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On vowel quantity in the Rigvedic auslaut¹

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Abstract: The Saṁhitā-text of the Rigveda quite often exhibits vowel length in the auslaut where the Padapāṭha shows a short vowel.² In the Rigveda-Prātiśākhya (R.-Pr.), these cases of vowel length in the Saṁhitā-text are viewed upon as means to even out irregularities of the metre (*sāmavaśa*)³. Benfey (1874: 6) supposes that this explanation of *sāmavaśa* as metrically induced is of a relatively recent date but he concedes that the connection with the metre normally is correct: the overwhelming majority of the examples with length appears in places where a long vowel is expected metrically. Good examples in point are lengthenings of auslauting *a*, *i* and *u* in the 6th syllable of octosyllabic verses and of the 8th and 10th syllables in verses with eleven and twelve syllables if the following word does not start with a vowel or with more than one consonant (cf. Benfey 1875; there are a number of counterexamples listed by Benfey 1875: 46-80). Furthermore Benfey meticulously collects examples and counterexamples for disyllabic words in the beginning of a Pāda (Benfey 1876), for mono- and polysyllabic words anywhere in the Pāda (Benfey 1879a, 1879b, 1879c) and for compounds (Benfey 1880a, 1880b), where he claims the same rule to hold in the unmarked case (lengthening of the auslauting vowel if the following word / part of compound does not start with a vowel or with two consonants). An article containing material on long augment and long vowel in the reduplication syllable ends Benfey's impressive series of collections (Benfey 1881) on this subject.

1.1. Examples (1) and (2) illustrate Benfey's rule:

- (1) Saṁhitā – text 1,25,19 *imám me varuṇa śrudhī / hávam adyá ca mṛlaya / tuvām avasyúr á cake*
(Padapāṭha: *imám me varuṇa śrudhi hávam adyá ca mṛlaya tvām avasyú á cake*)
“Listen (*śrudhi*) to my call, o Varuṇa, and be favourable today. I crave for you, looking for help.”

- (2) Saṁhitā – text RV 6,36,5a *sá tú śrudhi śrūtyā yó duvoyúr*
Padapāṭha: *sá tú śrudhi śrūtya yáḥ duvoyúḥ*
“Listen (*śrudhi*), indeed, to the commendable (words) (of him) who is in the state of worshipping.”

One may find this phenomenon also inside the same stanza:

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² These cases are represented as a short vowel plus the sign „+“ in the new dictionary of the Rigveda, RIVELEX (Krisch 2006). The same sign is used by Lubotsky 1997.

³ Cf. Benfey 1874: 5.

- (3) Saṁhitā – text RV 3,56,6: *trír á diváḥ savitar vāryāṇi / dive-diva á suva trír no áhnah / tridhátu rāyá á suvā vásūni / bhága trātar dhiṣane sātāye dhāḥ*

“Three times a day, o Savitṛ, provide (á suva) us with valuable things, every day for three times a day! Provide (á suvā) (us) threefold with riches (and) goods. O gracious lord, o protector, o Dhiṣanā, help (us) to achieve profit.”

1.2. The rule of Benfey does not operate in a regular way. Thus, there are lots of counterexamples showing a short auslauting vowel while the following word starts with one consonant, e.g. with 1,103,6: *sunavāma somam* “we want to press (*sunavāma*) soma” (there is no example for long auslauting vowel with *sunavāma*); 1,129,9: *sácasva nah* “follow (*sácasva*) us”(vs. 1,1,9: *sácasvā nah*); 1,12,3: *vaha jajñānō* “drive (*vaha*), just born,...” (vs. 1,31,17: *vahā daivī yam* ...“drive (*vahā*) the heavenly ...”) etc. Very rarely one finds examples showing a long auslauting vowel with a following word starting with two consonants⁴. In the younger book 1 of the Rigveda, we did not find an example for this case. In the older books 2 and 3 we have discovered only the following instances: 2,11,21c (= 2,15,10c = 2,16-20,9c): *śikṣā stotrbhyo* “try to help (*śikṣā*) the singers”; 2,14,9: *kártanā śruṣṭim* “pay (lit. “make” (*kártanā*) obedience”; 2,19,2c-d: *áchā / práyāṁsi* “... close to (*áchā*) / refreshments (NSg.) ...”. There are at least two instances for this phenomenon in the younger book 10: 10,156,5c: *bódhā stotrē* “awake (*bódhā*), for the singer (DSg.) ...”; 10,42,1b: *bharā stómam* “bring (*bharā*) the song of praise”.

There are two possible ways to deal with some of these exceptions just mentioned (the ones before the consonantal cluster *st* (2,11,21c; 10,156,5a and 10,42,1b)): One argument could be that a group *st* in Indo-European and some of its daughter languages almost had the status of a single unit. Cf. e.g. the widely accepted rule of reduplication with those two elements in conjunction in the reduplicative syllable already for PIE (cf. (4))⁵:

- (4) PIE 3PlPerf *ste-sth₂-i^s “they have stood” [ved. *ta-sthúr*; av. (younger language) Yt. 19,8: (*vī*)-*śa-starə* “they have extended (over)”; cf. lat. *ste-t-ī* “I have stood” (dissimilation in the root consonantism)]; PIE 3SgPrs *stí-sth₂-e-ti/toj “(s)he stands” (ved. *tiṣṭhati*, lat. (*sē*) *sistit*)

Another possibility to deal with these exceptions would be that originally the verbal forms were no imperatives but 2nd singular forms of subjunctives with a sandhi that marginally can be observed elsewhere (simplification of the group -s sC- to -Ø sC-)⁶:

⁴ One has to look at the text from the point of view of metrics, of course. Thus, an example like 3,9,8a is not a case in point: the Saṁhitā-text (á *juhotā svadhvarám* “offer to the one who makes a good offering [scil. to Agni, TK].”) has to be spelt out metrically (8 syllable verse (Bṛhatī) as: á *juhotā s_usvadhvarám*).

⁵ Cf. e.g. Sihler 1995: 487–488; Krisch 1996: 23; Tichy 2000: 110. The anlauting *s-* in Vedic before an obstruent has been analysed as „extrasyllabic” in the literature (cf. Kobayashi 2004: 48). The anlauting clusters *s + obstruent* have basically “survived” intact from PIE down to New High German, i.e. they have been preserved and treated as units during two big consonant shift waves (the Germanic one and the German one).

⁶ Cf. Wackernagel 1978=1896: 342.

- (5) a) 2SgSubjDesid *síkṣās* in 2,11,21c: *síkṣā stotřbhyo* < * *síkṣās stotřbhyo*
 b) 2SgSubjPrs *bódhās* in 10,156,5c: *bódhā stotrē* < * *bódhās stotrē*
 c) 2SgSubjPrs *bharās* in 10,42,1b: *bharā stómam* < * *bharās stómam*

1.3. Wackernagel's version of Benfey's observations takes into account the fact that there are exceptions by noting that this rule is in the state of declining already in Vedic times:

- (6) Wackernagel 1978=1896: 310: „Auslautende Vokale bleiben vor anlautenden Konsonanten in der Regel unverändert. Doch findet sich in den metrischen Saṁhitās und den liturgischen Sprüchen in weitem Umfang Dehnung von -a, -i, -u. ... Die Dehnung tritt nur ein im Inneren des Satzes und Verses vor einfacherem konsonantischem Anlaut.“ ... 312: „Man muss annehmen, dass in der lebendigen Rede der ältesten Zeit die meisten kurzvokalischen Ausgänge unter [diesen T.K.] Bedingungen dehnungsfähig waren. Im Satzsandhi begann dies schon in vedischer Zeit ... zu erlöschen.“
 Wackernagel 1978=1896: 310: “Auslauting vowels normally remain unchanged before anlauting consonants. But there is ample lengthening of -a, -i, -u in the metrical Saṁhitās and the liturgical sayings ... Lengthening only appears inside the sentence and verse before a single consonantal anlaut.” ... 312: “One has to assume that in living discourse of the oldest times most of the final sounds of a word which are short vowels could be lengthened under [these T.K.] conditions. In sentential sandhi this has already started to decline in Vedic times ...”

The following example should illustrate the amount of exceptions to Wackernagel's rule that actually occur. Let us take a look at all the attestations of the second person singular of the imperative present from *tiṣṭhati* in the Saṁhitā text of the Rigveda, *tiṣṭha* and *tiṣṭhā* “stand!”.⁷ The following instances in (7) fit in with Wackernagel's rule in (6):

- (7) *tiṣṭha*: 1,40,1a; 4,4,4a; 6,18,9b (end of pāda b, end of sentence); 6,21,7b (end of pāda b, end of sentence); 8,23,5; 10,29,8c (end of pāda c, end of main clause before a relative clause⁸).
tiṣṭhā: 1,30,6a; 1,36,13b; 1,121,12b; 3,35,1a; 3,53,2a; 5,28,3d; 5,33,3c; 8,69,16b; 10,16,3d.

In (8), one can find examples which one cannot use for argumentation because sandhi obscures length distinction.

- (8) 10,173,1b; 10,172,2c/d; 10,174,2c/d.

In (9), all the exceptions from Wackernagel's rule for *tiṣṭha* in the Rigveda are listed. All those examples exhibit a short vowel before an open syllable inside a sentence.

⁷ From an Indo-European point of view this imperative ended in a short vowel *-e (cf. gr. φέρε /pʰére/ “bear!”, lat. age “drive!”), which must lead to a Vedic short -a. Thus, one would not expect a long vowel here.

⁸ Thus, strictly speaking, this example shows a lack of lengthening not covered by Wackernagel's rule.

- (9) tiṣṭha: 1,42,4c; 1,84,3a; 1,102,5c; 1,177,2c; 1,177,3a; 3,44,1d; 4,6,1a; 5,1,11b; 5,56,5a; 6,31,5b; 7,38,2a; 8,60,16d; 9,96,12d; 10,69,12d; 10,95,1a; 10,103,5d.

One could try to reduce the exceptions in (9) furthermore if one eliminates vocatives immediately following the verbal form. Vocatives are independent utterances which, so one could argue, cut the utterance and put the imperative at the end of a boundary thus evoking Wackernagel's condition that lengthening only occurs inside sentences (cf. (10)):

- (10) (e.g. 1,84,3a: *á tiṣṭha vr̥trahan rátham* “Mount (*á tiṣṭha*) the chariot, o killer of Vṛtra (*vr̥trahan!*!”) 1,84,3a; 6,31,5b; 7,38,2a; 10,95,1a.

One can attempt to reformulate Wackernagel's rule (6) as in (11) to get rid of these examples:

- (11) Tentative reformulation: “Lengthening only appears inside the sentence before a single consonantal anlaut. Since the vocative has to count as a separate utterance there is no lengthening immediately before a vocative.”

This reformulation reduces the number of counterexamples in (9) from 16 to 12, which, still, is not especially satisfactory. Even worse: If one looks at imperatives from other verbal forms, this tentative reformulation does not even appear to be a valid solution. One case in question is (12) (the imperative *uchā* with a long auslauting vowel before a vocative):

- (12) 5,79,9a: *v̑y uchā duhitar divo* “Aglow with light (*v̑y uchā*), o daughter of the sky (*duhitar divo*).”

Also imperatives from other verbs show the same phenomenon, e.g. the verb *avⁱ-* “help” in (13):

- (13) 2,31,2: *ádha smā na úd avatā sajōsaso* “Then, o you, the ones acting in harmony (*sajōsaso*) help us (*úd avatā*).”

Consequently, one has to leave Wackernagel's rule as it is (cf. (6)).

2.1. A list of the examples (only one citation of attestation is given for each type, there are sometimes more attestations of an example, of course) that appear in the first book of the Rigveda and which show the phenomenon of a long auslauting vowel in the Saṁhitā text that is represented as a short vowel in the Padapāṭha is given under (14). The first book represents about 20% of the whole Rigvedic corpus.

(14) A)

Particles: *cā* (1,77,2d) “and”; *ghā* (emphasizing particle; 1,82,4a); *smā* (emphasizing particle; 1,102,3a); *ū* (1,112,1d) “and”.

Other non-inflected words (conjunctions, adverbs / preverbs) *akútrā* (1,120,8b); “where it does not belong” (“wrong place”); *áchā* (1,2,2b) “close to”, *átrā* (1,163,5c); “here”; *ádhā* (1,55,5c) “then”; *áthā* (1,16,7c) “then”; *adyā* (1,25,19b) “today”; *ápā* (1,7,6a) “away”; *abhi* (1,140,13a) “against, to”; *evā* (1,8,8a) “so”; *tū* (1,10,11a) “but”; *nahi* (1,167,9a) “for not”; *nū* (1,167,9a) “ever”; *nū cid* “never (1,39,4d)”; *práprā* (1,129,8a) “forth and forth”; *maksū* (1,39,7a) “swiftly”; *mithū* (1,162,20d) “wrongly”; *yátrā* (1,89,9b) “where”; *sū* (1,139,7a) “good, fine”

Nominal forms (including pronouns)

- a) **Indefinite pronoun:** (*kádā*) *canā* (1,84,20b) (“ever”)
- b) **Demonstrative: Nom. Sg. m:** *sā* “he”(?) (1,145,1)
- c) **Instrumental Sg. a-stem:** *vṛṣabhéṇā* (1,33,13b) “with the bull”; *ténā* (1,49,2c) “with this one”; *yénā* (1,50,6a) “with whom”; *ásivenā* (1,116,24) “with the enemy”; *bákureṇā* (1,117,21c) “with the Bákura [musical instrument in form of a tube]”; *mártyenā* (1,164,30d) “with the mortal one”.
- d) **Nominative Dual m.** (or Instr. Sg. fem) *supaptanī* (1,182,5d) “the two with a good flight; with a good flight”
- e) **Acc. Sg. Neutr.** *bhúmā* (1,173,6c) “earth”
- f) **Pl. Neutr.** *námā* (acc.) (1,123,4b) “names”; *purú* (nom. (1,62,10c); acc.(1,81,7b)) “many”; *bhúmā* (acc., collective(?)) (1,70,6a) “creatures”; *rómā* (acc., collective) (1,65,8b) “hair”; *svádmā* (nom. collective) (1,69,3b) “sweet (things)”

B)

Verbal forms:

- a) **Imperative:**

Active:

ajā (2SgPrs) (1,174,3a) “drive!“; *árcā* (2SgPrs) (1,54,2a) “sing!“; *arcatā* (2PIPrs.) (1,101,1a) “sing!“; *(úd) avā* (1,102,4b) “help!“; *itā* (2PIPrs) (1,5,1a) “go!“; *iláyatā* (2PIPrs) (1,191,6d) “get calm!“; *ukṣatā* (2PIPrs.) (1,87,2d) “sprinkle!“; *(ví) uchā* (2PIPrs) (1,48,1a) “glow!“; *uruṣyā* (2SgPrs) (1,91,15a) “rescue”; *kartā* (2PlAor) (1,86,10c) “make!“; *kṛdhī* (2SgAor) (1,10,11d) “make!“; *(á) gatā* (2PlAor) (1,106,2a) “come here!”⁹; *gántā* (2PlAor) (1,39,7c) “come!“; *gūhatā* (2PlPrs.) (1,86,10a) “conceal!“; *(prá) carā* (2SgPrs.) (1,91,19d) “go forth!“; *cikitsā* (2SgDes) (1,91,23d) “you shall be willing to appear!“; *tarpayā* (2SgCaus) (1,54,9c) “satisfy!“; *tiṣṭhā* “(2SgPrs) (1,30,6a) “stand!“; *didhṛtā* (2PlCausAor) (1,139,8g) “bestow as property!” *namasyā* (2SgPrs) (1,44,6d) “pay homage to!“; *namasyatā* (2PIPrs) (1,84,5d) “pay homage to!“; *paptatā* “(2PlAor) (1,88,1d) “fly!“; *paśyatā* (2SgPrs) (1,103,5a) “look!“; *(áti) parṣā* (2SgAor) (1,97,8b) “transfer!”¹⁰; *(níh) pipṛtā* “(2PlPrs) (1,115,6b) “lead away (from)!“; *pārayā* (2SgCaus) (1,174,9d) “transfer!“; *pibā*

⁹ Recent formation, cf. Hoffmann 1976 : 365.

¹⁰ Recent formation, cf. Narten 1964: 48.

(2SgPrs) (1,14,10c) “drink!”; *pibatā* (2PlPrs) (1,161,8b) “drink!”; *puṣyatā* (2PlPrs) (1,94,8c) “let flourish! cause to thrive!”; *pr̥chā* (2SgPrs) (1,4,4b) “ask!”; *pr̥chatā* (2PlPrs) (1,145,1a) “ask!”; *bodhā* (2SgPrs) (1,147,2a) “be alert!”; (*prá*) *bodhayā* (2SgCaus) (1,134,3d) “wake up”; (*ví*) *bhajā* (2SgPrs) (1,81,6d) “allot!”; (*sám* ... á; *prá*) *bhārā* (2SgPrs) (1,57,3b; 1,61,12a) “fetch!”; *bharatā* (2PlPrs) (1,136,1b) “fetch!”; *bhavā* (2SgPrs) (1,36,2d) “be!”; *bhavatā* (2PlPrs) (1,107,1b) “be!”; (á) *bhūṣatā* (2PlPrs) (1,182,1a) “be ready!”; *mádatā* (2PlPrs) (1,51,1b) “make glad!”; (*ví*) *mucā* (2SgPrs) (1,177,4d) “release!”; *mṛ̥lā* (2SgPrs) (1,94,12c) “be merciful!”; *mṛ̥latā* (2PlPrs) (1,171,4d) “be merciful!”; *yáchā* (2SgPrs) (1,22,15c) “grant!”; *yájā* (2SgPrs) (1,45,1c) “venerate!”; *rakṣā* (2SgPrs) (1,18,3c) “protect!”; *rakṣatā* (2PlPrs) (1,166,8b) “protect!”; (*ví*) *radā* (2SgPrs) (1,61,12c) “divide into pieces!”; *randhayā* (2SgCaus) (1,51,8b) “subject!”; (á) *vadatā* (2PlPrs) (1,64,9a) “speak (to)!”; *vardhayā* (2SgCaus) (1,103,3d) “increase!”; (á) *vahā* (2SgPrs) (1,31,17c) “drive!”; *vāsayā* (2SgCaus) (1,140,1a) “bestow (sth. on so.); clothe (so. with sth.)!”; *vidhyatā* (2PlPrs) (1,86,9c) “drill through!” (root *vyadh-*); (á) *veśayā* (2SgCaus) (1,176,2a) “let enter!”; (*ádhī*) *vocā* (2SgAor) (1,132,1e) “favour!”; (*prá*) *śamśā* (2SgPrs) (1,37,5a) “praise!”; *śikṣā* (2SgDes) (1,27,4c) “endeavour!”; *śumbhatā* (2PlPrs) (1,21,2b) “glorify!”; (*úpa*) *śṛ̥nuhī* (2SgPrs) (1,82,1a) “listen!”; *śṛ̥nutā* (2PlPrs) (1,86,2c) “listen!”; *śrudhī* (2SgAor) (1,2,1c) “listen!”; *śrotā* (2PlAor) (1,122,11b) “listen!”; *sádā* (2SgAor) (1,26,2b) “take a seat!”; *sādayā* (2SgCaus) (1,15,4b) “cause to sit!”; *sādhayā* (2SgCaus) (1,94,3a) “let reach the aim!”; *sṛ̥jatā* (2PlPrs) (1,9,2a) “throw!”

Middle

mimikṣvā (2SgPerf) (1,48,16b) “attach!” (root *myakṣ-*); *yukṣvā* (2SgAor) (1,10,3a) “yoke, harness!”; (*prá*) *sákṣvā* (2SgAor) (1,42,1c) “accompany, follow!”; *sácasvā* (2SgPrs) (1,1,9c) “follow!”

b) Optative

(*ví*) *cayemā* (1PlAor) (1,132,1f) “we wish to sort out”; (*sám*) *mahemā* (1PlPrs) (1,94,1b) “we wish to manage /accomplish”¹¹; *vanuyāmā* (1PlPrs) (1,73,9b) “we wish to overpower”; *vocemā* (1PlAor) (1,40,6a) we wish to recite”

c) Injunctive:

(má) *riṣāmā* (1PlAor) (1,94,1d = refrain in 1,94,2d – 14d) “we should not be harmed”

d) Subjunctive:

kṛ̥navāmā (1PlPrs) (1,94,4a) “we want to make”; (ápi) *matsathā* (2PlAor) (1,186,1c) “you should be glad”¹²

¹¹ “We want to accomplish / put together this hymn like a chariot”

¹² Cf. Meier-Brügger 1980: 72.

e) **Indicative present:**

khādathā (2Pl) (1,64,7c) “you devour”; *chadáyathā* (2Pl) (1,165,12d) “you please”; *nayathā* (2Pl) (1,41,5a) “you lead”; *pāthā* (2Pl) (1,86,1b) “you are vigilant”; *pāthanā* (2Pl) (1,166,8d) “you protect”; *pratiháryathā* (2Pl) (1,40,6c) “you accept”; *bibhrthā* (2Pl) (1,39,10a) “you carry”; *vartáyathā* (2PlCaus) (1,39,3b) “you set in motion”; *sthā* (2Pl) (1,15,2c) “you are”

f) **Imperfect:**

akṛṇutā (2Pl) (1,110,3d) “you made”; *akṛṇotanā* (2Pl) (1,161,11a) “you made”; *ásastanā* (2Pl) (1,161,11c) “you slept”; (*sám*) (*a*)*srjatā* (2Pl) (1,110,8b) “you threw together”¹³

g) **Indicative perfect active:**

jagāmā (3Sg) (1,145,1a) “he has come”; *cakrmā* (1Pl) (1,31,18b) “we have made”; *jagrībhā* (1Pl) (1,139,10d) “we have seized”; *vidmā* (1Pl) (1,10,10a) “we know”; *suṣumā* (1Pl) (1,101,9a) “we have pressed”; (*úpa*) *sedimā* (1Pl) (1,89,2c) “we have sat down (near)”; *cakrā* (2Pl) (1,89,9b) “you have made”

h) **Gerunds:**

anughúṣyā (1,162,18d) “calling out”; *abhicákṣyā* (1,92,9a) “looking across”; *abhivlágyā* (1,133,2a) “catching”; *ādítýā* (1,103,6c) “beating out”; *āvítýā* (1,56,1d) “having turned here”; *ávyā* (1,166,13c) “supporting” (á + avⁱ-); *āsádyā* (1,109,5c) “having sat down”; *nicáyyā* (1,105,18c) “having noticed”; *niṣádyā* (1,108,3c) “having sat down”; *pratigíhyā* (1,125,1b) “having accommodated”; *prárpyā* (prá + ar- + caus.-p-) (1,113,4c) “having set into motion”; *vimúcyā* (1,104,1c) “having set free”; *samcákṣyā* (1,165,12c) “looking (i.e. having the appearance)”.

2.2. Before I concentrate on the mass of forms of the imperative, injunctive, subjunctive, optative and imperative of the verb – this will be the main part of my paper – I want to deal with some of the cases (the ones under (14) A) and B) g) and h)) shortly. The research of the last century has shown that in this group of examples there are many relics of older stages and that the *Pādapāṭha* analyses wrongly if one considers the history of the forms.

One can classify this material into 3 groups as in (15):

- (15) 1) Examples with reflexes of Brugmann’s law.
- 2) Analogies
- 3) Shortening, not lengthening, i.e. the long vowel is the expected one: loss of laryngeal in pause.

¹³ Because of Praśliṣṭa-Sandhi it is not clear whether the form represents an imperfect or an injunctive present. The *Pādapāṭha* analyses the form as an imperfect.

2.3. Let us first look at Brugmann's law.

In (16) one finds a broadly accepted version of Brugmann's law

- (16) ie. **o* > ved. *ā* in open syllable (cf. ved. *jānu-* “knee”= gr. γόνυ (*gónu*) “knee”; ai. *dātāram* ~ gr. δώτορα (*dótora*) etc.)

(17) shows a clear example, the emphasizing Vedic particle *ghā*, where we find a long vowel and an anlaut without palatalization in contrast to its Vedic synonym *ha* with a short vowel and a palatal anlaut. The details of this case were made clear by Mark Hale 1999:

- (17) (cf. Hale 1999: 150-151) ved. *ghā* (emphasizing particle) < IE **gʰo* (cf. slav. -*go* in Serbian *ne-go* „but“) vs. ved. *ha* (emphasizing particle) < IE **gʰe* (cf. OCS že (gr.) “δέ /dé/” "but")

Another group of examples could perhaps be explained by Brugmann as well: the forms of the first person plural of the perfect of our list in (14 B(g)), repeated as (18):

- (18) *cakrmā* (1Pl) “we have made”; *jagrhma* (1Pl) “we have seized”; *vidmā* (1Pl) “we know”; *sušumā* (1Pl) “we have pressed”; (*úpa*) *sedimā* (1Pl) “we have sat down (near)”¹⁴

There could have been an Indo-European variation between *e*-grade and *o*-grade in the first person plural of the perfect, as it has been noticed for the present tense (1PlPrs IE *-*mes* and *-*mos*)¹⁵. Likewise, the 1PlPerf could have made use of both ablaut grades: IE *-*me*¹⁶ and *-*mo*, where *-*mo* would be continued in the Vedic 1PlPerf ending -*mā* with the long vowel¹⁷.

2.4. A few remarks on the second group in (15), the group explainable by analogy:

In (19), the examples from (14)A) for vowel length in the Instrumental Singular of nominal *o*-stems with the Vedic ending -*enā* are repeated.

- (19) *vṛṣabhéṇā* “with the bull”; *ténā* “with this one”; *yénā* “with whom”; *ásivenā* “with the enemy”; *bákureṇā* “with the Bákura [musical instrument in form of a tube]”; *mártyenā* “with the mortal one”

¹⁴ The single example for a long auslauting vowel in the 2PlPerf in our list, *cakrá*, could have got its length in analogy to the first person plural *cakrmā* with the additional syntactic/poetic analogy to rhyming *yátrā* in 1,89,9b.

¹⁵ cf. for *-*mes*: gr. dor -μες; cf. for *-*mos*: lat. -*mus* [ved. -*mas* can be both]

¹⁶ cf. gr. (-F)ιδμεν [*(v)idmen*] “we have got to know”; also the Hitt. *hi-* conjugation, generally viewed as a continuation of the IE perfect paradigm, shows vowel -*e*- in the 1PlPrs: -*m/ueni* and in the 1PlPret -*m/uen*;

¹⁷ Cf. e.g. ved. *cakrmā* (1Pl) „we have made“ < **kʷe-kʷr-mo* with Brugmann's Law. In his new book, Jasanoff (2003, p.32) suggests a different solution: “The special affinity of [Vedic] -*mā* for the perfect cannot be explained by prosodic factors such as metrical lengthening, and suggests rather that the original 1 pl. perfect ending may have been **meH* or **moH*, distinct from *-*me*, *-*mes*, **mos* etc. of the other tenses”.

The communis opinio is that the ending *-ena* was a Vedic innovation originating in the pronominal system which expanded to the nominal system, finally displacing the old nominal instrumental ending *-ā*. The ending *-ena* normally has got an auslauting short vowel.¹⁸ I do not want to go into the tricky details of *-ena* itself but only want to look at the vowel length. If one assumes that the variant with the short vowel *-ena* is the original one then it is easy to see that the length of the vowel could be an analogy after the “normal” old nominal thematic instrumental ending with auslauting long *-ā* (< *-eh₁). A good example of how such a (syntactically motivated) analogy could have taken place is (20) where an instrumental in long *-ā* is directly adjacent to an instrumental with *-enā* ending in a long vowel and an instrumental showing *-ena*.

- (20) RV 3,32,2: *brahmakṛtā mārutenā gaṇēna* “with the flock of the Maruts, which incites prayer“

2.5. The third possibility of explaining away the forms of the Padapāṭha is that there is no lengthening at all but that the short forms of the Padapāṭha reflect shortening because of loss of a laryngeal in paua, in absolute final position. This is the case in the examples concerning the gerunds in (14) B h).

Here we profit from the pioneering work by Kuiper (1955). According to him, the gerund formation goes back to a fossilized old instrumental ending with the first laryngeal (cf. (21)). In normal contexts inside the sentence, as illustrated in (21), the laryngeal is lost and the vowel undergoes compensatory lengthening. But in the case of an absolute paua position, the laryngeal is lost without lengthening the vowel. Thus, about a third of the examples of gerunds in the Rigveda show a short vowel and the Padapāṭha took this short vowel as the unmarked form.

- (21) (cf. Kuiper 1955: 2): Instr. Sg: *-eh₁. *VH# #C > V [+ long]# #C (H= Laryngal); in paua: > V

3.1. The rest of the paper will be devoted to the bulk of the material in (14B), the imperative (a)), subjunctive (b)), optative (c)) injunctive (d)) and the indicative forms of the present stem (e), f)). In this article, sometimes the term “long-vocalic” is used as “having a long auslauting vowel”, and the term “short-vocalic” is used as “having a short auslauting vowel”.

The overwhelming majority of the examples for lengthening in this corpus are imperative forms, most of them in the active voice. There are only four instances of a middle voice second person singular. In our view this fact (also to be observed in older books¹⁹) could reflect more than a coincidence (cf. 3.3.).

Also other moods, which can be used similar to imperatives, show lengthening, i.e. optative, subjunctive and injunctive.

¹⁸ Cf. Wackernagel 1975=1929/1930: 498.

¹⁹ In Book 2, e.g., imperatives with a long auslauting vowel occur at the following places: 2,6,1c; 2,11,21c (=2,17,9c = 2,18,7b = 2,18,9c; = 2,19,9c = 2,20,9c); 2,14,1b; 2,14,6d; 2,14,7d; 2,14,9a; 2,14,10b; 2,14,11c; 2,23,7c; 2,27,6d; 2,29,6a; 2,30,10d; 2,33,2d; 2,33,11c; 2,34,9a; 2,34,9d; 2,36,2d; 2,36,3b; 2,37,3b; 2,41,13b; 2,41,15c.

3.2. One interesting thing with the list in (14) is the fact that there is no instance of lengthening of the short *-u* in 3rd person imperatives *-atu* (3Sg) and *-antu* (3Pl): e.g. *avantu/ ávantu* “they shall help!”: 1,22,16; 1,23,12; 1,106,3; 1,127,2; (*ánu*) *tiṣthatu* “it shall stand by!”: 1,134,1e; *pibatu* “he shall drink!”: 1,44,14c; *pibantu* “they shall drink”: 1,14,8b; *bodhantu* “they shall wake!”: 1,29,4b; *nayatu* “he shall lead!”: 1,90,1b; *nayantu* “they shall lead!”: 1,40,3d etc. etc. By a cursory check I could not discover a single instance for final long vowel in the imperatives of the 3rd person in the whole Rigveda. The reason for this cannot be that *u*'s could not be long in the auslaut at all. We find long *ū* in the particles *ū*, *nú*, *tú* and *mithú* in the Saṁhitā-text of book 1 besides their short counterparts in the Padapāṭha.

Thus, lengthening in the imperative is restricted to the second persons. A partner has to be present (hearer or hearers) in the situation of communication. The situation is a similar one in the other moods: The optative and the injunctive supply examples for the first person plural and there are attestations for the first and second person plural of the subjunctive. The first person plural designates the speaker and one or more other persons present. The common denominator of all these cases of the imperative, the optative, injunctive and subjunctive: In the situation of discourse someone else is present who is directly affected by the utterance.

3.3. My hypothesis is that this optional lengthening in the forms mentioned under 3.2. encodes a prosodic / intonational feature used to underline a summons to a partner directly (or, in case of a god, virtually) present in communication. This would explain all the cases mentioned. This would also partly explain the optionality of the feature. The lengthening feature seems to have been noticed by the native grammarian tradition too: In the R.-Pr. (434; 436) (but not in the Prātiśākhyas of the other Vedic texts) this lengthening is called “pluti”. This term normally denotes an intonational feature for the formation of questions (see below). Our type of pluti does not show the timing “3”, though.²⁰ But recall our claim that it also carries a prosodic feature.

The “normal” Vedic pluti (marked with the timing “3”) is widely accepted as an optionally present prosodic feature characterizing questions. It was optionally used in yes/no questions. Cf. the two examples in (22). In (22a) one finds an example with pluti which is encoded with the number 3 after the length marker. (22b) shows a yes / no question without pluti

(22) a) (with pluti, cf. also Strunk 1983:68; Etter 1985: 56;120)

RV 10.129.5b: *adháḥ svid āśī́3d upári svid āśī́3t?* “Was there down (below), was there above?”

b) (without pluti)

RV 5,18,3c,d: *ásiti svin nú vīr̥yam tát ta indra / ná svid asti? tág rtuthá ví vocah!*

“Does this your manliness, o Indra, exist / (or) doesn't (it) exist? This do make us known at the right time!”

²⁰ Cf. Benfey 1874: 5.

3.4. The imperatives with a long auslauting vowel (= “long-vocalic imperatives”) often turn up when there is a series of imperatives. It could be a poetic means to mark imperatives that are especially prominent in the given situation. This poetic licence could have had its grounding in “real life”, in a special intonation (cf. 3.3) connected with the long vowel on the “prominent” form. In (23) and in (24) one may find examples for this phenomenon (the imperative forms are set in bold letters):

(23) 3,62,8a,b: *tám juṣasva gíram mama! / vājayántīm avā dhiyam!* “Be fond (*juṣasva*) of this praise of mine, support (*avā*) the song which is longing for a reward!”

(24) 1,1,9: *sá nah pitéva sūnáve / ágne sūpāyanó bhava! / sácasvā nah sūvastáye!* “You, o Agni, be (*bhava*) easily accessible for us like a father for the son! Escort (*sácasvā*) us to benefit!”

Here, the respective second form (a long-vocalic imperative) could express some kind of intensification. Many other examples show the same phenomenon of “intensification”: Either imperatives with a short auslauting vowel (= “short-vocalic imperatives”) appear in the same verse before the long-vocalic imperatives, or – as a second possibility – short-vocalic imperatives can be found in adjacent verses before the long-vocalic imperatives. Sometimes further imperatives may follow that can be either short-vocalic or long-vocalic. Some examples for this intensification in addition to (23) and (24) are e.g.: 1,10,11d (*kṛdhī* “make”)²¹; 1,88,1d (*paptatā* “fly”)²²; 1,86,9c (*vidhyatā* “drill through!”)²³; 1,91,15a (*uruṣyá* “save!”)²⁴; 1,102,4b (*úd avā* “support!”)²⁵; 1,191,6d (*iláyatā* “be quiet”)²⁶.

In a number of cases, it is already the first imperative form of the hymn that is marked with a long vowel at the end (followed by and thus in contrast to other imperatives either in the same verse or in the following ones), preferably when appearing in the first position of a sentence, as in 1,174,1b (*rákṣā* “protect!”)²⁷; 1,54,2a (*árcā* “sing!”)²⁸; 1,5,1a (*étā* = á + itā “come here!”)²⁹ but also in other positions near the beginning of a sentence, e.g. in 1,48,1b (*vīy ucha* “shine out!”)³⁰.

²¹ With double accusative; cf. the imperative *piba* “drink!” in 1,10,11b and the imperative *prá ... tira* “prolong!” in 1,10,11c.

²² cf. the imperative á ... *yāta* “come here” in 1,88,1a and b.

²³ cf. the imperative (*āvih*) *karta* “reveal!” in 1,86,9b, the imperative *gūhatā* “hide!” in 1,86,10a and the imperatives *ví yāta* “drive through” in 1,86,10b and *kartā* “make!” in 1,86,10c.

²⁴ cf. the imperatives *rārandhi* in 1,91,13a “have fun!” and *ní pāhi* “protect!” in 1,91,15b.

²⁵ cf. the imperatives *prá ava* “help forth!” and *yacha* “provide!” in 1,102,3 and the imperatives *kṛdhī* “make!” and *prá ... ruja* “break into pieces!” in 1,102,4c and d and á *tishtha* “mount!” in 1,102,5c.

²⁶ Directly adjacent to *tishθata* “stand”. In this case the quantity of the auslauting vowel of *tishθata* in the Saṁhitā text cannot be determined due to sandhi.

²⁷ cf. *pāhi* “protect!” in 1,174,1b and the imperative *ajā* “lead!” in 1,174,3a.

²⁸ cf. the imperatives *abhí stuhí* “praise!” in 1,54,2b and *arcā* “sing!” in 1,54,3a.

²⁹ We interpret the exclamation á *tú* in front of *étā* as an independent utterance. Cf. the imperative *ní sīdata* directly adjacent to *étā* in 1,5,1a and the imperative *abhí prá gāyata* “sing a song to” in 1,5,1b.

³⁰ Here the verb is in second position (not counting the vocative *uṣas*). Cf. the imperatives *úd īraya* “fetch!” in 1,48,2b and *coda* “incite!” in 1,48,2d.

Sometimes the first imperative (in the “emphatic” long-vocalic form) is not evidently part of a “chain” of imperatives in the hymn. In this case there does not seem to be an affinity of the form to the beginning of a sentence, e.g. (25)

- (25) 1,136,1: *prá sú jyéṣṭham nicirābhyaṁ bṛhán námo / havyám matím bharatā mṛlayádbhyām / svādiṣṭham mṛlayádbhyām* “Pay [/Make] (*bharatā*) the best great homage to the two attentive ones, (make) a sacrifice (and) a hymn for the two ones showing compassion, (make) the sweetest (thing) for the two ones showing compassion!”³¹

3.5. Observations similar to those just made on the imperatives can be done on the rarer examples of the long-vocalic optative, e.g. on the form (*vi*) *cayemā* in (26), a hymn to god Indra:

- (26) 1,132,1: *tváyā vayám maghavan pūrvye dhána / īndratvotāḥ sāsahyāma pṛtanyatō! / vanuyāma vanuṣyatāḥ! / nédiṣthe asmín áhan̄y / ádhi vocā nú sunvaté. / asmín yajñé vi cayemā bháre krtám / vājayánto bháre krtám!* “With you, o munificent, we wish to overcome (*sāsahyāma* (opt.)) the adversaries (in the competition) for the first prize with your help, o Indra! We wish to outdo (*vanuyāma* (opt.)) the jealous ones! On this next day, favour (*ádhi vocā* (long-vocalic impv.)) now the soma-offerer. In this sacrifice, we wish to sort out (*vi cayemā* (long-vocalic opt.)) the best throw (*krtám* (scil “throw in the game of dice”)) in the contest (*bháre*)!”

Passage (26) shows the sequence short-vocalic optative (*sāsahyāma*) – short vocalic optative (*vanuyāma*) – long-vocalic imperative (*ádhi vocā*) – long-vocalic optative (*vi cayemā*) in an “intensifying chain”. This reminds us of the intensifying function of the long-vocalic imperative postulated above in 3.4. The series of first person plural optatives is interrupted by a long-vocalic imperative (*ádhi vocā*)³². This long-vocalic imperative could perhaps also have played a “fermentative” role for the subsequent long-vocalic optative (*vi cayemā*). An example for an intensifying function of a sequence of short-vocalic optative and long-vocalic optative in two adjacent verses is *vanuyāmā* “we wish to overpower” in 1,73,9b. Here the preceding short-vocalic optative *sýāma* “we wish to be” appears in 1,73,8a.

The only example for a long-vocalic injunctive in our collection in (14B) c)) is the first person plural form *má riṣāmā* “we should not be harmed” in a prohibitive phrase (1,94,1d, appearing in a refrain in 1,94,1d – 14d, thus being quite prominent). It follows a first person plural long-vocalic optative in 1,94,1b: (*sám*) *mahemā* “we wish to accomplish”. There is another long-vocalic form, the first plural subjunctive *kṛṇavāmā* “we want to make” in 1,94,4a following the first plural subjunctive form *bhárāma* (1,94,4a), where (due to sandhi) it is not clear whether the auslauting vowel is short or long:

³¹ A similar case is *adhí vocā* “speak in favour of!” in 1,132,1e.

³² Here the prosodic feature of length is perhaps used to underline the contrast of the change from the first person plural to the second person singular.

- (27) 1,94,4a: *bhárāmedhmám̄ kṛṇavāmā havīṁsi* “we want to bring (*bhárāma* / *bhárāmā*) fuel for the sacrifice (*idhmám̄*), we want to make/give (*kṛṇavāmā*) oblations”

The long-vocalic form of the subjunctive, *kṛṇavāmā* in (27) and in our list in (14)B)c) can be interpreted as an “intensification” of the preceding form *bhárāma* / *bhárāmā*. The second example for a long-vocalic subjunctive, (*ápi*) *mátsathā* in 1,186,1b (“you should be glad”), is a case comparable to (25) with a long-vocalic form appearing in the first verse of a hymn without having a “chain” of forms in the same person. In this case, this long-vocalic 2nd plural form (*ápi*) *mátsathā* stands in contrast to third singular imperatives (*á ... etu* “he shall come” in 1,186,1a; *á ... gamantu* “they shall come”).

3.6. Why there are long-vocalic forms in the indicative present and imperfect forms (our list (14)B)d) and e)), still remains quite unclear to me. They are all second person plural forms. It is worth noticing, though, that sometimes an abrupt change of perspective towards direct addressing is encoded by these long-vocalic forms. Thus, in 1,64,7c, the long-vocalic 2PIIndPrs form *khādathā* “you devour” addresses the storm-gods, the Maruts, directly. In the text passage before this form, the storm-gods are simply described in the third person. Sometimes (as in 1,15,2c *sthā* “you are”) there are imperative forms before an indicative form which is intensified with the particle *hí*, thus almost getting the status of an imperative, see example (28):

- (28) 1,15,1a: *índra soma piba 1,15,2 márutah pibata rtunā / potrād yajñám punītana / yuyám hí sthā sudānavah* “O Indra, drink (*pibata*, ipv.) Soma! ... O Maruts, drink (*pibata*, impv.) out of the vessel of the Potr, make the offering clean (*punītana*, impv.)! You are (*sthā*’pres. ind.), alas, munificent”

4.1. Let us sum up briefly our results concerning the imperatives and related emphatic forms (optative, injunctive and subjunctive forms). There seems to be a functional difference between the forms with a long auslauting vowel (“long-vocalic” forms) in contrast to the forms with an auslauting short vowel (“short-vocalic forms”): The long-vocalic forms indicate a more intense hortatory speech act than the short vocalic forms. Thus, the length sign here probably is not a pure length marker but also the carrier of a certain intensifying intonation which is imposed onto a long vowel. In addition to this functional aspect, a phonological rule holds only admitting this intonation sign in open syllables inside the sentence (Wackernagel’s rule in (6)). Thus, this type of intonation does not get into conflict with other intonations (e.g. if one assumes a special intonation at the end of a sentence).

4.2. At least one question concerning these long-vocalic forms remains open: What might be the reason why this intensifying intonation is only allowed in open syllables? From the point of view of phonetics and historical linguistics, lengthening in open syllables is a phenomenon which can be observed in a number of languages. But one can be more specific than that. A possible answer could be that Vedic Sanskrit is a language which exhibits tendencies for the equilibrium of syllable quantity in several places.

One can compare the well-known situation in reduplication. In causative aorists, a long vowel in the reduplication syllable appears before a single consonant and a short vowel appears before a consonant cluster. Contrast the forms *nīṣ* ... *a-nī-naśat* “he has driven away” (RV 10,162,2) and *si-svadat* “he shall make tasty” (RV 1,188,10). One can also compare the well-known tendency of Vedic to create a comparable equilibrium in the reduplication syllable of the perfect, e.g. *vā-vanat* (third singular perfect active subjunctive of *van⁽ⁱ⁾*- “love, like”, TS 2,4,5,1) vs. *va-vnire* (third plural perfect middle of *van⁽ⁱ⁾*- “love, like”).

Another type of equilibrium in Vedic is what I have called the “humidityhouse effect” in Krisch 1996: 52-56. Here the regularity is: If the reduplicative syllable is metrically long then the root syllable is short and the other way round (if the root syllable is metrically long, then the reduplicative syllable is short), cf. *sā-saha* (third singular perfect active of *sah-* “defeat”; JS 1,12,72) vs. *sa-sāhē* (third singular perfect middle of *sah-* “defeat”; RV 10,104,10).

The imperatives (and similar moods) dealt with in this paper fit well into this scenario of equilibrium in Vedic. We tried to show that Wackernagel’s rule in (6) has to be supplemented by a functional aspect of intensification and that the lengthening in imperatives appears only in speech acts which are directed towards the hearer or hearers or at least can be heard by other persons present in the communication act. We also tried to make it plausible that the lengthened vowel could have carried a prosodic feature comparable to Pluti in the speech act of question. The function of “our” Pluti can be characterized as intensification and emphasis. Wackernagel’s rule reflects an answer of a language system which tends towards equilibria.

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