*g<sup>h</sup>l-* in Latin, see most recently Vine (2018, with further references), who argues that the regular urban outcomes are *r-*, *l-*, whereas rustic varieties had *gr-*, *gl-*. In any case, even if indisputable evidence for *\*γr* > Lat. *gr* or for *\*γl* > Lat. *gl* were to emerge, it would not be obvious at all that this would imply a fortition in *\*rγ* or *\*lγ*, where prevocalic *\*γ* by itself forms the onset of the next syllable.

Thus, from a phonological and phonetic viewpoint, Latin *rr* and *ll* would be plausible reflexes of *\*rγ* and *\*lγ*, respectively. However, previous scholars have adduced a few pieces of evidence for *-rg-* and *-lg-* as the regular reflexes. As I will now argue in more detail, none of these etymologies is watertight.<sup>28</sup>

### 3 Counterevidence against (PIE *\*-lġ<sup>h</sup>-* >) *\*lγ* > *ll*

I have found only two possible counterexamples against a regular change *\*lγ* > *ll*: the root of *algeō* ‘to be cold’ (*algor* ‘cold’) and the verb *indulgeō*. Neither of them is compelling evidence.

To start with *algeō*, the reconstruction of a root *\*h<sub>2</sub>elġ<sup>h</sup>-* or *\*h<sub>2</sub>elg<sup>h</sup>-* (*LIV*<sup>2</sup> 263, with a question mark) is based solely on a comparison with Icelandicic *elgur* ‘slush, molten snow’ (Lidén 1897: 66). However, as noted by Kroonen (*EDPG* s.v. *\*algi-* 2), though the latter form may indeed theoretically reflect an *s*-stem *\*algiz-*, the comparison with the Latin *s*-stem *algor* is tenuous: *elgur* is isolated in Germanic, and could also be connected within North Germanic with Far. *elġja* ‘to pour down the throat’. Therefore, the reconstruction and further etymology of Latin *algeō* remain uncertain.

The verb *indulgeō* means ‘to be benevolent or indulgent (+ *dat.*, towards sth. or sbd.); be inclined (towards)’ and hence ‘to yield, concede (to), grant’, and so on. There exist various etymological proposals.<sup>29</sup>

First of all, *indulgeō* has been connected to the root of Sanskrit *dirghá-* ‘long’, Greek *δολιχός* ‘id.’, Slavic *\*dъlgъ* ‘id.’ (Russ. *dólġij*) and other related words.<sup>30</sup> This root is usually reconstructed as *\*delh.g<sup>h</sup>-* (the full grade of the Sanskrit com-

28 Even more uncertain is the suggestion that *tergeō* ‘to rub, wipe’ would be related to Skt. *tarh-* ‘to crush’ (*EDL* s.v. *tergeō*).

29 I will further disregard the proposal by Vendryes (1923: 429) to connect the root *\*d<sup>h</sup>elg<sup>h</sup>-* of Old Irish *dligid* ‘to be entitled to’, *dliged* n. ‘law’, Goth. *dulgs* m. ‘debt’. As the etymological dictionaries agree, this comparison is semantically implausible (cf. *DELL* and *LEW*, both s.v. *indulgeō*; the proposal is no longer mentioned in *EDL*).

30 See *DELL*, *LEW*, *EDL* (all s.v. *indulgeō*). The first to propose this was Havet (1889: 233).

parative *drāghīyas-* is probably secondary).<sup>31</sup> According to Walde-Hofmann, the meaning developed from “einer Person oder Sache gegenüber ausdauernd sein, sich langmütig zeigen”, i.e. ‘to be persevering or lenient towards (a person or thing)’, and the meaning underlying ‘to indulge in’ (“einer Sache frönen, nachhängen”) may have been ‘to continue, persevere’ (“fortdauern, ausdauern”). In view of the root-internal laryngeal, one would have to assume a full-grade root *\*delh.g<sup>h</sup>-* or *\*dolh.g<sup>h</sup>-* to arrive at Proto-Italic *\*de/olay-*. A pre-form *\*en-de/olay-(ē-)* would then have been affected by vowel reduction and syncope to yield *indulgeō*.<sup>32</sup>

More recently, it has been suggested in the *LIV*<sup>2</sup> that *indulgeō* contains the root *\*delg<sup>h</sup>-* ‘fest werden’ (along with Vedic *darh* ‘be strong’, various Celtic forms and Gothic *tulgus* ‘firm’). The author of the entry (Th. Zehnder) reconstructs it either as a stative verb, or as a causative *\*dolg<sup>h</sup>-eje/o-*. However, in a footnote he also remarks that “die semantische Verbindung is ungewiss und bedürfte noch der Klärung”; moreover, it is not made explicit how the prefix *in-* should be interpreted. In answer to these points, De Vaan (*EDL* s.v. *indulgeō*) subsequently proposed that *indulgeō*, as a stative verb, could be derived from a negated adjective *\*n-dlg<sup>h</sup>-ro-* “not hard”, whence ‘lenient, indulgent’.

As a third option, *indulgeō* could be a compound with *\*endo-* ‘inside, within’.<sup>33</sup> The idea is not new, but the reconstructions with a first member *\*endo-* referenced by Walde-Hofmann (*LEW* 695) are implausible. Nevertheless, given that *indulgeō* may refer to an internal affect (emotional state), a compound with *\*endo-* could make sense. I wonder whether the second part could be a stative verb related to Greek ἀλέγω ‘to take care of, heed’, either as *\*algē-* (*\*h<sub>2</sub>lg<sup>h</sup>-eh<sub>1</sub>-*) or as *\*legē-* (*\*h<sub>2</sub>leg<sup>h</sup>-eh<sub>1</sub>-*). This root is also continued in Latin *diligō* ‘to heed’, *neglegō* ‘to disregard’ and *intellegō* ‘to perceive; understand’. For *\*end(o)-algē-* or *\*endo-legē-* one could start from a basic meaning ‘to heed within’, whence ‘to be well-disposed (towards)’.

31 Balles (2010: 23–24) has suggested that *\*delh.g<sup>h</sup>-* is a univerbation of *\*delh,-* ‘long’ and *\*g<sup>h</sup>eh,-* ‘reach’.

32 In the case of an *o*-grade root *\*dolh.g<sup>h</sup>-*, one could expect the loss of *\*h*, due to the Saussure Effect (Nussbaum 1997). Although I am not convinced of the reality of the Saussure Effect, neither in Italic (Pronk 2011) nor in Greek (van Beek 2011), even if one does accept that the Saussure Effect would have affected *\*dolh.g<sup>h</sup>-*, the laryngeal may have been restored from related forms with zero grade root. Moreover, forms like Greek δολιχός (cf. also Hitt. *daluki-* ‘long’) have been argued by Balles (2010) to reflect compounds of an adjective *\*dolh,i-* plus a zero grade verbal root *\*g<sup>h</sup>h,-* plus a thematic vowel, that is, *\*dolh,i-g<sup>h</sup>h,-ó-* ‘reaching far’. From the perspective of historical phonology it is possible that such a form (instead of *\*dolh.g<sup>h</sup>-*) underlies *indulgeō*.

33 Cf. Ernout and Meillet’s “la coupe *ind + ulgēre* est aussi possible” (*DELL*, s.v. *indulgeō*).

Which of the above etymologies should we accept? Admittedly, the third proposal (a compound with *\*endo-*) remains somewhat hypothetical as far as the semantics are concerned. As for the second, De Vaan's suggestion to derive *indulgeō* from a negated adjective *\*n̄-dl̥gʰro-* seems artificial to me. Though there are well-known cases in Latin where one Caland suffix is substituted for the other, such as *ruber* 'red' (*\*h<sub>1</sub>rudʰ-ró-*) besides *rubeō* 'be red' (*\*h<sub>1</sub>rudʰ-eh<sub>1</sub>-*), I do not know of a parallel case where this substitution occurs in a negated compound. Note that a form *\*n̄-dl̥gʰro-* can hardly be of high antiquity if we go by the Greek evidence (where *\*-ró-* does not occur in compounded adjectives).

The connection with *\*delh<sub>1</sub>gʰ-* is criticized by De Vaan on the grounds that "the nasalless variant of this adjective is not attested in Italic" (where we only find *longus*, which is usually thought to be somehow related to *\*delh<sub>1</sub>gʰ-*).<sup>34</sup> This is not compelling, as an older root shape may have been preserved in combination with a preverb. It is conceivable, then, that we are dealing with an old compound with *\*h<sub>1</sub>en-* 'in', but the exact mechanism of derivation remains uncertain.<sup>35</sup> Perhaps one could assume that *indulgeō* is a denominative to the reflex of an adjective *\*h<sub>1</sub>en-dolh<sub>1</sub>gʰ-o-* > *\*indulgus*. The existence of an iterative/causative verb *\*en-dolh<sub>1</sub>gʰ-ejē/o-* seems unlikely to me, as the root does not furnish primary verbal forms in other Indo-European languages.<sup>36</sup>

However this may be, the main point, for present purposes, is the following: even if a reconstruction such as *\*de/olh<sub>1</sub>gʰ-* > pre-Latin *\*de/olay-* is accepted to underlie *indulgeō*, it could be assumed that the assimilation *\*ly > ll* occurred before the medial syncope in *\*en-de/olay-*, and that *\*ly* in the post-syncope form *\*en-de/oly-* was affected by fortition, yielding Lat. *-lg-*.

In sum, I do not wish to advocate any particular etymology for *indulgeō*, but merely note that there is no compelling reason to posit an Indo-European pre-form containing a cluster *\*-lgʰ-* or *\*-l̥gʰ-*. The form therefore cannot serve as counterevidence to the sound law proposed here. On the contrary, I

34 For an attempt to explain this connection with *longus* (though in my view not entirely successful), see Balles (2010: 23–24).

35 The local adverb *\*h<sub>1</sub>en-* is also contained in the Greek adjective ἐνδελεχής 'continuous; persistent'. In view of the full grade root of the second member, ἐνδελεχής looks like a possessive compound based on a neuter abstract *\*délh<sub>1</sub>gʰ-os*, i.e. "having length/endurance within". However, if pre-Latin had a reflex of *\*en-délh<sub>1</sub>gʰ-es-* meaning 'of long duration; persistent', it is not immediately clear how a stative verb in *\*-ē-* (*\*en-délh<sub>1</sub>gʰ-ē-* > Proto-Italic *\*endelayē-je/o-*) could be formed to this. The derivational link between compounds in *-ής* and verbs in *-έω* is an innovation of Greek and cannot be projected back into PIE. It is therefore not clear whether a direct link can be established between the formations of ἐνδελεχής and *indulgeō* (granting that they are etymologically related).

36 Cf. again Balles (2010) for the nominal status of *\*delh<sub>1</sub>gʰ-*. Kölligan (2007) does not include *indulgeō* in his discussion of Latin iteratives and causatives, presumably because its original status as a verb is too unclear.

would argue that *follis* and *vellō* force us to look for an etymology of *indulgeō* that does not involve such a PIE cluster. If the connection with Greek δολιχός, ἐνδελεχής (etc.) is accepted, we may assume that post-syncope instances of *\*ly* were not assimilated to *-ll-* but instead yielded *-lg-*.

#### 4 The absence of evidence for PIE *\*-rg<sup>h</sup>-* > pre-Latin *\*-ry-*

The question must now be posed what happened to *\*ry* from PIE *\*-rg<sup>h</sup>-*. If pre-Latin *\*ly* was assimilated to Lat. *ll*, one expects *\*ry* to be reflected as *rr*; thus, if we were to find compelling evidence for *\*ry* > *rg*, this could cast doubt on the above findings concerning *\*ly*. As it happens, however, there is (as far as I can see at present) no clear-cut etymological evidence for either reflex of *\*-ry-*. In most inherited words with *-rr-* this reflects *\*-rs-*, and instances of *-rg-* in Latin reflect either PIE *\*-rg<sup>h</sup>-* or *\*-sg<sup>h</sup>-*.

As for potential evidence for *\*rg<sup>h</sup>* > Latin *rg*, the only relevant lexeme that I have been able to identify is *urgeō* ‘to press, push, force, drive, impel, urge’. *LIV*<sup>2</sup> (p. 697) derives this from the zero grade root of Goth. *wrikan* ‘to pursue’, but this idea is difficult to sustain for morphological and, especially, semantic reasons (cf. Zair 2017: 264). Schrijver (1991: 76) alternatively proposed that *urgeō* is related to Lith. *vēžti* ‘to tighten, squeeze’, OCS *ot-vrěsti* ‘to untie’ and ON *virgill* ‘noose’ (cf. also OE *wyrgan* ‘to strangle’), which reflect a root *\*uerg<sup>h</sup>-*.<sup>37</sup>

There are, however, two problems with Schrijver’s etymology. First, while Zair (2017: 265) claims that “a causative/iterative *\*uorǵ<sup>h</sup>-eje/o-* would work semantically”, there is a clear divergence in lexical meaning: while the alleged cognates in Germanic and Balto-Slavic have to do with tying ropes, this notion is absent from Latin *urgeō*. Secondly, and more problematically, Lat. *urC-* cannot reflect PIE *\*urC-* (which would result in OLat. *vorC-* > class. *verC-*, cf. *ver-sus* < *\*urt-tós*, *vermis* ‘worm’ < *\*urmís*), and the idea that *urC-* may reflect PIE *\*uorC-* (as proposed by Zair 2017) is in my view not supported by sufficient evidence.

In any case, there is an alternative etymology of *urgeō* that accounts in a natural way not only for its semantics, but also for the onset reflex *urg-*. In my view, *urgeō* must be related to Greek ἐέργω, εἴργω ‘to keep or force in a certain position, check’, the root of which is reconstructed as *\*h<sub>2</sub>uerg-*.<sup>38</sup> Among the more recent etymological dictionaries of Greek and Latin, only *DELL* (s.v.

37 See *LIV*<sup>2</sup> 688. As de Vaan (*EDL* s.v. *urgeō*) remarks, “If correct, this etymology would show that PIE *\*-rg<sup>h</sup>-* yields Latin *rg*”.

38 I see no compelling reason to reconstruct *\*h<sub>2</sub>uerg-*, as the Hittite noun *hurki-* ‘wheel’ can be unrelated.

*urgeō*) and *DELG* (s.v. εἶργω) mention this connection, though merely as a possibility. It is rejected without clear argumentation by Schrijver (1991: 76: “for semantic reasons”) and is not even mentioned by Zair (2017). In reality, the meanings of *urgeō* and εἶργω are close; moreover, the root-initial laryngeal may explain why the zero grade was vocalized as *\*h<sub>1</sub>urg-* rather than *\*(h<sub>1</sub>)urg-* and hence reflected in Latin as *urg-*, as opposed to a laryngeal-less root *\*urg-* which would have resulted in *uorg-* > *uerg-*.<sup>39</sup> In view of this attractive possibility, *urgeō* cannot serve as evidence for the outcome of PIE *\*rǵ<sup>h</sup>*.

Finally, an idea by Katz (1998) must be mentioned in this connection. Katz claims to have found evidence for a change *\*rǵ<sup>h</sup>* > Lat. *rb*, via an intermediate stage *rh*.<sup>40</sup> I am not convinced by any of the examples he provides, because of the irregular phonological developments involved and the unconvincing nature of the assumed semantic developments. Moreover, even if Katz’s idea turned out to be correct, it would not affect the possibility of a development *\*ly* > *ll* discussed here, as the author assumes that the reflex of *\*rǵ<sup>h</sup>* (like that of *\*rd<sup>h</sup>*) merged with the reflex of *\*rb<sup>h</sup>* at some point in Latin prehistory; such a development would not have affected a cluster *\*lǵ<sup>h</sup>*.

## 5 Further possible evidence for *\*ly* > Latin *ll*

### 5.1 Latin *fel*

Latin *fel fellis* n. ‘gall bladder; bile’ can reflect nom./acc. *\*b<sup>h</sup>elǵ<sup>h</sup>*, gen. *\*b<sup>h</sup>elǵ<sup>h</sup>es*. It is important to note that the meaning ‘bile’ may well be secondary, as *bīlis* is the normal word for the fluid, while the bladder is always referred to as *fel*. This allows us to connect *fel* to the root *\*b<sup>h</sup>elǵ<sup>h</sup>*- ‘swell, billow’ discussed in section 1.1.

Thus far, several other reconstructions of *fel* have been proposed, but various problems with them remain. It has been noted that the endless form *fel* must be a simplified form of *\*fell*: only in this way can we explain why it did not change to *\*fol* (cf. *EDL*, with reference to Cowgill). As for the inflected case forms (gen.sg *fellis*, etc.), their stem might theoretically reflect *\*fel-n-* or *\*fel-d-*, but only the *n*-stem is potentially matched in another branch, Germanic *\*gallan-* or *\*gallōn-*. Moreover, reconstructing *\*fel-n-* would mean that the

39 Concerning the problem of *urg-* as a Latin reflex of *\*urg-*, see the remarks by Kölligan (2007: 57). – Note that Latin *vergō* ‘(intr.) to incline, verge, slope; (tr.) bend, turn, pour’ either has a different ablaut grade (if it belongs to the root *\*h<sub>1</sub>uerg-*, as is assumed by De Vaan, *EDL*) or does not reflect the same root as *urgeō*.

40 For instance, the adjective *berber* attested in the archaic Latin *Carmen Arvale* is argued to reflect PIE *\*d<sup>h</sup>erǵ<sup>h</sup>-rǵ-s* (akin to Avestan *dərəzra-* ‘strong, solid’, but with an awkward *e*-grade root). The noun *orbis* ‘circle’ would represent the Indo-European word for ‘testicle’, *\*h<sub>1</sub>orǵ<sup>h</sup>-i-*.

nom./acc. form *fel* is secondary for *\*felen*. The main issue is that the etymological connection of *fel* with words for ‘bile’ like Gr. χόλος, Av. *zāra-* and possibly Lith. *tulžis* (if this was metathesized from *\*žultis* < *\*ǵ<sup>h</sup>lh<sub>3</sub>-ti-*) is problematic: these reflect a root *\*ǵ<sup>h</sup>el(h<sub>3</sub>-)*, and the expected reflex of *\*ǵ<sup>h</sup>-* would be Lat. *h-*. For this reason it has been cautiously assumed (e.g. Leumann 1977: 169; *EDL* s.v. *fel*) that *fel* is a dialectal borrowing into urban Latin, but there is no concrete evidence to support this. Finally, to assume that *fel* *fellis* was influenced by *mel mellis* ‘honey’ does not help much, as the pre-form of *mel* is not quite clear either, meaning that the direction of the influence cannot be established.

Reconstructing *fel* *fellis* as *\*b<sup>h</sup>elǵ<sup>h</sup>*, gen. *\*b<sup>h</sup>elǵ<sup>h</sup>es* would resolve several problems. The Latin paradigm directly follows from the reconstructed root, and the meaning ‘gall bladder’ may be a specialization of a more general meaning ‘bladder, sack’ (cf. Engl. *belly* reflecting PGmc. *\*balgi-*). The main question raised by this reconstruction concerns the accent and ablaut paradigm. Did this paradigm have other ablaut grades, apart from the *e*-grade? Was it static or accentually mobile? Given the absence of a direct morphological comparandum in another language, it is not possible to answer this question in a definite way.

In sum, the proposed reconstruction of *fel* resolves the phonological and semantic problems posed by this word from a Latin-internal viewpoint, but the reconstruction remains somewhat hypothetical given the absence of cognates reflecting a neuter root noun.

## 5.2 Latin *ille*

A final possible piece of evidence for a change *\*ly* > *ll* is the demonstrative pronoun *ille*. In my view it may reflect the local adverb *\*ol-* ‘on the other side; over there’ plus the stem *\*ho-* underlying *hic* ‘this’ (from *\*ho-* plus *-ke*). If so, it could be that its *ll* does not continue *\*ly* but instead reflects a sandhi development of *-l* plus *h-*.

It is widely agreed that the initial *i*-vowel of Latin *ille* is secondary,<sup>41</sup> as Old Latin has the form *olle*, of identical function. The latter form is matched by Oscan gen.sg.m *úlleis*, acc.sg.m *ulum*, etc.,<sup>42</sup> although it is uncertain by which exact process the vowel was changed in Latin to yield *ille*.<sup>43</sup>

41 Differently, Dunkel (*LIPP* II, 593 n. 9) thinks that *ille* arose by syncretism of two pronouns, *\*is li* and *\*ol-no-*.

42 For the forms, see Untermann 2000: 793.

43 According to some, the initial vowel of *olle* may have been influenced by that of *is* and *iste* (e.g. Leumann 1977: 470: “eine semantisch bedingte Lautangleichung an die Pronomina *is* und *iste*”). Others (e.g. Sihler 1995: 394) note that *olle* may have been weakened to *ille* in pretonic position. The details of this issue will not further concern us here.

The first element of this form must be the same *\*ol-* underlying *ulter* ‘on the other side’ and *ultimus* ‘utmost; last’. Its *-ll-* has thus far been reconstructed in two different ways. Most often (Meiser 1998: 163; Weiss 2020: 367; *EDL* s.v. *olle* / *ollus*), *-ll-* is traced back to *\*-ln-* with reference to a Slavic word for ‘last year’, OCS *lani*, Sln. *láni*, etc. < PSl. *\*olni*. The Slavic word is thought to reflect an elliptic locative noun phrase ‘in the other (year)’.<sup>44</sup> Alternatively, the Proto-Italic form has been reconstructed as *\*ol-so*, with a second part reflecting the nom.sg stem allomorph of the PIE pronoun *\*so*, *\*to-*. I will now first discuss the problems with both reconstructions, before presenting *\*ol-* plus *\*ho-* (plus *\*-ke*) as an alternative.

The first reconstruction *\*h<sub>2</sub>ol-no-* has most supporters, but in my view it is the least plausible. It has been objected that *\*h<sub>2</sub>ol-no-* could not have yielded forms like Oscan *úlleis* as *\*-ln-* yielded *-nn-* in Umbrian,<sup>45</sup> but this argument is probably not decisive.<sup>46</sup> More problematic is the fact that the stem *\*h<sub>2</sub>ol-no-* or *\*h<sub>2</sub>ol-ni-* allegedly underlying Slavic *\*olni* ‘last year’ is not a demonstrative pronoun, but at best reflects a pronominal adjective meaning ‘other’. The reconstruction of such an adjective in PIE, however, cannot be based solely on Slavic *\*olni*.<sup>47</sup> Moreover, if we derive *ille* from *\*h<sub>2</sub>ol-no-*, we would have to assume that its pronominal inflection arose from an adjectival one. This is not entirely excluded, but it is a considerable assumption which makes the reconstruction much less plausible. In particular, it should be noted that the other thematic pronominal adjectives (*alius*, *alter*, *sōlus*, *tōtus*, *ūnus*, *ūllus*, *nūllus*, *uter* and *neuter*) were only partly adapted to the pronominal paradigm: they changed their genitive and dative singular forms into *-ūs* and *-ī*, but kept the adjectival singular forms in *-us* (nom.m.) and *-um* (nom/acc.n.). The evidence for Old Latin *oll-* is ambiguous in this respect.<sup>48</sup>

In this context we must briefly discuss Osc. *allo* (f.) ‘whole’, another form that is sometimes compared to *ille* and its alleged pre-form *\*h<sub>2</sub>ol-no-*. This is

44 *EDPC* (s.v. *\*olo-*) and *EDSIL* (s.v. *olni*) speak of a “demonstrative” pronoun *\*h<sub>2</sub>ol-* that would be continued in OLat. *ollus*. This is clearly mistaken, as OIr. *ol* ‘beyond’ and Latin *ul-ter(ior)* ‘on the other side, farther, beyond’, *ul-timus* ‘farthest’ provide clear evidence only for a local adverb *\*h<sub>2</sub>ol-*.

45 Meiser (1986: 164–165), followed by Untermann (2000: 81).

46 Note that *\*-ln-* may have developed differently in Oscan as opposed to Umbrian, and that U. *-nt-*, *-nd-* in the examples *endendu* and *ampentu* discussed by Meiser arose by syncope from *\*telna-t-*, *\*pelna-t-* (as remarked by De Vaan, *EDL* s.v. O. *allo*).

47 OIr. *oll* ‘large’ is probably unrelated, see *EDPC* s.v. *\*folno-*.

48 There are only two attestations of the nominative singular masculine, one for *olle* and another for *ollus*, and there is no evidence for the neuter (*\*ollud* or *\*ollum*). If *ollus* was original, its inflection was secondarily aligned with that of the other demonstratives *iste* and *hic*. If *olle* was original, *ollus* would not be difficult to form either.

clearly related to Germanic *\*alla-* (Goth. *alls* ‘all, every’, ON *allr* ‘all, entire, whole’, etc.).<sup>49</sup> These forms may reflect *\*h<sub>2</sub>el-no-*<sup>50</sup> and are often assumed to be related to the root *\*h<sub>2</sub>el-* ‘beyond; other side’. However, it is unclear how such a meaning would develop into ‘all’, or what the suffix *\*-no-* would contribute to this semantic shift. In my view it is possible, given other words whose meaning ‘whole’ can be traced back to ‘sound, vigorous’ or ‘unscathed’;<sup>51</sup> that the root underlying Osc. *allo* and Germanic *alla-* is that of Latin *alō* ‘to nourish’, Gothic *alan* ‘to grow’, Old Irish *alid* ‘to feed, raise’.<sup>52</sup> This would, then, be a different root from PIE *\*h<sub>2</sub>el-* underlying OIr. *ol* ‘beyond’ and *\*h<sub>2</sub>el-jo-* > Latin *alius*, Greek *ἄλλος* ‘other’, etc. In sum, Osc. *allo* cannot be used to support a reconstruction *\*h<sub>2</sub>ol-no-* for Lat. *ille*.

The second reconstruction *\*ol-so* proposed for *ille* is better than *\*h<sub>2</sub>ol-no-*, but not without problems either. It is assumed that both PIE *\*so-*, *\*seh<sub>2</sub>* and the stem allomorph *\*to-* left reflexes in Italic. Of these, *\*so-*, *\*seh<sub>2</sub>* is probably reflected in the Old Latin anaphoric forms acc.sg *sum*, f. *sam*, acc.pl *sōs*, f. *sās* (standing in for classical *eum*, *eam*, *eōs*, *eās*),<sup>53</sup> and possibly in the conjunction *sī* (*seī*) ‘if, when’ and in *sapsa*, an older feminine form of *ipse*. The other stem *\*to-* underlies the adverbs *tum*, *tunc* ‘then, at that time’, *tam* ‘to that extent’, as well as the second element of *iste* (which is matched in Umbrian and South Picene *esto-*, although it remains uncertain what the first part *es-* of this pronoun was). Since direct evidence for a stem *\*so-* is practically limited to accusative forms that are used anaphorically, it is uncertain whether *\*so-* ever spread to other case forms. Put differently, there is no evidence for a full-fledged demonstrative pronominal stem *so-* to which the local adverb *ol-* could have been prefixed. This leaves the option that the paradigm of *ille* was based on the nominative and accusative forms.

49 Another form of ‘whole, all’ without the suffix *-no-* occurs in the Old Germanic languages as *\*ala-* in compounds, e.g. Goth. *ala-brunst* ‘completely burnt, δόξαυστον’. It may reflect another adjective *\*h<sub>2</sub>ol-ó-* ‘fully grown’ to the same root, with anticausative semantics. Another related form is Lith. *aliaĩ* adv. ‘completely’ (with an adverbial suffix *-ai*), reflecting *\*h<sub>2</sub>ol-io-* or *\*h<sub>2</sub>el-io-*.

50 See n. 46 above (and EDL s.v. O. *allo*) concerning the development of Plt. *\*-ln-* in Sabellic. The reconstruction of OIr. *uile* adj. ‘all, whole, entire’ is unclear: it might reflect *\*solio-* or *\*h<sub>2</sub>olio-*.

51 Cf., among many other examples, Engl. *whole*, Du. *heel* ‘whole, entire’, where the older meaning is found in Goth. *hails* ‘healthy, sane’, and both meanings in ON *heill* ‘healthy, sound; whole’.

52 This is also the view of Dunkel, LIPP II, 19 with n. 6 (“aus semantischen Gründen”, but without further elaborating the claim).

53 As remarked by Weiss (2020: 359 with n. 12), these forms are all attested exclusively for Ennius’ *Annales* (not in other extant fragments), with the exception of *sam*, which also occurs in the *Twelve Tables*.

Though *\*also-* is not impossible as a pre-form of OLat. *ollo-*, a new and possibly attractive alternative is now available: *ille* could reflect *\*ol-* plus the stem *\*ho-* that underlies *hic*, with an assimilation *\*ol-ho* > *olle*. This works if pre-Latin *\*ho-* was originally deictically neutral and if we assume that its proximal deixis developed relatively late, when the paradigms with and without the particle *-c(e)* were grammaticalized.<sup>54</sup> The reconstruction *\*ol-ho* (plus or minus *\*-ke*) would offer a straightforward explanation of the parallel inflection of *ille* and *hic*.<sup>55</sup> Note that in Old Latin, the element *-c* was not yet restricted to certain case forms of *hic*; *-c(e)* could be optionally added in most forms of both pronouns. In addition, it explains the structural opposition between *ille* and *hic*, which refer to entities that are more remote from the speaker and closer to the speaker, respectively, as illustrated by:

*aut in solem illum aut in hunc mundum cadere non potest* (Cic. *N.D.* 1.95)

(this bliss) can belong neither to the sun over there, nor to this world

*in his undis maluit jactari quam in illa tranquillitate vivere* (Cic. *Rep.* 1.1)

he wanted rather to be tossed about in these waves (of Roman politics)  
than to live in that tranquility (of Tusculum)

54 For this, compare PIE *\*só, tó-*, which in Greek developed proximal deixis only in combination with a cliticized particle: ὄδε, ὅνυ ‘this (over here)’ (versus ὁ μὲν ... ὁ δέ ‘the one ... the other’, which is deictically neutral).

55 As for its inflection, from Plautus onwards *ille* closely mirrors *iste*, but to a considerable extent also *hic*, and this similarity was even more pronounced in the prehistory of Latin. Of course, in classical Latin *hic* underwent accretion of the particle *\*-ke* in most forms of the singular paradigm, but otherwise all three paradigms can be derived from a single set of endings in prehistoric Latin, and *\*-ke* could originally (and still in Old Latin) be added also to forms of *ille* and *iste*. In the singular all three demonstratives are characterized by an endingless nom. masculine, a nom./acc. neuter in *-d*, and genitive and dative forms that are unmarked for gender. The gen. ending can be reconstructed as *\*-eḡos* < PIE *\*-osjo* plus *-s*, and the dative seems to reflect *\*-eḡ-ei* which may have been created analogically besides *\*-eḡos* when this was reanalyzed as having the athematic gen. ending *os*; cf. Weiss (2020: 363). The nom., acc. and abl. forms have the thematic adjective endings for all three genders, except in the endingless nom.sg.m. In the case of *ille* and *iste*, these case forms yielded *-ūs* and *ī* by vowel reduction of the medial syllable, whereas in *hic* the rounded quality of this vowel was preserved as *u* in an initial syllable, in the forms *huius* and *hui(c)*. A final peculiarity of *hic* is that the feminine nom.sg and neuter nom/acc.pl forms have received an additional *-i-* before the particle *-c*, but there can be no doubt that this represents a secondary addition.

This is not the place to discuss the functional differences between *ille* and *iste* in more detail, but it will be evident why it is attractive to analyse *ille* as ‘*hic* with added distal deixis’ once it is granted that the proximal deixis of *hic* could be a secondary development.

## 6 Excursus: Greek λάχνη and (ἀμφι)λαχαίνω

As a bonus, a PIE root *\*melgʰ-* can also help us explain the origins of a Greek lexical group containing a root λαχ-. The feminine noun λάχνη may denote the down or fluff of human hair, the fur or mane of animals, the hair of a fabric (all from Homer onwards), and also sheep’s wool (Soph. *Tr.* 690).<sup>56</sup> In a study consecrated to this group of words, Ch. de Lamberterie (1975) has proposed that the feminine adjective λάχεια, said of geographical features (an island and a promontory) in both its occurrences in the *Odyssey*, means ‘wooded’ and is related to λάχνη. Furthermore, he convincingly argued that the verb ἀμφιλαχαίνω (attested in the phrase φυτὸν ἀμφελάχαινε at *Od.* 24.242) means ‘to pluck the weeds (around a vine)’ rather than ‘to hoe, harrow’.

A widely accepted reconstruction of λάχνη (*DELG*, *GEW*, *EDG*) is *\*μῆksneh<sub>2</sub>-*, assuming a connection with Ved. *válsa-* ‘twig’ and Russ. *vólos* ‘hair’ from *\*μólk-o-*. An objection to this was made by Lamberterie (1990, II: 733): in early Greek epic, all instances of λάχνη and the derived adjective λαχνήεις ‘woolly, hairy’ behave prosodically as words starting with a single consonant. For Lamberterie, this contradicts any reconstruction with initial digamma.

In my opinion this objection is not decisive. Let us first of all briefly consider the evidence for Lamberterie’s claim. As I have recently argued, it is indeed possible to show that the prosodic behavior of etymological *\*μr-* in Homer is different from that of *\*sr-*, and that *ρ-* reflecting *\*μr-* should in principle close a preceding short open syllable.<sup>57</sup> However, the evidence for the prosodic treatment of etymological *\*μl-* in Homer is much less clear, for want of good evidence. There is one lexical root in Homer whose onset certainly reflects etymological *\*μl-*, namely *\*μleik<sup>w</sup>-* ‘liquid’ (reflected in λιπαρός ‘fat’ and adv. λίπα ‘richly’), and one other lexeme in λ- whose onset may reflect *\*μl-*, λάσιος ‘hairy, rough’ per-

56 Homeric Greek may also have a masculine counterpart λάχνος ‘fleece’, attested as a *varia lectio* competing with λαχμός (oxytone), both *hapax eiremena*, at *Od.* 9.445. Lamberterie (1990, II: 733) argues that λαχμῶ, the best attested form in manuscripts, is to be preferred over λάχνω, the form printed by most editors.

57 Van Beek (fthc.), where the complete evidence is sifted and subjected to a prosodic and metrical analysis.

haps from *\*μlt-io*.<sup>58</sup> Of these three words, *λιπαρός* is placed in 13 out of 22 occurrences after a word-final short vowel, making position length; *λίπα* (9×) only once follows a short vowel, and *λάσιος* (5×) never does. Other words in which *λ-* can make position length (i.e. in which *λ-* may start the second half of a foot) have no clear etymology: *λιαρός* and *λαπάρη* ‘flank, side’ often appear after short vowels, with *λ-* making position, while *λιγύς*, *λιγέως* behaves according to metrical demands. Interestingly, in one group of lexemes that almost certainly reflect plain *\*l-*, the onset liquid is sometimes used to make position, sometimes not: *λίσσομαι* ‘to supplicate, entreat’ (cf. also *λιτανεύω* ‘id.’ and *λιτή* ‘prayer’).<sup>59</sup>

Under these circumstances, it would be random to claim that the prosodic behavior of *λιπαρός* must be expected to hold true for all words with initial *\*μl-*. For one thing, the spread of prosodic lengthening before *λ-* to cases without etymological *\*μl-* (like *λίσσομαι*) may well betray that the reduction of *\*μl-* to *\*l-* before vowels took place relatively early – perhaps earlier than the simplification of *\*μr-*. Moreover, claiming that a hypothetical onset *\*μl-* of *λάχνη* must be reflected in its prosodic behaviour in Homer disregards the possibility (which cannot be easily discarded) that *λάχνη* was introduced into the language of Epic from contemporary Ionic only at a recent stage, while words like *λιπαρός* were present in the tradition much earlier. Finally, it is not to be excluded that the non-occurrence of position length before *λάσιος* is connected to the erstwhile presence of a syllabic liquid in this word (assuming that the reconstruction *\*μlt-io-* is indeed correct); in this case, the same may have been true of *λάχνη* (and *λαχνήεις*), provided that the presence of this word in Epic Greek is traditional.<sup>60</sup>

In sum, it is possible that *\*μlǵʰ-* developed into *\*μlakʰ-* (with the regular Ionic-Attic reflex of *\*l* between two Proto-Greek consonants, independent of the phonetic environment: cf. van Beek 2022, chapter 10) and then simplified its onset cluster to *l-* before this could leave a trace in Homeric prosody.

58 Cf. Van Beek (2022: 448) for doubts concerning the comparison with Germ. *Wald* ‘forest’ and OIr. *fol* ‘hair’.

59 The words are related to Lith. *liēsti* ‘to touch’: see *LIV*<sup>2</sup> s.v. 2. *\*leit-*; the original supplication gesture of touching the knees is still visible in Homeric Greek, e.g. *γούνων ἔλλιτάνευσα* (*Od.* 10.481). Of 74 occurrences of the verb *λίσσομαι* in Homer, 28 are encountered at the beginning of the verse, 7 are preceded by a metrically long augment syllable (e.g. *ἐλλίσσετο*), 15 stand after a word-final short vowel, and in the remaining 24 cases the prosodic behavior of *λ-* is indeterminate. Among the 15 cases following a short vowel, 8 have no position length (all in the *Odyssey*), while 7 do show position length (all in the *Iliad*).

60 In Van Beek (fthc.) I argue that the absence of position length before many instances of the verb *ρέζω* (e.g. verse-final *μέρμερα ρέζειν*, *αἴσυλα ρέζειν* and the frequent augmented past tense forms *ἔρεξα*, *ἔρεζον*) is to be ascribed to an erstwhile syllabic liquid. For traces of syllabic *\*r* in Homeric Greek, see van Beek (2022, chapters 6 and 7).

Another objection to a reconstruction *\*u<sub>2</sub>lk-sneh<sub>2</sub>-* has not been mentioned before: this form would ultimately have to be derived from an *s*-stem *\*uelk-es-* by means of the adjective-forming suffix *\*-nó-*. However, no *s*-stem neuter is attested for the root *\*uelk-* (Ved. *válsa-* and Russ. *vólos* reflect *\*uólk-o-*). It should also be taken into account that the stem *λάχαν-* of *ἀμφιλαχαίνω* and *λάχανον* cannot be easily explained from *\*u<sub>2</sub>lk-sneh<sub>2</sub>-*, for the outcome of this pre-form would have had the shape *\*ulaksnā-* until the late Mycenaean period (cf. Myc. *a<sub>3</sub>-ka-sa-ma* besides alph. Gr. *αἰχμή*), at which time a denominative verb would have been given the shape *\*ulaksná-e/o-* > *†λάχνάω*. On the other hand, a form *\*ulak<sup>h</sup>nā-* or *\*ulak<sup>h</sup>no-* (from PIE *\*u<sub>2</sub>lǵ<sup>h</sup>-neh<sub>2</sub>-*) existing in Proto-Greek may have easily spawned a denominative verb *\*ulak<sup>h</sup>η-je/o-* > *\*(u)lak<sup>h</sup>anie/o-* > *λαχαίνω* if the stem-final thematic vowel was still deleted in early denominative verbs in *\*-je/o-* (for this procedure, cf. *ἀγγέλλω* derived from *ἄγγελος*); the noun *λάχανον* could be a derivative of this verb, or it may have acquired its second *α*-vowel under the influence of it.

Now, as Lamberterie (1990, II: 742) remarked on *λάχνη* and *ἀμφιλαχαίνω*, “l'étymologie de cet ensemble ne sera établie que lorsque l'on aura réussi à identifier une racine verbale”. Indeed, all previous reconstructions<sup>61</sup> of the Greek forms appear to be superseded now that we have identified a verbal root PIE *\*u<sub>2</sub>lǵ<sup>h</sup>-* ‘to pluck, tear out’. Both form *and* meaning of *ἀμφιλαχαίνω* ‘to pluck weeds’ and *λάχανα* ‘herbs, vegetables’ follow more or less directly from the reconstruction *\*u<sub>2</sub>lǵ<sup>h</sup>-nó-*.<sup>62</sup> Moreover, the noun *λάχνη* (and the v.l. *λάχνος*, if its reality is granted) can easily be substantivizations of a resultative adjective *\*u<sub>2</sub>lǵ<sup>h</sup>-nó-* ‘torn, plucked’. As with several other words meaning ‘wool’ and ‘fleece’, the semantic motivation is that the wool was plucked from the fleece. Thus, a sheep’s fleece could be referred to with a result noun ‘that which is plucked (at, from)’, and for denoting wool or down as a material, the feminine noun *λάχνη* (originally ‘plucked stuff’) was used.

61 Nyman (1984: 84–86) reconstructs a PIE root *\*laǵ<sup>h</sup>-*, comparing the Slavic word for ‘vine’, *loza* (accent paradigm *c*) as well as Avestan *razura-* (expanding on a brief suggestion in Lamberterie 1975). For doubts regarding these connections, cf. Lamberterie (1990: 741–742).

62 Note that *(ἀμφι)λαχαίνω* can easily be a denominative to *λάχανα*, given the observations on the semantics of words for plucking and peeling made by Lamberterie (1975: 237); the chronological objection made by Nyman (1984: 82) is unconvincing. Conversely, *λάχανα*, assuming that its earlier sense was ‘weeds’, could be derived from (or back-formed to) *λαχαίνω* ‘to weed, pluck plants’ (Nyman 1984: 83 starts from the meaning ‘remove leafage’). Lamberterie’s idea (1975: 237; accepted by Nyman 1984: 82) to derive *(ἀμφι)λαχαίνω* from (a pre-form of) *λάχνη* ‘wool, down’ is more problematic, as it would require us to derive both *λάχνη* and *λαχαίνω* from an older athematic *n*-stem.

As a final note, we must ask whether this reconstruction can account for the nouns *λόχμη* ‘bush, coppice’ and *λόχος* ‘ambush’, which Lamberterie (1975) argues must also be connected to *λάχνη* and *ἀμφιλαχαίνω*. Usually these words are connected with the root *\*leg<sup>h</sup>-* ‘lie down’.<sup>63</sup> In case these words are *o*-grade derivatives to *\*uelg<sup>h</sup>-*, one would have expected them to display a root shape *\*olk<sup>h</sup>-*. Therefore, given that troops can be said to ‘lie in ambush’, and given words for ‘encampment’ like Germ. *Lager*, the traditional derivation from *\*leg<sup>h</sup>-* is certainly to be preferred for *λόχος*. As for *λόχμη*, if one wishes to retain the root connection with *λάχνη*, one could assume that *λόχμη* reflects a zero grade root, too, with an Aeolic reflex *\*l > λο*. This is not impossible per se (as *λόχμη* is a poetic word, unattested in classical prose), but not without problems as *λόχμη* also occurs several times in Aristophanes, including in a colloquial-sounding phrase like *ἔχω τὰς μασχάλας λόχμης δασυτέρας* ‘my armpits are more hairy than a thicket’ (*Eccl.* 60–61). It is therefore unclear whether *λόχμη* can be derived from the same root as *λάχνη* and *ἀμφιλαχαίνω*.

## 7 Conclusions

Two Latin words, *follis* ‘leather bag’ and *vellō* ‘to tear off, pluck’, have been provided with new and attractive etymologies. They allow us to posit a sound change PIE *\*lg<sup>h</sup> > \*ly > Lat. ll* that is natural and unsurprising from the viewpoint of Latin phonetics and phonology. Other possible but less compelling evidence for the same change is Lat. *fel* (gen. *fellis*) ‘gall (bladder)’; in addition, the distal demonstrative *ille* (OLat. *oll-*) could reflect *\*ol-* ‘over there’ plus the demonstrative stem *\*ho-*.

No concrete evidence for the outcome of PIE *\*rg<sup>h</sup>* in Latin has been found, but if *follis* and *vellō* have been correctly identified as evidence for *\*lg<sup>h</sup> > ll*, one should not be surprised if evidence for a parallel change *\*rg<sup>h</sup> > rr* should appear in the future.

The etymologies proposed for *follis* and *vellō* are also of importance for Indo-European reconstruction. First, a root *\*uelg<sup>h</sup>-* ‘to tear off, pluck’ can now be added to the Proto-Indo-European lexical inventory; it has descendants (apart from Latin *vellō*) in Vedic Sanskrit *varh* ‘to tear off’ and probably also Greek *λάχνη* ‘down, fluff, wool’ < *\*uelg<sup>h</sup>-neh<sub>2</sub>-*, *λάχανα* ‘herbs, vegetables’ and *(ἀμφι)λαχαίνω* ‘to weed’. Latin *vulnus* ‘wound’ and Greek *λάχνη* could be substantivizations based on the same *no*-adjective *\*uelg<sup>h</sup>-nó-*. Secondly, the *i*-stem *\*b<sup>h</sup>olg<sup>h</sup>-i-* ‘skin bag’ reflected in most early Germanic languages (Goth. *balgs*,

63 Cf. Beekes *EDG* II: 852 f., Frisk *GEW* II: 111.

ON *belgr*, etc.) appears to have left a trace in Latin *follis*, too. Given this identity in form and meaning, and that *\*b<sup>h</sup>olǵ<sup>h</sup>-i-* ‘skin bag’ is not a trivial innovation, the form can be reconstructed as a lexical item for the latest stage of PIE to which Proto-Germanic and Proto-Italic both belonged.

### Abbreviated works

- DIL*: Marstrander, Carl, Joynt, Maud, Quin, Ernest G. *et al.* (1913–1976). *Dictionary of the Irish language. Based mainly on Old and Middle Irish materials.* Dublin / London.
- DELG*: Chantraine, Pierre (1968–1980). *Dictionnaire étymologique de la langue grecque. Histoire des mots.* Paris.
- DELL*: Ernout, Alfred, and Meillet, Antoine (1985). *Dictionnaire étymologique de la langue latine. Histoire des mots* (4th edn.). Paris.
- EDAIL*: Martirosyan, Hrach (2010). *Etymological dictionary of the Armenian inherited lexicon.* Leiden / Boston.
- EDBIL*: Derksen, Rick (2015). *Etymological dictionary of the Baltic inherited lexicon.* Leiden / Boston.
- EDG*: Beekes, Robert S. P. (2010). *Etymological dictionary of Greek* (2 vols.). Leiden / Boston.
- EDHIL*: Kloekhorst, Alwin (2008). *Etymological dictionary of the Hittite inherited lexicon.* Leiden / Boston.
- EDL*: De Vaan, Michiel (2008). *Etymological dictionary of Latin and the other Italic languages.* Leiden / Boston.
- EDPC*: Matasović, Ranko (2009). *Etymological dictionary of Proto-Celtic.* Leiden / Boston.
- EDPG*: Kroonen, Guus (2013). *Etymological dictionary of Proto-Germanic.* Leiden / Boston.
- EWAia*: Mayrhofer, Manfred (1986–2002). *Etymologisches Wörterbuch des Altindischen.* Heidelberg.
- GEW*: Frisk, Hjalmar (1960–1972). *Griechisches etymologisches Wörterbuch* (3 vols.). Heidelberg.
- KEWA*: Mayrhofer, Manfred (1956–1980). *Kurzgefasstes etymologisches Wörterbuch des Altindischen.* Heidelberg.
- L-S*: Lewis, Charlton, and Short, Charles (1879). *A Latin dictionary.* Oxford.
- LEW*: Walde, Alois, and Hofmann, Johann B. (1938–1954). *Lateinisches etymologisches Wörterbuch* (3 vols.). Heidelberg.
- LIPP*: Dunkel, George E. (2014). *Lexikon der indogermanischen Partikeln und Pronominalstämme* (2 vols.). Heidelberg.
- LIV*<sup>2</sup>: Rix, Helmut, Kümmel, Martin J. *et al.* (2001). *Lexikon der indogermanischen Verben* (2nd edn.). Wiesbaden.
- PW*: Böhtlingk, Otto, and Roth, Rudolph von (1855–1875). *Sanskrit-Wörterbuch.* Sankt Petersburg.

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