The final cut: Hittite *iškallāri* 'splits, slices', PIE $*(s)k^{(y)}elH$ 'cut in half, split', and root statives in Proto-Indo-European

Laura Grestenberger University of Vienna

Laura.Grestenberger@univie.ac.at

1. Introduction

- A problematic category: Hittite 3sg.mid. "statives" in -a(ri), e.g., ēša(ri) 'sits', hannari 'decides a lawsuit', karšari 'cuts', pahša(ri) 'protects', šaliga(ri) 'touches', tukkāri 'is visible', etc.
 - **a.** Distribution of variants: -a(ri) vs. $-\bar{a}(ri)$
 - **b.** Not really "stative": transitive deponent subclass
 - c. Etymology of many verbs of the deponent subclass unclear
 - **d.** Function/origin of * '-or vs. *-ór
- Ad **a.**) PIE 3sg.mid. ("stative") endings *-o(r) ("dentalless middle"):
 - O Hitt. distribution of variants -a/-ari (& -ta/-tari) depended originally on accent: unaccented *-or# > -a#, accented *-or# > $-\bar{a}r\#$ (Yoshida 1990:121, Yoshida 2011:105)
 - Confirms that PA patterned with Italo-Celtic and Tocharian with respect to its primary middle marker (*-r rather than *-i), cf. Jasanoff 2003.
- Ad **b.)** Very few verbs with "stative" endings are actually stative verbs; the *a(ri)*-class includes a number of transitive, agentive verbs: *ḫannari* 'decides a lawsuit, judges', *ḫattari* 'slits; sacrifices', *ḫuettiya(ri)* 'plucks, pulls', *iškallāri* 'tears, slits off', (*karšari* 'cuts',) *paḥša(ri)* 'protects', *paršiya(ri)* 'breaks', *tuḥša(ri)* 'cuts off', *šaliga(ri)* 'touches', cf. Yoshida 1990, Oettinger 2007, Jasanoff 2012 → **deponents** (Grestenberger 2014, 2016, 2018)
 - o tend to be replaced with *active hi*-verbs in later texts.
- Ad **c.**) a(ri)-deponents without a secure IE etymology: hattari (* h_2et only in Anat.), huettiya(ri) (* h_2uet /?* h_2ued * h_2), paršiya(ri), tuhša(ri), šaliga(ri) (?*sleig/g), iškallari: ?*skelH
- Ad **d.**) Primary athematic middle presents in $(*R(\acute{e}))$ -or vs. (internally) derived "root stative-intransitive" presents to a oristic roots in $(*R(\varnothing))$ - $\acute{o}r$), cf. Jasanoff 2003, 2013, 2017, Villanueva Svensson 2012, etc.

Today's goals:

- discuss the averbo & etymology of the Hittite *ór-middle iškallāri 'cuts off, slits'
- introduce new cognates (Tocharian)
- discuss implications for the prehistory of "stative-intransitive root presents" & a(ri)-deponents

2. Background: "stative presents"

Standard reconstruction of PIE verbal category "stative":

- a descriptive label for athematic root presents with a "dentalless" 3sg. ending *-o(r/i)/-o(r/i) (e.g. Jasanoff 2003, 2017) or *-e(r/i)/-*e(r/i)
- more often: a distinct verbal (voice) category besides active and middle in (pre-)Proto-Indo-European that was marked with a distinct set of endings (e.g., Oettinger 1976, 1992, Kümmel 1996, LIV²), originally probably identical to the perfect endings (i.e., *-h₂e, -th₂e, -e, etc.).

Problems with "stative" as a distinct (voice) category: (cf. Jasanoff 2003:50-1, Grestenberger 2016):

- the attested dentalless forms are rarely semantically stative (cf. the a(ri)-deponent class)
- the attested distribution of dentalless and dental 3sg. endings depends on stem type, e.g., *-ske/o- and *-je/o-verbs never select the dentalless set of endings in Hittite
- while there is evidence for a functional differentiation between *-o(r) and *-to(r) in some branches (Celtic, IIr.), this differentiation was clearly *einzelsprachlich* (cf. passive *-or in Celtic vs. transitive *-or, passive *-tor in Anatolian, etc.)

- there is also evidence for a *chronological* replacement of dentalless by dental endings (e.g., productive -tta(ri) in Hittite tends to replace older -a(ri) in canonical mediopassive functions;
 Ved. śάγe 'lies' vs. Gk. κεῖται, etc.)
- → "stative" is here used descriptively for verbs with a dentalless 3sg. ending

Two types of dentalless "statives": type I, accented full grade of the root ("vollstufiger Wurzelstativ", LIV²:15), type II, $R(\emptyset)$ and accent on the endings ("schwundstufiger Wurzelstativ", LIV²:15).

Table 1. PIE "statives"

Type I: $R(\delta/\dot{e})$ - $o(r/\dot{i})$			Type II: $R(\emptyset)$ - $\dot{o}(r/\underline{i})$		
Ved. śáye, 3pl. śére, YAv. sōire,	<	*kéį-o(r)	Ved. duhé 'gives milk', 3pl. duh-	<	$*d^hug^h-\acute{o}(i)$
CLuv. zīyar(i) (vs. "dental" Gk.		'lies'	ré, Goth. daug 'is useful', Gk.		'is useful'
κεῖμαι, Hitt. kitta(ri))			ἔτυχον 'happened to be at'		
Hitt. eša(ri), YAv. 3pl. åŋhāire (vs.	<	$*h_1\acute{e}s$ - $o(r)$	Hitt. urāni (< *urāri) 'burns',	<	*u̞rH-ó(r)
"dental" 3sg. Ved. <i>aste</i> , Gk. ηται)		'sits'	OCS vbrěti 'to boil, seethe'		'is hot'

- Type I: primary athematic middle root presents (media tantum), originally R(é), cf. Villanueva Svensson 2012
- Type II: derived athematic middle presents to a oristic roots through internal derivation: R(o)-middle aorist → R(ø) middle present, cf. Jasanoff 2003, 2017, Villanueva Svensson 2010/11, etc.
 - o In several IE languages, certain preterits or preterit-like categories with historical R(o) or $R(o/\emptyset)$ -Ablaut correlate with $R(\emptyset)$ -presents (often with middle endings) \rightarrow "stative-intransitive systems" (Jasanoff 2003)
 - O Synchronic/attested remnants of "stative-intransitive systems": class V subjunctives & class III/IV presents in Tocharian, some Hittite active *hi*-conjugation presents (from older aoristic roots) with historic R(*o*)-grade & R(*ø*)-middle presents.

Table 2. R(o)-"aorists" $\rightarrow R(\emptyset)$ middle presents

	R(o)-"aorist"		$R(\emptyset)$ present	
Hitt.	<i>lāki</i> 'bends' (tr.)	$<*l\acute{o}g^h$ -(e)	lagāri 'bends' (itr.)	$<*l_eg^h$ -ór
	wāki 'bites' (tr.)	< *uóh2g-(e)	[*wakāri/*ukāri	$< *uh_2g-\acute{o}r]$
	[Ved. ástāvi 'was praised']	< *stóu-(e)	ištuwāri 'is known'	< *stuu-ór
Toch.	B wākaṃ 'will bloom'	< *uóh2g-(e)	B wokotär 'blooms'	<*¤µh2g-ór
	A letaș 'will depart'	< *lói̞t-(e)	A litatär 'departs'	<*lit-ór
	B mārsam 'will forget'	< *mórs-(e)	B märsetär 'forgets'	< *mṛs-ór

3. Hittite iškallāri

- **Original inflection**: The formally unambiguous attested forms suggest a mediopassive "stative" (in this case: deponent) paradigm, or an active *hi*-conjugation verb (cf. Neu 1968a:76, 1968b:55, HED II:413, HEG:397–98, Kloekhorst 2008:399, Grestenberger 2014:269–70)
 - \circ \rightarrow agentive, transitive syntax of *iškallāri* unexpected in a "stative" or middle present.
- The meaning must be "cut/rip/slice off" or "tear to pieces" (cf. Hoffner 1997:178), cf. (1).

Table 3. Attested forms of Hitt. iškall-

Active 3sg.pres. iškallai: KBo 6.4 i 39 (OH/NS), <iš-gal-la-i> KBo 6.4 i 37 (OH/NS), <iš-kal-la-a-i> KUB 58.81 ii? 6 (NS); 3sg.pres. iškallaizzi (NS); 3pl.pres. iškallanzi (OH/NS); 1sg.pret. iškallaḥhn (NS); 3sg.ipv.act. iškallau (MH/NS); 3pl.ipv.act. iškallandu (NS)

Mediopassive 3sg.pres.mid. iškallāri: KBo 6.3 i 39 (OH/NS; <iš-kal-la-ri>), KBo 6.5 i 16, 18

(OH/NS), KBo 6.3 i 37 (OH/NS)); 3sg.pret.mid. iškallatta¹: KBo 8.37 i 9 (MH/NS),

KUB 23.7 ii 12 (MH/NS);

Underspecified/ ambiguous pres.ptcp. *iškallant*- 'cut off, split' (NS); inf. *iškalliawanzi* (NS); 2sg.ipv. *iškalli*²: HKM 24, 51 (MH/MS), KBo 37.1 ii 16 (NS); original verbal abstract in TUG *iškalleššar*

n. 'type of dress' (< *'slitting, cutting' or 'what has been cut (off)')

(1) KBo 6.3 i 37-38

takku LÚ.U₁₉-LU-aš *ELLAM*<-aš> ištamana[n]=ššan kuiški If person-GEN free-GEN ear.ACC=3SG.POSS.ACC anyone.NOM

iškallāri 12 GÍN KÙ.BABBAR pāi

tear.off.3sg.pres.mid 12 shekel Silver give.3sg.pres.act

parna=šše=a šuwāyezzi

house.ALL=him=and look.3SG.PRES.ACT

'If anyone tears off the ear of a free person, he shall pay 12 shekels of silver, and he shall look to his house for it.' (Hoffner 1997:27)

= KBo 6.5 i 16; the later version KBo 6.4 i 37 has $\langle i\check{s}gallai\rangle$; the mediopassive forms in KBo 6.3 i 39 & KBo 6.5 i 18 are replaced with active forms in the later KBo 6.4 i 39 \rightarrow suggests that $i\check{s}kall\bar{a}ri$ was the older, inherited present & the active hi-present was its later replacement.

- Original ablaut: "stative" -āri points to *-ór, prototypical for the ending-accented "a-mediopassive" class (cf. Yoshida 1990) → implies R(Ø) and hence *iškalḫāri < *sKļh₂/h₃-ór (cf. Melchert 1994:55)
- Kloekhorst (2008:399) reconstructs full grade active 3sg. *skólh₂/h₃-ei, 3pl. *sklh₂/₅-énti; argues that the original strong stem allomorph that also spread to the weak stem & middle forms (full grade *sKelH would also be possible) → but "stative" forms are textually older, and the unexpected agentive semantics make it more likely that the "irregular", deponent form iškallāri preserves the original inflection and was later morphologically "activized" (cf. Oettinger 1976)

Interim summary: Oldest form = $/skall-\acute{a}r(i)/$ with *- $\acute{o}r$, replaced with active hi-conjugation verb in the attested time span (no synchronic motivation for replacement in the opposite direction, pace Kloekhorst 2008, Villanueva Svensson 2010/11). If so, root must have been * $sKelh_1$ (more to be said below).

4. Cognates in other IE languages

4.1. Greek

• **Gk.** σκύλλω 'flay, tear' (cf. Σκύλλη) < *skol(H)-ie/o-, Vine 1999:566: *-oli-> -υλλ-, no need for a Cowgill's Law context (*sk^(y)ol(H)-ie/o-> PGk. *skol-ie/o-> *skul-ie/o-> skulle/o-)

• **Gk. σκάλλω** 'hoe, harrow' (Hdt.+) < *skl-ie/o- or *skl-n- (Vine (1999: 586–87, fn. 51); cf. the root allomorph of Att. σκαλίς, -ίδος 'hoe, shovel'; σκαλμός 'thole pin, oarlock', σκάλμη 'knife'

Problem: Hittite form requires a laryngeal, Greek reflects an *anit* root (cf. LIV²: *?2. (s)kel- 'spalten').

- *anit*-variant generalized from Saussure's Law ("In PIE, a laryngeal was lost adjacent to a tautosyllabic resonant plus */o/", Byrd 2015:26) or Pinault's Law context ("A laryngeal is deleted in an onset before a tautosyllabic yod", Byrd 2015:225)? → the **ie/o*-present
- Suggests that */skol/ is the older root allomorph and */skal/ was backformed from it

¹ Both attestations on broken tablets without syntactic context.

² The formally problematic "*i*-imperatives" often correlate with "statives" in -a(ri), cf. Oettinger (2007), who analyzes the *i*-imperatives as synchronically middle; Kloekhorst 2008, Jasanoff 2012: (originally) formally active.

4.2. Lithuanian

• Lith. *skiliù*, *skìlti* & *e*-grade variant *skeliù*, *skélti* 'split' < **sklH-ie/o-*, **skelH-ie/o-* (Vine 1999: 566, Jasanoff 2003:78, Villanueva Svensson 2010/11: 17) also point to a *set*-root.

4.3. Old Norse

• ON skilja 'divide, separate' < *skel(H)-je/o- (Villanueva Svensson 2010/11:17)

Vine, Jasanoff, Villanueva Svensson (loc.cit): Lith. *skeliù*, *skélti*, ON *skilja* and Gk. Σκύλλω together present evidence for an old " $mol\bar{o}$ -present" (= a * h_2e -conjugation present with R(o/e)-ablaut). Some problems:

- A "stative" in *- $\acute{o}r$ usually implies a * h_2e -conjugation *aorist* rather than a present (and cf. LIV², where the root is reconstructed with a primary root aorist, though for different reasons)
- The e-grade *ie/o-present Lith. skeliù is treated as a Neubildung in LIV²
- ON skilja is analyzed as denominal to ON skil 'divide, division' in LIV² (?2. *(s)kel- 'spalten')
- \rightarrow This leaves the unexpected o-grade of Gk. σκύλλω sufficient evidence for a "molo-present"?

4.4. Armenian

- Arm. *c'elaw* 'split, tore' (itr.), 3sg.mid. aorist < ("semi-thematic") aorist stem *skel(H)-(e)-? \rightarrow main reason why LIV² reconstructs an aoristic root *skel(H)-
- However, no such agrist is found in any other daughter language (LIV² adds Hitt. *iškall(a)*-, but we've seen that that's better analyzed as old "stative" present)
- The Armenian form has the phonological and morphological peculiarities (unexpected reflex of the initial *sk-cluster, whose lack of palatalization clashes with the supposedly generalized *e-grade of the form; age of the e-grade of the root and the middle inflection is unclear³)

Summary: comparative evidence points to a root *sKelH and possibly an R(\emptyset)-*ie/o-present, evidence for R(o) outside of Anatolian is limited to Gk. σκύλλω.

4.5. Tocharian

Tocharian A and B both have an intransitive class III present from the root $kul^{\bar{a}}$ (glossed as 'nachlassen', 'recede' in Malzahn 2010:602), **TA 3sg.** $kulat\ddot{a}r$, **TB** $k_ulet\ddot{a}r/kulet\ddot{a}r$.

- Class III presents go back to stems of the structure 3sg. * $R(\emptyset)$ - \acute{o} -tor (Jasanoff 2003, etc.).
- The corresponding (middle) subj. V paradigm (likewise with $R(\emptyset)$) may have been modeled on the class III present and does not necessarily imply an inherited active subjunctive with $R(\emptyset)$.

Meaning: "weaken", "fail", "be diminished", subjects = abstract nouns ("power", "will", "virtue"):

Tocharian B (examples & translations from CEToM unless otherwise indicated):

(2) THT 278 b2

[ne] mcek nai tremassana arsāk]

[ne]mcek nai tremaṣṣana arṣāklaṃts **kuletär** maiyyo certainly indeed angry.GEN.PL snake.GEN.PL recede.3SG.PRES.MID strength.NOM Peyrot 2013:355: '(Who has the thought), ''certainly the power of the snakes of anger **fails**''.'

- (3) THT 21 b5
 - ... pakwāreṃmpa nauṣ /// (att)s(ai)k maiyyo **kulātār** -me bad.COM.PL earlier Completely strength.NOM recede.3SG.SUBJ.MID -3PL.OBJ 'With the bad ones first their power **will recede** completely.'
- (4) THT 78 a1

³ Daniel Kölligan (p.c.), cf. Klingenschmitt 1982:83, 278, Kölligan 2015:174–175.

pāramitne āyorṣṣe mā no **kulā** -ñ palsko virtue.LOC munificent.OBL not PART recede.3SG.PRET.ACT -1SG.OBJ mind.NOM 'Also, my mind would not relent towards the virtue (pāramitā) of munificence.'

Tocharian A:

(5) A 17 b1

pñiṣiṃ tampeyo mā tsraṣṣune **kulatär** virtuous.OBL power.INSTR not energy.NOM recede.3SG.PRES.MID 'Through the power of virtue, energy does not **weaken**.'

(6) A 230 b7

tampe kälpītär **kuli(ṣ)** tampe omäskeṃ kleśāś(ś)i power.NOM obtain.3SG.OPT.MID recede.3SG.OPT.ACT power.NOM evil.NOM kleśa.GEN.PL '... power will be gained; the evil power of the Kleśas **will go down**.'

Etymology of $kul^{\bar{a}}$ (cf. Malzahn 2010:603):

- (*g*el(h₁)), *gwel(h₁): Jasanoff 1978:39–40 (cf. *g*elh₁ 'treffen, werfen', LIV²:208, ?2. *gwel-'sich legen', LIV²:192), equates TA *kulatär*, TB *kuletär* with the Lith. "essive"/stative guliù, gulĕti 'lie' and Lith. gulti 'lie down', arguing that B.-Sl. "ē-statives" like gulĕti < *gul-eh₁often functionally replace older root statives or middles
 - o so could imply an older stative *gul- $\acute{o}r$ or *gulH- $\acute{o}r$ underlying the Toch. and the Lith. forms but only indirect evidence
 - The Toch. forms suggest a passive or anticausative (= dynamic rather than stative) middle, so semantically closer to (formally unrelated) Lith. *gulti* 'lie down' than to stative *guleti*
- *k*elh₁ 'turn', Hilmarsson 1991:64ff.; but that root = Toch. käl^ā 'lead, bring', with alternating subj. V and pret. I paradigms in Toch. A and B, cf. Malzahn 2010:584–586; Adams 2013:256
- *(s)k^(y)el: Lubotsky 1988:92
 - o argues that PIE labiovelars and palatals became velars after *s, and that forms like Tocharian $kul^{\bar{a}}$ with a labiovelar reflex are therefore in principle compatible with forms without labiovelar reflexes after *s in s-mobile roots.
- **5. Proposal**: connect TA *kulatär*, TB *kuletär* with Hittite *iškallāri* based on Lubotsky's etymology of the former & argue that they all descend from a "stative-intransitive", ending-accented present $*(s)k^{(u)}[(H)-\acute{o}r$ from an *s*-mobile root $*(s)k^{(u)}elh_1$ 'cut off/into, slice'.

Three main problems to overcome:

- the proposed phonological equation $*(\#)sk : *(\#)k^{\#}$
- the semantic mismatch between the Toch. intransitive verb & the Hitt. transitive-agentive verb
- the morphonological question of the original root ablaut in Hittite (& the Greek forms)

$5.1. *(\#)sk : *(\#)k^{\#}?$

An old idea (Meillet 1894): labiovelar coarticulation is lost after *s, cf. more recently Steensland 1973 (shows that the sequence * $/sk^u/$ is completely missing from the reconstructed forms in IEW).

Hittite: no instances of inherited /#sk w /, potential medial -sk w -:

- is secondary, e.g., $male\check{s}ku\bar{e}\check{s}\check{s}^{zi}$ 'become weak' $\leftarrow mali\check{s}ku$ 'weak'
- or lacks an etymology (tašku(i)- 'thigh bone', wašku(i)- 'offense')

Tocharian⁴: initial <kw>, <ku> and <k_u> as reflexes of *#k u , *#g u , *#g u h are well-represented, 5 and some medial reflexes are found as well (e.g., Toch. B *walkwe* 'wolf' < *u|k u 0-, Fellner & Malzahn Forthcoming), synchronic sequences of <(#)skw>, <(#)sku>, <(#)sku> and <(#)suk> are only found

- in Skt., BHS, and Iranian loanwords (e.g., Tocharian B sakw, A suk 'fortune, happiness' < Skt./Pkt. sukhá- 'fortune', Toch. B pässakw, A psuk 'garland' < Iranian *pusāka-, etc.)
- in synchronically derived sequences of -sk + u/w- (e.g., verbal nouns in -o/-w to neo-roots in -sk, like Toch. B $m\bar{a}skw$ 'obstacle', palsko 'thought', etc.).

Potentially inherited $*sk^{\mu(h)}$ ($<*s+*g^{\mu},*g^{\mu h},*k^{\mu}$) does not reflect the labial element:

- Toch. B *skeye*, A *ske* 'zeal' ($\rightarrow sk\bar{a}y^{\bar{a}}$ 'strive') < PIE * $sk^{\mu}oyo^{-6}$ (Adams 2013, cf. Malzahn 2010:956), possibly an *s*-mobile variant of the root of Gk. ποιέω 'do', Ved. *cinóti* 'collects, arranges', etc. (LIV²:378–9, 2. * $k^{\mu}e\dot{i}$ 'sammeln, schichten').
- Toch. A adverb *skam* 'always, continuously' $< *sk^w-o-mo-$, $*sek^w-$ 'follow' (a "quasi-participial" *mo-adjective, Georges-Jean Pinault, p.c.).

So even though more evidence is a desideratum, this suggests that Toch. A *kulatär*, Toch. B *kuletär* and Hitt. *iškallāri* could in principle go back to the same root.

5.2. Meaning

- Toch. 'recede, weaken' could come from a canonical "middle" meaning 'be/get cut off (from)'
- But the Hittite verb is the real problem: transitive, agentive 'cut/tear off'
- Grestenberger 2014, 2016: at least some members of the Hittite deponent a(ri)-class are "inherited deponents" that lost their canonical non-active semantics already before the Anatolian split-off and were therefore not renewed with the synchronically productive non-active ("mediopassive") endings (that is, a 3sg. in -tta(ri), etc.).
- The same would then be the case for *iškallāri*, which could go back to a canonical "protomiddle" meaning 'cut off for oneself' or 'cut (away) at'.⁸
- Tocharian replaced *all* inherited dentalless endings with *-tor, so $*k^{\mu}l(H)$ - $\acute{o}r \rightarrow *k^{\mu}l(H)$ - $\acute{o}tor$ was used to "update" the semantics of the form as well
 - Parallels: "protomiddle" *kónk-e 'hangs' (itr.), formally > synchronically active Hittite 3sg. kānki 'hangs' (tr.) & new oppositional middle 3sg. mid. gangattari 'hangs' (itr.), cf. Jasanoff 2003: 72–4.

 \rightarrow synchronically productive, *canonical* non-active contexts tend to be associated with the appropriate productive non-active morphology or could be renewed as such - the Hittite-Tocharian pair *iškallāri*: TA *kulatār*, TB *kuletār* would then be a further example of this type of renewal.

5.3. Original root ablaut grade

- R(\emptyset) attested in Tocharian and required by the reconstruction as a "root stative-intransitive" \rightarrow implies that the Hittite form cannot come from the zero grade of a root with * h_2 or * h_3
- Suggests a preform with * h_1 : * $sklh_1$ - $\acute{or} > *skll$ - $\acute{or} > *skll$ - $\acute{or} > /(i)skall\acute{a}/$ (cf. Melchert 1994:80 on * Rh_1)
- So neither *iškallāri* nor its formally active replacement *iškallai* requires an *o*-grade.

⁴ I am grateful to Bernhard Koller and Hannes Fellner for helpful discussion of the orthographic variants.

⁵ Apart from contexts where labiovelar dissimilation took place by regular sound change, cf. Fellner 2005, 2006.

⁶ Alternatively, B *skeye*, A *ske* could be verbal nouns formed to the inherited averbo of $sk\bar{a}y^{\bar{a}}$ 'strive', since the regular outcome of inherited *-oio- is controversial. Either way, the initial cluster lacks of a labial reflex.

⁷ It could be argued that dissimilatory unrounding before [+round] vowels could have played a role in these cases, but there are several counterexamples to unrounding in that environment, e.g., Toch. A saku, B sekwe 'pus' < *sok^μ-o- (Gk. ὀπὸς 'vegetable juice', OCS sokτ 'juice, broth', etc.); Toch. B eṅkwe (A oṅk) 'human' < *ņk-μ-o-; see Pinault 2008: 424-5 for discussion.

⁸ Cf. Jasanoff 2003:145+fn.2 for a discussion of the protomiddle use of verbs of violent action.

- o $i\ddot{s}kall(a)$ is consistently spelled with the signs <kal> or <gal> rather than <ka-a-al> or <ka-al>9
- o "stative" *iškallāri* is textually older than the formally active *iškallai*, where such an *o*-grade might be expected; no *o*-grade expected in an **ór*-stative in the first place.¹⁰

However, two independent reasons for the *internal* reconstruction of a preform with o-grade:

- $R(\emptyset)$ "root stative-intransitives" are (originally) internally derived from * h_2e -conjugation aorists with $R(\emptyset)$ (cf. Section 2.2). A root stative-intransitive 3sg. * $(s)k^{(u)}lh_1$ - δr could therefore imply an older 3sg. * h_2e -conjugation aorist * $(s)k^{(u)}\delta lh_1$ -e and justify reconstructing an aoristic root
- The o-grade of Greek σκύλλω 'flay, tear', which is unexpected in a *ie/o-present (no obvious nominal basis for σκύλλω) \rightarrow maybe deverbal *ie/o-present from inherited * h_2e -conjugation aorist * $(s)k^{(u)}\delta lh_1-e$, with root ablaut grade from its derivational basis.

6. Conclusion

- No need to assume that the PIE "dentalless middle" endings were associated with a separate, semantically distinct (voice) category "stative"
- Rather, they represent a particular stage in the development of the PIE non-active ("middle") endings and its various functions, some of which were compatible with a later development into syntactically active, transitive functions, i.e., as formally active (thematic) verbs or as deponents.
- Assuming that labiovelars are reflected as velars after *s in Anatolian and Tocharian makes it possible to identify Toch. B *kuletär*, A *kulatär* as cognates of Hitt. *iškallāri* and reconstruct a further dentalless, $R(\emptyset)$ "stative" * $(s)k^{(u)}lh_l$ - $\acute{o}r$ for PIE.
 - And possibly a *h₂e-conjugation agrist indirectly reflected in the R(o)-grade of Gk.
 σκύλλω

References

Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck. Hilmarsson, J. 1991. *The Nasal Prefixes in Tocharian: A Study in Word Formation*. Reykjavík: Málvísindastofnun Háskóla Íslands.

Hoffner, H. A. Jr. 1997. The Laws of the Hittites: A Critical Edition. Leiden: Brill.

Jasanoff, J. H. 1978. Stative and Middle in Indo-European. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.

. 2003. *Hittite and the Indo-European Verb*. Oxford: Oxford University Press.

_

⁹ I am grateful to Jay Jasanoff for pointing this out to me.

¹⁰ Alternative: Craig Melchert (p.c.) suggests that an inherited $*h_2e$ -conjugation aorist $*(s)k^{(u)}\delta lh_1$ -e could have transmitted its o-grade analogically to its internally derived stative present (the Anatolian reflexes of the $*h_2e$ -conjugation have mostly generalized o-grade throughout the paradigm, cf. Melchert 2013), the aorist would then have been lost in Anatolian, or is simply not transmitted.

- . 2012. "Did Hittite have si-imperatives?" In R. Sukač and O. Šefčik (eds.), The Sound of Indo-European II, 116–32. München: Lincom.
 . 2013. "The Tocharian subjunctive and preterite in *-a-." In A. I. Cooper et al. (eds.), Multi Nominis Grammaticus: Studies in Classical and Indo-European Linguistics in Honor of Alan J. Nussbaum on the Occasion of His Sixty-Fifth Birthday, 105–20. Ann Arbor/New York: Beech Stave.
- ————. 2017. "PIE *ueid- 'notice' and the origin of the thematic aorist." In Hansen, B. S. S. et al. (eds.), Etymology and the European Lexicon: Proceedings of the 14th Fachtagung der Indogermanischen Gesellschaft, 17–22 Sept. 2012, Copenhagen, 197–208. Wiesbaden: Reichert.
- Kloekhorst, A. 2008. Etymologial Dictionary of the Hittite Inherited Lexion. Leiden: Brill.
- Kölligan, D. 2015. "Indogermanisch und Armenisch: Studien zur historischen Grammatik des Klassisch-Armenischen." Habilitation thesis, University of Cologne.
- Kümmel, M. 1996. Stativ und Passivaorist im Indoiranischen. Göttingen: Vandenhoeck & Ruprecht.
- LIV² = Kümmel, M., and H. Rix (eds.). 2001. Lexikon der indogermanischen Verben: Die Wurzeln und ihre Primärstammbildungen. Wiesbaden: Reichert
- Lubotsky, A. 1988. "Tocharian A surm, B sarm "cause" and A sul, B sale "mountain"." TIES 2:89-95.
- Malzahn, M. 2010. The Tocharian Verbal System. Leiden: Brill.
- Meillet, A. 1984. "De quelques difficultés de la théorie des gutturales indo-européennes." *Mémoires de la Société de linguistique de Paris* 8:277–304.
- Melchert, H. C. 1994. Anatolian Historical Phonology. Amsterdam: Rodopi.
 - ——. 2013. "Ablaut patterns in the Hittite *hi*-conjugation." In S. W. Jamison et al. (eds.), *Proceedings* of the 24th Annual UCLA Indo-European Conference, October 26th and 27th, 2012, 137–50. Bremen: Hempen.
- Neu, E. 1968a. Interpretation der hethitischen mediopassiven Verbalformen. Wiesbaden: Harrassowitz.
- . 1968b. Das hethitische Mediopassiv und seine indogermanischen Grundlagen. Wiesbaden: Harrassowitz.
- ———. 2007. "Der hethitische Imperativ auf -i vom Typ paḥši 'schütze!'." In D. Groddek and M. Zorman (eds), Tabularia Hethaeorum: Hethitische Beiträge Silvin Košak zum 65. Geburtstag, 561–68. Wiesbaden: Harrassowitz.
- Peyrot, M. 2013. The Tocharian Subjunctive: A Study in Syntax and Verbal Stem Formation. Leiden: Brill.
- Pinault, G.-J. 1982. "A neglected phonetic law: the reduction of the Indo-European laryngeals in internal syllables before yod." In A. Ahlqvist (ed.), *Papers from the 5th International Conference on Historical Linguistics*, 265–72. Amsterdam: John Benjamins.
- . 2008. Chrestomathie tokharienne: textes et grammaire. Leuven/Paris. Peeters.
- IEW = Pokorny, J. 1959–69. *Indogermanisches etymologisches Wörterbuch*. Bern: Francke.
- Steensland, L. 1973. "Die Distribution der urindogermanischen sogenannten Gutturale." Ph.D. dissertation, University of Uppsala.
- Vine, B. 1999. "On 'Cowgill's Law' in Greek." In H. C. Luschützky and H. Eichner (eds.), *Compositiones Indogermanicae in Memoriam Jochem Schindler*, 555–600. Prague: Enigma.
- Villanueva Svensson, M. 2007/2008[2010]. "Indo-European middle root aorists in Anatolian (part I)." *Die Sprache* 47/2:203–38.
- . 2010/2011[2012]. "Indo-European middle root aorists in Anatolian (part II)." *Die Sprache* 49/1:6–25.
- . 2012. "The ablaut of the middle root athematic presents in Indo-European." In H. C. Melchert (ed.), The Indo-European Verb: Proceedings of the Conference of the Society for Indo-European Studies, Los Angeles, 13–15 September 2010, 333–42. Wiesbaden: Reichert.
- Yoshida, K. 1990. The Hittite Mediopassive Endings in -ri. Berlin: De Gruyter.
- . 2011. "Proto-Anatolian as a mora-based language." *Transactions of the Philological Society* 109/1:92–108.