Did Hittite have si-imperatives?

Jay H. Jasanoff

Harvard University

The modern view of the Vedic Sanskrit "*si*-imperatives" — 2 sg. forms of the type $v\dot{a}ksi$ 'convey!', $y\dot{a}ksi$ 'sacrifice!', $n\dot{e}si$ 'lead!', and over twenty others — dates from the 1960's.¹ Before that time opinions were divided, the majority of scholars seeing them as 2 sg. indicative forms, specialized in an imperative sense, of obsolete or discarded root presents. This possibility was progressively demolished, first by Narten (1964: 45ff.) and Cardona (1965), who independently demonstrated the close distributional association of *si*-imperatives with *s*-aorist subjunctives (cf., e.g., 3 sg. subj. $v\dot{a}ksat(i)$, $y\dot{a}ksat$, $n\dot{e}sat(i)$); and then by Szemerényi (1966), who definitively explained the "ending" *-si* as a haplologized form of the 2 sg. subjunctive complex *-sasi* ($v\dot{a}ksi < v\dot{a}ksasi$, etc.).² Since 1966 the main historical question regarding *si*-imperatives has been not whether they rest on haplologized subjunctives, but how early and how extensive the haplology was.

Szemerényi himself dated the process to the Indo-Iranian period, citing GAv. $d\bar{o}i\bar{s}\bar{i}$ Y 33. 13 'show!' (as if Ved. * $d\acute{e}ksi$) as the unique instance of a si-imperative in Iranian. Szemerényi's "shallow" chronology was for a time the standard view. In 1982, however, I argued at the First East Coast Indo-European Conference that the peculiar truncated imperatives associated with s-subjunctives in Old Irish — forms of the type $at r\acute{e}$ 'arise!', tair 'come!', *foir 'help!', etc., standing beside subjunctives *ad-reg-se/o-, *to-ar(e)ink-se/o-, *wo-ret-se/o-, etc. — were in fact si-imperatives exactly comparable to those of

¹ I would like to express my thanks to Norbert Oettinger for allowing me to see a preprint version of Oettinger (2007), to which this article is partly a response. I am grateful to both Oettinger and Craig Melchert for useful discussion of the substantive issues. All views, of course, are my own.

² Szemerényi's analysis was anticipated by Benfey (1852: 397). Cardona (1f.) gives a useful survey of the older literature.

Indo-Iranian (**reg-si*, **ink-si*, **ret-si* < **-s-e-si*), transformed beyond recognition by the precocious Insular Celtic apocope of final **-i* (cf. Cowgill 1975: 57 ff.). This analysis of the Irish forms, ultimately published as Jasanoff (1986), had the effect of projecting Szemerényi's haplology back to the protolanguage, thus opening up the possibility of further *si*-imperative reflexes turning up elsewhere in the family.

Such a form soon presented itself in the irregular Tocharian imperative 2 sg. B *päklyauş*, A *päklyoş* 'hear!', forming an apparent word equation with Ved. śróşi 'id.' (Jasanoff 1987: 103-05).³ But PIE **kléusi*, the common ancestor of *päklyauş / päklyoş* and śróşi (see below on the vocalism), was interestingly different from the main body of *si*-imperatives in Vedic and Old Irish. While it was possible, though with difficulty, to take śróși as a standard *s*-aorist-based form in Vedic,⁴ an *s*-aorist analysis was out of the question for Tocharian. The Tocharian verb *klyaus- / klyos-* 'hear' (class II (thematic) present-subjunctive B 3 sg. *klyauşäm*, mid. *klyauştär*, A 3 sg. mid. *klyoştär*, etc.) was not based on the simple root **kleu-*, but on the extended root form **kleus-* (: Ved. śruş-; cf. Eng. *listen*). If Ved. śróși and its subjunctive śróşa- were really cognate with B *päklyauş* and its class II present-subjunctive **kléus-e/o-*, corresponding to an apparent Narten present indicative **kléus-ti*. The lengthened-grade indicative was the analogical source of the lengthened grade of the (subjunctive-based) Tocharian forms (Common Toch. **klyaus-* **klēus-*.).⁵

³ I further compared Messapic *klaohi* 'id.', subject to the uncertainty that inevitably attaches to evidence from fragmentarily attested languages; cf. *LIV* (336).

⁴ The root *śru*- only forms a root aorist in the Rigveda; an unambiguous *s*-aorist indicative is not found until the Brahmanas. The Vedic present *śróṣa*-, however, goes back to an old subjunctive ('listen, obey' < 'incline to listen, obey'), which has sometimes been interpreted — unconvincingly, in my opinion — as the subjunctive of the otherwise unattested *s*-aorist. Cf. Cardona (11), Narten (261).

⁵ Cf. Jasanoff (1987: 104, note 28). Here and in other early discussions of this word, I wrongly took CT **klyaus-* from PIE **klĕus-* directly.

The larger lesson of the *päklyauş* = *śróşi* equation was that the haplology of 2 sg. subj. *-*s*-*e*-*si* to *-*si* was not confined to the *s*-aorist. *Any* stem ending in *-*s*- — a root present, root aorist, or *s*-present as well as an *s*-aorist — could in principle give rise via its subjunctive to a *si*-imperative.⁶ In the case of PIE **kléusi*, the underlying indicative was a Narten root present, probably reflecting an older *s*-present (***kléu-s*-*ti*) of the type seen in Hitt. *ganešzi* (< **ĝnéh₃-s*-*ti*) 'recognizes'. A root aorist, not an *s*-aorist, was eventually recognized as the basis of Ved. *jóşi* 'enjoy!' (as if < **jóş-a-si*; cf. 3 pl. indic. *ajuşran*).⁷

It was against this background that I first ventured the suggestion (1987: 104) that the common Hittite 2 sg. impv. *pahši* 'protect!' might also be a *si*-imperative. The *hi*conjugation imperatives in -*i* fall into two groups — one relatively transparent, in which the -*i* is etymologically part of the stem, and another, more puzzling, in which the -*i* is clearly a desinence. To the first group belong the imperatives of the iteratives in -*anna/i*-(*iyanni* 'proceed!', etc.) and other verbs in -*a/i*- (e.g., *uppi* 'send!' (: *uppa/i*-), *mēmi* 'say!' (: *mēma/i*-)); to the second belong *pahši* and up to a dozen other forms, by far the best attested of which is *pahši* itself. In my 1987 discussion I identified the stem *pahš*- as an etymological *s*-present cognate with OCS *pasq* 'graze'. I thanked Craig Melchert for the observation that two other potentially archaic forms in -*ši*, namely, *ešši* 'perform!'

⁶ The haplology presumably began as an inner-PIE sound change proper to fast or informal speech; independent instances of a parallel development can be seen in Lat. $d\bar{i}xt\bar{i}$, $d\bar{i}xtis$, etc. (for $d\bar{i}xist\bar{i}$, *-istis*) and Insular Celtic **treksamos* 'strongest' (> OIr. *tressam*) for **treksisamos* (Cowgill 1970: 131). As a sound change, the reduction of **-sesi* to **-si* would not have been linked to any particular function of the subjunctive. But given the crosslinguistic tendency of the imperative to undergo expressive lengthening and shortening (cf., e.g., Latin truncated *fac*, *dīc*, etc. for *face*, *dīce*), the haplologized forms would inevitably have been favored in imperatival contexts. The result was a late PIE synchronic rule: any subjunctive in **-se/o-*, regardless of the morphological identity of the **-s-*, could generate a 2 sg. impv. in **-si*.

⁷ See Jasanoff (2002: 294) for the possibility that $j \delta s i$ forms a word equation with OIr. tog 'choose!' (< *to- $g \delta s(s)$, remodeled from * $\hat{g} \delta u s i$ with secondary *-ss-?).

(OH/NS, for presumed OS **išši*), and *eši* 'settle, possess!' (MH), probably belonged here as well.⁸

These positions, all formulated in the 1980's, were reaffirmed in my 2003 book, *Hittite and the Indo-European Verb* (henceforth *HIEV*). By then, however, the dossier of *si*-imperatives in Hittite had expanded to include an important additional item. This was the 2 sg. imperative **nēši* (or **nešši*)⁹ 'direct, lead!', the Hittite counterpart of the Vedic *si*-imperative *néşi*. No actual form of this shape is attested in Hittite, its place having been taken by the regularized *nai*, created on the model of *dai* 'put!', *pai* 'give!', *halzai* 'call!', etc. before the period of our earliest texts. But a virtual **nēši*, I argued, had left its analogical "shadow" in the unexplained phenomenon of "intrusive" -*š*-, the functionally empty sibilant inserted before certain endings in the paradigm of *nai*- and other diphthongal *hi*-verbs (cf. 2 pl. pres. *naišteni* (-*štani*), *pišteni*; pret.-impv. *naišten*, *pišten*, *halzišten*; 2 sg. pres. mid. *naišta(ri)* (beside *neyattati*), 2 pl. pret.-impv. mid. *naišdumat*).

The existence of $*n\bar{e}si$ was inferred from the peculiar 2 sg. middle imperative *nešhut* 'turn (intr.), wende dich!', twice attested with *-e-* in Middle Hittite script but otherwise mostly modernized to *naišhut*.¹⁰ The older variant *nešhut* was remarkable in two respects: it was both the only Hittite verb form *anywhere* to show intrusive *-š-* before a non-dental consonant,¹¹ and the only signatic form of *nai-* to show monophthongal *neš-* for otherwise normal *naiš-*. Since the diphthong *-ai-* (< *-*oi-*) was preserved before

⁸ This is not necessarily Melchert's current view nor in all respects mine; see the discussion of $e\bar{s}\bar{s}i$ and $e\bar{s}i$ below. I use the customary notation for indicating the age of forms: OH/NS = Old Hittite composition, Neo-Hittite script; MH, MH/MS = Middle Hittite composition, Middle Hittite script; etc.

⁹ Whether this hypothetical form would have been written with one *- \check{s} - or two would have depended on several factors, one of which might have been the identity of the root-final laryngeal. In what follows I use $n\bar{e}\check{s}i$ as a cover notation for both possibilities.

¹⁰ *CHD* lists one instance of *ne-eš*- and one of *ni-iš*- on the same Middle Hittite tablet; *ne-eš*- is also attested in Neo-Hittite. The argument here recapitulates Jasanoff (2003b) and *HIEV* 119 f., 182-84.

¹¹ The special case of 1 sg. mid. *aušhahat* 'I saw' and *maušhahat* 'I fell', where the $-\dot{s}$ - has a different explanation, is discussed below.

s-clusters in Hittite, the preform of *nešhut* must have had historical *e*-grade (**neiH-s*-), with the regular across-the-board monophthongization of tautosyllabic *-*ei*- to -*e*- (perhaps via an intermediate stage *- \bar{e} -; cf. Melchert 1994: 56). The historical vocalism of *nešhut* was thus distinct from that of 3 sg. pret. *naiš* and the other forms with intrusive -*š*- (*naišteni*, *naišdumat*, etc.), which went back to proximate preforms in **noiH-s*-.

All these facts fell into place, I suggested, if one posited a stage in the prehistory of Hittite when

1) the indicative paradigm of *nai*- was built — as is still the case in attested Hittite — on an ablauting "presigmatic" aorist stem **noiH*- / **neiH*- or an invariant leveled stem **noiH*- (1 sg. $n\bar{e}hhi < *noiH-h_2ai$, 3 sg. pret. naiš < *noiH-s-t, 3 pl. $n\bar{e}anzi < *noiH-nti$ or **neiH-nti*, 3 sg. mid. $n\bar{e}a(ri) < *noiH-or$ or **neiH-or*, etc.);¹² and

2) the corresponding imperative forms included both a 2 sg. active *si*-imperative **neiH-s-i* 'lead!' (> Hitt. **nēši*) and a "medialized" *si*-imperative **neiH-s-(s)h_2u* 'turn (intr.)!' (> Hitt. *nešhu[t]*).¹³

The relationship of medialized **neiHsh*₂*u* to **neiHsi* at this stage would have been comparable to that of Ved. 2 sg. mid. impv. *yákṣva* to act. *yákṣi* (: *yaj*- 'sacrifice'), mid. *rấsva* to act. *rấsi* (: *rā*- 'bestow'), and, with the same pairing of voice and transitivity as

¹² As argued in *HIEV* 172 ff., the forerunner of the "classical" *s*-aorist of Indo-Iranian, Greek, and most of the other IE languages was the PIE "presigmatic" aorist, characterized by a sigmatic 3 sg. active (e.g., $*n\acute{e}iH$ -*s*-*t*; cf. Ved. *ánaiħ) and sigmatic subjunctive (e.g., $*n\acute{e}iH$ -*s*-*e*/*o*-; cf. Ved. *néşa*-), but an otherwise non-sigmatic h_2e -conjugation aorist paradigm with **o* : **e* ablaut (e.g., 1 sg. act. **nóiH*-*h*₂*e*, 3 pl. **néiH*-*rs*). Hittite, like Tocharian, retained the restricted distribution of the *-*s*-, but generalized *o*-grade to the 3 sg. and elsewhere.

¹³ The earliest internally recoverable form of the Hittite 2 sg. middle imperative ending is *-(h)hu < *- h_2u ; the -*t* of -(h)hut is an import from the presents in -*nu*- (e.g., *arnut* 'bring!'), where it continues the active imperative particle *-*dhi*. In Jasanoff (2006) I argued that the PIE form of the 2 sg. middle imperative ending was *- $sh_2(u)\mu o$, whence Ved. -sva, -sua, Av. - $\eta^v ha$, - $huu\check{a}$, etc., Lat. -re, and (with probable analogical interference from the indicative) Gk. -[σ]o. In Hittite, *- $sh_2(u)\mu o$ was truncated to *- sh_2u , and the initial *-s- was lost by false segmentation after stem-final *-s-, as, e.g., in * $h_i\bar{e}s$ - sh_2u (*vel sim.*) 'sit!' > Hitt. $\bar{e}shut$. The pair * $n\bar{e}si$: $ne\bar{s}hu[t]$, if present in the language early enough, would naturally have invited the same misparsing.

in Hittite, mid. *mátsva* 'become intoxicated!' to act. *mátsi* 'intoxicate!' (: *mad*-). In each of the Vedic pairs, an active *si*-imperative, formed by haplology from an *s*-aorist subjunctive in the normal Indo-Iranian fashion, gave rise to a "middle" *si*-imperative, made by substituting the middle imperative ending *-sva* for active *-si*. In precisely the same way, I speculated, the *s*-aorist-based *si*-imperative **neiHsi* (= Ved. *nési* < **neiH-s-e-si*) had spawned a medial "companion" **neiHsh₂u* (> *nešhut*) in pre-Hittite.

The resulting synchronic situation would have provided a favorable environment for the rise of intrusive -š-. The 2 sg. imperatives $*n\bar{e}si$ and $*ne\bar{s}hu[t]$, synchronically analyzed as $*ne\bar{s}-i$ ($*ne-\bar{s}-i?$) and $*ne\bar{s}-hu[t]$ ($*ne-\bar{s}-hu[t]?$),¹⁴ respectively, naturally invited the creation of matching plural forms $*ne\bar{s}ten$ (act.) and $*ne\bar{s}tuma[ti]$ (mid.). Given the general homophony of the 2 pl. imperative and preterite in Hittite (cf. $\bar{e}sten$ 'este, eratis', $\bar{e}sdumat$ 'sedete, sedebatis', etc.), these would inevitably have come to be used as preterites as well. But in their role as preterites, $*ne\bar{s}ten$ and $*ne\bar{s}tuma[ti]$ would have been open to "infection" from the historical *o*-grade of the unmarked preterite 3 sg. *naiš* ($*ne\bar{s}ten \Rightarrow nai\bar{s}ten$, $*ne\bar{s}tuma[ti] \Rightarrow nai\bar{s}dumat$). Starting from *nai\bar{s}ten*and*nai<math>\bar{s}dumat*, the *o*-grade stem form *nai\bar{s}*- spread to the present (2 pl. *nai\bar{s}teni*,**nai<math>\bar{s}duma(ri)*, 2 sg. **nai\bar{s}ti(?)*, *nai\bar{s}tari*). The only sigmatic form to resist the change from *ne\bar{s}*- to *nai\bar{s}*-, at least until the Neo-Hittite period, was *ne\bar{s}hut* itself, shielded from the influence of the preterite because it was confined to the imperative.

The assumption of an etymologically grounded pre-Hittite *si*-imperative $*n\bar{e}si$ (= Ved. $n\acute{e}si$ < PIE $*n\acute{e}iHsi$) thus opens the way to an explanation of the aberrant structure of *nešhut* and the restriction of intrusive $-\dot{s}$ - to the second person forms of *nai*and verbs potentially modeled on *nai*-. To the extent these facts can better be accounted for in this way than any other, they constitute an independent argument, distinct from the

¹⁴ It is impossible to be sure how speakers would have analyzed the signatic element at this stage. The relevant fact is that the 2 sg. imperative endings *-*i* and *-*hut* would have seemed to attach to a special stem form in *- \check{s} -, which could thus easily be extended to the 2 pl.

evidence of *pahši*, etc., for the survival of *si*-imperatives in Hittite.¹⁵ None of this would be of more than language-specific interest if Anatolian were a normal branch of the IE family like, say, Germanic or Armenian. But because Anatolian was the first branch to separate from the rest of the family, the *si*-imperative analysis of *pahši* and $n\bar{e}ši$ / *nešhut* has an important implication for PIE as a whole: if correct, it would show that the PIE subjunctive in *-*e/o*-, not otherwise documented in Hittite, must have existed prior to the split between Anatolian and the other languages.¹⁶

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These conclusions have not gone uncontested. In particular, Norbert Oettinger, in his review of *HIEV* (Oettinger 2006), and at much greater length in an article specifically devoted to the problem of the imperative ending -i (Oettinger 2007), has denied that *pahši* is a *si*-imperative and dismissed the evidence for $*n\bar{e}ši$. Oettinger's critique has now been presented as a decisive rebuttal by Steer (2009: 134 f.). This assessment is in my view unjustified. But since Oettinger also introduces new data and broaches questions not previously raised in connection with these forms, it will be useful to continue the discussion here.

¹⁵ A recent attempt to explain *nešhut* (*naišhut*) without appeal to a *si*-imperative is Kloekhorst (2008: 600), building on Kloekhorst (2007). According to Kloekhorst's argument, the original *hi*-conjugation 2 pl. ending was *-šten(i)*; when this was replaced by the *mi*-conjugation ending *-(t)ten(i)* in the Middle Hittite period, the *-*š*- of the inherited 2 pl. imperative *naišten* was reinterpreted as an imperative marker and transferred to the middle imperatives *naišdumat* (2 pl.) and *naišhut* (2 sg.). But there is no evidence that the 2 pl. in *-šten(i)* was ever common to the entire *hi*-conjugation; *-šten(i)* and the other signatic endings are exclusively associated with diphthongal stems (*nai-*, *dai-*, *pai-*, etc.), the compounds of diphthongal stems (e.g., *penna/i-* 'drive off', *uppa/i-* 'send'), and the obviously related stems in *-a/i-*, including *mēma/i*and the iteratives in *-anna/i-*. A strong case can be made that the locus of *-šten(i)* was in the verb *nai*itself. It would be astonishing if the unique forms *nešhut* and *naišdumat* were mere spinoffs of a *general* 2 pl. in *-šten(i)* and had nothing to do with the special status of *nai-* as the only clear etymological "home" of the *s*-aorist in Hittite (Hitt. 3 sg. pret. *naiš* \cong Ved. **ánaih*; cf. note 12).

¹⁶ pace Dahl (forthcoming: 5). Eichner's suggestion (1975: 80) that Hitt. 1 sg. impv. *ašallu* 'may I be!' contains a PIE 1 sg. subjunctive $*h_1 \acute{es} - o - h_2$ is fatally compromised by the fact that in this and other ablauting verbs the 1 sg. imperative is formed from the weak stem.

Oettinger's presentation of my views (2007: 561) begins with a serious misunderstanding:

Die Herkunft der hethitischen Imperativformen der 2. Person Singular auf -*i*, die nach allgemeiner Auffassung dem Aktiv zugerechnet werden, ist zuletzt von Jasanoff 2003: 183f. behandelt worden. Er nimmt an, daß die Endung eigentlich -*ši* und nicht -*i* gewesen sei und führt die betreffenden Formen auf die 2. Person Singular Konjunktiv des indogermanischen *s*-Aorists zurück. Wie Szemerényi 1966 den ai. *si*-Aorist [*sic* – JJ] vom Typ *śrósi* 'höre!' plausibel durch Synkope auf 2.Sg.Konj. *s*-Aor **kléu-s-e-si* zurückgeführt hat, so will Jasanoff nun auch z.B. heth. *eši* 'besetze!', *ešši* 'bewirke!' und *pahši* 'schütze!' und andere erklären. Und zwar stamme z.B. *pahši* 'schütze!' aus 2.Sg.Konj. *s*-Aor. **peh*₂-*s*-(*e-s*)*i* mit Synkope...

As will have become clear from the preceding pages, Oettinger here attributes to me a number of positions that I do not hold and have in fact expressly disavowed. Nowhere have I ever claimed that *palyši*, *eši*, or *ešši* contain an *ending -ši* or that they are based on the subjunctives of *s*-aorists; indeed, I would not accept an *s*-aorist analysis for Ved. *śróşi* either, since the root **kléu-* made a root aorist in PIE, and the Tocharian cognate of *śróşi* (TB *päklyauş*), as pointed out above, is almost certainly based on a *present* subjunctive **kléu(-)s-e/o-*. Hitt. *palyš-* cannot go back to an *s*-aorist, if only because the ancestor of the classical *s*-aorist was not yet fully sigmatic in Anatolian or Tocharian; the canonical Hittite representative of the PIE "presigmatic" aorist is the partly sigmatic, partly non-sigmatic *nai-*.¹⁷ The obvious cognates of *palyš-* are OCS *pasq* and probably Toch. A *pās-* 'protect', both ultimately based on an *s*-present or — what is virtually the same thing — a root present built to an *s*-extended root. As far as the marginally attested *ešši* and *eši* are concerned, the former (whatever else we say about it; see below) rests on an "iterative" present in *-šš(a)-* (type *halzišša-* 'call (repeatedly)'), and the latter contains the stem of

¹⁷ Cf. note 12. Oettinger himself has long favored the view that *pahš*- is an old *s*-aorist (cf. Oettinger 1979: 185, 212), which may explain his willingness to attribute this position to me.

the enigmatic quasi-root present $e\check{s}a(ri)$ 'sits, sits down' (= Ved. $\dot{a}ste$, Gk. $\tilde{\eta}\sigma\tau\alpha\iota$).¹⁸ Neither has anything to do with an aorist, sigmatic or otherwise.

Oettinger's failure to report my positions correctly may be linked to a more general misconception. Nowhere in his critique does he reveal any awareness of the larger role that *si*-imperatives have come to play in IE comparative grammar since Szemerényi (1966). The references to *si*-imperatives in Oettinger's discussion all presuppose a purely Indo-Iranian category based exclusively on the 2 sg. subjunctive of the *s*-aorist. If this were in fact the case — if *si*-imperatives were not independently known to be a PIE formation, and if the haplology *-*s*-*e*-*si* > *-*si* were not known to be "blind" to the morphological identity of the first *-*s*- — then the analysis of *pahsi* as a *si*-imperative would be a far more daring proposition than it actually is.

So much for Oettinger's characterization of my views. The more interesting and positive part of his contribution concerns his own proposals. These can be summarized as follows:

1) the -*i* of *pahši*, etc. was synchronically a *middle* ending in older Hittite, correlated with transitive indicatives in 3 sg. -a(ri) (cf. *pahša(ri)* 'protects') and functionally opposed to the intransitive imperative ending -(h)hut;

2) the etymological source of the ending *-i* was in a specific pair of imperative forms, *viz.*, *huitti* 'pull!' and *karši* 'cut off!'. In both of these the apparent desinence was originally part of the stem (e.g., *karši* < *-*(i)ie*; differing accounts of *huitti* are offered in Oettinger (2006) and (2007)). But *huitt-* and *karš-* also had transitive root presents in 3 sg. *-a(ri)* (**huetta(ri)* 'pulls', *karša* 'cuts'), thus providing a model for the spread of *-i* to other transitive deponents (*pahša(ri)* \rightarrow *pahši*, *eša(ri)* \rightarrow *eši*, etc.);

¹⁸ Several reconstructions of the stem have been proposed. From the Hittite point of view, $*h_i\bar{e}s$ - (so, e.g., Oettinger 2007: 564) is preferable to $*h_ieh_is$ - or (reduplicated) $*h_ie-h_is$ - (so, e.g., *LIV* 232), which in my view would have given Hitt. $*e\bar{s}\bar{s}a(ri)$.

nešhut is regularly formed and contributes nothing to the case for a *si*-imperative
 **nēši*.

Points 1) and 2) are closely related and will be discussed together.

As the first and only scholar to have made a systematic collection of the imperatives in desinential -i,¹⁹ Oettinger is also the first to have noticed the surprising tendency of these forms, despite their transitive meaning, to be associated with middle presents of the "stative" type in 3 sg. -a(ri).²⁰ The most dramatic case is *pahši* itself: the indicative in older texts is exclusively deponent (1 sg. *pahhašha*, 2 sg. *pahhašta*, 3 sg. *pahša(ri)*, etc.), and only in Neo-Hittite does a (mostly) *hi*-conjugation active begin to make its appearance (*pahhašhi*, *pahhašti*, etc.; but no 3 sg. **pahši*).²¹ In all, Oettinger identifies eight examples of this pattern:

eši 'occupy, possess!' (3 sg. eša(ri)) hanni 'decide (a legal case)!' (hannari) huitti 'pull!' (2 sg. huezta, 3 sg. *huetta(ri)) iškalli 'tear!' (iškallari) karši 'remove, cut off!' (karšari) pahši 'protect!' (3 sg. pahša(ri)) šaliki 'touch!' (šaliga(ri)) šarri 'divide!' (šarratta(ri) for *šarra(ri))

¹⁹ i.e., those where the -i is not visibly part of the stem. As we shall see, however, the distinction between desinential and suffixal *i*-imperatives (*iyanni*, etc.) is not always clear.

²⁰ I employ the word "stative" — coined, coincidentally, by Oettinger (1976) — to refer to middle paradigms in the older IE languages in which the 3 sg. ending was *-o(r) rather than *-to(r). I mean the term to be purely conventional; despite the much greater than average frequency with which such forms are intransitive outside Anatolian, it is hard to find a consistent value that distinguishes "statives" from other middles.

²¹ Interestingly, the 3 sg. indicative of this verb remains deponent until the very end of the Neo-Hittite period.

By contrast, only three *bona fide* imperatives in *-i*, according to Oettinger, have genuinely old active paradigms:

hāni 'draw (water)!' (3 sg. hāni)
kueni 'kill!' (kuenzi)
maldi 'vow! (māldi)

Some of the details of this tabulation can be disputed. The eight verbs on the "middle" list — we will call these the "*pahši*-group" — are anything but a homogeneous group, while several items can be added to the "active" list (see below). But there is no doubt that Oettinger has identified a real pattern — one whose significance for the origin of the ending -i is of major interest.

The deponent inflection of the *pahši*-group is the basis of Oettinger's claim (e.g., 2007: 565) that the *-i* of these forms was synchronically a middle ending in older Hittite. This is not, in my view, a particularly useful or insightful formulation. What Oettinger has shown beyond any doubt is that the ending *-i* in a small set of forms, the clearest of which is Old and Middle Hittite *pahši*, occupies a morphological position that might rather and more predictably have been filled by a middle ending. But this does not make the *-i* of *pahši* a distinct synchronic middle desinence, separate, e.g., from the active *-i* of the equally old-looking 2 sg. impv. *ištāpi* 'plug up!' (OH/MS; indic. 1 sg. *ištāphé*, 3 sg. *ištāpi* (OS)).²² The question is, of course, partly terminological. Under a less tendentious reading, the *-i* of *pahši* might be described as *suppletive* — an active ending taking the

²² *ištāpi* (cf. Kloekhorst 2008: 415), from an active *hi*-verb with a vigorous presence in Old and Middle Hittite, is the most important omission from Oettinger's "active" list. It is hardly credible that this form was ever correlated with a middle indicative, or that it was too late a creation to counterexemplify Oettinger's claim that *-i* was synchronically a middle ending. Other potentially troublesome forms for Oettinger's position are *kueni* (MH/MS) and, according to some, $n\bar{a}h\bar{j}$ 'fear!' (OH/MS; see, however, Hoffner-Melchert 2008: 191f., n. 29). On a different level, one may wonder whether the *Sprachgefühl* of Old and Middle Hittite speakers would really have failed to perceive a connection between the supposedly "middle" ending of *pahši*, etc. and the etymologically distinct, but homophonous and unambiguously active *-i* of *iyanni*, *penni*, *mēmi*, etc.

place of the expected middle one, which in Hittite would have been -(h)hut. How and why this replacement came about is the nub of the historical problem.

Despite his insistence on a "middle" analysis of -*i*, Oettinger is quite content to trace it to an active source. His starting point is the old but unsupported assumption that PIE originally had no distinctive ending for the 2 sg. middle imperative at all (566 f.; cf. Schwyzer 1939: 797)). Later, in his account, when the active : middle distinction was extended to the imperative in pre-Hittite, *-(h)hu[ti] (vel sim.), of unexplained origin, became the new ending in oppositional (i.e., intransitive) middles, while -*i* was selected as the ending in transitive middles.²³ This -*i* was not historically a desinence, but — at least according to the earlier and simpler version of events presented in Oettinger (2006) — the phonologically regular treatment of *-(*i*)*je*, the final sequence in the 2 sg. *active* imperative of *je/o*-presents.²⁴ Two of the forms generated in this way, *huitti* 'pull!' (: *huittiya*-) and *karši* 'cut off!' (: *karšiya*-), happened to be built to roots that also formed transitive middle root presents in 3 sg. -*a*(*ri*) (**huetta*(*ri*), *karša*(*ri*)). Thanks to this accidental correlation, Oettinger says, speakers could identify *huitti* and *karši*, which were no longer "at home" in their inherited paradigms, with the middle forms in -*a*(*ri*). From here the pattern spread to *paly*-

²³ None of this, to my mind, is remotely plausible. It is altogether unlikely that PIE, which had separate active and middle endings for every other morphological position in the finite paradigm, would have failed to make a voice distinction in the unmarked 2 sg. of the imperative. That it is difficult to reconstruct an actual 2 sg. mid. impv. ending is well-known; my own candidate for the role, $*-sh_2(u)\mu o$ (cf. note 13), may or may not be correct. But the difficulty or impossibility of reconstructing a particular ending does not mean that the ending never existed. The desinence of the PIE 2 pl. perfect is similarly obscure (Ved. *vidá* 'you (pl.) know' \neq Gk. ĭστε 'id.'), yet no careful scholar would venture to conclude that PIE used the 2 pl. *active* ending in this position.

The only evidence Oettinger presents for the supposed absence of a voice distinction in the 2 sg. impv. is Gk. $\pi\alpha\delta\epsilon$, morphologically the 2 sg. impv. of $\pi\alpha\delta\omega$ (act.) 'make to end, stop (tr.)', but employed as an expletive in the meaning "stop (intr.)!" — a sense otherwise proper to the middle ($\pi\alpha\delta\omega\mu\alpha$). There is nothing archaic about this usage, which is simply elliptical: the literal meaning of $\pi\alpha\delta\epsilon$ is something like "stop [*sc.* the action]!" Compare English "stop it!", virtually interchangeable, as a free-standing utterance, with "stop!"

²⁴ The normal imperative of historical *ie/o*-presents ends in *-iya*: cf. *aniya* 'perform!', *tiya* 'step!', etc. Oettinger considers these forms to be analogical, made by generalizing the *a*-variant of the thematic vowel.

when the whole category of transitive presents in *-a(ri)* began to acquire active inflection in the pre-Neo-Hittite period (cf. NH *hannai*, *iškallai*, *šaligai* (*šalikzi*), etc. for older *hannari*, *iškallari*, *šaliga(ri)*), *-i* spread further to *hani*, *kueni*, and *maldi*, where there was no historical connection with the middle at all.

Oettinger deserves credit for having offered a theory of the desinential imperative in -i that explicitly addresses the hitherto unnoticed association of these forms with the transitive middle inflection in 3 sg. -a(ri). His etymology of the ending -i, however, is unconvincing. I believe he is right in thinking that -i originally had nothing to do with the middle, and that its association with the eight-verb pahsi-group is secondary. I also share his view that a small nucleus of pahsi-group verbs must have inherited their ending from some non-middle-related source, whence it spread to the group as a whole by analogy. But the real problem is to determine what verb or verbs constituted this nucleus. Here we do not agree at all.

The "original" imperatives in *-i*, according to Oettinger, were *huitti* and *karši*. Let us take a closer look at these forms and their morphological patterning.

huittiya- 'pull', as it is sometimes conveniently but misleadingly lemmatized,²⁵ is one of the most confusing verbs in Hittite. There are at least three stem variants: 1) *huittiye/a-*, the normal Neo-Hittite form; 2) *huett-* (rare), chiefly found in older texts and more common in the middle than the active; and 3) *huitti-*, unambiguously identifiable only in 3 sg. mid. *huittiyari* (MS), pret. *huittiyati* (OS), and impv. *huittiyaru*, but potentially also on hand in the corresponding 3 pl. forms (*-iyanda*, etc.) and elsewhere.²⁶ The same allomorphy is seen in the verb *parš(iya)-* 'break' (cf. *CHD* s.v.), where the

²⁵ Thus Friedrich (*HW*, s.v.). Puhvel (*HED*) gives "*huet-*, *huit-*, *hut(t)-*, *hu(i)ttiya-*"; Kloekhorst (2008) has "*huett-*^{*tia(ri)*} / *huetti-*^{*a(ri)*}; *huttiie/a-*^{*zi*}." In what follows I cite actual forms as they appear in the texts (e.g., 2 sg. impv. *huitti*), but asterisked forms cited by Oettinger in the spellings preferred by him (e.g., **huetti*).

²⁶ E.g., the well-attested 3 sg. *huittiyat* (OH/MS, OH/NS), classified as active by Kloekhorst (2008: 350), but just as easily analyzed as a middle form (= *huittiyati*). 3 sg. mid. forms in -iya(ri), -iyat(i), and -iyaru are never thematic in Hittite.

stem form *paršive/a*- is known to have been thematized from *parši*- within Hittite (so already Watkins 1969: 102). The parallelism with *parš(iva)*- strongly suggests that the thematic stem huittive/a- is secondary as well - a fact which makes it likely that the imperative *huitti* (OH/MS), if old at all, goes back to a bare stem form in *-*i* rather than to a thematized preform in *-(i)ie. Oettinger himself recognizes this point and corrects for it in his revised 2007 scenario (Oettinger 2007: 566), where he separates *huitti* from karši and assigns *huitti* to the paradigm of a hypothetical lost active 3 sg. *huittai*, pl. *huittivanzi.²⁷ But there is another, more fundamental problem with Oettinger's reliance on *huitti*. The verb *huitt(iya)*- could never have belonged to the nucleus of the *pahši*group because there was no 3 sg. **huetta(ri) (*hui-)* in Hittite; the alleged pattern 3 sg. pres. *huetta(ri): 2 sg. impv. *huetti never existed. The transitive 2 sg. mid. huezta (OH/MS and later) is multiply attested (there is also a Neo-Hittite 1 sg. *huitt(a)hhari*), but the 3 sg. is only found as *huittiyari*. Remarkably enough, this pattern — 1 sg. -(*h*)*ha*(*ri*), 2 sg. -(t)ta(ti), 3 sg. -iva(ri) — is linguistically real. It is confirmed by the corresponding preterite forms of *huitt(iya)*- (1 sg. *huitt(a)hhat*, 3 sg. *huittiyati*) and, most interestingly, by the older present forms of the parallel *parš(iva)*-: 1 sg. *parašha*, *parašhari* (both OS); 3 sg. paršiva (OS), paršivari (MS). Oettinger's 2 sg. impv. *huetti could not have been the model for pahši, hanni, iškalli, etc. (3 sg. pahša(ri), etc.) because speakers would almost surely have identified the *-*i* of **huetti* with the suffixal *-*i*(y)- of 3 sg. *huettiva(ri).²⁸

In the case of karš(iya)- 'cut off', the normal stem is karš-, found in texts from all periods in all paradigmatic positions, active and middle. A more restricted stem form karšiye/a- is known from the multiply attested 3 sg. form karšiezzi (OS), found beside kar(a)šzi (OS) in the Laws. Seen in the context of these early attestations, the transitive 3 sg. mid. karša, restricted to a single Neo-Hittite composition and contravened by

²⁷ He thus in effect shifts it to the type of *iyanni*, $m\bar{e}mi$, uppi, etc., where the -*i* is suffixal. Cf. note 19.

²⁸ Or, to put it another way, the only possible solution to the proportion 3 sg. *huettia(ri) : 2 sg. impv. *huetti :: 3 sg. pahša(ri) : 2 sg. impv. X would have been X = *pah(ha)š.

parallel forms with intransitive meaning (e.g., $karš\bar{a}ru$ 'let [it] cease'; cf. Puhvel, *HED* 4, 102), is unlikely to be an archaism. The 2 sg. impv. karši (NH) may well have an older pedigree (cf. below), but not as the imperative of a *ie/o*-present; the claim that *-i* was the phonologically regular reflex of **-iie* is not supported by any actual examples.²⁹ Oettinger's proposed scenario fails as badly for karš(iya)- as for *huitt(iya)*-.

What, then, was the model for the association of the imperative in -i with the transitive middle inflection in -a(ri)? Every indirect indicator points to the verb pahšitself. *pahši* is the best-attested imperative in -*i* in the Hittite corpus. Though not found on any Old Hittite original tablet — no *i*-imperative can claim this distinction — it is attested in Middle Hittite original documents and Neo-Hittite copies of Old Hittite texts. It is used in the formulaic language of Hittite treaties. It has no variants; there is no bare stem form *pahh(a) ike impv. 2 sg. kar(a) (NH) beside karši. Outside the imperative too, the profile of this verb is remarkably stable and uniform. There is no hint of a competing stem *pahši- or *pahšive/a-. While the inflection mostly shifts from deponent to active *hi*-conjugation over the course of Hittite history (1 sg. pres. *pahhašha* \Rightarrow pahhašhi, 2 pl. impv. pahhašdumat \Rightarrow pahhašten, etc.), the stem remains invariant pahš-— and the 3 sg. pres. remains pahša(ri) — until the very end of the Hittite tradition. The "look" of *pahši* is thus not at all that of a late, analogical addition to the class whose other members, in addition to *huitti* and *karši*, are the rare and in some cases atypical *eši*, hanni, iškalli, šaliki, and šarri (see below). If a source could be found for the ending -i, *pahši* would be the obvious choice for the original *i*-imperative of the group.³⁰

In my view, of course, the source of the *-i* of *pahši has* been found. Oettinger's new arguments make it clearer than ever that *pahši* is, as I have maintained since 1987, a *si*-imperative, haplologized from a 2 sg. *present* subjunctive $*p\acute{e}h_2$ -*s*-*e*-*si*. Whether the

²⁹ The supposed parallel of *huitti* < **huettije*, which Oettinger cited in 2006, is, of course, no longer usable under the reanalysis in Oettinger (2007). The natural assumption is that *-*ije* regularly gave -*iya*.

³⁰ Interestingly, this was also Oettinger's intuition in his early *Stammbildung* (1979: 211), where, however, a comparison of *pahši* with the Vedic *si*-imperatives was explicitly rejected.

underlying stem was $p\dot{e}h_2$ -s- / $p\dot{e}h_2$ -s- (i.e., a Narten s-present like $g\dot{n}\dot{e}h_3$ -s- / $g\dot{n}\dot{e}h_3$ -s-), or $p\dot{e}\dot{h}_2$ -s- / $p\dot{e}\dot{h}_2$ -s- (i.e., a "molō-type" s-present of the type seen in $h_2\mu\dot{o}g$ -s- / $h_2\mu\dot{e}g$ -s- 'grow'; cf. *HIEV* 75) is immaterial. The operative fact is that once the pre-Hittite ancestor of $pah\dot{s}i$ came to be paired with the pre-Hittite ancestor of $pah\dot{s}a(ri)$, a pattern of association was established that could be imitated by other transitive verbs with indicatives in 3 sg. -a(ri). Oettinger, as the discoverer of the $pah\dot{s}i$ -group, is also the first to have attempted to identify its historical nucleus, the verb or verbs that constituted its inherited core. In arguing unsuccessfully for huitt(iya)- and $kar\dot{s}(iya)$ -, he has in effect eliminated every thinkable alternative to $pah\dot{s}$ - itself.³¹

While it may seem surprising that a strictly deponent verb like (OH) $pah\bar{s}$ - would have formed its imperative from a haplologized 2 sg. *active* subjunctive (*-*si* < *-*s*-*e*-*si*), the same phenomenon is attested elsewhere. In the Rigveda, the *s*-aorist of the root *stu*-'praise' is found seven times in the indicative and eight times in the subjunctive; the indicatives are all middle (1 sg. *astoși*, etc.), while the subjunctives are all active (1 sg. *stoșāņi*, etc.). In an interesting parallel to *pahš*-, the root aorist of *juș*- 'enjoy' is exclusively middle in the indicative (3 pl. *ajușran* 'liked')³² and participle (*jușāná*-), but active in the subjunctive (*jóșat*, etc.) and associated *si*-imperative (*jóși*). The origin of this alternation of voice, which on the Hittite side must be linked to the better-known problem of why verbs meaning "protect," "tear," and other active notions are middles of the "stative" type at all, must for now remain a mystery. One inevitably wonders whether the full-blown middle inflection of the *pahši*-group is secondary, the replacement —

³¹ This point is important. The effect of Oettinger's discovery of the *pahši*-group is to shift the problem from a relatively unfocused general question, *viz.*, where do imperatives in *-i* come from? — to a simpler and narrower one, *viz.*, where do the c. six imperatives in *-i* with transitive middles in *-a(ri)* come from? Since at least one of this small group of forms *must* be original, the *si*-imperative analysis of *pahši* is necessarily more compelling than it was under the older, more general formulation of the problem.

³² transitive, despite the "stative" ending *-ran*.

either within pre-Anatolian or late PIE itself — of some other middle- or *hi*-conjugation-related category.³³

The special position of *pahš*- as the founding verb of the *pahši*-group does not, of course, preclude the possibility that there were also other etymological *si*-imperatives in Hittite. One such was the hypothetical $*n\bar{e}si$, to which we will return below. More generally, if the haplological reduction of PIE 2 sg. subj. *-s-e-si to *-si was earlier than the separation of Anatolian from the rest of the family, then any Hittite imperative in -ibuilt to a stem ending in -*š*- could in principle go back to a historical *si*-imperative. An obvious possible case is the just-discussed karši. The underlying verb karš(iya)- is not a good candidate for the nucleus of the *pahši*-group because it lacks a well-established transitive middle in -a(ri). But the imperative karši can attractively be seen as an authentic si-imperative based on the stem of the present kar(a) šzi (< root aorist *kers- / *krs-? cf. Kloekhorst 2008: 455, after Melchert 1997: 86). Here too may belong the much-disputed ešši <e-iš-ši> 'perform!', found once in the Hittite-Akkadian bilingual of Hattusilis I (OH/NS) and spelled in a way that shows it to be a modernization of OH *i-iš*-. Oettinger (2007: 562, note 3) dismisses *ešši* as a mistake for *ešša*, *išša*, the "regular" form in a small number of possibly more recent (NH and MH/NS) contexts. I suspect that this judgment may be too severe. *ešši* is certainly too slender a reed on which to base an argument for the existence of etymological *si*-imperatives in Hittite. But given that a si-imperative analysis is virtually assured for *pahši* in any case, there is no reason to exclude the possibility that *ešši* may represent a further instantiation of the type.³⁴

³³ No hypothesis will be offered here. But it should be noted that whether secondary or not, the middle inflection cannot be recent, since the Hittites themselves sought every opportunity to eliminate it in the immediate aftermath of the Old Hittite period.

³⁴ Yet another form worth bringing up here, though not attested at all(!), is **tuhši* 'cut off!' The etymologically obscure verb *tuhš-* is a typical Old Hittite transitive middle in 3 sg. *-a(ri)*; like *pahš-*, etc., it acquired active inflection in Middle and Neo-Hittite. The 2 sg. impv. of *tuhš-* is not recorded, but if it were, there can hardly be any doubt that it would have been **tuhši* — a presumptive *si*-imperative and possible core form of the *pahši*-type. Likewise potentially interesting, though alternatively explainable as a form of the *iyanni*-type (like its "double" *huitti*), is **parši*, the predicted 2 sg. impv. corresponding to 3 sg. *paršiya(ri)* 'breaks (tr.)'.

One form which, despite my previously expressed opinion to the contrary,³⁵ is almost certainly *not* a historical *si*-imperative is *eši* 'occupy!'. The synchronic position of eši has now been clarified by Oettinger. As a deponent, the verb $\bar{e}s$ - (3 sg. esa(ri)) normally means "sit" or (with the particle -za) "sit down"; in this sense the 2 sg. imperative is $\bar{e}\bar{s}hut$, with the normal middle ending -(h)hut. But the same middle indicative forms are also occasionally transitive, with the meaning "sit on, occupy"; cf. KUB 14.1, rev. 44 (Madduwattas): nam[-ma]=ma=wa-a=z pa-ra-a ta-ma-a-i KUR-e [ta-ma-a-i]n-n=a ha-pa-[a-ti-in ZI-i]t le-e e-eš-ta-[ri] 'do not then occupy (ēštari) any further land or any further river valley'.³⁶ In this usage the imperative is $e \dot{s} i$: cf. [ka]-aša=wa-a=t-ta KUR ^{HUR.SAG}ZI-IP-PA-AŠ-LA-A AD[-DIN] nu=wa=za a-pu-u-un=pat e-ši 'I have given you the upland of Zippasla; occupy that only' (*ibid.*, obv.19; quoted from Oettinger 2007: 564). The historical problem, then, is to explain how and why the intransitive and transitive "paradigms" of $\bar{e}\bar{s}$ -, which are everywhere identical in the indicative $(e\check{s}a(ri))$ 'sits (down)' = $e\check{s}a(ri)$ 'occupies', etc.), came to differ only in the 2 sg. imperative. To invoke an inherited si-imperative for this purpose would be inefficient, minimally requiring the assumption of a PIE transitive active subjunctive (e.g., 2 sg. * $h_i \bar{e}s - e - si$ (> * $h_i \bar{e}s - i$) 'you may occupy'; cf. note 18) which has left no trace in Greek or Indo-Iranian.³⁷ An inner-Hittite explanation is both possible and *a priori* more likely. Transitive *eša(ri)* has parallels elsewhere in the IE family; there are comparable transitive uses of $\hat{\eta}$ otal in Greek (e.g., Aesch. Ag. 183 ($\delta \alpha \mu \phi \nu \omega \nu$. .) $\sigma \epsilon \lambda \mu \alpha \sigma \epsilon \mu \nu \delta \nu \dot{\eta} \mu \epsilon \nu \omega \nu \dot{\eta}$ (of the gods. . .) sitting on their exalted thrones') and \dot{aste} in Vedic Sanskrit (e.g., RV III 4. 11 barhír na ástām áditih suputrá 'Let Aditi, who brings forth good sons, sit down on our sacrificial straw'). In all three languages the rare transitive forms are functionally extended middles, marked by the normal middle endings. We can make it our default assumption, therefore, that the same range of values once extended to the imperative, and

³⁵ So most recently Jasanoff (2003b: 36; *HIEV* 183).

³⁶ I am grateful to Craig Melchert for help with the details of Hittite usage.

³⁷ It is true that Hitt. $\bar{e}\dot{s}$ - 'sit' has a historically obscure active inflection in Old and Middle Hittite (3 sg. $\bar{e}\dot{s}zi$, etc.) alongside the normal deponent paradigm. But this active is intransitive.

that the normal 2 sg. mid. impv. forms, Hitt. $\bar{e}\bar{s}hut$, Gk. $\tilde{\eta}\sigma\sigma$, and Ved. $\bar{a}sva$, originally had marked transitive as well as unmarked intransitive readings. This is still apparently the synchronic situation in Greek and Vedic, but not in Hittite, where the place of the predicted transitive $\bar{e}\bar{s}hut$ is taken by $e\bar{s}i$. $e\bar{s}i$ must have been the historical *replacement* of $\bar{e}\bar{s}hut$ — a simple analogical creation modeled on the transitive pair $pah\bar{s}a(ri)$: $pah\bar{s}i$.³⁸

Let us now return to the larger picture. Oettinger's discovery of the "pahši-group" — the half dozen or so verbs with imperatives in -i and transitive middles in 3 sg. -a(ri)— tells us a great deal about the propagation of -*i* through the Hittite lexicon, but nothing about its origin. The locus of this ending, I continue to believe, was in inherited siimperatives like *pahši* itself, where the inner-PIE reduction of *-s-e-si to *-si created the synchronic appearance of an ending -i.³⁹ The subsequent spread of -i was analogical. One channel for this process was the transitive "stative" middle in 3 sg. -a(ri): transitive verbs that inflected like *pahš*- in the indicative tended also to adopt its signature inflection in the 2 sg. imperative. Forms thus produced, all with indicatives in -a(ri), were iškalli 'tear!', šaliki 'touch!', and (as detailed above) eši 'occupy!'. hanni 'decide!' no doubt belongs here as well, although in this case the iteratives in *-anna/i-* (*iyanni*, etc.) and the compounds of *nai*- (*penni* 'drive!', etc.) may also have played a role.⁴⁰ In the meantime, the handful of *si*-imperatives *not* linked to indicatives in $-a(ri) - *n\bar{e}si$, possibly karši, ešši (for *išši), and others never recorded — helped provide a context for the spread of -i outside the pahši-group (ištāpi, hāni, maldi, etc.). Oettinger's claim that forms of the latter type were created only after the "activization" of *iškalla(ri)* to *iškallai*,

³⁸ This account of $e \dot{s} i$ is clearly preferable to the one in Jasanoff (2006: 209-10), where a different analogical model was suggested.

³⁹ While this point would seem rather obvious, Oettinger (2007: 561) and Steer (2009: 135) insist on the synchronic segmentation *pahš-i* as though it were somehow at odds with a *si*-imperative analysis. The more general and largely definitional question of whether *si*-imperatives "really" ended in *-i* or in *-si* is taken up below.

⁴⁰ Hand in hand with the extension of -i in transitive middles went the restriction of the older ending -(h)hut to the intransitive sphere. Such a scenario would fit much better with the usual IE pattern than Oettinger's view that -(h)hut, unlike every other middle ending in the older IE languages, was purely intransitive from the outset.

hanna(ri) to *hannai*, etc. is improbable and barely consistent with the chronology of the attested forms (cf. note 22). No chronological fine tuning is needed under the *si*-imperative approach, which sees the link between the ending -i and the middle in -a(ri) as descriptively important but not organic.

It remains to consider Oettinger's views on *nešhut*. As already discussed, I have argued that this form arose as the "medialization" of a lost *si*-imperative $*n\bar{e}si$ — an interpretation that Oettinger, who denies the existence of *si*-imperatives in Anatolian altogether, naturally rejects. His short rebuttal of my position (2007: 567) has two parts: an argument against the possibility of a preform $*n\bar{e}si$ *in principle*, and an alternative explanation of *nešhut*. The argument against $*n\bar{e}si$ is best put in his own words:

Letzteres $[= n\bar{e}si]$ erscheint allein schon deshalb nicht möglich, weil *nešhut* (*naišhut*) intransitive Bedeutung hat, Imperative auf -*i* (sic) aber nur transitive Medialstämme supplieren. . .

There is a fallacy here: the conclusion that -i was exclusively a transitive middle ending is assumed at the outset and taken as the basis for excluding potential evidence to the contrary. But logical niceties aside, Oettinger's framework is no less dependent than mine on *active i*-imperatives at an early stage of Hittite. Structurally, our two approaches are parallel. The updated *si*-imperative theory, modifying and improving upon *HIEV* 182-84, starts from a handful of active *si*-imperatives, one of which, *pahši*, was or came to be associated with a transitive middle in -a(ri) and called forth a small group of analogical imitators. For Oettinger, the role played by *pahši* in the *si*-imperative theory is played by the active imperatives *huitti* and *karši*, the former said (in Oettinger 2007) to correspond to an active indicative 3 sg. **huittai*, pl. **-iyanzi*, and the latter to the attested active 3 sg. *karšiezzi*. Here too the reinterpretation of *-i* as a middle ending (in Oettinger's terms) was an accident, a result of the secondary pairing of *huitti* and *karši* with independently formed transitive middles in *-a(ri)*. Since the active origin of *-i* is undisputed, there is no reason, even in Oettinger's framework, why an active imperative in -i (e.g., $*n\bar{e}si$) could not, at a suitably early date, have coexisted beside a middle intransitive imperative in -(h)hut (e.g., the pre-Hittite equivalent of *nešhut*).

Though supported by an attractive word equation (= Ved. *néşi*) and useful for a variety of purposes, **nēši* is above all an abstraction created to explain *nešhut*. Oettinger finds nothing in *nešhut* to merit special interest. The -*š*- of this form, he says, is regular according to the principle that when the middle forms of active *hi*-verbs with *ai* : *i* or *au* : *u* ablaut adopt "strong" vocalism, they employ the *s*-extended form of the strong stem, not only before dentals, but also before -*h*-.⁴¹ But this strange rule, apparently stated here for the first time, will not stand scrutiny. *A priori*, it makes little sense: since intrusive -*š*- is only found before dentals and not before -*h*- in the active (cf. 2 pl. *naišteni*, *naišten*, etc. vs. 1 sg. *nēhhi*, *nēhhun*), and since the rule is stipulated to apply specifically to middle forms where the strong stem has been introduced *from the active*, it is hard to see why speakers would have decided to extend the range of -*š*- in the middle only, and in so idiosyncratic a fashion. In support of his rule Oettinger cites the following forms:⁴²

2 sg. impv. ne-š-hut (< nai-š-hut) 'turn! (intr.)'
1 sg. pret. au-š-hahat 'I saw', mau-š-hahat 'I fell'
1 sg. pret. me-š-hati (< *mai-š-hati) 'I prospered'

The first of these, of course, is our explicandum. The others require closer examination.

The forms $au-\dot{s}-hahat$ and $mau-\dot{s}-hahat$ can be discussed — and dismissed — together. au-/u- 'see' and its morphological satellite mau-/mu- 'fall' differ from the far more numerous diphthongal stems in -ai-/-i- in one all-important respect: they systematically substitute signatic *mi*-conjugation forms for their inherited *hi*-conjugation

⁴¹ "Es ist vielmehr so, daß Medialformen, die zu aktiven Verben der hi-Konjugation mit Ablaut ai/i oder au/u gehören, bei Einführung der starken Ablautstufe die um -s- erweiterte Stammvariante aufweisen. Dies tun sie nicht nur vor Dental, sondern auch vor h" (Oettinger 2007: 567).

⁴² here rendered as presented by Oettinger, with hyphens and derivational information reflecting his own analyses.

forms in the 3 sg. Thus, we find 3 sg. act. pres. *aušzi*, *maušzi* for expected *(*m*)*aúi*; pret. *aušta*, *maušta* for expected *(*m*)*auš*; mid. pres. **aušta*(*ri*), *mauštari* for expected *(*m*)*uwari*;⁴³ and pret. *auštat*, *mauštat* for expected *(*m*)*uwat*(*i*). It is clear what must have happened: the "correct" but morphophonemically opaque 3 sg. pres. forms **aw* \bar{e} and **maw* \bar{e} (*vel sim.*) were replaced at some pre-Hittite stage by the more transparent **aušti* and **maušti*, back-formed from the regular but formally ambiguous *hi*-conjugation preterites **aušt* and **maušt*. The latter forms, now reassigned to the *mi*-conjugation, underwent the regular *mi*-conjugation development to *aušta*, *maušta*;⁴⁴ these, in conjunction with the new present forms in -*šzi* (< *-*šti*), triggered the creation of analogical 3 sg. middle forms in -*šta*(*ri*) (pres.) and -*štat*(*i*) (pret.). In the new middle paradigm the forms of the 2 sg. and 3 sg. preterite were homophonous:

3 sg.
$$(m)auštat(i) = (m)auš- + -tat(i)$$

s-extended mi-conj. stem 3 sg. mid. (< *-to + particle)
2 sg. * $(m)auštat(i) = (m)au- + -š- + -tat(i)^{45}$

intrusive -*š*-

2 sg. mid. (< *- th_2e + particle)

For the Neo-Hittite language learner the structural difference between the 2 sg. and 3 sg. would obviously have been problematic. New speakers would have been tempted to analyze both forms in the way mature speakers analyzed the 3 sg., i.e., as cases of an *s*-final stem followed by the appropriate secondary middle ending. Generalization of this analysis to the first person produced the attested *aušhahat* and *maušhahat* (for "correct" *uwahhat*, **muwahhat*) — distant analogical spinoffs, so to speak, of the original analogical creation of *aušzi* and *maušzi*. Oettinger's claims for "*mešhati*" notwithstanding (see below), there were no comparable developments in stems

strong *hi*-conj. stem

⁴³ Cf. 3 sg. impv. *uwaru* 'let [it] appear' (OH/MS).

⁴⁴ The process is described in *HIEV* 120 f..

⁴⁵ Neither verb, by chance, is attested in the 2 sg., but the reconstruction is secure.

containing an *i*-diphthong; no Hittite scribe ever recorded a 3 sg. act. **naišzi* or a 1 sg. mid. pret. **naišhahat* / **nešhahat*.

The form that Oettinger cites as *mešhati* is actually spelled *mi-eš-ha-ti* in its unique (Middle Hittite) occurrence.⁴⁶ There is some uncertainty as to the precise identification of the underlying verb. Despite the spelling with *mi*-, Oettinger reads [meš-] and assumes a monophthongized form of *maishati, from mai- / miya- 'grow, prosper'. But mi-es-ha*ti* cannot be separated from the numerous other forms, some pre-Neo-Hittite, that contain the same graphic sequence: 3 sg. pres. *mi-i-rei-eš-zi*, pl. *mi-eš-ša[-an-zi]*, 3 sg. pret. *mi-e*eš-ta, 3 sg. impv. mi-e-eš-du, pl. mi-e-eš-ša-du, iter. mi-i-e-eš-k-. Some of these are multiply attested, yet, remarkably, there are no spellings with initial *me*. The only possible inference, confirmed by the occasional writings with *mi-i-*, is that the stem underlying these forms was not $me\check{s}(\check{s})$ - but $mie\check{s}(\check{s})$ -. Etymologically, $mie\check{s}(\check{s})$ - was a "fientive" in $-e\check{s}(\check{s})$ - (< *- eh_1 -s-), with the literal meaning "enter a full-grown (thriving, prosperous) condition" and standing in the same relationship to the primary verb mai- / *miya-* as, e.g., *parkeš(š)-* 'become high' to *park-* 'rise'. Whether *mieš(š)-* was still an autonomous lexical item in synchronic Hittite (so Kloekhorst 2008: 540 f.) or a third allomorph of the verb "mai- / miva- / mieš(š)-" (the CHD view) is difficult to tell.⁴⁷ What is clear is that, historically speaking, *miešhati* [sic recte] is an interloper in the paradigm of *mai*-: *miya*-; it is not a phonologically evolved form of **maišhati*, and furnishes no support for the supposed regularity of intrusive -*š*- before -*h*- in *nešhut*.

Oettinger's alleged parallels for *nešhut* are thus flawed. *nešhut* is unique, and unique in a way that suggests retention rather than innovation. Like *pahši*, an archaism with a similar profile, it is both frequent and constant. Apart from the analogical substitution of *nai*- for *ne*-, there are no significant byforms. There is no *s*-less **nehhut* or **ne(y)ahhut*

⁴⁶ All forms and spellings in the following discussion are taken from *CHD*, s.v. *mai- / miya- / mieš(š)-*.

⁴⁷ As is now generally recognized, $mie\check{s}(\check{s})$ - 'grow, prosper' was lexically separate from $mie\check{s}(\check{s})$ - 'become mild', a denominative to the adjective *miu*- 'mild, gentle'. Speaking in favor of a "one-paradigm" analysis of $mie\check{s}(\check{s})$ - and mai- / miya- is the fact that synchronic fientives in $-e\check{s}(\check{s})$ - are activa tantum; the creation of the middle form $mie\check{s}hati$ suggests that $mie\check{s}(\check{s})$ - was no longer identified by speakers as a fientive.

— a remarkable fact given the saliency of the secondary "thematic" stem ne(y)a-, especially in the middle (1 sg. pres. *neyabhari*, pret. *neyabhat*, 3 sg. pret. *neyattat*, etc.). If there is a better explanation for *nešhut* than the one that links it to a *si*-imperative, it has not been forthcoming.⁴⁸

* * *

Where does all this leave us? As I have tried to show, the claim that Hittite had si-imperatives has sometimes been misunderstood. In the context of IE comparative grammar, "si-imperative" is a historical term; it refers to any 2 sg. imperative that goes back, directly or analogically, to a haplologized 2 sg. subjunctive in *-sesi. In Indo-Iranian, where the category was first identified, the overwheming majority of siimperatives are based on s-aorist subjunctives. But this is not a defining property of siimperatives; cases like Ved. śrósi, based on a present $\hat{k}l\dot{e}u(-)s$ - / $\hat{k}l\dot{e}u(-)s$ - and forming a word equation with Toch. B päklyaus (= A päklyos), show that these forms could potentially arise from the subjunctive of any stem ending in *-s-. Another misconception, likewise rooted in the specific character of the Vedic evidence, is the notion that the *-si of si-imperatives was an ending proper, a desinence. The historical connection between *si*-imperatives and *s*-aorists was no longer synchronically clear to the Indian grammarians, who classified forms like váksi and nési as 2 sg. indicatives with the primary ending -si. Western Sanskritists took over this analysis, seeing the "problem" of si-imperatives as the problem of explaining the role of the "ending" -si. But this is an

⁴⁸ There is one imaginable scenario that deserves to be mentioned if only to be rejected. If the original form of the 2 sg. middle imperative ending was, as I have maintained, $*-sh_2(u)\mu o$ (cf. note 13), it might seem possible to skip the assumption of a *si*-imperative $*n\bar{e}si / *n\acute{e}iHsi$ altogether and take *nešhut* directly from PIE $*n\acute{e}iH-sh_2(u)\mu o$. But this scenario does not play out well. The Hittite ending is synchronically -(h)hut; for pre-Hitt. $*n\acute{e}iH-sh_2u$ to have retained its *-s-, the *-s- would have to have been reinterpreted as part of the preceding stem. The only form that could have served as the basis for such a resegmentation, however, would have been the *si*-imperative $*n\bar{e}si / *n\acute{e}iHsi$ itself, where the morpheme boundary before the *-i would have been transparent from *pahš-i* and similar forms. Thus, even in the (unlikely) event that *nešhut* was created by direct composition (*ne- + -shu[t], *vel sim.*) rather than by "medializing" *(-s)-i to *(-s)-hu[t], $*n\bar{e}si$ would have to have been present in the language to block the conversion of *nešhut* to *nehhut.

Indocentric perception, valid only for Vedic and historically misleading. In late PIE, a newly haplologized *si*-imperative like **néiHsi* (< **néiH-s-e-si*) would surely have been parsed **néiH-s-i*, i.e., as an *s*-aorist imperative with the desinence **-i*.⁴⁹ It was only at the Indo-Iranian stage or later, when the form ceased to be felt as belonging to the aorist, that the synchronic segmentation became **néiH-si / né-și*. In the less typical case of Ved. *jóși* (< PIE **ĝéus-i* < **ĝéus-e-si*; cf. note 7), which was based on a root aorist, there were no grounds for reparsing. The segmentation remained *jóș-i*, and the ending *-i* even enjoyed a mild productivity, spreading in Hittite-like fashion to the forms *yódhi* 'fight!' and *bodhi* 'heed!' (cf. Jasanoff 2002).

Given the confusion over what a *si*-imperative *is*, there have naturally also been different opinions about how the existence of *si*-imperatives in Hittite might affect our reconstruction of PIE. Oettinger's view is too strong: if *pahši* were really a *si*-imperative, he says, it would show that "das Anatolische einmal sowohl einen Konjunktiv als auch einen *s*-Aorist (und überhaupt einen Aorist) besessen hätte und somit eine ganz 'normale' indogermanische Sprache gewesen wäre" (2007: 561). Only the first part of this statement is correct. Most scholars are agreed that Anatolian inherited the PIE *s*-aorist in some form, but this consensus has nothing to do with *pahši*; it follows from the general interpretation of the *hi*-conjugation 3 sg. pret. ending -*š* as a reflex of the 3 sg. (pre)sigmatic aorist in *-*s*-*t*. On the matter of the subjunctive, however, Oettinger is exactly on the mark. If Hittite had *si*-imperatives — as it did — it must have had an ancestor with 2 sg. subjunctives in *-*(s-)e-si*. Thanks in part to Oettinger's own clarification of the Hittite material, it is now more certain than ever that the subjunctive in *-*e/o*- was part of the heritage of undivided PIE.

⁴⁹ or more precisely, as the imperative of a *presignatic* aorist; cf. note 12.

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