## THE VEDIC IMPERATIVES vódhi 'FIGHT' AND bodhi 'HEED'

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The 2nd sg. imperatives  $y\acute{o}dhi$  (: yudh- 'fight') and bodhi (: budh- 'awake, heed') are usually seen as athematic imperatives in -dhi with irregular guṇa of the root syllable and reduction of the geminate cluster -ddhi- to -dh-. It is argued here, by contrast, that these forms are actually analogical creations on the basis of the 2nd sg. imperative  $j\acute{o}si$  (: jus- 'enjoy'). Etymologically and historically,  $j\acute{o}si$  is a "si- imperative" (\* $j\acute{o}s$ -si), haplologized from a 2nd sg. subjunctive \* $j\acute{o}sasi$  / \* $g\acute{e}usesi$ . Synchronically, however, it appeared to be an "i-imperative" based on the gunated root, and the overall parallelism of the verbs yudh-, budh-, and jus- led to the creation of  $y\acute{o}dhi$  and bodhi on the same model.

It was from reading one of Stanley Insler's stimulating articles nearly thirty years ago that I first came to appreciate the oddity of the Vedic 2nd sg. imperatives yódhi (; yudh-'fight') and bodhi (; budh-'awake, heed'). In dedicating this little study to him now, I hope that our honorand will be pleased to see how much my analysis owes to him.

yódhi is a hapax, occurring at RV V 3.9:

áva sprdhi pitáram yódhi vidvấn, putró yás te sahasaḥ sũna ũhế

Insler (p. 556) translates this passage as follows: "Protect (or free) the father. Knowing how, fight (for him) who is considered thy son . . ." In adopting this interpretation, he specifically upholds the traditional analysis of yódhi as a form of yudh-, correctly rejecting the attempts of Oldenberg, Geldner, and other scholars to refer it to yu- 'keep away'. Insler's stated reason for preferring yudh- to yu- is functional: transitive yu-, he notes, never appears in the Rigveda without an overt direct object. But his discussion as a whole reveals another, more intuitive line of thought: since yódhi is inseparable from bodhi, and since bodhi is a form of budh-, yódhi must be a form of the morphologically parallel root yudh-.

bodhi itself—not to be confused with the homophonous but unrelated 2nd sg. impv. bodhi (bodhi) 'be(come)'

(: *bhū*-)<sup>3</sup>—is attested ten times in the *Rigveda*. The typical use is seen in passages like IV 3.4:

rtásya bodhí rtacit svädhíh

Being of good attention, be aware of the truth, thou perceiver of truth.

and VIII 43.27:

ágne sá bodhi me vácah

Agni, be now aware of my words.4

Since both yudh- and budh- have characterized presents in -ya- (yúdhya-, búdhya-), the imperatives yódhi and bodhi must be classified as root aorists. As active athematic imperatives in -dhi, however, they are anomalous in at least two respects: 1) they show single -dh- rather than expected \*-ddh- for presumed underlying /-dh-dhi/; and 2) they have full grade, rather than zero grade, of the root. The expected root-based imperatives of yudh- and

<sup>&</sup>lt;sup>1</sup> I refer, of course, to Insler 1972 (hereinafter "Insler"), especially pp. 556-64.

<sup>&</sup>lt;sup>2</sup> See Insler's discussion, where full references are given. The connection to *yudh*- is maintained by Grassmann, Whitney, and Macdonell.

<sup>&</sup>lt;sup>3</sup> On bodhi '(be)come', which was probably accented differently from \*bôdhi 'heed', see especially Jamison 1997, with literature. Jamison's point of departure is the present imperative bhava; she assumes that this gave monosyllabic \*bho, which was then extended by the addition of the imperative particle -dhi. To explain the special development to \*bho, she envisages a precocious Middle Indic sound change of -ava- to -o-; an alternative might be to start with a truncated imperative \*bhav' (i.e., llr. \*bhay'), typologically comparable to Lat. fac 'do', dic 'sav', etc.

<sup>&</sup>lt;sup>4</sup> Inster's translations in both passages.

budh—the present vs. aorist distinction makes no difference here—would have been \*yuddhí and \*buddhí. The problem is to explain why these forms seem to have been replaced by yódhi and bodhi.

Insler (p. 556f., n. 9) attributes the simplification of \*-ddhi to -dhi in yódhi and bodhi to the preceding heavy syllable, comparing the loss of the root-final consonant in trndhi (: trd- 'bore'), prndhi (: prc- 'mix'), bhandhi (; bhañi- 'break'), rundhí (AV) (; rudh- 'obstruct'), and vrndhi (: vrj- 'twist'). These examples, however, are not satisfying comparanda, since all involve the loss of the medial consonant in sequences of the type - $NC_1C_2$ -. The \*-ddh- in \*yóddhi and \*boddhi, by contrast, was for all practical purposes intervocalic, even if-as is not unlikely—the root vowel at the time of the putative phonological reduction was the diphthong \*-au- rather than -o-. Clusters, and in particular geminates, were not simplified in this position; direct counterexamples can be seen in agent nouns of the type yoddhf- (; yudh-), cettf-(: cit- 'notice'), bhettf- (: bhid- 'split'), etc.5 An extreme variant of the "reduction" approach underlies Mayrhofer's attempt (1986: 111-12) to place the degemination of \*-ddhi to \*-dhi within Proto-Indo-European. According to Mayrhofer, "im Falle von RV 5, 3, 9 yódhi ,wehre ab!' (und in ved. bodhi ,merke, sei wachsam!') scheinen Wurzeln auf \*"eudh vor dem Morphem -dhi die Silbengrenze nach \*°eu- zu legen, wodurch °dhdhi in der Position .TTV zu .TV vereinfacht wurde." This, however, is merely notational sleight-of-hand; it is almost inconceivable that a preform of the type \*jeudh-dhi could even have been syllabified \*jeu.dhdhi in a phonetically meaningful way.

Even more surprising than the apparent reduction of \*-ddhi to -dhi is the unexpected gunation of the roots yudh-, budh- to yo(dh)-, bo(dh)-. The normal Vedic rule for the formation of aorist and present imperatives in -dhi (-hi) calls for zero grade of the root; cf. śrudhi (: śru- 'hear'; root aor.), kṛdhi (: kṛ- 'do'; root aor.), gahi (: gam- 'go'; root aor.), brūhi (: brū- 'say'; root pres.), ihi (: i- 'go'; root pres.), dhehi < \*dha(d)zdhi (: dhā- 'put'; reduplicated pres.), śṛṇuhi (: śru-; nasal pres.), as well as tṛndhi, pṛṇdhi, etc., cited above. Exceptions occur; these, however, are mainly of the type śagdhi (: śak- 'be able'; root aor.), edhi < \*azdhi (: as- 'be'; root pres.), xāhi (: sā- 'bind'; root aor.), and pāhi (: pā- 'protect'; root

pres.), which illustrate "the overwhelming tendency of roots of the shape (C)CaC and  $(C)C\bar{a}$  to generalize their full-grade morphemes in root formations" (Insler: 552). yódhi and bodhi clearly have nothing to do with this phenomenon; roots in medial -i-, -u-, and -r- notoriously retain their inherited zero grades, and even extend zero grade at the expense of full grade in certain grammatical categories. As far as the origin of yódhi and bodhi is concerned, therefore, one of the following three general scenarios must be correct. Either 1) both forms go back to very ancient-in effect, late PIE-preforms with an atypical but historically justified full grade; or 2) one of vódhi and bodhi has a historically justified full grade and the other is analogical; or 3) neither yódhi and bodhi is old, but both are closely modeled on a third form or group of forms with a well-motivated full grade. The first possibility is purely theoretical; no one has ever adduced independent morphological evidence to support the proposition that late or dialectical PIE had both a full-grade \*iéudh-dhi6 and a full-grade \*bhéudh-dhi. Practically speaking, the choices that need to be considered are 2) and 3). These are discussed below.

Insler's proposed solution to the problem of yódhi and bodhi falls under the broad heading of 2). The root agrist of yudh-, as he points out (558f.), is represented in the Rigveda not only by the imperative yódhi, but also by the 3rd sg. subjunctive yodhat and the middle participle yodhāná-. Although the full-grade form yodhāná-, standing in lieu of expected \*yudhāná-, is virtually unique, it recalls the present middle participle stávāna- / stavāná-(: stu-'praise'), with the regular weak vocalism—historically, \*e-grade—of a PIE "Narten" present.7 Insler makes no attempt to argue that the root \*jeudh- itself formed such a present in the parent language, since the stem yúdhya- (< \*judh-jé/ó-) shows every sign of being an IE inheritance. He proposes instead to set up a Narten root aorist, differing in aspect from a Narten present but having the same  $*\bar{e}: *\check{e}$  ablaut pattern. The agrist middle participle yodhāná- (< \*iéudh-ono- or \*iéudh-mh1no-),8

<sup>&</sup>lt;sup>5</sup> While it is perfectly true that these forms could have restored the double dental sequences by analogy, it is hard to see why an analogical process that restored *yoddhf*- for \**yodhf*-would not also have restored \**yoddhi* for *yodhi*.

<sup>&</sup>lt;sup>6</sup> Or \*Hieudh-dhi; cf. LIV 201f. Since the evidence for the initial laryngeal is inconclusive, the traditional reconstruction with \*j- will be retained here.

<sup>&</sup>lt;sup>7</sup> The term, which Inster does not employ, refers to the acrostatic (root-accented) present type with  $*\bar{e}: *\check{e}$  ablaut, as classically described by Narten (1968).

<sup>8</sup> The position of the accent in yodhāná-, as Insler notes, must be secondary; the shift from acrostatic to "normal" accentuation is also seen in stavāná- beside stávāna- and ohāná-(; ūh- 'consider') beside óhāna-.

under this interpretation, was a typical Narten full-grade weak form; another was the imperative  $y\delta(d)dhi < *ieudh-dhi$ . The inherited  $y\delta dhi$ , according to Insler, triggered the analogical creation of bodhi. Crucial for the analogy was the fact that budh-, like yudh-, formed an active root aorist subjunctive ( $b\delta dhat$ ,  $b\delta dhati$ , etc.). In proportional terms,

yudh-, subj. yodhat : impv. yódhi : : budh-, subj. bódhat : impv. X.

where X was solved as bodhi (p. 561). As Inster correctly notes, the fact that the root agrist of budh- lacks active forms outside the subjunctive (cf. 3 sg. "passive" agr. ábodhi, pl. abudhran (-ram), budhánta, ptep. budhāná-) makes an analogical origin for bodhi likely in any case.

This intuitively attractive account is unfortunately compromised by two facts. The first, which Insler could not possibly have foreseen in 1972, is that Narten aoristsroot aorists with \*ë: \*ë ablaut—seem not to have existed as a formal category in PIE. While the parent language did have a handful of root aorists with a Narten-like full grade, rather than zero grade, in the middle (e.g., 3rd sg. \*mén-to 'brought to mind' [> GAv. mantā]; \*h<sub>1</sub>ér-to 'got moving' [> Ved. árta, ptcp. árāna-]; etc.), none of these had lengthened-grade actives or, indeed, any active forms at all. More generally, lengthened grade is nowhere unambiguously attested or reflected in a root agrist, either in Vedic, Avestan, or any other early IE language.9 This is why most current students of the IE verbal system, including Harðarson (1993:57ff.) and LIV (20-21), maintain that, at least in the active, all PIE root aorists were of the "normal," or \*e: zero apophonic type. 10

The second difficulty with Insler's explanation of yódhi is that even if it could be shown that there were Narten root aorists in PIE, and even if it were known that the root \*jeudh- in fact formed such an aorist, there would still be no basis for predicting \*jéudh-dhi rather than \*judh-dhí as its imperative. The only interestingly parallel Rigyedic case of a "Narten" imperative in \*-dhi, present or aorist, is stuhí (= YAv. °stūiði) 'praise', found nearly two dozen times beside the present stáuti. 11 While it is not inconceivable that this form replaced an earlier full-grade \*stóhi or (Hr.) \*stáudhi, just as zero-grade stuvánti replaced earlier \*stávati (< \*stéunti) in the 3rd pl., the fact remains that there is not a single quotable example of a full-grade Narten imperative of the type allegedly seen in vódhi. The proposed derivation of vódhi from \*iéudh-dhi, in short, is so problematic as to be virtually untenable.

What, then, can we say about the origin of yódhi and bodhi? Insler is obviously right that bodhi, as an isolated active form embedded in a basically deponent paradigm, must be analogical.12 He is also right to stress the morphological parallelism of the roots yudh- and budh-, which goes far beyond yódhi, bodhi and the subjunctives yodhat, bódhat(i). Thus, e.g., both roots also make class IV (-va-) presents, represented by the multiply attested vúdhya- (active and middle) and búdhya- (middle only), both with Iranian cognates. The stem búdhya- in particular conforms to a well-known Vedic (and, mutatis mutandis, IE) pattern. Like a number of other primarily intransitive roots, budh- underlies a "stative-intransitive system," a synchronic array consisting, inter alia, of a present in -ya- (búdhya-), a stative perfect (ptcp. bubudhāná-, subj. búbodhati), and an intransitive middle ("passive") root agrist in 3rd sg. -i, 3rd pl. -ran / -ram

<sup>&</sup>lt;sup>9</sup> Apparent cases of lengthened-grade root aorists are either secondary or better explained in other ways. Thus, e.g., Lat.  $u\bar{e}nit$  'came' and Toch. B  $\dot{s}em$  'went' point to a root-form \* $g^{\mu}\bar{e}m$ -, but the original paradigm was probably a normal root aorist with a long vowel that arose through inner-IE sound changes (1st sg. \* $g^{\mu}\dot{e}m$ - $m > *g^{\mu}\bar{e}m$ : 2nd sg. \* $g^{\mu}\dot{e}m$ - $s > *g^{\mu}\bar{e}m$  [ $\rightarrow *g^{\mu}\dot{e}n$ [s]?]). Gk.  $\dot{e}\gamma\dot{\eta}\rho\ddot{\alpha}$  'grew old' is traced to a lengthened-grade aorist by Peters (1980: 313f.), but the vocalism of this perennially troublesome form is inseparable from that of the present γηράσκω and the noun γῆρας 'old age'. Pace Adams (1988: 87f.), the Tocharian imperfect/preterite type A  $ly\ddot{\alpha}k$ , B  $ly\ddot{\alpha}ka$  'saw' is better analyzed as a lengthened-grade (Narten) imperfect than as an aorist; see Weiss 1996: 674 and Jasanoff 1998: 306f., where an equation is suggested with the Latin type  $l\bar{e}git$  'read'.

<sup>10</sup> It is important to emphasize, however, that "normal" root aorists were not necessarily the same as "normal" imperfects,

their counterparts in the present system. As repeatedly pointed out by Karl Hoffmann (cf., e.g., Hoffmann 1968: 7–8), there is good reason to believe that the zero-grade stem, which characterizes the entire dual and plural in the present/imperfect active, was confined to the 3rd pl. in the indicative of the root agrist.

<sup>11</sup> To which may be added mṛdḍhi (: mṛj-, pres. mārṣṭi, 'wipe') in the Atharvaveda. Although ad- 'eat' and takṣ- 'fashion' made Narten presents, the structure of these roots makes it impossible to conclude anything from the imperatives addhi and tāṭhi.

<sup>&</sup>lt;sup>12</sup> This is also the tentative *LIV* view, which takes *bodhi* to be an alteration of the present imperative  $b\delta dha$  (p. 67). But  $y\delta dhi$  cannot be explained in this way, and the supposed change from *-dha* to *-dhi* is unparalleled in other thematic imperatives to roots in *-dh*-.

	yudh-	budh-
root aorist indic, active	none	none
root aorist indic. middle	yodhāná-	ábodhi, abudhran, budhāná-
	[yutsmahi (AV)]	[abhutsi, -mahi
root aorist subj. active	yodhat	bódhat(i), etc.
root aorist subj. middle	none	none
iş-aorist active	ayodhīt, yodhişat, etc.	bódhişat
is-aorist middle	none	none
aorist imperative active	yódhi	bodhi

(ábodhi, abudhran, ptep. budhāná-). 13 Similar triplets of forms are associated with the roots śúc- 'be kindled' (pres. śúcya-, perf. ptep. śuśukváms-, aor. áśoci), pad- 'fall' (pres. pádya-, perf. 3rd sg. papáda, aor. ápādi), jan- 'be born' (pres. jáya-, perf. mid. jajñé, aor. ájani), and tṛṣ-thirst' (pres. tṛṣya-, perf. mid. ptep. tātṛṣāṇá-, aor. tṛṣāṇá-). Simple pairs consisting of a perfect and a passive aorist are particularly common (cf., e.g., perf. cikéta / cikité: aor. áceti |: cit- 'notice / appear'|; perf. śuśráva / śuśruvé: aor. śrávi, GAv. ṣrāuuī (: śru- 'hear']; perf. ruroca / rurucé: aor. aroci |: ruc- 'shine'}; ete.).

The present *vúdhya*- suggests that the root *yudh*-, which etymologically meant 'be(come) active / agitated', may originally have formed a stative-intransitive system as well. The lack of a stative perfect does not rule out this possibility (cf. *LIV* 202), and neither does the absence of a finite middle or passive root aorist paradigm, which could easily be accidental or secondary. Indirect evidence for a middle root aorist of *yudh*- comes from the 1st pl. *s*-aorist injunctive *yutsmahi* (*AV*), which looks very much like the sigmaticization of an earlier \**yudhmahi*; compare 1st pl. *abhutsmahi* (*RV* V 3.4, VII 81.3), clearly the replacement of older \**abudhmahi*. <sup>14</sup> Pointing specifically to a 3rd sg. "passive" \**áyodhi* is the apophonically aberrant participle *yodhāná*-. The closest par-

allel to yodhāná- elsewhere in the Vedic corpus is the privative adjective ácetāna- 'unknowing' (RV VII 13.7), which implies a full-grade participle \*cetāná- or \*cétāna-. The formal relationship of the participle -cetāna- to the passive aorist áceti (cf. above) is the same as that of yodhāná- to the suspected but unattested \*ayodhi. If, as I have suggested elsewhere, the PIE ancestor of the Indo-Iranian passive aorist had \*o: \*e, rather than \*o: zero ablaut, then yodhāná- and -cetāna- may well preserve the weak vocalism of the PIE "stative-intransitive aorist" in its original form. 15

The general parallelism of the roots yudh- and budhis underscored by the surprising and unexplained fact that both also underlie a very rare active is-aorist. In the case of budh- this is restricted to the hapax 3rd sg. subjunctive bódhişat (II 16.7); in the case of yudh- the subjunctive yodhişat is flanked by an injunctive (2nd sg. yodhīs), an imperative (2nd du. yodhistam), and an indicative (3rd sg. áyodhīt). Putting the iş-aorist together with the root agrist, we obtain a Gesamtbild of the agrist of yudh- and budh- that is best appreciated in tabular form as shown above. No more eloquent confirmation could be found for Insler's insight that the imperatives vódhi and bodhi are inseparable. Finding an independently motivated explanation for yódhi, as Insler attempts to do, would clearly translate at once into an explanation for bodhi, and vice versa. Unfortunately, however, neither yódhi nor bodhi appears to lend itself to such an explanation. Neither has a discoverable Indo-European pedigree; neither can be be generated analogically from within its own extended paradigm; neither has any claim to historical priority over the other. It will not be amiss at this point to recall, therefore, that there is another possibility to consider—the possibility that both forms are analogical to something else.

There is one, and only one, other verbal root in the Rigveda that forms a root agrist with an exclusively

<sup>13</sup> Stative-intransitive systems are discussed *in extenso* in Jasanoff (2002). At the IE level there was a fourth term—the "stative" present type (cf. LIV 15) vestigially represented in Vedic by forms like cité 'appears' (RV X 143.4). The middle root aorists associated with stative-intransitive systems were, with a very few lexical exceptions (e.g., \*men-, \*h<sub>1</sub>er-), of a distinctive formal type, originally characterized by \*o: \*e ablaut and other special features. Such PIE "stative-intransitive aorists" (briefly discussed in Jasanoff 1994: 164ff.) are reflected in Indo-Iranian by middle root aorists with a 3rd sg. "passive" in -i and a 3rd pl. in -ran, -ram, -ra. Our understanding of the synchrony of these forms owes an enormous debt to Insler 1968.

<sup>&</sup>lt;sup>14</sup> To which may be added 1st sg. ábhutsi. The process is discussed by Narten 1964; 26ff.

<sup>15</sup> Cf. n. 13. Insler was thus probably correct to assign yodhāná- to an acrostatic, if not to a Narten, paradigm.

"passive"-type indicative and participle beside an exclusively active subjunctive. Remarkably, it is a root that, like *yudh*- and *budh*-, also happens to form an active *is*-aorist subjunctive and a full-grade active aorist imperative. The relevant forms of *jus*- 'enjoy' are the following: <sup>16</sup>

root aorist indic, active none ajuşran, juşāṇároot aorist subj. active jóṣat(i)
root aorist subj. middle none iṣ-aorist active jóṣiṣat iṣ-aorist middle none aorist imperative active jóṣi

The relationship of the imperative jósi to the other forms, and in particular to the modal forms jósat(i) and jósisat, is on one level exactly the same as that of vódhi and bodhi to yodhat, yodhisat and bódhat(i), bódhisat, respectively. But while yódhi and bodhi notoriously cry out for explanation, jósi is perfectly well understood. It is a siimperative of the same formal type as váksi 'convey', yáksi 'sacrifice', nési 'lead', jési 'conquer', and nearly twenty others, <sup>17</sup> si-imperatives, as shown by Szemerényi (1966) for Indo-Iranian and by the present author for Indo-European as a whole (Jasanoff 1986, 1987: 92-112), are haplologized 2nd sg. subjunctives in \*-s-e-si. The first \*-s- of the pre-haplologized sequence is typically the \*-s- of the s-aorist, as, e.g., in Ved. váksi, nési (cf. 3 sg. indic. ávāt, ánaih < \*yégh-s-t, \*néiH-s-t) or Olr. com-éi-r 'arise'  $< *k\acute{o}m$ -ess-ress < \*-reg-si < \*-reg-s-e-si (; s-subj. \*ress- < \*-reg-s-e/o-). In other cases, however, the \*-sis either another sigmatic morpheme (so, e.g., Ved. śrósi 'hear' [= Toch. B päklyaus] < \*kleu-si < \*kleu-s-e-si; Hitt.  $pah\check{s}i$  'protect' < \* $peh_2$ -si < \* $peh_2$ -s-e-si, both probably from s-presents), or simply the final consonant of the root (so Hitt,  $e\check{s}i$  'settle'  $< *h_1\acute{e}h_1si < *h_1\acute{e}h_1s-e-si$ [vel sim.]), jósi, which forms a word equation with OIr. tog 'choose' ( $< *t\acute{o}$ -gos(s)  $< *-\acute{g}eusi < *-\acute{g}eus$ -e-si), is a case of the latter type.

Merely to review these facts is to grasp the true position of  $y \delta dhi$  and bodhi. Neither form is an archaism; both are analogical pendants to the inherited si-imperative  $j \delta si < *\hat{g} \hat{e} u si$ . The inherent ambiguity of the form  $j \delta si$  caused it to be reanalyzed by some speakers as an "i-imperative," and the ending -i was extended, dialectally at first, to the parallel roots yudh- and budh-. <sup>19</sup> The proportion was

subj.  $j \delta s_i - (is)at$ : impv.  $j \delta s_i - i$ : subj. yodh-(is)at,  $b \delta dh$ -(is)at: impv. X,

where X was solved as yódh-i, bodh-i. A typologically similar process can be seen in Hittite, where bona fide si-imperatives of the type pahši, eši (cf. above) induced the creation of Neo-Hittite *i*-imperatives of the type  $z\bar{a}hi$ 'fight' and hāni 'draw water', and other late forms. But in Vedic, unlike Hittite, the career of the imperative ending -i ended as quickly as it began. Transparent as the segmentation yódh-i, bodh-i may have been to the first generation of linguistic innovators, the subsequent propagation of *yódhi* and *bodhi* across the Vedic speech community clearly depended on the fact that they were perceived by most native speakers as containing the imperative ending -dhi. The synchronic reinterpretation of vódhi and bodhi as irregularly altered forms of \*yóddhi, \*bóddhi or \*yuddhí, \*buddhí was not an error of Western Sanskritists or the Indian grammarians. It was a reanalysis by the Vedic Aryans themselves.

were perceived as ordinary sigmatic formations and "clarified" to \*geus-si and geus-se/o-. The later shortening of expected \* $t\dot{o}$ - $g\ddot{o}s(s)$  to \* $t\dot{o}$ - $g\ddot{o}s(s)$  in the imperative was due to the influence of the s-subjunctive, where loss of length was phonologically regular in medial syllables and analogically extended to other positions. See the discussion by Thurneysen (1946; 392ff.), and compare n. 19.

This was not, of course, the only possible synchronic analysis. Since the sequence  $y_i y_j$  was phonotactically impossible in Vedic,  $j \delta y i$  could also be interpreted as the surface realization of an underlying "normal" x i-imperative  $f_j \delta y_j - y_j i$ ; this parsing may have been responsible for the rise of the analogical nonce form  $y \delta t s i$  (RV I 132.4). In the subjunctive ( $f_j \delta y_j s t i$ ), where there were again two possible readings, the  $f_j s i s i$  offered an obvious way to distinguish the sigmatic from the non-sigmatic analysis. The result was the partial renewal of  $f_j \delta y_j s i s i s i$ , whence the creation of  $f_j s i s i s i$  and  $f_j \delta s i s i s i$ .

Not shown is the very common thematic aorist jusa, best attested in the imperative and possibly a thematization of the middle root aorist. There was also a stative perfect jujosa, jujusana, etc., showing that the root \*secsion secsion sec

<sup>17</sup> GAv. dōiši (: daės- 'show') is the lone Iranian representative of the formation.

<sup>&</sup>lt;sup>18</sup> To be sure, the Irish form was remodeled: both the si-imperative \*geusi and the associated subjunctive \*geuse/o-

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