The IE. "ā-Preterite" and Related Forms

§ 1. Reflexes of a verbal suffix $*-\bar{a}-$ ($< *-h_2-$), with both preterital and modal functions, are attested in several early IE. languages. Perhaps the clearest evidence for such a morpheme comes from Baltic, where the spread of the preterite in $*-\bar{a}-$ (Lith. -o-; cf. 3 p. bégo 'ran', guléjo 'lay', sãkė 'said' $< *sakijā(t)$, etc.) has contributed to the complete elimination of the root and thematic aorists from this branch of the family (cf. § 6). An analogous formation is found in Slavic: here, numerous thematic and i̯e/o-presents occur beside infinitives in -ati and sigmatized aorists in 1 sg. -axъ, 3 sg. -a (cf. OCS. berǫ 'I gather', inf. bьrati, aor. bьraxъ; glagoljǫ 'I speak', inf. glagolati, aor. glagolaxъ). Further afield, Latin shows an apparent ā-preterite in the imperfect of the verb 'to be' (eram, -ās, -at, etc.), in the preterite of the perfect system (i. e., the pluperfect, cf. dīxeram 'I had said', etc.), and probably also in the periphrastic imperfect in -bam, -bās, -bat (cf. tacēbam 'I was silent' $< *-bh\underset{\circ}{u}ām$). Latin also employs -ā- to mark the present subjunctive of thematic verbs (cf. dūcam, -ās, -at $<$ dūcō 'I lead'); this usage recurs not only in Osco-Umbrian (cf. Osc. kahad 'capiat', Umbr. dirsa 'det'), but in Celtic as well (cf. OIr. 3 sg. beraid, ·bera '(may) carry', Lat. ferat). The Tocharian ā-preterite (cf. 3 sg. B kauta, A kot 'chopped' $<$ CToch. $*-āt$) and ā-subjunctive (cf. 3 sg. B wākam̐, A wākaṣ 'will split' $<$ CToch. $*wāk-ā-$) are usually reckoned as belonging to the same group of formations.[1]

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[1] So too is the Armenian aorist passive in -a- (type lk̈ay 'I was left', beray 'I was carried', etc.), cf. e. g., Godel, An Introduction to the Study of Classical Armenian, § 5.353. In my view, however, the -a- of these forms is etymologically short and historically unrelated to the $*-\bar{a}-$ of the categories above (see "Notes on the Armenian Personal Endings", KZ. 93, 1979, p. 133–149).

The precise interrelationships of these categories are obscure; for earlier treatments the reader is referred to the discussion in Szemerényi, Einf., p. 242–3, and the references there cited. For reasons which will become clear, our own investigation will begin with an attempt to clarify the status, still imperfectly understood, of -ā- as a preterite marker in Tocharian.

§ 2. The overwhelming majority of preterite stems in Tocharian A and B are characterized by a suffix -ā-, which under certain phonetic conditions is weakened to -a- or (in Toch. A) zero. This morpheme has clearly enjoyed a period of productivity; its association with the Toch. B ṣṣ-preterite (cf. *yamaṣṣa*, *yāmṣa* 'made') and the Common Tocharian s-preterite (cf. A *prakäs*, B *preksa* 'asked' < *-sāt), for example, is obviously secondary.[2] The original locus of the ā-preterite is probably to be sought in Krause-Thomas' class I (cf. Tocharisches Elementarbuch I, p. 239 ff.), where -ā- is added directly to the verbal root, rather than to an already characterized preterite stem. A notable feature of this class is the frequent appearance of paradigmatic ablaut, which is manifested in two ways: 1) roots which in their citation form show zero-grade vocalism exhibit an apparent o-grade in the plural forms of the active in Toch. A, and exceptionally also in Toch. B; and 2) a relatively small group of roots show palatalization of their initial consonant—pointing to an earlier e-grade—in the singular forms of the active in Toch. A, and (less archaically) throughout the active in Toch. B. Both types of alternation are found in the preterite of AB *kärs-* 'know':

3 sg. act.	A *śärs*,	B	*śarsa*	(< *kers-)
3 pl. act.	A *krasar*,	[B	*śärsāre*]	(< *kors-)
3 sg. mid.	A *kärsāt*,	B	*kärsāte*	(< *kr̥s-)
ptcp.	A *kärso*,	B	*kärsau*	(< *kr̥s-)

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[2] The ṣṣ-preterite clearly owes its suffix to an underlying palatalized *-sk-; it probably originated as a thematic imperfect (3. Sg. *-sket) which was later "reinforced" by the addition of *-ā-. The palatalization before -ā- in the Toch. A imperfect (cf. 3. sg. *pälśā* < *pälk-* 'shine') probably has a similar explanation.

Although the appearance of o-grade in the active plural of the ā-preterite may well be of Common Tocharian date (note the apparent equation B 3 pl. *prautkar*, ptcp. *prutkau* : A *protkar*, *prutko* < *prutk*- 'be fulfilled'), it is unlikely that this feature is an inheritance from Proto-Indo-European. Roots with o-grade vocalism were confined to "strong" stems in the parent language; representative formations in this respect are the perfect (cf. Gk. οἶδα, Go. *wait* 'I know', 1 pl. ἴδμεν, *witum*), the present type seen in Hitt. *karāpi* 'eats, frißt', 3 pl. *karipanzi* (cf. "The Position of the ḫi-Conjugation" in E. Neu and W. Meid, edd., Hethitisch und Indogermanisch) and, within Tocharian itself, the class I (athematic) and class V (-ā-) subjunctives (cf. B 1 sg. *kewu* 'I will pour' (< *ǵhou̯-), 3 sg. mid. *kutär*; 3 sg. *sälkam* 'will pull out' (< *solk*-),[3] 3 pl. mid. *sälkāntär*). It is significant that o-grade forms are not found in the middle or past participle of the ā-preterite, although these categories, like the plural indicative, were "weak" in Indo-European (cf. Ved. 3 sg. pf. *jujóṣa* (< *juṣ*- 'enjoy') vs. 3 pl. *jujuṣúḥ*, 3 sg. mid. *jujuṣé*, ptcp. *jujuṣváṃs*-).[4]

It seems legitimate to conclude, therefore, that the apophony of forms like A *protkar* and B *prautkar* is the result of a Tocharian innovation, and that the plural indicative of ablauting ā-preterites was originally characterized by zero-grade vocalism. The reasons for the introduction of *-o- into the preterite paradigm are not altogether clear, but are probably connected with the alternation of o- and zero-grade root-forms in the ā-subjunctive. The latter category, insofar as it displays ablaut, is characterized by o-grade in the active singular and zero-grade elsewhere (cf. above). There is a significant correlation between the appearance of ablaut in the two formations: Toch. A verbs with o:∅ apophony in the ā-subjunctive regularly show o-grade in the

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[3] For a discussion of the rule whereby *-o- was lowered to *-ā- before *-ā- in a following syllable see Cowgill, Studies Lane, p. 176ff.

[4] This statement, of course, does not apply to cases where o-grade has been generalized throughout the preterite paradigm, as, e.g., in 3 sg. mid. A *māntat*, ptcp. *māmāntu*, B *mamāntau* (< *mānt*- 'injure'), and 3 sg. mid. A *pekat*, B *paiykāte*, ptcp. A *pāpeku*, B *papaikau* (< *pik*- 'write').

plural forms of the *ā*-preterite, and, conversely, verbs with ablauting preterites have *o*-grade forms in the singular of the subjunctive (cf. pret. 3 sg. *kälk* 'went', pl. *kalkar*; subj. 3 sg. *kalkaṣ*, pl. *kälkeñc*).[5] It is thus at least thinkable that the preterite plural was remade by a kind of "reverse analogy" to the subjunctive: since the singular of the preterite had an apparent zero-grade where the subjunctive had *-o-* (pret. sg. **kälk-ā-* : subj. sg. **kălk-ā-*),[6] the zero-grade stem of the subjunctive plural (**kälk-ā-*) was utilized as a trigger for the introduction of *o*-vocalism into the plural stem of the preterite (**kălk-ā-*, replacing **kälk-ā-*). It is remarkable, of course, that Common Tocharian did not adopt the simpler course of confining *o*-grade to the subjunctive and zero-grade to the preterite; the effect of such a change, however, would have been to eliminate paradigmatic ablaut from the subjunctive entirely, and Tocharian is strikingly resistant to simplifications of this kind.[7]

§ 3. While the $o:\emptyset$ ablaut of the *ā*-preterite is almost certain to be an innovation, the same cannot be said of the $e:\emptyset$ apophony implicit in the paradigm 3 sg. act. A *śärs*, B *śarsa*: mid. A *kärsāt*, ptcp. A *kärso*, B *kärsau*. The appearance of root-initial palatalization, confined to the active singular in Toch. A and generalized to the active plural in Toch. B,[8] has no obvious analogical source; its distribution is precisely that of the full-grade in such familiar IE. categories as the athematic root presents (cf. Ved. 3 sg. *éti*, Gk. εἶσι 'goes', pl. *yánti*, ἴασι) and root aorists (cf. Ved.

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[5] Cf. Krause-Thomas, op. cit., p. 227. Given our limited corpus, of course, it frequently happens that no subjunctive forms with *o*-grade are actually quotable.

[6] Following the merger of **eR* and **R̥* as CToch. **äR* (*R* = **r*, **l*, **m*, **n*), earlier *e*-grade forms like **śärs-ā-* would also have conformed synchronically to this pattern.

[7] Alternatively, one might seek to relate the *o*-grade forms of the preterite to the strong (*o*-grade) forms of the IE. perfect; the respective distributions of **-o-* in the two categories, however, speak strongly against such a connection.

[8] Palatalization has apparently been extended to the middle in B 2 sg. *ñätkatai* (< *nätk-* 'push aside'), which also shows the MQ-writing of *-a-* for *-ā-*; the participle *nätkau* is regular.

3 sg. *ákar* 'did' (= GAv. *čōrət* < **ker-t*), pl. *ákran*). There is
good *a priori* reason to believe, therefore, that the ablaut pattern
*kers-/*kṛs- is an archaism; this impression is strengthened by
the fact that verbs like *kärs-* constitute a small and unproductive
class, comprising only eleven roots in both languages.

The apparent antiquity of root-apophony in the *ā*-preterite
has serious consequences. Since the inflectional system of Proto-
Indo-European did not otherwise admit paradigms in which an
ablauting root was followed by an invariant full-grade suffix,
it is highly improbable that the preterite of *kärs-* continues an
IE. aorist type **kers-eh₂-/*kṛs-eh₂-*. Several other possibilities,
however, may be considered. It is conceivable, for example, that
CToch. **śärsā-/*kärsā-* acquired its **-ā-* secondarily: since a
morpheme of this shape characterized the great majority of
Tocharian preterites, -*ā*- could have been mechanically added to
the regular reflex of an inherited root aorist **kers-/*kṛs-*. Alter-
natively—and, as we shall see, far more probably—the stem-
final element of **śärsā-/*kärsā-* may represent a vocalized laryn-
geal (cf. A *ckācar*, B *tkācer* 'daughter' < **dhugh₂tēr*) rather than
a full-grade suffix **-eh₂-*. Two main subcases can be distinguished,
depending on whether the laryngeal is regarded as a genuine
preterite morpheme (**kers-h_x-/*kṛs-h_x-*) or as a component of the
underlying root (**kersh_x-/*kṛsh_x-*).[9]

§ 4. The roots listed by Krause and Thomas (p. 239) as forming
ā-preterites with initial palatalization are *kät-* 'scatter', *kätk-*
'transgress', *kärs-* 'know', *käl-* 'bring', *kutk-* 'embody', *tärk-*
'release', *nätk-* 'push', *läm-* 'sit', *lu-* 'send', *stäm-* (*ṣtäm-*) 'stand'
and *tsuk-* 'drink'.[10] Three of these, *läm-*, *stäm-* (*ṣtäm-*) and *tsuk-*,
are defective and excluded from the present system; their
missing forms are supplied by the roots *ṣäm-*, *käly-* and *yok-*,

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[9] These possibilities, of course, are not mutually exclusive: it is perfectly
thinkable, for example, that **-ā-* is old only in a subset of the prete-
rites of the *śärsā*-type, or that it continues a root-component in some
forms and a distinct morpheme in others (cf. § 5).

[10] The preterite B 3 sg. *lyāka*, pl. *lyakār(-ne)* (< *läk-* 'see') is historically
a "strong" imperfect of the same type as A 3 sg. *lyāk*, pl. *lyākar*; for
further examples see Krause-Thomas, p. 221.

respectively. Of the remainder, it is noteworthy that all but one
form nasal presents:

kät-:   cf. A 3 sg. *knās* (class VI), B *katnam* (VI) < CToch.
     kätnā-;

kätk-:   cf. A inf. *ktäṅkātsi* (VI), B 3 sg. *kätkanam* (VI), *kättaṅkäm*
     (VII) < CToch. *kätk(ä)nā-*, with partial remodeling to
     kät(t)äṅkā-;

kärs-:   cf. A 3 sg. *kärsnāṣ* (VI), B 3 sg. mid. *kärsanatär* (VI)
     < CToch. *kärs(ä)nā-*;

käl-:   cf. A 3 sg. *källāṣ* (VI), B *källāṣṣäm* (X) < CToch. *källā-*
     < *kälnā-*, extended by -sk- in Toch. B;

kutk-:   cf. B ptcp. *kutäṅkmane* (VII), remodeled from CToch.
     kutk(ä)nā-;

tärk-:   cf. A 3 sg. *tärnāṣ* (VI), B *tärkanam* (VI) < CToch.
     tärk(ä)nā-;

nätk-:   cf. B 3 sg. *natknam* (VI), *nättaṅkäm* (VII) < CToch.
     natk(a)na-, with partial remodeling to *nät(t)äṅkā-*.

The pattern displayed by these verbs has a close parallel in
Vedic Sanskrit. It is well-known that the ninth-class (-nā-)
presents of Vedic generally correspond to roots with a final
laryngeal: forms like *pṛṇáti* 'fills', *gṛṇáti* 'praises' and *punáti*
'purifies' are the normal nasal-infix presents to IE. $*pleh_1-$,
$*g^werh_x-$ and $*peuh_x-$. Predictably, such presents are also made
from *seṭ* roots which end synchronically in a stop or sibilant.
Among these, a group of special interest consists of the verbs *aś-*
'eat' (*aśnáti*), *gra(b)h-* 'seize' (*gṛ(b)hnáti*), *pruṣ-* 'drip' (cf. ptcp.
pruṣṇánt-), *math-* 'snatch away' (*mathnáti*), *muṣ-* 'steal' (*muṣṇáti*),
śrath- 'slacken' (*śrathnīté*), *ska(m)bh-* 'prop up' (*skabhnáti*) and
sta(m)bh- 'id.' (*stabhnáti*). Two morphological idiosyncrasies of
these roots call for comment: 1) their tendency to form competing
quasi-denominative presents in -āyá- (cf. *gṛbhāyá-, pruṣāyá-,*
mathāyá-, muṣāyá-, śrathāyá-, skabhāyá-, stabhāyá-), and 2) their
association with *iṣ*-aorists of an apophonically deviant type,
with full-grade, rather than lengthened-grade root-vocalism (cf.
3 sg. *aśīt, agrabhīt, mathīt,* 2 sg. *moṣīs,* 3 sg. *(a)stambhīt,* all found

in the Rigveda).[11] The former feature has been variously interpreted; the best explanation is probably still that of de Saussure, who saw -āyá- in these forms as the continuant of IE. *-nh_x-i̯e/o- (Mem., p. 251–2; cf. § 11 below). The position of the aorist type agrabhīt is somewhat clearer. For gra(b)h- itself, a root aorist 1 sg. agrabham is found several times in the Rigveda, and similar non-sigmatic forms are attested from aś- (opt. 1 pl. aśyāma, YV.), math- (subj. 3 sg. máthat, AV.), muṣ- (subj. 2 pl. moṣathā) and śnath- (impv. 2 sg. śnathihi, subj. 3 sg. śnáthat). There can be little doubt that such root aorists were once common to the entire group: their transfer to the sigmatic type was obviously triggered by the fact that the endings -īs (2 sg.) and -īt (3 sg.), which here reflect etymological *-h_x-s and *-h_x-t, were also the regular endings of the iṣ-aorist (< *-h_x-s-s, *-h_x-s-t).[12] For the earliest active aorist of gra(b)h- we may reconstruct a paradigm 3 sg. *ghrébhh$_x$-t, pl. *ghṛbhh$_x$-ént.

It will now be noted that the relationship of aor. agrabhīt to pres. gṛbhṇáti can be directly compared with that of Toch. A pret. śārs (B śarsa) to pres. kärsnāṣ (cf. B kärsanatär). Independent support is thus provided for a derivation of CToch. *śārsā-/ *kärsā- and the other preterites discussed above from preforms with a vocalized laryngeal. The purely structural resemblance between Vedic and Tocharian, moreover, can be supplemented by a significant word-equation. The Tocharian cognate of Ved. muṣṇáti: *ámoṣīt is AB musnātär 'gives up, raises', pret. 3 sg. mid. A musāt, ptcp. muso (= B musau); the parallelism between the two languages virtually compels the reconstruction of an IE. aorist *meush$_x$-/*mush$_x$- and an associated nasal present *mus-né-h$_x$-ti. This analysis can clearly be extended to the remaining Tocharian verbs with nasal presents and class I preterites, even where, as in the case of mus-, root-initial palatalization is not directly attested in the latter category. Typical further examples are räm- 'bend' (cf. pres. AB rämnā- (: Ved.

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[11] The Sanskrit grammarians also give aproṣīt, aśranthīt, askambhīt.

[12] This is also the view taken in J. Narten's Die sigmatischen Aoriste im Veda; see especially her discussion under grabhi-. The mechanism by which Vedic substituted -ī- for -i- in these forms is irrelevant to the present discussion.

ramṇā́ti 'stops'), pret. 3 sg. mid. B *rämāte*, ptcp. A *rmo*) and *wärp-* 'enjoy' (pres. A *wärpnā-*, B *wärpana-*, pret. 3 sg. mid. A *wärpāt*, B *wärpāte*).[13]

§ 5. The status of the laryngeal in these forms is problematic. The roots *läm-*, *lu-* and *stäm-* (*stäm-*) lack convincing etymologies, but could in principle easily continue set preforms *$lemh_x$-*, *$leuh_x$-* and *$stemh_x$-*. The assumption of a root-final laryngeal is more difficult, however, in the case of lexical items like *kärs-*, *tärk-*, *tsuk-*, *mus-* and *wärp-*, which end synchronically in a stop or sibilant. Roots of the structure *$T(R)E(R)TH$-* (where T = any obstruent, R = resonant, H = laryngeal) are exceedingly rare in Indo-European; indeed, the majority of credible cases are furnished by precisely the group of Vedic verbs—*gra(b)h-*, *muṣ-*, *math-*, etc.—which pattern morphologically with the Tocharian forms under discussion. Not all these examples will stand scrutiny. For *grabh-*, aniṭ forms are attested both in the perfect (1 pl. *jagr̥bhmá*, 3 pl. *jagr̥bhré*) and middle root aorist (3 pl. *agr̥bhran*);[14] *sta(m)bh-* makes an aniṭ gerund *stabdhvā* in the Atharvaveda and a participle *stabdha-* in the Brahmanas. Note also that *ram-* (= Toch. *räm-*) forms an aniṭ agent noun *rántr̥-* as early as the Rigveda; a laryngealless root is presupposed by the cognate verb in Lithuanian (*remiù, reñti* 'support').

The inconvenience of assuming a substantial class of roots in final *$-TH$* suggests the possibility that the final consonant of the aorist stems *$kersh_x$-*, *$ghrebhh_x$-* and *$meush_x$-* may not have been part of the root at all, but an independent morpheme. Pursuing this alternative, let us consider the consequences of positing an IE. "h_2-aorist", the choice of laryngeal being dictated, of course, by the voiceless aspirate of Ved. *math-* and *śrath-*. Like the *-s-* of the sigmatic aorist and similar "enlarge-

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[13] In many cases, of course, the absence of palatalization in the preterite is merely a consequence of the fact that no active singular forms are attested; the deponent root *wärp-* is a representative example. The initial consonants *p-*, *m-*, *r-*, *y-* and (A) *w-* are incapable of showing palatalization.

[14] The significance of these forms was pointed out to me by J. Schindler.

ments", the $*-h_2-$ of this category would presumably have lacked
a full-grade; a close formal parallel to the hypothetical paradigm
3 sg. $*ghrébh-h_2-t$: pl. $*ghṛbh-h_2-ént$ can be seen in the Hittite
conjugational type 3 sg. $dāi$ 'puts' : pl. $tiyanzi$ ($<$ $*dh'h_1-i-e(i)$:
$*dhh_1-i-ént(i)$). The new theory would not entail any change in
the analysis of presents like $*ghṛbh-né-h_2-ti$, which clearly stand
in the same relation to aorists like $*ghrébh-h_2-t$ as ordinary nasal
presents (e.g., $*ḱḷ-né-u-ti$ 'hears', Ved. $śṛṇóti$) to proper root
aorists (e.g. $*ḱleu-t$, Ved. $áśrot$). It is uncertain whether the
existence of $*ghṛbh-né-h_2-ti$ and similar forms in Proto-Indo-
European necessitates the conclusion that $*-h_2-$ had already been
reinterpreted as a root-constituent within the common period;
an eventual reanalysis of this kind must be assumed for Indic,
where forms like ptcp. $mathitá-$, $gṛbhītá-$, fut. $mathiṣyati$,
$grahiṣyati$, etc. show the generalization of $-i-$ before consonants
throughout the verbal system.[15]

If unsupported by further evidence, the hypothesis of an IE.
aorist marker $*-h_2-$ would hardly merit further discussion, since
the possibility that Ved. $agrabhīt$ and CToch. $*śärsā$ represent
genuine root aorists clearly cannot be absolutely excluded. Sig-
nificant new light is shed on these forms, however, by the "ā-
preterites" of the other IE. languages, to which we now turn.

§ 6. It has long been recognized that the Baltic preterite in $*-ā-$
and the Slavic "second-stem" aorist in $-a-$ ($-ax-$, $-as-$) are
referrable to the same original formation. To be sure, the two
categories have diverged considerably: in Baltic, the $ā$-preterite
has acquired the endings of the present (cf. Lith. 1 sg. $bė́gau$
'I ran', 3 p. $bė́go$, like 1 sg. $sakaũ$ 'I say', 3 p. $sãko$); in Slavic $-a-$
has spread to the infinitive (cf. OCS. $glagolati$ 'speak'), while the

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[15] As a typological parallel, compare the spread of $*-i-$ in "long-diphthon-
gal" roots of the type $*dheh_1-(i-)$ 'suck', $*peh_3-(i-)$ 'drunk', etc.; the
original locus of this element was probably in presents like Hitt. $dāi$.
It should hardly be necessary to point out that not all the forms here
analyzed as "h_2-aorists" directly continue IE. preforms. The preterites
of the Tocharian roots $kätk-$, $kutk-$ and $nätk-$, for example, cannot
originally have contained the cluster $-tk-$, the second element of which
is historically a vestige of the present suffix $*-ske/o-$.

finite forms of the aorist have been at least partly sigmatized (cf. 1 sg. *glagolaxъ* < *-āsom*, 3 pl. *glagolaše* < *-āsņt*, etc.; 2, 3 sg. *glagola* may continue *-ās*, *-āt* or *-ās(s)*, *-āst*).[16] Both branches, but especially Baltic, have considerably extended the list of verbs which form preterites of this kind: in Lithuanian the ā-preterite has replaced the thematic aorist, which is preserved in Slavic (cf. Lith. *bùdo* 'awoke' beside OCS. *-bъde*), while in Old Church Slavonic the a-aorist has come to be productively associated with *ie/o*-presents, which generally form ē-preterites in Baltic (cf. OCS. *orjǫ* 'I plow', 3 sg. aor. *ora* beside Lith. *ariù*, pret. 3 p. *ãrė*).[17] For Common Balto-Slavic we may reconstruct an athematic type in *-ām*, *-ās*, *-āt*, etc., the original distribution of which remains to be determined.

Since non-productive morphophonemic alternations often provide a reliable index of antiquity, special interest attaches to a group of Slavic verbs which exhibit zero-grade root-vocalism and -a- in the aorist and infinitive, but full-grade of the root and a thematic suffix (*-e/o- or *-ie/o-) in the present. The pattern is clearly on the decline: while some verbs, such as OCS. *berǫ*, *bъrati* 'pick, gather', *ženǫ*, *gъnati* 'hunt', *steljǫ*, *stъlati* 'spread out', *lějǫ*, *lijati* 'pour' and *pljujǫ*, *pljъvati* 'spit' are consistent in retaining the difference in vocalism, others, such as *židǫ* (later *žъdǫ*), *žъdati* 'wait', *ližǫ*, **lъzati* (normally *lizati*) 'lick', and *pišǫ*, *pъsati* (beside *pisati*) 'write' show that leveling was already underway at an early period. Alternations of this kind have generally been reduced in the later Slavic languages; see Vaillant, Gram. Comp. III, p. 207–12, 291–5, 209–17, for further examples and discussion.

The evidence of Slavic thus suggests that the a-aorist was originally associated with zero-grade root-vocalism; this con-

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[16] It is possible that the spread of *-s- in such aorists was triggered by presence of *-s- in denominative forms like *dělaxъ* 'I did' (: pres. *dělajǫ*), the -a- of which is ultimately that of the present stem and has nothing to do with the morpheme under discussion. In the sections which follow, the term "ā-aorist", as applied to Slavic, will refer only to the aorists in 1 sg. *-axъ* of verbs with "second stems".

[17] In general, the Baltic ē-preterite appears to have replaced the IE. *s*-aorist; cf. Chr. S. Stang, Vergl. Gr. d. balt. Spr., p. **388**f.

clusion is supported by the facts of Baltic. In Lithuanian the
$\bar{a}$-preterite is regularly found beside full-grade thematic presents
in -a- (< *-e/o-); in such cases roots of the structure TERT-
show zero-grade in the preterite (cf. *liẽka* 'leaves', pret. *lìko*;
veĩka 'drags', pret. *vìlko*; *keĩta* 'hits', pret. *kìřto*).[18] Other com-
mon patterns couple zero-grade $\bar{a}$-preterites with zero-grade
thematic presents (cf. *sùpa* 'rocks', pret. *sùpo*; *rìta* 'rolls', pret.
rìto) and zero-grade presents in -sta- (cf. *diñgsta* 'disappears',
pret. *diñgo*; *pỹksta* 'is angry', pret. *pỹko*). Likewise showing
zero-grade in the preterite, but less archaic, are pairs of the type
miñga 'falls asleep', pret. *mìgo* and *lìmpa* 'sticks', pret. *lìpo*; the
corresponding verbs form thematic aorists in Slavic (cf. OCS.
u-sъnǫti 'fall asleep', aor. 3 sg. *u-sъpe*; *pri-lьnǫti* 'stick', aor.
3 sg. *pri-lьpe*).[19] Full- and lengthened-grade $\bar{a}$-preterites, while
extremely numerous, are of little diagnostic value for historical
purposes, since the preterite stem in such cases almost invariably
agrees in vocalism with that of the present (cf. *áuga* 'grows',
pret. *áugo*; *jója* 'rides', pret. *jójo*; *bė́ga* 'runs', pret. *bė́go*).[20]

§ 7. The *-$\bar{a}$- of the Balto-Slavic $\bar{a}$-aorist presumably continues
an earlier sequence *-eh_2- which could in principle be analyzed
in a number of ways. A superficially attractive possibility might
be to regard *-eh_2- as an ablauting suffix with zero-grade *-h_2-:
a form such as OCS. *pьsaxъ* 'I wrote' could then be referred to
an original paradigm of the type 3 sg. *$pi\hat{k}$-$éh_2$-t : 3 pl. *$pi\hat{k}$-h_2-$ént$.
The objections to such an analysis, however, are serious. True
apophonic suffixes are surprisingly rare in IE. verbal morpho-
logy, and unknown within the system of reconstructible tense
and aspect markers. The only certain example of a morpheme

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[18] The significance of this pattern is in no way affected by the fact that
certain of the thematic presents in question—*liẽka*, for example—
originally belonged to the athematic conjugation (cf. OLith. 3 p. *liẽkti*).

[19] It seems reasonable to suppose that the Baltic replacement of the
thematic aorist by the $\bar{a}$-preterite was facilitated by the agreement of
two categories in root-vocalism.

[20] Here also belong cases like *stója* 'enters', pret. *stójo*, where both present
and preterite appear to have been created on the basis of an earlier
root aorist (cf. Ved. *ásthāt*).

of this kind is the athematic optative suffix $*-ieh_1-/*-ih_1-$ (cf. OLat. *siem* : *simus*).[21] No trace of the putative weak alternant $*pik-h_2-$ is found in Balto-Slavic; while stem-forms of this structure ($*mus-h_2-$, etc.) were tentatively reconstructed for Tocharian and Indo-Iranian in § 5, it is clear that the "h_2-aorist" of these languages and the *ā*-forms of Balto-Slavic cannot be directly equated.[22] In a word, the hypothesis of an ablauting aorist in $*-eh_2-/*-h_2-$ is without comparative support.

An obvious alternative would be to assume an invariant aorist marker $*-eh_2-$, which could then be regarded either as an unanalyzable suffix or as a sequence of the thematic vowel and a "true" aorist morpheme $*-h_2-$. The former possibility does not appear very likely. Non-alternating full-grades are exceptional in athematic active paradigms; the clearest other example of such a suffix in the verbal system is the "stative" morpheme $*-eh_1-$ ($> *-ē-$; cf. Lith. *minė́ti* 'think of', OCS. *mьněti*, aor. 1 sg. *mьně́хъ* 'think', Gk. ἐμάνη 'went mad', etc.), which, as I have tried to show in my "Stative and Middle in Indo-European", §§ 102 ff., is not a true verbal element at all, but a displaced nominal desinence. An analysis of $*-eh_2-$ as $*-e-h_2-$, on the other hand, would have an exact formal parallel: a homophonous sequence $*-eh_2-$ must be reconstructed for the IE. factitive present type represented by Hitt. *newaḫzi* 'makes new', Lat. *(re)nouat* 'id.' and Gk. νεᾷ 'plows up anew', which show the addition of a denominative morpheme $*-h_2-$ to an inherited thematic adjective ($*néu̯e/o-$ 'new'). Under such an interpretation of $*piké-h_2-$ it would obviously be tempting to identify the added $*-h_2-$ with the stem final laryngeal of Ved. *agrabhīt* and CToch. *śärsā*. The underlying thematic stem $*piké-$, which could theoretically represent either a thematic aorist or an oxytone present of the "*tudáti*" type, is more easily referred to the latter category, inasmuch as the IE. thematic aorist seems to have been quite

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[21] The nasal infix $*-ne-/*-n-$, which is not a suffix at all, is hardly a cogent counterexample.

[22] Theoretically, such an equation would still be possible if we could assume earlier "proterokinetic" paradigms of the type 3 sg. $*méus-h_2-t$, $*péik-h_2-nt$, pl. $*mus-éh_2-nt$, $*pik-éh_2-nt$; this type of inflection, however, appears to have been confined to nominal forms.

capable of yielding aorists in Balto-Slavic without further suf-
fixation.

§ 8. One of the strongest indications that the Balto-Slavic
$\bar{a}$-aorist indeed continues a variety of thematic present extended
by *-h_2- is provided by additional evidence from Tocharian.
Here, as we have seen, class I preterites corresponding to nasal
presents often exhibit root-initial palatalization in the singular,
showing that the root in such cases was originally characterized
by $e : \emptyset$ apophony. Preterites in -$\bar{a}$-, however, are extremely
widespread in both Tocharian languages, and by no means con-
fined to verbs with nasal presents (classes VI and VII). In
particular, the largest single group of verbs with class I preterites
are those with simple thematic presents, either of the normal
type with active and middle forms in *-e/o- (class II, cf. 3 sg.
act. A śoṣ, B *śaim 'lives' < *$g^u\underset{\,}{i}\acute{e}h_3$-$\underset{\,}{u}$-$e$-, mid. A klyoṣtär,
B klyauṣtär 'hears' < *$kl\acute{e}us$-e-), or of the special deponent type
with *-o- generalized throughout the paradigm (classes III and
IV, cf. A wikatär, B wiketär 'disappears' < *$u\underset{\,}{i}k$-$\acute{o}$- or *$u\underset{\,}{i}g$-$\acute{o}$-,
A asatär, B osotär 'gets dry' < *$\breve{a}s$-o-). At first glance it might
seem attractive to regard the preterites of such verbs in the
same light as those discussed in § 5, i.e., as seṭ root aorists or
as "h_2-aorists" to roots ending in an obstruent or sonorant.[23]
The possibility of such an analysis, however, is seriously com-
promised by a remarkable fact: while no fewer than seven nasal
presents correspond to $\bar{a}$-preterites with root-initial palataliza-
tion, not a single example of a palatalizing preterite is found
beside an inherited present of one of the thematic classes.[24] The
conclusion suggests itself that, unlike the type *śärsā- *kärsā-,
preterites like A 3 sg. wik, ptcp. wiko, B 3 sg. wika, ptcp. wikau

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[23] Naturally, this view would not require us to assume such aorists for
all verbs with thematic presents and $\bar{a}$-preterites, but only for a subset
from which the type could plausibly be supposed to have spread.

[24] The one seeming exception is the root lu- 'send', which shows a pre-
terite of the śärsā-type (cf. 3 sg. A lyu (< lyāwā), B lyuwa, pl. A
lawar) beside a class III present (cf. B lyewetär). It is probable from
the ė-vocalism of lyewetär, however, that its thematic inflection is
secondary.

(< CToch. *wikā-) originally lacked paradigmatic ablaut.[25] This difference could be explained by referring CToch. *wikā- to a preform *u̯iḱéh₂-, itself analyzable as the thematic present stem *u̯iḱé/ó- extended by the aorist marker *-h₂-.

As in Balto-Slavic, there is reason to believe that such preterites in Tocharian were originally associated with zero-grade root-vocalism. Tocharian retains only a very small number of e-grade thematic presents from Proto-Indo-European, and these, in the clearest cases, have irregular preterites. Thus, āk- 'lead' (: Ved. ájati, Gk. ἄγω, etc.) and pär- 'carry' (pres. 3 sg. B paräṃ, A mid. pärtär; cf. Ved. bhárati, Gk. φέρω) are suppletive outside the present system (cf. pret. B 3 sg. wāya, A 3 pl. mid. wānt- 'led'; pret. 3 sg. mid. A kāmat, B kamāte 'brought'); A klyos-, B klyaus- (: Ved. ptcp. śróṣamāṇa-) shows root-final palatalization in the preterite (cf. 3 sg. A klyoṣ, B klyauṣa), suggesting a comparatively late remodeling of an earlier thematic imperfect.[26] The remaining presents of class II, insofar as it is possible to draw any historical inferences at all, are typically either petrified sk-presents (cf. AB kātk- 'rejoice', B ñäsk- 'desire', nāsk- 'bathe') or post-IE. thematizations of originally athematic formations (cf. A pänw- 'sketch', probably based on an inherited type in *-nu- or *-u-; B tek- 'touch', pres. 3 sg. cesäṃ, with the vocalism of an ablauting "Narten" present; B aik- 'know', apparently cognate with the Gothic preterito-present aih 'has'). The same appears to be true of the presents of class IV (cf. A pärsk- 'fear' < pr̥ḱ-sk-; A tsälp- 'be redeemed', ptcp. śalpmāṃ < *tēlp-; AB yāt- 'be capable' < *i̯ot-); in effect, the only inherited group of thematic root presents with non-suppletive preterites of the type in *-e-h₂- are those of class III.

The third class has been discussed at length in SMIE., ch. 2. Like classes II and IV, class III includes a certain number of

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[25] The secondary presence of o-grade in the active plural (§ 2), on the other hand, is as characteristic of this group of preterites as of those discussed earlier; cf. A 3 sg. pärk, pl. parkar (: pres. pärkatär 'rises'), A ptcp. lipo, 3 pl. lepar (cf. B pres. lipetär 'is left').

[26] Cf. note 2. The majority of e-grade thematic presents which survive in Tocharian have been reinterpreted as subjunctives of class III (type A pkatär, B pketär 'will ripen' < *péku̯e/o-; cf. § 15).

petrified *sk*-presents and secondarily thematized forms (cf. AB *mäsk-* 'be located' $<$ *$m\eta$-sk-*, B *nu-* 'roar', pres. 3 sg. *ñewetar* $<$ *$n\bar{e}\underset{.}{u}$-*). It also contains, however, a sizeable residue of presents with zero-grade root-vocalism and no recognizable suffix other than the thematic vowel. These forms are identical in structure with the presents of the Indo-Iranian sixth (*tudáti*) class, and in a number of cases actually have Vedic or Avestan cognates of this type: representative examples are AB *wik-* (: Ved. *viśáti* 'enters' or *vijáte* 'flees'), A *sik-* 'overflow' (: Av. 3 pl. *frašičanti* 'pour forth'), B *pränk-* 'restrain oneself' (: Ved. inj. 3 sg. *bhraśat* 'falls away').[27] The association of class III presents with non-palatalizing *ā*-preterites in Tocharian, which appears to have been the starting point for the generalization of such preterites to the other thematic types, provides striking support for our provisional conclusion (cf. § 7) that the *ā*-aorists of Balto-Slavic originated as oxytone thematic presents suffixed by *-h_2-.[28]

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[27] This form, it is true, is ordinarily taken to be a thematic aorist. In my opinion, however, it is very questionable whether the distinction between *tudáti*-presents and thematic aorists can in every case be upheld for late Common Indo-European: the two types are formally identical, and *tudáti*-presents, like thematic aorists, appear originally to have lacked (or at least to have avoided) forms with the primary endings (cf. § 16). The semantic difference between injunctives of the two categories is slight (see K. Hoffmann, Der Injunktiv im Veda, esp. p. 45–92), and in a number of cases the assignment of a given oxytone thematic stem to the present or aorist system seems to have been uncertain. Note that the Indo-Iranian stem *$sič\check{a}$- 'pour', which underlies a *tudáti*-present in Avestan, serves as a thematic aorist in Ved. 2 sg. inj. *sicaḥ*; compare also the discussion of Ved. *sárat* and *riṣat* in § 12.

[28] The interpretation of the Tocharian class III presents given here differs somewhat from that in SMIE. §§ 35–6, where, although conceding the resemblance of these forms to the Indo-Iranian *tudáti*-type, I preferred to regard both formations as largely independent thematizations of earlier middle root aorist injunctives. That oxytone thematic presents are closely related to middle root aorists seems indisputable; for a variety of reasons, however, I now incline to agree with P. Hollifield that the relationship is derivational in nature (On the System of Conjugation in Proto-European, 1977 Harvard University dissertation, ch. 12), and that injunctives of the *tudáti*-type already existed in the parent language.

§ 9. This finding ist also corroborated by an important word-equation. The class III present of Toch. A *sik-* points, as we have seen, to an IE. stem *$sik-é/ó$-, which is likewise preserved in Indo-Iranian. The Tocharian preterite *$sikā$- (cf. ptcp. A *siko*) is thus to be analyzed as *$sik-é-h_2$-; significantly, a stem of this shape is also attested in the Slavic verb *$sъčǫ$ (3 sg. *$sъčitъ$), *$sъcati$ 'piss' (cf. Slov. *šči-*, *scati*, Cz. *šti-*, *scáti*, Russ. *šči-*, *scat'*). The correlation of the infinitive stem *$sъca$- with a present in *-*i*- is synchronically anomalous, and virtually guarantees the existence of an aorist. *$sikā$- in Common Balto-Slavic.[29]

Although the equation CToch. *$sikā$- = BS. *$sikā$- is unique, *$sъcati$ is by no means the only Slavic verb in *-ati* with close ties to an attested *tudáti*-present. In four cases such a present is found in Slavic itself:

*$sъkǫ$, *$sъkati$ (Russ. *sku*, *skat'*) 'twist': cf. also Lith. *sùka* 'turns' (< *$suk-é/ó$-), pret. *sùko* (< *$suk-é-h_2$-); the precise agreement of the Baltic and Slavic forms is noteworthy.

OCS. *$sъsǫ$, *$sъsati$ 'suck': cf. also OE., OS., OHG. *sūgan* 'id.'; the inherited stem *$suk̂-é/ó$- has undergone the normal lengthening of *-*u*- to *-*ū*- in Germanic.

*$rъvǫ$, OCS. *$rъvati$ 'tear out': cf. perhaps Lat. *ĕruō* 'dig up, tear out', *dīruō* 'tear apart', etc.; whether the latter forms reflect an oxytone stem *$(h_1)ruh_x-é/ó$- or a full-grade variant *$(h_1)réuh_x-e/o$-, however, cannot be determined.

OCS. *$tъkǫ$, *$tъkati$ 'weave': neither the present stem *$tuk-é/ó$- nor the presumptive root *$teuk$- has known connections elsewhere in the family.

To these may be added examples like the following, in which the evidence for a zero-grade thematic present comes from outside Slavic:

OCS. *$jemĺjǫ$*, *imati* (< *$jъmati$) 'take': cf. Lith. *ìma*, OPr. *imma(ts)* 'takes' (< *$(h_1)m̥-é/ó$-).

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[29] The present *$sъči$-, which I earlier derived directly from a root aorist injunctive (SMIE. § 96), is perhaps more attractively referred to a zero-grade "causative" *$sik-éi̯e/o$-. As will be seen in § 12, such forms are frequently found beside *tudáti*-presents in Vedic.

*serblj̨o, *sьrbati (Russ. dial. serbát', Pol. dial. siarbać) 'sip': cf. Lat. sorbō, -ere (beside sorbeō, -ēre) 'suck in', Arm. aor. (< impf.) arbi 'I drank' (< *sr̥bh-é/ó-).

OCS. ziždǫ, zьdati 'build': the Slavic verb is apparently based on a metathesized form of IE. *dheiĝh-: cf. the irregular Gothic strong verb digan 'form (of clay)' (< dhiĝh-é/ó-).

OCS. zovǫ, zъvati 'call': cf. Ved. inj. 3 sg. huvat 'calls', opt. 1 pl. huvéma, etc. (< ĝhuh₂-é/ó-).

When the evidence of such forms is supplemented by the testimony of Baltic pairs like Lith. sùpa : sùpo, lìpa : lìpo (< lìpti 'climb'), dìrba : dìrbo (< dìrbti 'work'), etc., the case for a derivation of the Balto-Slavic ā-aorists from an inherited nucleus of tudáti-presents becomes still more attractive.[30]

§ 10. Before proceeding further, it may be useful to survey the results of our investigation thus far. We have recognized the existence of two varieties of h_2-aorist. The first, or deradical type, is most clearly preserved in Tocharian and Indo-Iranian, where it is represented by forms like CToch. *śärsā-/*kärsā- (< *kers-h_2-/*kr̥s-h_2-) and Ved. agrabhīt (< *ghrebh-h_2-), respectively. Such aorists are associated in both branches with nasal presents (cf. CToch. *kärs(ä)nā- < *kr̥s-né-h_2-, Ved. gr̥bhnā́ti < *ghr̥bh-né-h_2-); the question of their possible representation elsewhere in the family must await further study.[31] The second

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[30] The fact that a certain number of zero-grade thematic presents in Slavic, such as OCS. mlьzǫ, mlьsti 'milk' and črъpǫ, črěti 'draw (water)', lack second stems in -a- does not seriously compromise our analysis, since *-h_2- need not have been the only device that was utilized to provide aorists to tudáti-presents. Note, moreover, that many of the presents in question are inner-Slavic creations (an earlier athematic present is presupposed by Lith. mélžu 'I milk' and Ved. 3 sg. mā́rṣṭi, pl. mr̥jánti 'wipe'), while others are historically associated with ā-aorists that belong synchronically to other paradigms (cf. črěpljǫ, črъpati, iterative to črъpǫ, črěti).

[31] Thus, Latin perfects of the type necuī (: necāre 'kill') and uetuī (: uetāre 'forbid') probably continue preforms in 1 sg. *-ă-wai, which could in principle have replaced earlier h_2-aorist forms in *-h_2-m. But it is impossible to be sure that the perfects of these verbs are not simply

type of h_2-aorist consists of forms in which *-h_2- serves not to enlarge a root, but the stem of a zero-grade thematic present of the *tudáti*-type. This class is continued in Baltic by the ā-preterite, in Slavic by the "second-stem" aorist in -*a*-, and in Tocharian by the ā-preterites of verbs with simple thematic presents (classes II–IV). All three categories have undergone considerable expansion in the dialectal period; in general, the inherited predilection of *-ā- for zero-grade roots has remained clearer in Balto-Slavic, while the association with thematic presents is more faithfully maintained in Tocharian. For ease of description in the discussion which follows, the IE. representatives of this extended type in *-é-h_2- will be referred to simply as "eh_2-aorists."

§ 11. The theory set forth above provides a straightforward explanation for the limited distribution of the eh_2-aorist. As enlarged forms of *tudáti*-presents, preterite stems of the type *sikā- would naturally have tended to disappear everywhere except in those languages where the *tudáti*-type was itself preserved as a significant class, i.e., in Balto-Slavic, Tocharian and Indo-Iranian. It is thus only in Indo-Iranian that the absence of *-ā- as an aorist marker requires special comment.

It is hardly surprising, of course, that aorists of the type *(á)tudāt are not found in Vedic or Avestan. Such forms would have tended to overlap with present subjunctives and imperfects, and in the optative would have coalesced completely with the corresponding optative forms of the present (IE. *-eh_2-ih_1- and *-o-ih_1- would both have yielded IIr. *-ai-). A morpheme *-ā- would thus not have been well-suited for survival as a tense-marker in this branch of the family; it is significant that the *-ā- which regularly resulted from the stative suffix *-ē- (< *-eh_1-) was likewise suppressed. Considerably more important than the loss of the eh_2-aorist per se in Indo-Iranian is the fact—hitherto unnoticed—that substantial traces of its former vitality are

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analogical to forms like *domuī* < -*ă-waī* (: *domāre* 'tame') and *sonuī* < *-*ă-waī* (: *sonāre* 'sound'), the *-*ă- of which is etymologically part of the root.

preserved in a synchronically isolated, but historically closely allied present formation.

As seen in § 4, h_2-aorists of the deradical variety (*agrabhīt*) co-occur in Vedic with presents of two kinds—the familiar nasal type in *-nā-* (*gṛbhṇáti*), and the more exceptional type in *-āyá-* (*gṛbhāyáti*). Although attempts have been made to relate the latter formation to the *ā*-aorists of Balto-Slavic (e.g., by Kury-łowicz, Étrennes Benveniste, p. 51 ff., who takes *-āyá- < *-ā-i̯é/ó-*), it is clear that no such explanation can be correct: the very fact that *gṛbhāyáti* is synchronically associated with the reflex of an aorist **ghrébh-h₂-* precludes the possibility of its being formally derived from an aorist **ghṛbh-é-h₂-*. There is thus every reason to prefer the analysis advanced for these forms by de Saussure (cf. § 4), who, linking *gṛbhāyá-* to the parallel nasal present *gṛbhṇáti*, derived *-āyá-* from **-ṇ-h₂-i̯é/ó-*. As J. Schindler has pointed out to me in a personal communication, the relationship of *gṛbhṇáti* to *gṛbhāyáti* recalls that of the nasal present 3 pl. *ṛñjate* (< *ṛj-* 'direct') to the irregular *-i̯e/o-* present *irajyáti* 'rules', which presupposes a stem **ṛ-ṇ-ĝ-i̯é/ó-*.[32]

Since the aorist types *TéRT-h₂-* and *TṚT-é-h₂-* are parallel formations, it would not be unreasonable to expect that, just as derived presents *TṚT-né-h₂-* and *TṚT-ṇ-h₂-i̯é/ó-* were created from *TéRT-h₂-* in pre-Indo-Iranian times, comparable nasal presents were made to stems of the structure *TṚT-é-h₂-*. Such presents would presumably have infixed the nasal element **-ne-* (zero-grade **-n-*) directly before the laryngeal of **TṚT-é-h₂-*: the morphological analogue of *gṛbhṇáti* would thus have had the form **TṚT-e-né-h₂-* (weak stem **TṚT-e-n-h₂-'*), while that of *gṛbhāyáti* would have had the form **TṚT-e-n-h₂-i̯é/ó-*. The latter of these hypothetical types, though posited on purely theoretical grounds, is in fact directly attested.

The sequence **-e-n-h₂-i̯é/ó-* would have yielded **-anyá-* in Indo-Iranian; this, it appears, is the source of the suffix in the present type represented by Ved. *turaṇyáti* 'rushes'. Such forms, attested from about a dozen roots, are often regarded as de-

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[32] The irregular **ṛ-* of this form has presumably been taken over from the present **ṛ-n(e)ĝ-*.

nominatives in -yá- to nominal stems in -an- or -ana- (e.g., by Macdonell, Ved. Gr., § 563), but a number of considerations make this impossible. A true denominative to turáṇa- 'rushing forward' (RV. 1.121.5) would have had the form *turaṇắyati rather than turaṇyáti; n-stems of the type *turáṇ-, while formally a more appropriate source of presents in -anyá-, are without any actual basis in the Vedic corpus. Significant also is the fact that the turaṇyáti-type is especially well-attested in the present indicative, contrasting in this respect with the ordinary denominative type in -ya-, which shows a heavy preponderance of participial forms in -ya(n)t-.

§ 12. In point of fact, the most striking distributional idiosyncracy of the -anyá-presents is their preference for roots with tudáti-presents, as can be seen from the following examples:

iṣaṇyá- 'impel': cf. 1 sg. mid. iṣe, 1 pl. opt. iṣema, 3 pl. mid. inj. iṣanta. Note also the present iṣáya-, which, like the majority of other zero-grade "causatives", lacks causative meaning and is probably best regarded as a thematic stem extended by -ya-.[33]

kṛpaṇyá- 'desire': cf. ánu kṛpate 'longs for'; possibly related are 3 pl. mid. inj. kṛpanta and the pseudo-causative kṛpáya- (< krap- 'lament').

turaṇyá-: cf. ptcp. turá(n)t-, pseudo-caus. turáya-; perhaps from the same root is (prá, ví, etc.) tiráti, -te 'penetrates, survives', although a connection with tvarate 'rushes' is more probable (S. Jamison, personal communication).

pṛtanyá- 'fight, be hostile': cf. YAv. 3 pl. pərətante Yt. 13.27, 45, ptcp. pərətamna- Yt. 17.13; the primary verb corresponding to IIr. *pṛt- has been lost in Vedic.

bhuraṇyá- 'agitate, be agitated': cf. 3 pl. impv. bhurántu, mid. inj. bhuránta, ptcp. bhurámāṇa-.

ruvaṇyá- 'cry out': cf. 3 sg. ruváti 'roars', inj. ruvát, 2 sg. impv. ruva, ptcp. ruvá(n)t-.

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[33] Cf. note 29. Such zero-grade forms in -aya- will be referred to as "pseudo-causatives" in the discussion below.

saranyá- 'rush': cf. 3 sg. *sárat*, *ásarat* 'rushed. flowed', 2 sg. impv. *sárā*; while synchronically interpreted as apophonically abnormal thematic aorists, these forms are clearly inseparable from the *tudáti*-presents enumerated above (cf. note 27). Compare also the pseudo-causative *saráyante* 'rush' RV. 4. 17. 2, distinguished by its ablaut and intransitive meaning from the true causative (*ánu prá*) *ásārayanta* 'caused to flow forth' RV. 10. 56. 5.

riṣaṇyá- 'do wrong': cf. 3 sg. inj. *riṣát* 'suffers harm', 3 pl. *riṣan*, pseudo-caus. inf. *riṣayádhyai*, etc.; these forms too pattern synchronically as thematic aorists.

huvanyá- 'call': cf. 3 sg. inj. *huvat*, 1 pl. opt. *huvéma*, 1 sg. mid. *huvé*, inf. *huvádhyai*, etc.

Only two Vedic stems in *-anyá-* fail to conform to this pattern. The present *dhiṣaṇyá-* 'be eager (to sacrifice)' is found once in the Rigveda (2. 41. 6), where it is used in a figura etymologica with instr. sg. *dhiṣá* 'sacrificial wish'; it would perhaps be simplest to regard this stem as an analogical creation on the basis of *dhiṣáṇā* 'offering', according to a proportion of the type *pṛtanā* 'battle' : *pṛtanyá-* :: *dhiṣáṇā* : X, X = *dhiṣaṇyá-*. Likewise confined to a single occurrence (10. 99. 6) is *damanya-* 'subdue', synonymous with the causative *damáya-* (< *$domh_2$-éi̯e/o-*; cf. Go. *ga-tamjan* 'id.') and possibly formed from it on the model of pairs like *turáya-* : *turaṇyá-*, *saráya-* : *saraṇyá-*, etc. To these must be added YAv. *zaraniia-* 'be angry', the historical position of which vis-à-vis Ved. *hṛṇīte* 'is angry' is unclear.

The association of the *turaṇyáti-* and *tudáti-*types provides a strong indication that the complex suffix *-anyá-* consists diachronically of the thematic vowel + *-nya-*. While it is impossible to prove from Indo-Iranian alone that the latter sequence in turn represents *-n-h_2-i̯é/ó-*, rather than, e.g., *-n-i̯é/ó-*, the parallelism with the *gṛbhāyáti-*type, where *-āyá-* clearly continues *-ṇ-h_2-i̯é/ó-*, is too striking to be ignored. Positive evidence for the laryngeal, moreover, is supplied by Hittite. Presents like *turaṇyáti* appear to be represented in Anatolian by "duratives" of the type *iyannāi*, *iyanniyanzi* 'proceed' (< *iya-* 'march'), *paršiyannāi*, *-anniyanzi* 'break' (< *paršiya-* 'id.'),

walḫannāi, *-anniyanzi* 'play (a musical instrument)' (< *walḫ-* 'strike'), etc. The most significant fact about these forms, for our present purposes, is their geminate *-nn-*, which probably continues earlier *-nh_x-; it is noteworthy that, like the *turanyáti-*type, the type in *-annāi-/-anniya-* is characteristically associated with underlying thematic stems, *walḫannāi* itself being the main exception.[34] To pursue the consequences of this identification further would take us beyond the scope of the present study; it will readily be seen, however, that if *-anyá-* and *-annāi-/-anniya-* indeed represent a single inherited sequence, the former existence of an *eh_2-aorist* must be assumed not only for Indo-Iranian, but for Anatolian as well.[35]

§ 13. We are now in a position to examine the alleged evidence for an *ā-preterite* in Italic and Celtic. Both groups, as is well-known, make extensive use of *-ā-* as a subjunctive marker (cf. § 1); in a now classic paper (Festschr. Kretschmer, p. 267–74, 1926), Trubetzkoy suggested that this value could most easily be assumed to have developed from an earlier optative in *-ā-*, parallel to the thematic optative in *-oi-*. The number of actual preterite forms in Italic and Celtic is small: apart from the obviously innovated Latin pluperfect in *-is-ā-*, examples are

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[34] Further representatives of the class are given by Kronasser, Etym. d. heth. Spr., § 216.

[35] As I have briefly observed elsewhere (cf. "The Position of the *ḫi-*Conjugation", cited in § 2 above), the athematic *ḫi-*conjugation inflection of the *iyannāi-*type (note especially the associated supine form in *-anniwan*) strongly suggests an original paradigm in 3 sg. *-$néh_2$-i-e, 3 pl. *-nh_2-i-énti. In Hittite, where *-$néh_2$-i-e(i) regularly yielded *-nāi*, an obvious reanalysis led to the creation of a new 1 sg. in *-naḫḫi* (cf. OH. *iyannaḫḫé*); the generalization of *-nn-* throughout the paradigm was triggered by forms like the supine, where *-nh_2-i- regularly gave *-nni-*. In Indo-Iranian the type was completely thematized, the probably point of departure being the 3 pl. in *-nyanti* *-nh_2-i-énti. Unclear are the injunctive forms 2 sg. *iṣaṇaḥ*, 3 sg. *iṣaṇat*, 3 pl. mid. *iṣaṇanta*, *kṛpaṇanta* (beside *iṣaṇya-*, *kṛpaṇya-*), which cannot be separated from GAv. 1 pl. opt. *zaranaēmā* (beside *zaraniia-*) and YAv. 3 sg. *pəšanaiti* 'struggles' (cf. Ved. *pṛtanyá-*). Note also 3 pl. mid. *iṣaṇayanta* (RV. 10. 67.8), which stands in the same formal relation to the injunctive stem *iṣaṇa-* as 3 pl. *iṣayanta*, *turayante*, etc. to *iṣá-*, *turá-*.

confined to the Latin imperfect in -bā- < *-bhu̯ā-, evidently comparable with Osc. *fufans* 'erant'[36] and the Old Irish preterite of the copula (cf. 3 sg. *ba* 'was'), and to the imperfect of the verb 'to be' (*eram*, etc.), an apparent counterpart to which is found in MW. *oed* 'was' (< *esāt).[37] In BSL. 47, p. 11–20 (1951), Benveniste succeeded in showing on the basis of typological parallels in Iranian and Tocharian that these forms could plausibly be explained as transformed optatives. He concluded that the modal function of *-ā- was the only one which could be considered original in Italic and Celtic, and that a direct equation between the "eh₂-optative" of these languages and the eh₂-aorist of Balto-Slavic was impossible.

This result is confirmed by purely formal considerations. We have seen that the eh₂-aorist is archaically found in conjunction with zero-grade root-vocalism, and that apparent exceptions to this pattern are due to the analogical influence of paradigmatically related forms (cf. the replacement OCS. *pьsati* → *pisati*, pres. *pišǫ*). It is quite otherwise with the eh₂-optative. Both Italic and Celtic, but especially the latter, offer abundant evidence that the modal sign *-ā- was originally associated with full-grade roots. In Old Irish, where the stem of the subjunctive is independent of that of the present, strong verbs with presents in *-i̯e/o- (B II) and *-nă- < *-nhₓ- (B IV) regularly show e-grade in the subjunctive: representative examples are ·*gainethar* 'is born', subj. ·*genathar*, ·*moinethar* 'thinks', subj. ·*menathar*, ·*sern(n)* 'spreads' (with secondary vocalism), subj. ·*sera*, ·*cren* 'buys' (< *kʷrinăt(i)), subj. ·*cria* (< *kʷrei̯ăt(i)).[38] Note also the irregular subjunctive ·*fía* (< *u̯esāt(i)) to *fo(a)id* 'spends the night' (< *u̯os-) and, in Welsh, the suppletive form *el* (< *pelāt(i)), 3 sg. subj. to *af* 'I go'. Latin, in the few instances where the present subjunctive has maintained an independent stem, preserves traces of an identical system, seen in 3 sg. *aduenat* (for *gʷem-ā-) beside *adueniō* 'I arrive' and *tulat* (<

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[36] Alan Nussbaum, however, points out that this form is perhaps rather to be taken as equivalent to Lat. *fuērunt*.

[37] See Watkins, IE. Origins of the Celtic Verb, p. 149f.

[38] A derivation of ·*cria* from *kʷri̯āt(i) would also be possible, but considerably less plausible on morphological grounds.

*telāt) beside tollō 'I lift' (the special case of fuat 'be (subj.)'
will be treated below). Of particular importance is the form erat
(= MW. oed): if zero-grade root-vocalism had originally been
proper to the eh_2-optative, it would be difficult to see why it
should have been lost here but preserved in the ordinary optative
of the root *$(h_1)es$- (OLat. siem, siēs, etc.). In short, any attempt
to link the Italic and Celtic ā-subjunctive to the Balto-Slavic
ā-aorist must account not only for the obvious functional dif-
ference between the two categories, but for a significant formal
disparity as well.

§ 14. Nevertheless, several obstacles stand in the way of Tru-
betzkoy's view of the eh_2-optative as an inherited variant of the
thematic optative parallel to the ordinary type in *-$oi(h_1)$·. First
of all, the eh_2-optative is found exclusively in Italic and Celtic,
contiguous branches of the family notorious for their shared
isoglosses; in this respect it contrasts with the eh_2-aorist, which
is directly attested in Balto-Slavic and Tocharian, indirectly pre-
supposed in Indo-Iranian and Anatolian, and structurally paral-
leled by forms in Indo-Iranian (agrabhīt) and Tocharian (*śärsā).
Furthermore, there is no reason to believe that the optative in *-eh_2-
was ever exclusively associated with thematic presents or aorists.
Some of the most obviously archaic ā-subjunctives, such as
OLat. aduenat, tulat and fuat, and the Irish type represented by
·sera, ·cria, etc., are built to roots from which only athematic
stems are attested in the archaic IE. languages. Benveniste, who
recognized this difficulty, posited an early association of the
eh_2-optative with both thematic stems and "certaines formes
radicales attestées seulement par des aoristes radicaux voisinant
avec des présents secondaires" (op. cit., p. 19); even so ad hoc
a reformulation, however, will not account for the common
prototype of Lat. erat and MW. oed, nor will it explain why the
root *$(h_1)es$- also underlies an athematic optative of the normal
type (siet, syāt, etc.).[39] In descriptive terms, the eh_2-optative

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[39] Benveniste's view of erat as an analogical creation (via a proportion
-bit (fut.): -bat (impf.): erit (fut.): X) is badly comprised by the appear-
ance of *esāt in Celtic.

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seems from the earliest period to have been associated with both thematic and athematic root formations; there is no actual evidence to support the assumption that it originally occurred in complementary distribution with the types in $*-\underset{.}{i}eh_1-$ and $*-oi(h_1)-$.

These observations suggest that the term "eh_2-optative", though still perhaps a convenient designation, is inaccurate, and that the category we have referred to by this name was in fact an independent modal formation, probably of dialectal IE. date, which came at an early period in the prehistory of Italic and Celtic to compete with the true optatives in $*-\underset{.}{i}eh_1-$ and $*-oi(h_1)-$. The eh_2-optative is thus basically to be regarded as an innovation, rather than as a feature once common to the entire IE. speech-community—a fact which provides an important clue to its origin.

§ 15. The attested IE. languages have employe dthree common devices to create new modal forms. The use of auxiliary verbs and particles, as e.g., in NE. *I would read* or Russ. *ja čital by,* is largely confined to the modern and medieval languages; the possibility of such an origin for the eh_2-optative is virtually nil. Nor is it likely that the Italic and Celtic *ā*-subjunctives represent displaced present or aorist indicatives, although instances are known elsewhere of indicative forms which have secondarily acquired modal value (cf. Hindi *paṛhe* '(that) he may read' < Skt. *paṭhati,* Toch. B *pketär* 'will, may ripen' < $*pék^ue/o-$). Of greater typological interest, however, are those cases in which a new modal form has been made by providing an existing future stem with preterite inflection: examples include the conditional in Romance (cf. Fr. *lirait* 'would read' < VLat. *legere habēbat,* It. *leggerebbe* 'id.' < *legere habuit,* beside fut. *lira,* *leggerà* < *legere habet*) and Sanskrit (cf. *abhariṣyat* 'would carry' beside fut. *bhariṣyati*), and the secondary future in Old Irish (cf. *do·moinfed* 'would think' beside fut. *do·moinfethar,* standing in the same relationship as pres. *do·moinethar* to impf. *do·moined*). An approximation to the same usage can be seen in informal English sentences of the type "*If you had returned it*

promptly I was going to give (i.e. *would have given*) *you a reward.*" [40]

In addition to employing the desiderative morpheme *-(h_1)s-, Proto-Indo-European made extensive use of the subjunctive to express futurity. This remains one of the commonest functions of the subjunctive in the oldest Indo-Iranian; it is the only function to survive in Italic, where Latin preserves representatives of both the "short vowel" and normal thematic types (cf. *erō, -is, -it* 'I will be, etc.' < *-(h_1)és-e/o-, [*ueham*], *-ēs, -et* 'I will convey, etc.' < *μégh-ē- < -e-e/o-). It is of more than passing interest, therefore, that the Italic and Celtic *ā*-subjunctive, along with its offshoot, the *ā*-imperfect, can in every case be analyzed as an IE. subjunctive extended by a further element *-h_2-. This holds true not only for regular examples like Lat. *uehā-* and OIr. *bera-* (indic. 3 sg. *berid, ·beir*), which can be derived respectively from *μégh-e-e-h_2- and *bhér-e-e-h_2-, but also for the archaic types illustrated below.

Lat. *-uenat* < *g^μem-e-h_2-: cf. Ved. subj. 3 sg. *gámat*, Toch. A subj. 3 sg. *śmäṣ*, pl. *śmeñc* < *g^μém-e/o-, beside the root aorist preserved in Ved. 3 sg. *ágan* 'went', Arm. *ekn* 'id.'.

Lat. *erat*. MW. *oed* < *(h_1)és-e-h_2-: cf. Ved. subj. 3 sg. *ásat* (= Lat. *erit*), beside the root present Ved. *ásti*, Lat. *est*, etc.

Lat. *fuat, -bat*, OIr. *ba* < *bhuh_x$-e-$h_2$-: cf. Ved. subj. 3 sg. *bhuvat*, Lat. *-bō, -bis, -bit*, etc., with a synchronically irregular zero-grade, beside the root aorist Ved. *ábhūt*, Gk. ἔφυ 'became', etc.[41]

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[40] The preterital, rather than modal, value of the Sanskrit conditional is still clear in its only Vedic occurrence (*abhariṣyat* 'was going to carry off', RV. 2.30.2). The English *would*-construction may belong here also, despite the fact that *would* is historically the preterite subjunctive, as well as the preterite indicative, of *will*.

[41] The phonological development of *bhuh_x$-e-t, *$bhuh_x-e-h_2-t to *bhṷet, *bhṷāt would have been regular in close composition with a preceding element, as in the Latin future and imperfect; cf. Ved. *ábhva-* 'monstrous' < *n-bhuh_x$-e/o-, aor. *áhvat* 'called' < *e-ǵhuh_2-e/o-. OIr. *ba* is probably best explained by supposing an original contrast between *$bu\mu$āt (cf. Lat. *fuat*) and *-$b(\mu)$āt (Lat. *-bat*), which was leveled in favor of the latter form.

OIr. ·menathar (indic. ·moinethar) < *mén-e-h₂-: cf. Ved. subj.
1 pl. mid. mánāmahe, beside the root aorist 3 sg. mid. ámata
'thought (of)' (pres. 3 sg. mányate).

OIr. ·sera (indic. ·sern(n)) < *stér(h₂)-e-h₂-: cf. Ved. subj.
3 sg. mid. stárate, beside the root aorist 3 sg. ástar 'laid low'
(pres. 3 sg. stṛṇóti).[42]

Interpretable in the same way is the Old Irish type ·cria
(indic. ·cren; cf. ·bia, ·ben 'strikes', ·glia, ·glen 'sticks', etc.):
although no actual root aorist subjunctive *kráyat is quotable
from Ved. krī- 'buy' (pres. krīṇáti), the existence of an IE. sub-
junctive stem *kʷréih₂-e/o- is implied by the Greek root aorist
ἐπρίατο (: pres. ὠνεῖται 'buys').

§ 16. The close formal connection between the IE. subjunctive
and the Italic and Celtic "optative" in *-ā-—still palpable in
the case of Lat. erō : eram and -bō : -bam—suggests a plausible
scenario for the rise of the latter forms. At a period when the
dialectal differentiation of Proto-Indo-European had already be-
gun, the speech-forms ancestral to Italic and Celtic evidently cre-
ated a "conditional" by supplying their inherited subjunctive, the
value of which was partly that of a future, with a preterite
paradigm. Of the formal devices which might have been utilized
for this purpose, the two most natural candidates were the aorist
morphemes *-s- and *-h₂-, which, following the loss of the IE.
aspectual system in pre-Italic and pre-Celtic, would presumably
have acquired a purely temporal function.[43] The actual choice
fell on *-h₂-, doubtless because this suffix was already speci-
fically associated with thematic stems of the tudáti-type. It is
significant that in the Rigveda tudáti-presents display a special
preference for injunctive forms, which occasionally overlap with
subjunctives in meaning; if a similar situation can be assumed
for the IE. dialects ancestral to Italic and Celtic, the pattern

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[42] To be sure, the Irish verb agrees more closely in meaning with stṛṇáti
'scatters'; the subjunctive stem stára-, however, is not attested in this
sense.

[43] The secondary endings alone, of course, would have been insufficient
to mark the new category: a paradigm in *-om, *-es, *-et, etc. was
characteristic of the subjunctive itself.

inj. *sik-$é/ó$- : pret. (< aor.) *sik-$é$-h_2- would have provided an obvious model for the creation of modal preterites of the type *$(h_1)és$-e-h_2-, *$g^ʮém$-e-h_2-, *$ʮégh$-e-e-h_2- from subjunctives *$(h_1)és$-e/o-, *$g^ʮém$-e/o-, *$ʮégh$-e-e/o-.[44]

Once established as a category, the new conditional would naturally have tended to compete with the inherited optative; compare the typologically similar spread of the secondary future at the expense of the past subjunctive in later Old Irish, or the encroachment of the *would*-construction on the domain of the subjunctive (< optative) in English. In the majority of cases, notably including those in which a conditional in *-$ā$- occurred alongside a thematic optative in *-$oi(h_1)$-, the ascendancy of the new forms was complete; only in the case of a few athematic presents, such as Lat. *uolō* 'I went', subj. *uelim* and *edō* 'I eat', subj. *edim*, was the old optative able to maintain itself.

The behavior of the roots *$(h_1)es$- and *$bheuh_2$- was somewhat idiosyncratic. Here the conditionals *$(h_1)és$-e-h_2- and *$bhuh_x$-e-h_2- developed into preterites (*erat, oed*; *-bat, ba*), while the optative of *$(h_1)es$- survived to yield the Latin subjunctive *siet*. It is not immediately clear whether this situation reflects an earlier period when *$esā$- and *$bh(u)ʮā$- were purely modal forms (Benveniste's view), or whether we should not rather envisage a direct development of 3 sg. *$(h_1)és$-e-h_2-t, *$bhuh_x$-e-h_2-t, lit. 'was going to be' (vs. IE. subj. *$(h_1)és$-e-t, *$bhuh_x$-e-t 'is going to be') to simple preterites *$esāt$, *$bh(u)ʮāt$ 'was'. Perhaps favoring the latter possibility are "conative" usages of the type *ea ad hos redibat lege hereditas* 'that inheritance was going to fall to them'. Ter., Hec. 171, or *curiam relinquebat* 'he was for leaving the senate house', Tac., Ann. II. 34, 1; on the other hand, it is certain that *$bhuh_x$-e-h_2- underwent the normal development to an optative

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[44] Considerable antiquity must be assumed for this development, as can be seen from the fact that the eh_2-aorist itself was subsequently lost in both branches. Formally reminiscent of the new conditional in *-e-h_2- is the Armenian present subjunctive type 3 sg. *beric'ē* 'will, may carry' < *$bheroisketi$, which appears to have originated as a preterite in *-$sket$ (cf. Gk. φέρεσχε 'would carry') of the optative stem *$bheroi(h_1)$- (cf. "Notes on the Armenian Personal Endings", cited in note 1).

in Lat. *fuat*.[45] Within the pre-Latin period the use of the
periphrastic imperfect in *-bam*, *-bās*, *-bat* greatly increased the
synchronic importance of the preterite stem *$*bh\underline{u}ā$-, which in
Celtic survives only as a free form (OIr. *ba*).

§ 17. Whatever the merits of the above explanation of the Italic
and Celtic subjunctive in *$*-ā$-, it should be clear from §§ 13–16
that there can be no direct connection between these forms and
the class V (*-ā*-) subjunctives of Tocharian. The Italic and Celtic
formation, as we have seen, is characterized by full-grade root
vocalism and shows no sign of ever having had paradigmatic
ablaut; the Tocharian subjunctive, on the other hand, is com-
monly associated with *o*-grade of the root in the active singular
and zero-grade elesewhere (cf. A 3 sg. *krasaṣ* 'will know', B
kārsaṃ, vb. n. A *kärsālune*, B *karsalñe*). This fact is alone suf-
ficient to suggest that, like the *$*-ā$- of the preterites discussed in
§ 4, the *$*-ā$- of the Tocharian subjunctive is properly not a full-
grade suffix, but a vocalized laryngeal. In a forthcoming paper,
P. Hollifield has compared forms like B *kārsaṃ* with Indo-
Iranian aorist "passives" of the type Ved. 3 sg. *aśrāvi*, GAv.
srāuui 'was heard', which he derives from preforms with a
laryngeal suffix and zero-desinence.[46] Under such an analysis
it would be possible to view the class V subjunctives as h_2-aorists
of a second type, apophonically distinct from the preterites
studied above.[47] No difficulties are presented by the presumed
functional transformation indicative → subjunctive, which is
amply attested elsewhere in Tocharian (cf. § 15).

[45] On the use of MW. *oed*, which sometimes has conditional, rather than
preterital value, see Evans, A Grammar of Middle Welsh, p. 110f.

[46] It remains to be explained, of course, why the 3 sg. ending appears as
zero, rather than as *-a* < *$*-o$ (*$*-e$?) or *-ta* (< *$*-to$). Possibly comparable
is the apparent reduction of *$*-h_2e$ to *$*-h_2$ in the secondary ending of
the 1 sg. middle in Indo-Iranian (cf. Ved. *akri* 'I made'), and in the
thematic 1 sg. active elsewhere in the family (cf. Gk. φέρω, Go. *baira*,
etc. < *$*-o-h_2$). I do not think it likely that the *-i* of *aśrāvi* is apophoni-
cally related to the stative suffix *$*-ē$- (*$*-eh_1$-), which seems not to have
participated in ablaut alternations of any kind.

[47] The formal difference between the two h_2-aorists would presumably
have corresponded to a difference in function, the nature of which,
however, cannot yet be determined.

Thus, it is at least possible that the Tocharian *ā*-subjunctive can be added to the list of categories containing the aorist marker *-h_2- — a list which already includes the following items:

1) h_2-aorists of the type CToch. *śärsā-/kärsā-*, Ved. *agrabhīt*;
2) nasal presents derived from such aorists, such as CToch. *kärs(ä)nā-* and the Vedic types *gr̥bhnáti* and *gr̥bhāyáti*;
3) *eh₂*-aorists of the type Lith. *sùko*, Sl. *sьca*, CToch. *sikā-*;
4) nasal presents derived from such aorists, such as Ved. *turaṇyáti* and the Hittite type *iyannāi, -anniyanzi*;
5) "*eh₂*-optatives", properly conditionals, of the type Lat. *aduenat, erat, -bat*, OIr. ·*menathar, ba*, MW. *oed*.

Inevitably, some of our individual conclusions concerning these forms may have to be revised. Taken together, however, they provide us not merely with evidence for a new verbal suffix in the parent language, but with a revealing glimpse into the derivational morphology of the early IE. dialects.

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