

ACCENT AND ABLAUT IN THE VEDIC VERB

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Most scholars nowadays reconstruct a static root present with an alternation between lengthened grade in the active singular and full grade in the active plural and in the middle. I am unhappy about this traditional methodology of loosely postulating long vowels for the proto-language. What we need is a powerful theory which explains why clear instances of original lengthened grade are so very few and restrains our reconstructions accordingly. Such a theory has been available for over a hundred years now: it was put forward by Wackernagel in his Old Indic grammar (1896: 66-68). The crucial element of his theory which is relevant in the present context is that he assumed lengthening in monosyllabic word forms, such as the 2nd and 3rd sg. active forms of the sigmatic aorist injunctive. Since the sigmatic aorist is the prototypical static paradigm in the verbal inflection, it offers the possibility of testing the relative merits of the two theories, Wackernagel's lengthening in monosyllabic word forms versus a static paradigm with lengthened grade in the singular and full grade in the plural. As I have pointed out elsewhere (1987), the evidence substantiates Wackernagel's view and forces us to reject the alternative because we find full, not lengthened grade in the 1st sg. form, e.g. Vedic *jeṣam* 'conquer', *stoṣam* 'praise'. The only 1st sg. active form with lengthened grade in the sigmatic aorist injunctive is *rāviṣam* of the root *ru-* 'hurt', which is clearly analogical. It is therefore reasonable to assume that originally the static present also had lengthened grade in the 2nd and 3rd sg. active forms of the injunctive and full grade elsewhere.

Following Hoffmann, Narten interprets *jeṣam* and 1st pl. RV. *jeṣma* as precative forms (1964: 120). The reason for this interpretation is evidently the absence of lengthened grade (cf. Hoffmann 1967a: 254). The functional evidence for the interpretation as precative (Hoffmann 1967b: 32f.) or subjunctive (Insler 1975: 15²⁶) is very weak, while the formal objections against it are prohibitive. It is therefore preferable to retain the traditional view that these forms are what they look like: full grade injunctive forms, which were interchangeable with the corresponding subjunctive in certain contexts and which could be interpreted as precative when the latter category became common.

Narten assumes that the injunctive forms *yoṣam* and *stoṣam* took their vocalism from the subjunctive (1964: 213, 277). The model for this analogic development is lacking, however, because the subjunctive ending was *-āni*, not *-am*. Hoffmann attributes the alleged substitution of the injunctive ending *-am* for the earlier subjunctive ending *-ā* to the influence of the 2nd sg. imperative: "Das Bestreben, den Konjunktivausgang *-ā* von dem durch Auslautsdehnung gleichlautend gewordenen Imperativausgang zu sondern, hat das Ausweichen zu *-am*, wodurch die 1. Person deutlich gekennzeichnet wurde, gefördert" (1967a: 248). I find such influence highly improbable. The use of the 1st sg. injunctive for the subjunctive must be explained from the meaning of the forms. Note that standard British English offers an exact parallel in the use of 'I shall' where other persons 'will'. During my stay in Dublin, Dr. Patrick Sims-Williams told me that when an Irish friend asked him in front of an open door: "Will I go first?", the only reasonable answer to him would be: "I don't know". Compare in this connection RV.VII 86.2 *kadā*

nv àntár váruṇe bhuvāni ... kadā mṛṭkām sumānā abhī khyam ‘When will I be inside Varuna? When shall I, cheerful, perceive his mercy?’. Also X 27.1 *ásat sú me jaritaḥ sábhivegó, yát sunvaté yájam ānāya śikṣam* ‘That will be my excitement, singer, that I shall be helpful to the pressing sacrificer’. In X 28.5 *kathá ta etád ahám á ciketam* ‘How shall I understand this (word) of yours?’, the substitution of the subjunctive for the injunctive would yield a quite different shade of meaning: it would shift the responsibility from the singer to Indra. Similarly VIII 74.15 *dediśam* ‘I shall point out’ must be identified as an injunctive (cf. Hoffmann 1967a: 253²⁸¹), not a subjunctive (thus Schaefer 1994: 42f. “will ich [...] hinweisen”), and the same holds for *yoṣam* and *stoṣam*. The injunctive presents the event as a fact without specifying its time frame. As a result, the listener has to supply a time frame in which the event is part of reality, and is driven by the context to choose the most obvious possibility. The subjunctive, however, presents the will to achieve a situation as part of reality, and thereby suggests that its accomplishment may be beyond the subject’s control. The “Spezialfall” of the “Nebeneinander von Injunktiv und Konjunktiv in der 1. Person Singularis” (Hoffmann 1967a: 247) is a result of the fact that the first person can take full responsibility for his own actions, cf. also II 18.3 *hárī nú kam rátha indrasya yojam āyái sūkténa vácasā návena* ‘die Falben schirre ich nun an Indras Wagen [‘now indeed shall I harness the steeds to Indra’s chariot’] mit wohlgesprochener neuer Rede, auf daß er komme” beside I 82.1-5 *yójā nv indra te hárī* ‘ich will dir nun deine Falben anschirren, Indra” followed by 82.6 *yunājmi* ‘I harness’ (Hoffmann 1967a: 253).

If Wackernagel’s theory is correct, as I think it is, we also expect lengthened grade in the 2nd and 3rd sg. active forms of the root aorist injunctive. Perhaps the clearest piece of evidence for this original distribution is the long vowel in 3rd sg. **g^wēmt* ‘came’, Latin *vēnit*, Gothic *qēm-*, Toch. B *śem*, which can hardly be explained otherwise. Another instance is Greek σβη- < **sg^wēst* ‘(the fire) went out’ (cf. Ruijgh 1998: 226). A third example may be Old Irish *ro-míadair* ‘he judged’ < **mēd-* of *midithir* ‘judges’ < **med-*, Gothic *mēt-* ‘measured’, Greek μηδ- ‘be disposed, inclined’ beside μεδ- ‘be observant, attentive’. This raises the question of why in Indo-Iranian the long vowel was generalized in the sigmatic aorist indicative, which had fixed stress, and eliminated in the root aorist, which had mobile stress. The reason must be sought in the difference between static and dynamic paradigms. The problem will be taken up below.

We first have to establish the nature of the static present, which is not a frequent type of inflection. I subscribe to Dr. Alexander Lubotsky’s unpublished theory that it must be derived from a reduplicated formation (cf. already Rix apud Harðarson 1993: 29¹²). A clear instance is Vedic 3rd sg. *táṣṭi*, 3rd pl. *tákṣati* ‘fashion’, which cannot be separated from Greek τέκτων ‘carpenter’ < **tetk-*. Another example is Vedic 3rd sg. *dáṣṭi* ‘makes offering’ beside *dákṣate* ‘is able’ < **dedk-* (cf. Lubotsky 1994: 204). These verbs may have provided a model for *kāś-* ‘appear’ beside *cáṣṭe* ‘sees’ < **k^wets-* < **k^wek^wk-*, then **śās-* ‘order’ < **ke(k)Hs-* beside aorist **śās-*, *śiṣ-* < **keHs-*, **kHs-*, and 3rd sg. *márṣṭi* ‘wipes’ < **me(m)rg-*, *stáuti* ‘praises’ < **ste(st)u-*, with lengthening of the vowel replacing the lost consonants. The original formation can be identified with Greek τίκτω ‘engender’.

It may be useful to have a look at the place of this formation in the original verbal system. Following a line of thought developed by Pedersen (1921: 25f.) and Kuiper (1934: 212), I reconstruct a hysterodynamic *s*-present, 3rd sg. **tresti*, 3rd pl. **trsentī*, beside a static *s*-subjunctive (Indo-Iranian aorist injunctive), 3rd sg. **tērst*, 3rd pl. **tersnt*, the coexistence of which is perhaps best preserved in Tocharian (cf. already Kortlandt 1985: 117³), where we find B *tās-* < **dhH₁es-* beside A *tās-* < **dhH₁s-* in the present and

B *tes-*, A *cas-* < **dhēH₁S* in the preterit of the verb *tā-* < **dheH₁-* ‘put’. If the reduplicated formations followed a similar pattern, we may reconstruct a hysterodynamic reduplicated present, Vedic 3rd sg. *vívakti* ‘speaks’ < **wíwek^wti*, weak stem **wíwk^w-*, but with retracted stress in 3rd pl. **wewk^wnti*, cf. 3rd sg. *síṣakti*, 3rd pl. *sáscati* ‘accompany’ < **sísek^wti*, **sesk^wnti*, beside a static reduplicated subjunctive (Indo-Iranian aorist injunctive), 3rd sg. **wēwk^wt*, 3rd pl. **wewk^wnt*, Vedic *ávocat* ‘he spoke’, subjunctive *vócati* beside *vócāti*. This reconstruction actually explains the long *-ē- in the reduplication syllable of original reduplicated aorists, as opposed to original presents and perfects, in Tocharian (cf. Kortlandt 1996: 173). The original accentuation of the hysterodynamic reduplicated present is preserved in Vedic 3rd sg. *juhóti*, 1st pl. *juhumás*, 3rd pl. *júhvati* ‘sacrifice’. For the reduplication syllable cf. also 3rd sg. *yuyóti* ‘separates’, aorist injunctive *yūyot* for **yāyut* < **yēywt* (?), also 3rd sg. *ápīpatat* for **-pāp(t)* < **pēpt* beside *ápaptat*, 3rd pl. *ápaptan* ‘flew’ for **-paptat* < **peptnt*, and *jáhāti* ‘leaves’ beside *jihāte* ‘goes forth’, further 2nd sg. *vaváksi* beside 3rd sg. *vivaṣṭi* ‘desires’, imperative *rírīhi* beside subjunctive *rárate* ‘give’, also *jígāti* ‘goes’, *jágat* ‘going, world’, like Greek τίκτω ‘engender’, τέκτων ‘carpenter’. There is no reason to assume two types of reduplicated present which as a result of partial adaptation under mutual influence gave rise to four different combinations of accent and ablaut in Vedic (thus e.g. Harðarson 1993: 30¹⁴) because this assumption does not explain the coexistence of the two types of reduplication within a single paradigm. The rise of the static reduplicated present may have been provoked by the raising of pretonic *-e-* to *-i-* in the reduplication syllable (cf. Kortlandt 1987: 222).

If the historical background of the reduplicated formation proposed here is correct, we should expect full grade reduplication and zero grade root vocalism throughout the paradigm of the Vedic intensive. It follows that full grade root vocalism in the paradigm of the intensive is always the result of analogy after the hysterodynamic flexion types. Thus, I think that 1st sg. *dediśam* ‘point out’ is the regular injunctive form and that e.g. 2nd sg. *dardar* ‘split’, 3rd sg. *adardhar* ‘held’ are analogical for **dardur*, **adardhrt*, which were anomalous forms. On the other hand, 3rd pl. forms in *-at* < **-nt* could easily give rise to a thematic injunctive paradigm with 3rd sg. *-at* and 3rd pl. *-an*, e.g. *davidyutat* or *-an* ‘flashed’ (cf. Thieme 1929: 12f., Hoffmann 1967a: 200f., Schaefer 1994: 41). Jamison asks the question “why the intensive was not thematized throughout: it is the restriction, the relative rarity of these thematic forms that is curious, not their existence” (1983: 48). The answer is precisely that the subjunctive had zero grade root vocalism in the intensive so that the thematic paradigm existed already with a different function. Since the intensive was the only athematic present without full grade vocalism in the predesinential syllable of the active singular forms, the analogical introduction of a full grade root vowel is only to be expected, e.g. *dávidyot* for **-dyut* beside *davidyutat* or *-an*. Interestingly, the two instances which Jamison adduces as clear examples of thematized injunctives, as opposed to subjunctives, are precisely the 3rd pl. forms *carikiran* ‘commemorate’ and *pāpatan* ‘fly’ (1983: 47), where *-an* may have replaced *-at* < **-nt* (cf. also Schaefer 1994: 41f. and Lubotsky 1997: 561), like *-anta* replacing *-ata* in the middle. This replacement must have been earlier than the general substitution of *-ur* for **-at* < **-nt* in Vedic (cf. Kortlandt 1981: 129²).

As I have argued elsewhere (1987), the 3rd pl. form occupies a special position in the paradigm. This is clear not only from the alternating vowel in the reduplication syllable of 3rd sg. *síṣakti*, 3rd pl. *sáscati* ‘accompany’ and *jígāti* ‘goes’, *jágat* ‘going, world’, but also from the alternating vocalism in the active and middle root aorist and in the paradigm of the optative. As Meillet noticed a long time ago (1920: 202-205), the 3rd pl.

middle indicative forms *ákrata* ‘made’, *ārata* ‘went’ correspond to the injunctive forms *kranta*, *ranta*. The archaic character of this distribution is supported by the isolated 3rd pl. injunctive forms *naśan* and *naśanta* ‘attain’, which correspond to indicative *ākṣiṣur* (for *āśur* replacing **āśat*) and *āśata*. Hoffmann’s conjecture that the initial *n-* of the injunctive is of secondary origin (1957: 124f.) does not explain why it is limited to the 3rd pl. forms, cf. 3rd sg. middle *aṣṭa*. In the active root aorist we find 3rd pl. *ásthur* ‘stood’, *ávran* ‘covered’ beside the corresponding injunctive forms *sthúr*, *vrán*, which suggest an original alternation between double zero grade in the indicative and a full grade ending in the injunctive. This distribution must be old because the double zero grade is supported by comparative evidence from Greek, where 3rd pl. *ἔθεαν* ‘put’ replaces earlier **ἔθαν*, with loss of the laryngeal and vocalization of the nasal (cf. Kortlandt 1988: 67), and from Germanic, where original **dunþ* is reflected in the Old English preterit sg. *dyde*, pl. *dydon* ‘did’ (cf. Kortlandt 1989: 102). In the optative, the alternation between a full grade suffix in the singular and double zero grade in the suffix and the ending in the 3rd pl. form is best preserved in the Old Church Slavic *je*-presents *xošte-* ‘want’ and *do-vilje-* ‘satisfy’, which have **-iHnt* in 3rd pl. *xotetŭ* and *dovileŭ*, corresponding to Latin *velint*, Gothic *wileina* (cf. Kortlandt 1987: 221). As in the case of the reduplicated presents, there is no reason to assume different flexion types in the optative, an assumption which does not explain the coexistence of the two types within a single paradigm. Instead we must reconstruct an original alternation between suffixal stress in the active singular, desinential stress in the active 1st and 2nd pl. forms and in the middle, and root stress in the active and middle 3rd pl. forms. This reconstruction actually offers an explanation for the Vedic isolated 1st pl. form *naśimahi* (3x) beside *aśimahi* (5x) ‘attain’, which suggests that this paradigm also contained a form with full grade in the root. Since the initial *n-* is lacking elsewhere in the middle optative and indicative paradigms, it was probably taken from the unattested 3rd pl. middle optative form.

The reconstruction of a triple accent and ablaut alternation advocated here also accounts for the root aorist optative type exemplified by 1st sg. Vedic *dheyām*, Greek *θεῖην* ‘put’ (cf. Harðarson 1993: 126-142 for a survey of the scholarly literature). In his elaborate treatment, Insler connects the type *dheyām* with the type *gaméyam*, the two being in complementary distribution (1975: 15). His explanation falters on two points. First, it requires the previous existence of both **dheyam* and **dhāyām*, of which the attested form represents a blending. It is highly improbable that neither of the earlier forms would have survived because both were supported by other paradigms, while the alleged blending created a new type. Second, the motivation for the spread of the new vocalism to the third person forms is very weak. The long chain of analogic changes which Insler’s theory requires is too complicated to be credible. Thus, I think that the paradigm of *dheyām* was based on the 3rd pl. form **dhaHiHat*, which had full grade in the root and double zero grade in the suffix and the ending, because the zero grade of the root was reduced to *dh-* before the optative suffix *-yā-*, *-ī-* in the other persons. Similarly, Greek introduced the stem vowel from 3rd pl. **theīn* into the other persons, where the zero grade of the root had been reduced to *th-* before *-iē-*, *-ī-* (cf. Kortlandt 1992: 238). The disyllabic character of **theīn* is still preserved in *τιθεῖεν* < **tithēī-en* ‘they may put’, where the accent was not retracted to the initial syllable, unlike *δύναιο*, *δύναισθε* ‘you may be able’, which replace earlier **dunīso*, **dunīsthe*. The 3rd pl. ending of the sigmatic aorist optative **-sīn* < **-sīnt*, which had become homophonous with 1st sg. **-sīn* < **-sīm*, was replaced by **-seīn* on the analogy of **theīn*, the ending of which was also found in the passive aorist and in the paradigm of *ἔημι* ‘let go’. This is the origin of the so-called

Aeolic optative.¹ The correctness of these reconstructions is corroborated by the Old High German preterit subjunctive (Indo-European optative) of weak verbs. The difference between Alemannic *nāmi* ‘took’ and *suohī* ‘sought’ (Notker *nāme* versus *suohī*), which cannot be explained as a secondary development, shows that the two paradigms represent different formations. While *nāmi* can be compared with *wili* ‘wants’ (Notker *wile*) and derived from **-īt*, the weak ending *-tī* must be compared with Vedic 1st sg. *dheyām*, 3rd pl. *dheyur*, Greek θείην, θεῖεν, and derived from **dheīt* (cf. Kortlandt 1989: 105). It provides conclusive evidence for the compound origin of the Germanic weak preterit.

The peculiar accentuation of the 3rd pl. forms such as Vedic *tákṣati* ‘fashion’, *sáscati* ‘accompany’, *júhvati* ‘sacrifice’, **jágati* ‘go’, *ákrata* ‘made’, *ārata* ‘went’, *naśan*, *naśanta*, *āsata*, *ākṣiṣur* ‘attain(ed)’, *ásthur* ‘stood’, *ávrān* ‘covered’, *dheyur* ‘put’ points to a different origin from the other forms of the verbal paradigm. In fact, the accentual alternation in 1st sg. *juhómi*, 3rd sg. *juhóti*, 1st pl. *juhúmas*, 3rd pl. *júhvati* ‘sacrifice’ suggests that these forms have three distinct origins: the singular looks like a regular verbal paradigm, with suffixed endings which may go back to clitics, while the 1st pl. form resembles a derivative, perhaps a compound, and the 3rd pl. form has the appearance of a participle. As I pointed out earlier (1987: 222), I think that the form in *-nti* represents the original nom.pl. form of the participle, with the Indo-Uralic plural ending *-i* which is also found in the Proto-Indo-European pronominal inflection, e.g. **toi* ‘they, these’, gen. **toisom*, etc. Since Beekes’s discussion of Latin *iens*, *eunt-* ‘going’ (1985: 67-71), we have to start from a reconstructed paradigm with nom.sg. **H₁eints*, acc.sg. **H₁ientm*, gen.sg. **H₁intos*, in which Vedic 3rd pl. *yánti* < **H₁ienti* may have been the original nom.pl. form of the participle. If the present indicative **trsentī* and the aorist injunctive **tersnt* originally belonged to the same paradigm, the latter form looks like the original neuter of the participle. This is indeed the expected form if the agent of a transitive verb in the aorist was in the ergative case (cf. Kortlandt 1983). Thus, I tentatively reconstruct present indicative **toi trsentī* beside aorist injunctive **tois tersnt*, where **tois* is the original ergative from which the genitive **tois-om* and the instrumental **to-ois* were derived.² It appears that the participial form was cliticized after the augment in Vedic *ásthur* ‘stood’ for **ásthat* < **H₁e-stH₂nt*, also *ákrata* ‘made’ < **H₁e-krnt-*, and after the reduplication, e.g. neuter *dádhat* ‘putting’ < **dhedhH₁nt*, 3rd pl. *dádhati* < **dhedhH₁nti*. In this view, forms like *naśan*, *naśanta* ‘attain’, *ávrān* ‘covered’ adopted the full grade ending on the analogy of the primary (i.e. nom.pl.) form in **-enti*, whereas the static paradigm is ultimately based on the secondary (i.e. neuter) form with zero grade **-nt* exemplified in **tersnt* and **dhedhH₁nt*. The model for the creation of the full grade secondary endings **-ent*, **-ento* beside primary **-enti* was of course provided by 3rd sg. **-t*, **-to* beside **-ti*, while the zero grade primary ending of *dádhati* ‘they put’ may have been the original nom.pl. ending of the reduplicated participle.

The remaining question is why the lengthened grade was eliminated from the Indo-

¹ Cf. *ibidem*. The ending **-seīn* was subsequently replaced by **-seīyan* on the analogy of the thematic ending **-oiyan*. This replacement accounts for the retraction of the accent in λύσειαν ‘they may loosen’ in accordance with the limitation law. In the original paradigm with mobile stress, the 3rd pl. ending **-īn* was replaced by **-iye*n on the basis of the indicative paradigm, e.g. τιθεῖεν < **titheiye*n, also Delphi περιεῖεν < **-i-eiye*n ‘they may go round’, Hom. ἰεῖη < **i-eiye* ‘he may go’. Similarly, εἰδεῖη, εἰδεῖεν < **weideiye*ē, **weideiye*n ‘he, they may know’ represent **widieH₁t* (Vedic *vidyát*), **weidiH₁nt* (with original full grade in the root) plus **-eī-* from **theīn* and the 3rd pl. ending **-ent*.

² A typological parallel is offered by the dialectal Russian (plu)perfect, e.g. *v jix košali bal’šyje nabito (byli) sénom* ‘they had/ve filled the big bags with hay’ (cf. Honselaar 1998: 303), literally: at them [gen.pl.] bag [nom.pl.] big [nom.pl.] filled [neuter past participle] (were [pl.]) hay [inst.sg.].

Iranian root aorist, e.g. Vedic 3rd sg. *ágan* ‘went’ < *-g^wemt, cf. Latin *vēnit*, Gothic *qēm-*, Toch. B *śem* ‘came’ < *g^wēm-. As in the case of the *s*-present and the *s*-aorist, I think that we have to start from a reduplicated present indicative, 3rd sg. **wiwek^wti*, 3rd pl. **wewk^wnti*, beside a reduplicated aorist injunctive, 3rd sg. **wēwk^wt*, 3rd pl. **wewk^wnt*, cf. Vedic *vívakti* ‘speaks’, *ávocat* ‘spoke’. The meaning of this formation must have been iterative or intensive (cf. Bybee et al. 1994: 166-174 on the semantic development of reduplicated formations). When lengthened grade superseded reduplication in the active singular of the static present, first in *TeK*-roots such as *táṣṭi* ‘fashions’, *dáṣṭi* ‘makes offering’, then analogically in *márṣṭi* ‘wipes’, *stáuti* ‘praises’, the long vowel became characteristic of this type of derived present and thereby anomalous in the paradigm of the root aorist, where it was limited to the 2nd and 3rd sg. injunctive forms and could easily be eliminated, cf. 3rd sg. imperfect *akrāmat* beside aorist *akramūt* ‘strode’. The original lengthened grade may have been preserved in 2nd and 3rd sg. *akrān* ‘cried’, *asyān* ‘moved’, *āraik* ‘left’, *acait* ‘perceived’, *aśvait* ‘brightened’, *adyaut* ‘shone’, which are isolated in the paradigm of the root aorist and could be reanalyzed as sigmatic aorist forms. The hypothesis that these forms are independent analogical creations (Narten 1964: 18) does not explain their isolated character in the oldest texts. I therefore think that they may be relics from the stage when lengthened grade had not yet adopted the function of reduplication in the static present, which provoked its elimination from the root aorist.

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