

The Unexceptional Stress of the “Endingless Locative” in Indo-European*

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This paper proposes a new reconstruction of word stress in the endingless locative of Proto-Indo-European nominals. It is widely held that nominals could exhibit stress patterns in the endingless locative that diverge from other oblique case-forms. I argue that stress in the endingless locative was not exceptional in this way, but was rather determined by regular principles of stress assignment and thus predictable on the basis of how a nominal’s other case-forms were stressed, as remains the case in Vedic Sanskrit. I contend that the proposed reconstruction of the endingless locative is both more economical than previous theories and better accounts for the stress patterns of its attested Indo-European reflexes.

1 Introduction

This paper is concerned with word stress (traditionally, “accent”) in the locative singular of athematic nominals in Proto-Indo-European (PIE) and its ancient daughter languages. It is well established that the locative singular case could be formed in two ways: (i) by adding an inflectional ending **-i* to the nominal stem; or (ii) without any overt inflectional ending.¹ The focus of this paper is the latter type, generally known as the “endingless locative” (EL), which is best preserved

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1 See Fortson 2010:116; Neri 2017:81–83; Lundquist and Yates 2018:2085–6; Weiss 2020:221, i.a. This literature is clear in treating the output of both (i) and (ii) as paradigmatic case-forms. It is less clear and less uniform as to whether nominal forms containing the “locative” morphemes **-en* (e.g., Ved. *jmán* ‘on the earth’) and **-er* (e.g., Ved. *vanar*^o ‘in the wood’) have the same status. I view these PIE morphemes as adverb-forming suffixes (cf. Lundquist and Yates 2018:2105 on **-en*, Lundquist 2014 on **-er*; see also van Hes, this volume on the reconstruction of other PIE adverb-forming suffixes), and accordingly discuss them no further here.

in Indo-Iranian—in particular, in Vedic Sanskrit. An example of an EL in Vedic is *udán* in (1), which means ‘in the water’ but lacks the ending *-i* characteristic of the locative singular in Vedic. In other IE branches the EL has been lost as a paradigmatic case-form, but most attest traces of its erstwhile function. For instance, it has been generally accepted since Schindler (1967:194–5) that Hittite *tagān* ([taká:n]) ‘onto the earth’ in (2) historically continues an EL.

- (1) RV I.104.3ab (trans. Jamison and Brereton 2014)

áva tmánā bharate kêtavedā
away self:INS.SG bring:PRS:3SG.MID will:knowing:F.NOM.SG

áva tmánā bharate phénam udán
away self:INS.SG bring:PRS:3SG.MID foam:M.ACC.SG water:LOC.SG

She who knows his will carries away by herself; (the other by) herself carries away the foam in her water.

- (2) KUB 33.62 iii 9 (CTH 330; OH/MS)

nu tagān šipanti
CONN on.the.earth libate:NPST.3SG

Then he libates onto the earth.

1.1 “Endingless locative” as a prosodically exceptional case-form

It is at present the *communis opinio* that the EL could be exceptional within its PIE inflectional paradigm, exhibiting prosodic properties that differ from those of a nominal’s other oblique case-forms. Thus, e.g., Jasanoff (2017:6 n.21) describes the EL as being “formed by a special subrule,” and Neri (2017:117–21) reconstructs the EL of all primary athematic nominals with zero-grade of the root and stressed full-grade (or lengthened-grade) of the derivational suffix (cf. n.1 above). A consequence of this reconstruction is that two out of the four (or five) athematic inflectional classes hypothesized under the widely accepted Erlangen Model (EM) of IE nominal inflection would have an EL with exceptional stress: “acrostatic” (AS) nominals and “amphikinetic” (AK) nominals (cf. Schindler 1975b:262–3, 1994:397). According to EM, AS nominals generally had oblique case-forms with stressed full-grade of the root and zero-grade of the suffix, but zero-grade of the root and stressed full-grade of the suffix in the EL. In the same vein, AK nominals generally had zero-grade of root and suffix and stressed inflectional endings in their oblique case-forms, but stressed full-grade of the suffix in EL. These properties are illustrated with the AS (type II) ‘water’ in (3a) and AK ‘earth’ in (3b):

(3)		<u>ACC.SG</u>	<u>OBL.SG</u>	<u>EL</u>	<u>IE</u>	
a.	‘water’	*wód-r	*wéd-n-	*ud-én	>	Ved. <i>udán</i>
b.	‘earth’	*dʰégʰ-ōm	*dʰəgʰ-m-’	*dʰgʰ-ém	>>	Ved. <i>kṣámi</i> >> Hitt. <i>tagān</i> ([taká:n]) >> CLuw. <i>tiyammi</i>

On this view, Ved. *udán* would directly continue the PIE EL **ud-én* in (3a). Meanwhile, the EL in (3b) would be indirectly reflected in Ved. *kṣámi* ‘on the earth’ and in CLuw. *tiyammi* ‘id.’, having been recharacterized in each language with the synchronic LOC.SG ending, *-i* and *-i* ([i:]) respectively; and also in Hitt. *tagān*, with the quality of its suffixal vowel analogically remade after the direct cases.² Notably, all three reflexes of (3b) provide convergent evidence for suffixal stress, which is directly observable in Vedic; indicated by plene spelling in Hittite; and supported by the geminate *-mm-* ([m:-]) in Luwian, which must be due to Čop’s Law.

1.2 Toward a principled account of stress in the “endingless locative”

In this paper I challenge the long-standing view that the EL had exceptional stress in PIE. I argue rather that stress in the EL was predictable from a nominal’s other case-forms—specifically, whether the nominal was MOBILE, viz., characterized by stem stress in the direct cases contrasting with stress on vowel-initial inflectional endings in the oblique cases,³ or it was IMMOBILE, viz., characterized by stress on the same stem syllable in both direct and oblique case-forms.⁴ I propose that in PIE the position of stress in the EL was consistent with the descriptive generalization in (4):

(4) GENERALIZATION ON ENDINGLESS LOCATIVE STRESS (GELS):

If a nominal is MOBILE, it has stem-final stress in the “endingless locative”; if IMMOBILE, it is stressed on the same syllable of the stem as in its other oblique case-forms.

2 See Schindler 1967:201 on Ved. *kṣámi*; Neu 1980:8 n.7 on Hitt. *tagān* (modifying Schindler); and Kimball 1983:427 n.20 on CLuw. *tiyammi* (cf. Melchert 1994:135, 231 on the Anatolian material).

3 I leave aside here oblique cases potentially marked with consonant-initial inflectional endings (e.g., INS.PL *-bʰi) in view of their uncertain PIE status (cf. Lundquist and Yates 2018:2182–3; Yates 2022b:264 n.104). Note also that the ACC.PL of animate nouns patterns with the oblique cases in Vedic, but I assume that this an innovation vis-à-vis PIE (cf. Yates 2022b:216 n.5).

4 For the terms see Kiparsky 2010:141–7 (cf. Lundquist and Yates 2018:2124).

The remainder of this paper is organized as follows. In Section 2 I demonstrate that the stress patterns of all EL's attested in Vedic are consistent with GELS. This finding is non-trivial, since Vedic is not only by general agreement the IE language that "best preserves the inherited PIE situation" with respect to word stress (Jasanoff 2017:7), but also the one that provides the vast majority of the evidence for the reconstruction of the EL. The next two sections make the case that in PIE the EL was stressed in accordance with GELS. I discuss some empirical and theoretical advantages of this reconstruction in Section 3, then in Section 4 address two potential objections. Section 5 concludes.

2 The "endless locative" in Vedic

2.1 Data

EL's are securely attested for fifty-four distinct nominal stems in Vedic (48 in RV). Some representative examples are given in (5),⁵ organized by (historical) stem type and stress pattern:

- (5) Vedic "endless locatives" by type:
- a. *udán* 'in the water'
 - b. *áhan* 'on the day', *úadhan* 'in the udder'; *ádhanvan* 'on the path', *dhánvan* 'on the bow', *párvan* 'at the joint'⁶
 - c. *bráhmaṇ* 'in the formulation', *sádmaṇ* 'at the seat'
 - d. *ásán* 'in the mouth', *tmán* 'in person', *múrdhán* 'at the head', *śrṣán* 'id.'
 - e. *ásman* 'in the rock', *párijman* 'in the circling'
 - f. *camú* 'in the cup', *tanú* 'in the body'

Nominal stems with EL's include neuter *-r/n-stem nouns, some with stress on the final syllable of their stem, e.g., (5a), others with stress on a non-final syllable of their stem, e.g., (5b); many neuter *-men-stems, all with non-final stem stress, e.g., (5c); *-n-stem nouns of different types, some with stem-final stress, e.g., (5d), others with non-final stem stress, e.g., (5e); and the *-uh₂-stem nouns in (5f) with stem-final stress.

5 A complete list of data included in this study is available at: <https://zenodo.org/record/8101933>.

6 The latter three are synchronically *n*-stems but historically continue *-r/n-heteroclitics; see *EWA* I:68 on *ádhanvan*- and Clayton 2023:39–42 on *dhánvan*- and *párvan*-.

Also relevant for the problem at hand is a set of locative singular forms standardly analyzed as historical EL’s that were recharacterized with the synchronic locative singular ending *-i*.⁷ I refer to this type of formation as an “endingful endingless locative” (EL+). An important motivation for analyzing the EL+ in this way is the underapplication of vowel deletion in the stem-final syllable of the locative singular vis-à-vis the noun’s other oblique case forms. Such underapplication can be observed in (6): just like the EL, the EL+ contains a vowel ([a]) in its stem-final syllable, which is absent in the noun’s other oblique case-forms (viz., before vowel-initial lexically accented endings; see §3.2 below). Treating the word-final *-i* of the EL+ as an innovative accretion offers a diachronic explanation for the otherwise irregular preservation of stem-final /a/ in this context.⁸

(6) Vedic nominals with EL+ attested beside EL vs. other oblique case-forms

	<u>EL+</u>	<u>EL</u>	<u>Oblique</u>	
a.	<i>ásman-i</i>	<i>ásman</i>	<i>ásn-as</i>	‘in/of the rock’
b.	<i>áhan-i</i>	<i>áhan</i>	<i>áhn-as</i>	‘on/of the day’
c.	<i>mūrdhán-i</i>	<i>mūrdhán</i>	<i>mūrdhn-ás</i>	‘at/from the head’
d.	<i>udán-i</i>	<i>udán</i>	<i>udn-ás</i>	‘in/of the water’

As evident in (6), the position of stress in the EL+ is always the same as in the EL. The EL+ forms in (6) are thus uninformative in the sense that they do not introduce novel data that a viable analysis of stress in the EL(+) must account for. Cases like (6) are significant, however, in that they establish non-deletion as a diagnostic feature of an EL+. This diagnostic can then be used to identify forms like those in (7) as EL+ even in the absence of a parallel EL.

(7) Vedic nominals with only EL+ attested vs. other oblique case-forms

	<u>EL+</u>	<u>EL</u>	<u>Oblique</u>	
a.	<i>rájan-i</i>	—	<i>rájñ-as</i>	‘in/of the king’
b.	<i>pitár-i</i>	—	<i>pitř-é</i>	‘in/for the father’
c.	<i>kṣám-i</i>	—	<i>kṣm-ás</i>	‘on/from the earth’

7 See Wackernagel and Debrunner 1930:16 with references to earlier literature (cf. Schindler 1967:201 on *kṣámi* in (7c) below).

8 If vowel deletion is conditioned by Kiparsky’s (2010:145) “Zero-Grade Rule,” then the accented LOC.SG ending *-i* should trigger deletion; the EL+ would thus exhibit underapplication of this process.

	<u>EL+</u>	<u>EL</u>	<u>Oblique</u>	
d.	<i>uṣás-i</i>	—	<i>uṣ-ás</i>	‘at/of dawn’
e.	<i>dyáv-i</i>	—	<i>div-ás</i>	‘in/of the sky’

In Vedic an EL+ is attested for twenty nominal stems (all already in RV), thirteen of which do not attest a parallel EL. Adding these thirteen stems to the analysis is significant not only because they include several stem types that are not otherwise represented in the data, but because many of these stems are surely inherited: the kinship terms in (8a), all with stem-final stress; the *-*ter*-stem agent nouns in (8b), all with stem-final stress; and the other animate nouns in (8c)–(d), the former with stem-final stress and the latter with non-final stem stress.⁹

- (8) Vedic “endingful endingless locatives” by type
- a. *duhitári* ‘in the daughter’, *pitári* ‘in the father’, *mātári* ‘in the mother’
 - b. *kartári* ‘in the performer’,¹⁰ *netári* ‘in the leader’
 - c. *uṣási* ‘at dawn’, *kṣámi* ‘on the earth’, *dyávi* ‘in the sky’
 - d. *rājani* ‘in the king’

Of special interest here is *dyávi* in (8c), which competes with another locative singular form, *diví*, the latter more frequent in RV. A reasonable explanation for these competing variants is that *diví* continues the proper (i.e., endingful) inherited locative singular **diw-í* with regular deletion of the vowel (**/e/*) in the final syllable of the stem, whereas *dyávi* reflects the EL **d(i)yéw* with non-deletion. These forms would thus support the longstanding view that non-deletion is a meaningful diagnostic of an EL+. The same type of account could also be extended to Ved. *áhni* ‘on the day’ beside *áhan* ‘id.’ in (6b); though the former occurs first in AV, it matches YAv. *asni* ‘id.’ and is thus plausibly inherited.¹¹

9 For inheritance of (8a)–(c) see *EWA*, s.vv.; for (8d) see Weiss (2017:794), who adduces a (near-)word equation between its derivatives: Ved. *(sam)rājñī-* = OIr. *rigain* < **h₃rēǵnih₂-* ‘queen’.

10 The Padapāṭha text reads short *-i* for Samhitā *kartári* (RV I.139.7), likewise in *vaktári* (RV X.61.12; also attested with short *-i* in AVŚ II.1.4 = AVP II.6.4). Both RV’ic forms are disputed. I assume they are LOC.SG forms with metrical lengthening as proposed by Lanman (1872–80: 426) and supported by Jamison, *RV Comm.* ad V.41.10, X.61.12, but see the latter for discussion of alternative views.

11 Less probative is Ved. *rājñi* ‘in the king’, a variant of (8d) first attested in ŚB.

2.2 Excluded data

I have excluded from this study a number of locative singular forms attested in Vedic that arguably continue an EL. Forms representative of excluded data are given in (9), organized by (historical) stem type:

- (9) Not “(endingful) endingless locatives” in Vedic by type
- a. *agnā́* ‘in Agni/the fire’, *yónā* ‘in the womb’
 - b. *aktáu* ‘at night’, *prtháu* ‘in the broad (seat)’, *krátau* ‘under the will’, *sánau* ‘on the back’
 - c. *agnáu* ‘in Agni/the fire’, *yónau* ‘in the womb’
 - d. *sáno* (*ávye*) ‘on the back (of the sheep)’, *vásta* (*usrás*) ‘at the break (of dawn)’
 - e. *gaurí* ‘in the wave’, *nadí* ‘in the river’, *sarasí* ‘in the pond’
 - f. *rājáni* ‘under the direction’ (RV X.49.4c)

The bulk of the excluded data is comprised of *-i-* and *-u-*stems of the type in (9a)–(c). The reason for excluding these locative singulars is that, in all likelihood, they are ultimately based on endingful forms. It is widely thought that the final *-ā* seen in forms like (9a) continues PIE **-ēi*, which developed from ***ey-i* via regular sound change.¹² The resulting long vowel then spread analogically to the locative singular of *-u-*stems like (9b) (*-au* < **-ēu* = X in the proportion **-i* : **-ei* :: **-u* : X). Finally, the desinence *-au* spread back to the *-i-*stems, yielding innovative forms like (9c).¹³

The locative singular forms in (9d)–(f) are different. In my view, Ved. *sáno* and *vásto** in (9d) probably continue EL’s with full-grade of the suffix (i.e., **-eu*). Reflexes of **-eu* are also attested in Avestan *-u-*stems, e.g.: OAv. *pərətō* ‘at the ford’; YAv. *vaštō* ‘in desire’, *haētō* ‘on the bridge’ (Hoffmann and Forssman 2004: 130, Gotō 2013:14). Since the Vedic forms in (9d) occur only in fixed formulae at line-end, it seems plausible that for this very reason they escaped the otherwise systematic spread of the analogical long vowel from the *-i-*stems into the *-u-*stems.

12 See Schindler 1973:153 and Szemerényi 1996:118, the latter with references to earlier scholarship. The exact nature of the change remains disputed (e.g., Ringe [2017:51] attributes it to Stang’s Law, but Neri [2017:116–7, 120] to Szemerényi’s Law).

13 See, e.g., Neri 2017:120–1 for the spread of suffixal lengthened-grade from **-i-*stems to **-u-*stems (though he takes it to be a PIE development), and Wackernagel and Debrunner 1930:156–7 on the spread of *-au* into *i-*stems.

For the present, though, I exclude these likely EL forms as too insecure.¹⁴ As for the forms in (9e), they contain the “*vykī*-suffix” **-ih_x-*. Wackernagel and Debrunner (1930:170) reasonably suggest that these continue EL’s, but it is also possible that they reflect endingful forms (< **-ih_x-i*).¹⁵ Finally, I exclude Ved. *rājāni* in (9f) because it is not the locative singular of any nominal stem. While it resembles Ved. *rājan-* ‘king’ in (7a)/(8d) above, it has a different meaning and probably also a different prehistory (for one account see Weiss 2017:796–7).

Yet while I believe there are principled grounds for omitting the locative singular forms in (9) from the present study, it should be emphasized that their exclusion has no bearing on its results. In fact, all of the nominal stems in (9a)–(e) are stressed exactly as predicted by GELS in (4), in this respect behaving just like the data included in this study (viz., the stems treated in §2.1), as will be shown in §2.3 below. Thus had the forms in (9) also been included, they would only add to the robustness of this generalization in Vedic.

2.3 Stress in Vedic “(endingful) endingless locatives” is predictable

Sections 2.1 and 2.2 established what Vedic data must be accounted for in an analysis of stress assignment in the EL. This data is summarized in (10), organized by stress pattern:

(10) Vedic nominal stems with “(endingful) endingless locative” by stress pattern

	Stem	Diagnostic	Mobile	SF	SNF
EL only	47	29	0	5	26
EL+ only	13	9	8	—	—
Both	7	7	4	0	2
TOTAL	67	45	12	5	28

In total, 67 nominal stems attest either an EL or EL+—henceforth EL(+)—in Vedic. Of these stems 45 attest the case-forms that are necessary to determine their intra-paradigmatic stress patterns. The stress patterns in these diagnostic stems are distributed as follows: 12 stems are MOBILE, all with stress alternating between the final syllable of the stem and inflectional endings; 5 are IMMOBILE, with stress fixed on the final syllable of the stem (SF); and 28 are IMMOBILE, with stress fixed on some non-final syllable of the stem (SNF).

¹⁴ I intend to discuss these forms in more detail elsewhere.

¹⁵ For *sarasī* as a “*vykī*-stem” see Jamison, *RV Comm.* ad VII.103.2 with references.

The remainder of this section tests GELS against the data in (10). I begin with MOBILE stems, where GELS predicts stem-final stress in the EL(+). This prediction is borne out by the data: monosyllabic mobile stems like (11a)–(b) consistently exhibit stem-final stress in the EL(+), as do polysyllabic stems like (11c)–(f).¹⁶ That the former show this pattern is trivial, since it is the word’s only stressable syllable, but that the latter have stem-final stress is significant.

(11) Vedic mobile stems have stem-final stress in the EL(+)

	<u>Direct/ó-E</u>	<u>Oblique/σ-É</u>	<u>EL(+)/ó(-i)</u>	
a.	<i>dyāv-as</i>	<i>div-ás</i>	<i>dyāv-i</i>	‘day’
b.	<i>kṣám-as</i>	<i>kṣm-ás</i>	<i>kṣám-i</i>	‘earth’
c.	<i>mūrdhán-as</i>	<i>mūrdhn-ás</i>	<i>mūrdhán(-i)</i>	‘head’
d.	<i>pitár-as</i>	<i>pitṛ-é</i>	<i>pitár-i</i>	‘father’
e.	<i>uṣás-as</i>	<i>uṣ-ás</i>	<i>uṣás-i</i>	‘dawn’
f.	<i>udá</i>	<i>udn-ás</i>	<i>udán(-i)</i>	‘water’

For IMMOBILE stems, on the other hand, GELS predicts that the EL(+) is stressed on the same syllable as the nominal’s other oblique case-forms. Nominal stems with fixed stem-final stress should thus also exhibit stem-final stress in the EL(+). As evident in (12), this prediction is borne out too, trivially in monosyllabic stems like (12a)–(b), but more significantly in polysyllabic stems like (12c)–(e).

(12) Vedic SF stems have stem-final stress in the EL(+)

	<u>Direct/ó-E</u>	<u>Oblique/ó-E</u>	<u>EL(+)/ó(-i)</u>	
a.	<i>tmán-am</i>	<i>tmán-ā</i>	<i>tmán(-i)</i>	‘self, person’
b.	— ¹⁷	<i>rāṇ-e</i>	<i>rán</i>	‘joy’
c.	<i>anarvāṇ-as</i>	<i>anarvāṇ-ām</i>	<i>anarván</i>	‘unassailing/-able’
d.	<i>camív-as</i>	<i>camív-os</i>	<i>camī</i>	‘cup’
e.	<i>tanív-as</i>	<i>tanív-as</i>	<i>tanū</i>	‘body, self’

16 Direct case forms in (11)–(13) are represented by the NOM.PL of animate nouns and the NOM/ACC.SG of neuter nouns whenever these forms are attested; in (11f) the NOM/ACC.PL is cited, and in (12a) and (13f) the ACC.SG. Oblique case-forms are generally represented by the ABL/GEN.SG; in (11d) and (12b) the DAT.SG is cited, in (12a) the INS.SG, in (12c) the GEN.PL, and in (12d) the GEN/LOC.DU.

17 No direct case-forms of this root noun are attested, but I include it among diagnostic stems because stress can hardly have fallen anywhere except on the stem-final syllable (= root).

On the other hand, nominal stems with stress fixed on some non-final stem syllable should bear stress on the same non-final stem syllable in the EL(+). The forms in (13) show that, once again, this prediction of GELs is correct.

(13) Vedic NSF stems have same non-final stem stress in the EL(+)

	<u>Direct/ó-E</u>	<u>Oblique/ó-E</u>	<u>EL(+)/ó(-i)</u>	
a.	<i>áhar</i>	<i>áhn-as</i>	<i>áhan(-i)</i>	‘day’
b.	<i>úđhar</i>	<i>úđhn-as</i>	<i>úđhan(-i)</i>	‘udder’
c.	<i>dhánva</i>	<i>dhánvan-as</i>	<i>dhánvan(-i)</i>	‘head’
d.	<i>sádma</i>	<i>sádman-as</i>	<i>sádman(-i)</i>	‘seat’
e.	<i>rájān-as</i>	<i>rájñ-as</i>	<i>rájān-i</i>	‘king’
f.	<i>ásmán-am</i>	<i>ásn-as</i>	<i>ásman(-i)</i>	‘stone’

Notably, included in (13) is a wealth of inherited material: neuter **-r/n-*stems, both “simple” like (13a)–(b) and complex like (13c);¹⁸ neuter **-men-*stems like (13d); and other inherited animate **-n-*stems like (13e)–(f). I return to the historical implications of these stems in more detail in §3.1 below.

In sum, GELS accounts for the position of stress in all 45 Vedic EL(+) forms in which its predictions are testable: the 12 mobile stems have stem-final stress in the EL(+); the 5 immobile stems with stem-final stress have stem-final stress in the EL(+); and the 28 immobile stems with stem non-final stress have stress on the same non-final stem syllable in the EL(+). Vedic thus provides prima facie evidence that word stress in the EL was consistent with GELS already in PIE. I pursue this hypothesis in the next two sections.

3 The case for reconstructing the Generalization on Endless Locative Stress

In this section I present evidence in support of reconstructing the EL in PIE with the stress patterns expected under GELS. I argue that the GELS-based reconstruction of the EL has empirical and theoretical advantages over the traditional reconstruction of the EL favored by proponents of EM, among other scholars.

3.1 Empirical advantages of reconstructing GELS

The major split between the GELS-based reconstruction of the EL and the traditional reconstruction is in nominals for which EM reconstructs AS inflection: the EL should have root stress according to GELS, but suffixal stress according to EM,

¹⁸ See Yates 2022a:272 for the terms. On (13c) see n.6 above.

in this respect differing from the nominal’s other root-stressed oblique case-forms. Per EM an important locus of AS inflection is “simple” primary **-r/n*-stems (Schindler 1975a:4–6; cf. Weiss 2020:227; Yates 2022a:282–90, i.a.), such as the PIE ancestor of the Vedic word for ‘day’ in (6b)/(13a) above, which thus should have had the NOM/ACC.SG in (14a) and GEN.PL in (14b).¹⁹ EM’s reconstruction of the EL is given in (14c) vs. the GELS-based reconstruction in (14d).

- (14) Competing reconstructions of ‘day’ in PIE
- a. **h_xóǵ^h-r²* >> Ved. *áhar* ‘day’
 - b. **h_xéǵ^h-n-oh_{1/3}om* > Ved. *áhnām*, OAv. *asnqm* ‘of the days’
 - c. **h_x(e)ǵ^h-én* > Ved. **ahán*
 - d. **h_xéǵ^h-en* > Ved. *áhan* ‘on the day’

Notably, only the GELS-based reconstruction in (14d) correctly accounts for root stress in the attested Vedic EL.

Similarly, the Vedic word for ‘udder’ continues an inherited “simple” primary **-r/n*-stem with AS inflection (cf. Gk. οὔθηρα, οὔθηρατος; Lat. *ūber* ‘id.’).²⁰ According to EM it had suffixal stress in the EL, but according to GELS the EL had root stress just like all of the noun’s other case forms; it is the latter situation that is reflected in Vedic: NOM/ACC.SG *údhār*, ABL/GEN.SG *údhnas*, LOC.SG *údhan(i)*.²¹

Another place where the GELS-based reconstructions of the EL and EM’s potentially diverge is in neuter **-men*-stems. Schindler (1975b:263–4) reconstructs original “proterokinetic” (PK) inflection for nouns of this type, which would mean that both their oblique case-forms and the EL were characterized by zero-grade of the root and stressed full-grade of the suffix. However, Schindler also argued explicitly that stressed full-grade of the root was systematically generalized from the direct cases to the oblique cases of deverbal neuter **-men*-stems already in PIE (cf. Lundquist and Yates 2018:2110)—thus, e.g., in the ABL.SG in (15b) beside the NOM/ACC.SG in (15a).²² GELS makes a clear prediction about the EL

19 The noun’s root etymology is uncertain (see *EWA* I:154 with references), as is whether it had root **o*-grade (AS II) or **ē*-grade (AS I) in the direct cases (hence “?” in (14a)); the attested NOM/ACC.SG in (14a) reflects full-grade, presumably leveled from the oblique cases.

20 See Schindler 1975a:7–8 for the reconstruction and Vine and Yokoyama 2010 for discussion of the root etymology.

21 On the other hand, only EM’s reconstruction of the EL accounts for the zero-grade root vocalism of ‘udder’ in Vedic. Yet since the direct and oblique case-forms also unexpectedly reflect zero-grade, it is not clear how much significance should be attached to this fact.

22 Schindler (1975b:263–4) excludes only the inherited word for ‘name’—which lacks an identifiable PIE verbal root—from this analogical generalization (“sonst ist R(é) verallgemeinert

corresponding to these PIE forms: it was (15d) with root stress. Less clear, though, is what EM reconstructs for the EL. One could argue that the EL was subject to the same analogical generalization of stressed root full-grade as the oblique case-forms, in which case the EL should be reconstructed as in (15d)—viz., just as under GELS. However, it might be expected that the “special subrule” (Jasanoff (2017:6 n.21; cf. §1.1 above) responsible for the EL having the same prosodic properties across EM’s inflectional classes would “override” this analogical generalization, in which case the EL should be reconstructed with suffixal stress, as in (15c).

- (15) Competing reconstructions of PIE neuter **-men*-stems
- a. **séd-mṇ* > Ved. *sádma* ‘seat’
 - b. **séd-men-elos* > Ved. *sádmanas* ‘from the seat’
 - c. **s(e)d-mén* > Ved. **sadmán*
 - d. **séd-men* > Ved. *sádman* ‘in the seat’

Once again, the GELS-based reconstruction of the EL in (15d) accounts straightforwardly for the attested Vedic form. EM arguably accounts for this form also, but would do so at an additional cost—namely, by positing an exception to the “subrule” that yields prosodically exceptional ELs in AS and AK nominals.

3.2 Theoretical advantages of reconstructing GELS

An upshot of the GELS-based reconstruction of the EL is that GELS itself fits hand-in-glove with established principles of PIE morphophonology. Specifically, GELS can be derived from an interaction between the lexically specified accentual properties of morphemes and (16), which is securely reconstructible for PIE since it governs inflectional stress assignment both in Vedic and in Hittite.²³

- (16) BASIC ACCENTUATION PRINCIPLE (BAP; Kiparsky and Halle 1977)

If a word has more than one accented vowel, word stress is assigned to the leftmost. If a word has no accented vowel, word stress is assigned to the leftmost syllable.

Deriving GELS requires just one novel assumption—namely, that the exponent of EL was a segmentally null PRE-ACCENTING ending (**'’-Ø/*), which thus prefers

worden”), and explicitly compares neuter **-men*-stems to (erstwhile PK) neuter **-es*-stems, which in his view underwent the same change prior to PIE (op. cit. 259–62).

23 For its operation in Vedic see further Kiparsky 2010 and for Hittite Yates 2015, 2017, et seq.

stress to fall on the immediately preceding syllable.²⁴ Whether or not this preference gets realized then depends on the accentedness of the nominal stem, a property that is deduced from the stress (non-)alternations observed in its direct vs. oblique case-forms and thus independently justified.

This analysis straightforwardly handles the attested reflexes of the two nominal classes, AK and AS, in which EM reconstructs a prosodically exceptional EL. Mobile nominals with stress alternating between the root in the direct cases and inflectional endings in the oblique—AK per EM—have unaccented stems, and thus receive default leftmost stress via the BAP in the direct cases, e.g., in the ACC.SG in (17a). That the stem is unaccented is evident from oblique case-forms like the GEN.SG in (17b): the accented inflectional ending attracts stress, which would not be possible if the stem were accented (viz., because the BAP would then assign stress to the stem by virtue of its position to the left of the ending). The pre-accenting property of the EL morpheme can then be observed in the LOC.SG in (17c): it places an accent on the final syllable of the stem, which then attracts stress via the BAP.²⁵

- (17) Deriving GELS in mobile nominals with root-ending stress alternations
- a. */d^heġ^h-om-m/ → *[d^héġ^h-o:m] > Hitt. *tēkan* ([té:kan]) ‘earth’
 - b. */d^heġ^h-em-é/ós/ → *[d^həġ^h-m-é/ós] > Hitt. *taknāš* ([takn-á:s]),
 - c. */d^heġ^h-em-’Ø/ → *[d^hġ^h-ém] >> Ved. *kṣámi*, Hitt. *tagān* ([taká:n]), CLuw. *tīyammi* ‘on the earth’

The important difference between (17) and immobile nominals with fixed root stress like (18)—AS per EM—is that the latter are accented on the root.²⁶ Accordingly, in oblique case-forms like (18b) there is a competition for stress between two accented morphemes, the root and the inflectional ending; this is resolved in favor of the root, leftmost accented wins via the BAP. A similar competition takes place in the EL in (18c), but in this case it is between the accent of the root and the accent placed on the stem-final syllable by the pre-accenting ending. Once again, the root receives stress by virtue of being the leftmost accented morpheme.

24 In a similar vein, though, Kim (2013:73 n.16) proposes that the EL morpheme was “accented -Ø” (cf. Ringe 2017:50–1).

25 The EL+ Ved. *uśási* in (11e) might be derived historically in this way, although synchronically the noun is mobile with stem-final stress in the direct cases.

26 The same basic analysis would apply to any NSF stems with non-root stress: they are accented on the stressed stem syllable.

(18) Deriving GELS in immobile nominals with root stress

- a. */h_xóĝ^h-or/ → *[h_xóĝ^h-r̥] >> Ved. *áhar* ‘day’
- b. */h_xéĝ^h-en-óh_{1/3}om/ → *[h_xéĝ^h-n-oh_{1/3}om] > Ved. *áhnām*, OAv. *asnəm* ‘of the days’
- c. */h_xéĝ^h-en-’Ø/ → *[h_xéĝ^h-en] > Ved. *áhan* ‘on the day’

Neuter **-men*-stems like (15) work in essentially the same way, differing only in that their root accent is not a lexical property of the root, but rather assigned by the pre-accenting derivational suffix (**’-men-*)—thus, e.g., LOC.SG **/sed-’men-’Ø/* → *[séd-men] > Ved. *sádmán* ‘in the seat’ in (15d).²⁷

The analysis outlined above also correctly derives the predictions of GELS in inflectional classes in which EM assumes the EL had unexceptional stress—viz., was stressed just like other oblique case-forms. These include polysyllabic mobile stems in which stress alternates between the stem-final syllable in the direct cases and inflectional endings in the oblique, and polysyllabic mobile stems with fixed stem-final stress.²⁸ EM’s “hysterokinetic” (HK) nominals mostly belong to the former type,²⁹ while the latter type in principle includes various nominals in which EM posits PK inflection but are more likely reconstructible for PIE with fixed stem-final stress.³⁰ In both types, the stem is accented on the final syllable, which thus attracts stress word-internally, e.g., in NOM.PL in (19a) and (20a). Stress also surfaces on the stem-final in the EL in (19c) and (20c), the position favored by both the stem-final accent and the pre-accenting ending. The only difference between these two types is that in the oblique case-forms of the mobile stems—e.g., in the

27 See *in nuce* already Kiparsky 2010:154 and Lundquist and Yates 2018:2126–7 for a pre-accenting analysis of structurally parallel neuter **-es*-stems.

28 I treat here only nominals with polysyllabic stems, though these were grouped together with root nouns in §2.1 above. Stress in the EL of root nouns requires no further discussion: because they are monosyllabic, the EL can only be stressed in one place, viz., on the root.

29 As do some nominals reconstructed by EM as AK on the basis of their suffixal **-o*-vocalism, such as PIE animate **-oi*-stem nouns (Yates 2019) or **-mon*-stem nominals (Yates 2020b, 2022b).

30 I exemplify this type in (20) with a **-uh₂*-stem because of its securely attested EL, although it is uncertain whether such stems are reconstructible for PIE (and if so, what prosodic properties they had at this stage). I assume, however, that the same analysis applies, e.g., to putatively PK primary **-u*-stem adjectives (cf. Lundquist and Yates 2018:2115, 2129–30). If LOC.SG forms like Ved. *prtháu* in (9b) can ultimately be traced back to EL’s in **-éu* (as tentatively suggested in §2.2 above), their stress pattern can be derived in the same way as in (20c): **/pleth₂-éw-’Ø/* → *[p̥l̥th₂-áu] >> Ved. *prtháu*.

DAT.SG in (19b)—the accented stem-final vowel is deleted, thereby allowing the accented ending to attract stress via a process that Kiparsky (2010:146) terms “secondary mobility” (cf. Yates 2020a); no such deletion occurs in the immobile type—e.g., in the GEN.SG in (20b)—and so the stem-final syllable attracts stress via the BAP.

(19) Deriving GELS in mobile nominals with SF-ending stress alternations

- a. */ph₂tér-es/ → *[pəh₂tér-es] > Ved. *pitáras*, Gk. *πατέρες* ‘fathers’
- b. */ph₂tér-éi/ → *[pəh₂tr-éi] >(>) Ved. *pitré*; Gk. *πατρί* ‘for the father’
- c. */ph₂tér-’Ø/ → *[pəh₂tér] >> Ved. *pitári* ‘in the father’

(20) Deriving GELS in immobile nominals with stem-final stress

- a. */ten-úh₂-es/ → *[ten-úh₂-as] > Ved. *tanúvas* ‘bodies’
- b. */ten-úh₂-é/ós/ → *[ten-úh₂-a/os] > Ved. *tanúvas* ‘of the body’
- c. */ten-úh₂-’Ø/ → *[ten-úh₂] > Ved. *tanú* ‘in the body’

The predictions of GELS thus emerge from a single, uniform grammar. In contrast, to explain why the EL of AK nominals like (17c) exceptionally exhibits stem-final stress, EM must introduce an additional grammatical mechanism, a “special subrule” that trumps the normal grammatical principles responsible for assigning AK-type stress and ablaut. This assumption seems costly, however, in view of the data discussed in §3.1 above. AS nominals were previously thought to furnish evidence for such a rule, but Ved. *áhan* in (14d) suggests instead that in PIE AS nominals had root stress in the EL just like their other oblique case-forms. Likewise, PIE neuter *-men-stems militate against an across-the-board “subrule,” since their Vedic reflexes consistently exhibit root stress in the EL, e.g., *sádman* in (15d) above. If it is indeed the case, then, that the “subrule” lacks any support outside of AK nominals (as argued in §3.1 above and §4.1 below), invoking it in this context would amount to pure stipulation.

4 The case against reconstructing the Generalization on Endingless Locative Stress

In this section I address two possible arguments against the GELS-based reconstruction of the EL—in particular, of AS nominals. In §4.1 I discuss some potential counter-evidence, EL’s like **ud-én* ‘in the water’ that—if reconstructible for PIE—would problematize GELS, but I contend that these are innovative, replacing **wéd-en* and structurally comparable forms. Some scholars may object to this

alternative reconstruction of the EL because of its unstressed suffixal full-grade. In §4.2 I argue that this objection cannot be maintained for PIE.

4.1 Counter-evidence to GELS?

One apparent obstacle to the GELS-based reconstruction of the EL is the PIE word for ‘water’ in (21a), which according to Schindler (1994:397) was characterized by AS inflection but had an exceptional EL **ud-én* ‘in the water’ that is directly continued in Ved. *udán* ‘id.’ (cf. §1.1 above). Two further examples of the same kind are added by Melchert (1994:126), the Hittite words for ‘basket’ and ‘word; matter’ in (21b)–(c). As simple primary **-r/n-*stems, these PIE lexemes would have exhibited AS inflection according to EM (cf. §3.1), but would have had exceptional EL’s **p(e)th₂-én* and **uth₂-én*;³¹ Melchert suggests that these forms are continued in Hitt. *paddāni* ‘in the basket’ and *uddāni** ‘in the word’, which have been recharacterized with the Hittite DAT/LOC.SG ending *-i* (cf. Rieken 1999:290–1).³²

(21) Inflection of PIE **-r/n-*stems according to EM

	<u>ACC.SG</u>	<u>OBL.SG</u>	<u>EL</u>		<u>IE EL(+)</u>
a.	‘water’	<i>*wód-r</i>	<i>*wéd-n-</i>	<i>*ud-én</i>	> Ved. <i>udán(i)</i>
b.	‘basket’	<i>*póth₂-r</i>	<i>*péth₂-n-</i>	<i>*p(e)th₂-én-</i>	>> Hitt. <i>paddāni</i> ([pat:á:ni])
c.	‘word’	<i>*wóth₂-r²</i>	<i>*wéth₂-n-</i>	<i>*uth₂-én-</i>	>> Hitt. <i>uddāni*</i> ([ut:á:ni])

I contend that Schindler’s and Melchert’s analyses of these forms overlook an important synchronic fact about these nominals—namely, that within the attested languages they are mobile, as evident in (22). As noted already in (11f) above, the Vedic reflexes of ‘water’ in (22a) exhibit stress mobility, with stem-final stress in the NOM/ACC.PL *udá* and ending stress in oblique case-forms like the GEN.SG *udnás*. The same is true for ‘basket’ and ‘word; matter’ in Hittite in (22b)–(c): NOM/ACC.SG *pattar* and *uttar* with root stress alternate, respectively, with DAT/LOC.SG *paddanī* and GEN.SG *uttanāš* with ending stress. These facts are

31 It is uncertain which type of AS inflection Hitt. *uddar/n-* in (20c) would have exhibited, since the attested Hittite forms reflect invariant zero-grade of the root (for an account of this innovation see Yates 2022a:289).

32 These EL+ forms compete with the regular DAT/LOC.SG forms *paddanī* in (22b) below ([pat:n:í:]; e.g., KBo 17.1 iv 21) and *uddanī* ([ut:n-í]; e.g., KBo 39.8 iii 28) with stressed ending (cf. Yates 2022a:288–9). Note that the EL+ of ‘word’ in (21c) is attested only as *uddānī* (KUB 1.16 iii 50; KBo 22.250 i 12; KUB 7.8 ii 20). I assume its double plene spelling is due to the influence of regular *uddanī* (e.g., KBo 39.8 iii 28); similarly, Kloekhorst (2014:454) posits a “graphic conflation.”

notable because, from a synchronic perspective, the stem-final stress observed in their corresponding EL(+) forms is totally unsurprising; rather, it is exactly what is expected under GELS.

(22) Synchronically mobile paradigms of IE **-r/n-*stems

		<u>Direct</u>	<u>OBL.SG</u>	<u>EL(+)</u>
a.	‘water’	Ved. <i>udā́</i>	<i>ud-n-ás</i>	<i>ud-án(i)</i>
b.	‘basket’	Hitt. <i>pattar</i> [pá:t:-ar]	<i>paddanī</i> [pat:-n-í:]	<i>paddāni</i> [pat:-á:ni]
c.	‘word’	Hitt. <i>uttar</i> [ú:t:-ar]	<i>uttanāš</i> [ut:-n-á:s]	<i>uddāni*</i> [ut:-á:ni]

The diachrony of the nominals in (21)–(22) and other simple **-r/n-*stems was discussed in detail in Yates 2022a. I argued that the traditional AS reconstruction of these nominals is ultimately correct, but that they developed innovative oblique case-forms with ending stress due to a recurring type of prosodic change that was first identified by Schindler (1972) in AS root nouns and subsequently observed in other AS categories (Jasanoff 2003:73–4; Melchert 2010, 2013). This phenomenon was termed EMERGENT MOBILITY, defined as in (23):

(23) EMERGENT MOBILITY (Yates 2022a:282)

Stress shifts from the root to “weak” (= lexically accented) inflectional endings, with the result that paradigms with fixed root stress become mobile.

While the nature and causes of emergent mobility require further research, one way of understanding this prosodic change is that the stress-preferring property of the lexically accented inflectional endings comes to be realized (cf. Yates 2022a: 291).³³ On this view, it is expected that stress would also shift onto the syllable immediately preceding a pre-accenting morpheme, as its stress preference is likewise satisfied.

This opens the door for an alternative diachronic account of the Vedic and Hittite EL(+) forms in (21). I propose that these nouns developed as in (24). In PIE these nouns were characterized by stressed full-grade of the root in the oblique cases and—crucially—also in the EL, thus **wéd-en* and **péth₂-en*.

33 Previously the situation was as in (18b) above: the lexical accent on the root attracted stress in preference to the accented ending, leftmost wins in accordance with the BAP.

(24) Emergent mobility in IE *-r/n-stems

a. ‘water’		b. ‘basket’	
	<u>Oblique</u> <u>EL(+)</u>	<u>Oblique</u> <u>EL(+)</u>	
PIE	*wéd-ŋ-s *wéd-en	PIE	*péth ₂ -n-ei *péth ₂ -en
>>	*ud-n-é/ós *ud-én	>>	*p(e)th ₂ -n-éi *p(e)th ₂ -én
Ved.	ud-n-ás ud-án(i)	Hitt.	paddanī paddāni

Subsequently they underwent emergent mobility in (23): stress shifted from the root to their oblique case endings, hence, e.g., GEN.SG *ud-n-é/ós and DAT.SG *p(e)th₂-n-éi. At the same time—and for the same underlying reason—stress shifted from the root onto the final syllable of the stem (viz., preceding the EL morpheme), yielding *ud-én and *p(e)th₂-én.

On this account, there was no point at which these nominals had inflectional paradigms of the type in (21), with root-stressed oblique case-forms and exceptional ending stress in the EL (contra Schindler 1994 and much subsequent work in EM). Instead, at each historical stage the inflectional paradigms of these nominals were consistent with GELS, their oblique case-forms and EL’s changing in lockstep when emergent mobility occurred.

4.2 Unstressed suffixal full-grade in the EL—grounds for rejection?

It was argued above that in PIE the EL of immobile root-stressed nominals—including but not limited to those reconstructed as AS per EM—had root stress in the EL and unstressed full-grade of the suffix, thus, e.g., (25):

(25)	<u>ACC.SG</u>	<u>OBL.SG</u>	<u>EL</u>
a. ‘day’	*h _x óǵ ^h -r ²	*h _x éǵ ^h -n-	*h _x éǵ ^h -en
b. ‘water’	*wód-ŋ	*wéd-n-	*wéd-en
c. ‘liver’	*h ₁ yéǵ ^w -ŋ	*h ₁ yéǵ ^w -n-	*h ₁ yéǵ ^w -en
d. ‘seat’	*séd-mŋ	*séd-men-	*séd-men
e. ‘provision’	*pén-os	*pén-es-	*pén-es

Suffixal full-grade in the EL of the AS *-r/n-stem in (25a) and of neuter *-men-stems like (25d) is directly reflected in the Vedic forms discussed in §3.1 above, áhan(i) ‘on the day’ and sádman(i) ‘in the seat’. If Lat. penes ‘under the control of’ continues the EL of the neuter *-es-stem in (25e) (cf. Weiss 2020:221), then it is

likely that this category too had suffixal full-grade in this context.³⁴ The same property is supported by indirect evidence for AS nominals like (25b)–(c). As recognized already by proponents of EM, it provides an analogical basis for oblique case-forms with suffixal full-grade that arise in the daughter languages, e.g., GEN.SG PGmc. **wat-en-az* > Goth. *watins* ‘of water’; PItal. **yek^w-en-es* >> Lat. *iocineris* ‘of the liver’.³⁵ Significantly, none of these IE forms actually require EM’s further assumption that this suffixal full-grade was stressed, and the Vedic reflexes of (25a) and (25d) speak against it.

Still, some scholars may view the ELs in (25) with skepticism, questioning whether it is appropriate to reconstruct the derivational suffix with full-grade but without stress for PIE. Fundamentally, this objection stems from the idea that unstressed full-grades in the ancient IE languages are in general innovative vis-à-vis (pre-)PIE. This idea was influentially articulated by Schindler (1975b:261): “[U]nbetonte *e*-Stufen dürfen im großen und ganzen als sekundär betrachtet werden. Eine voridg. Regel, nach der unbetontes *e* (*è*) schwand, läßt sich für alle phonologischen Kontexte, vortonig und nachtonig, sichern.” Following this line of reasoning one might conclude that, because full-grade of the suffix is reconstructible in ELs like (25), this suffix must also once have been stressed, even if this is no longer the case in the IE languages.

Whether there ever was a stage of the proto-language at which all (and only) full-grades were stressed is immaterial for the proposal advanced here,³⁶ which is concerned with PIE, the stage reached by comparative reconstruction. Unstressed full-grades are an incontrovertible feature of PIE, and are especially well-represented in post-tonic contexts comparable to the ELs in (25). In (26a)–(c) are given some securely reconstructible stem-internal examples; these include the oblique case-forms of neuter **-es-* and **-men-*stems, which were explicitly reconstructed as such for PIE by Schindler (1975b:259, 263) (cf. §3.1 above).

(26) Unstressed post-tonic full-grades in PIE:

- a. **pénk^we* > Ved. *pāñca*, Gk. *πέντε*, Lat. *quīnque* ‘five’
- b. **wék^w-es-e/os* > Ved. *vácasas*, Gk. *ἔπεος* ‘of the word’
- c. **gén(h₁)-men-ei* > Ved. *jánmane* ‘for birth’, Lat. *germinī* ‘for the seed’

34 Neuter **-es-*stems—like neuter **-men-*stems—were an immobile root-stressed category in PIE (cf. n.21 above).

35 See Neri 2005:29–30 on ‘water’ in Germanic and Weiss 2020:257 n.7 on the stem shape of ‘liver’ in Latin (cf. Yates 2022a:285 n.21). Per Schindler (1975a:7) the suffixal full-grade of ‘water’ in Hittite is analogical to ‘fire’ (cf. Yates 2022a:286 n.24).

36 I am skeptical on both typological and empirical grounds.

- d. **suh₃n-éw-ei* > Ved. *sūnáve*, OCS *synovi* ‘for the son’
- e. **ph₂tér-es* > Ved. *pitáras*, Gk. *πατέρες* ‘fathers’
- f. **woíd-h₂e* > Ved. *véda*, Gk. *οἶδα* ‘I know’

Post-tonic full-grades are also reconstructible in the inflectional endings in (26d)–(f); these include the PIE athematic ANIM.NOM.PL ending in (26e) and the **h₂e*-conjugation 1SG.PST.ACT (> PFC) ending in (26f), which never bore stress. In view of such examples, the potential objection raised above cannot be maintained: the unstressed suffixal full-grade of EL’s like (25) does not constitute grounds for rejecting their reconstruction as such for PIE.

5 Conclusion

In this paper I have argued that stress in the EL was predictable from a nominal’s other case-forms in PIE just as it is in Vedic Sanskrit (cf. §2 above): nominals with intra-paradigmatic stress mobility between the stem in the direct cases and inflectional endings in the oblique cases were stressed on their stem-final syllable in the EL; nominals in which stress was fixed on the same stem syllable in their direct and oblique case-forms were also stressed on this syllable in the EL (= GELS in (4) above).

Empirically, the proposed reconstruction of the EL mostly agrees with its traditional reconstruction under EM, diverging from it only in AS nominals and other nominals reconstructible with immobile root stress—in particular, neuter **-men*-stems. It was shown in §3.1 and §4.1 that this revision fits better with the available IE data. In the first place, it directly accounts for the root stress observed in Ved. *áhan(i)* ‘on the day’ (< PIE **h₃éǵ^h-en*) and consistently in the EL of neuter **-men*-stems in Vedic (< PIE **R(é)-men*); such forms must be regarded as innovations under EM, which reconstructs exceptional stem-final stress in both forms (unambiguously in the former, arguably in the latter). Conversely, the IE forms previously thought to support the reconstruction of exceptional stem-final stress in AS nominals—Hitt. *paddāni* ‘in the basket’, *uddāni** ‘in the word’, and above all, Ved. *udán(i)* ‘in the water’—are likely to be *einzelsprachlich* innovations. Supposing EM’s AS reconstruction of these **-r/n*-stems is correct for PIE, it is also necessary to accept that a prosodic change has taken place between PIE and its daughter languages, since they are attested in Vedic and Hittite with ending stress in their oblique case-forms. From the perspective of EM, it is purely coincidental that putatively archaic EL(+) forms of this kind are attested only beside innovative oblique case-forms. Yet this seems unlikely to be a coincidence. A more parsimonious explanation is that the stress shifts in the oblique cases and the endingless locative

were linked. The account proposed here connects these diachronic stress shifts, and furthermore offers a principled explanation for why they should go hand-in-hand, both arising as a consequence of emergent mobility in (23).

The reconstruction of the EL advanced here is also attractive on theoretical grounds. It was proposed in §3.1 that the PIE exponent of the EL was a segmentally null pre-accenting inflectional ending (*’-Ø/); it would then follow from independently established principles of PIE inflectional stress assignment that the EL was stressed in accordance with the generalization outlined above. Accordingly, there is no need to posit a “special subrule” (or any other additional grammatical mechanism) to account for the EL, as is the case under EM. Moreover, this analysis offers a straightforward explanation for why all attested ELs in Vedic—including those that might not be inherited as such—are synchronically consistent with this generalization: it is because Vedic preserves the PIE stress system so well (a point of general agreement; cf. §1.2 above). Since the principles of stress assignment that give rise to this generalization are stably maintained (e.g., the BAP in (16)), whenever individual lexemes undergo innovations that change how they are stressed, such as emergent mobility or analogical stress leveling, the system produces new EL’s that conform to it.

I therefore conclude that in PIE the EL had unexceptional stress. A further question is whether the EL was prosodically exceptional in a different respect, viz., in its ablaut. Schmidt (1885:309) argued that nominals had “im suffixlosen locativ die letzte silbe um je eine stufe stärker” than in their other oblique case-forms. Though he is widely followed (Fortson 2010:116; Neri 2017:120; Weiss 2020:221, i.a.), I am doubtful of his claim, in part because it is contradicted by some of the forms discussed above—e.g., the EL’s of the neuter **-men-* and **-es-* stems in (25d)–(e) above with full-grade root rather than the hypothesized lengthened-grade. For the present, though, I leave this question open, pending further research.

Abbreviations

AK	“amphikinetic” inflection according to EM (§1.1)
AS	“acrostatic” inflection according to EM (§1.1)
BAP	Basic Accentuation Principle (§3.2, example (16))
EL	endingless locative (§1)
EL+	endingful endingless locative (§2.1)
EL(+)	endingless locative or endingful endingless locative (§2.1)
EM	Erlangen Model of IE nominal inflection (§1.1)
GELS	Generalization on Endingless Locative Stress (§1.2, example (4))

- HK “hysterokinetic” inflection according to EM (§3.2)
 PK “proterokinetic” inflection according to EM (§3.1)

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