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Tocharian verb stems in *-tk-**)

I.

One of the more bizarre aspects of Tocharian from the Indo-European point of view is the presence of a large class of verbs with stem-final *-tk-*. A cluster of dental plus velar is quite rare in Indo-European. Oblique cases of the word for 'earth' must have had underlying **d(h)gh-*, but this sequence was subject to various phonological rules within Indo-European and is nowhere directly preserved¹⁾. Hittite shows dental plus velar in *hatk-* 'close', *hatku-* 'narrow' and *watku-* 'leap', and from Indo-Iranian one may cite Vedic *átka-* 'coat', *adga-* 'twig' (?) and Av. *varədka-* 'kidney'. All of these forms, however, are isolated and not part of a productive formation. We are therefore surprised to find in Tocharian some thirty verb stems in final *-tk-*, nineteen of them shared by both A and B. Synchronically, *-tk-* is part of the root, appearing in all forms of the verb, not just the present system. The formation has obviously enjoyed considerable productivity. Since its unusual phonetic shape virtually eliminates any chance of its being old, we are led to seek its origin within the history of Tocharian.

The following summary of all the *-tk-* verbs is based on that of Lane, JAOS 85 (1965) 66f., with minor additions and modifications to be justified later. It does not purport to be a complete list of forms, but it does attempt to identify as far as possible the present (indicative), subjunctive, and preterite formations of each

*) I would like to thank Professors Jay Jasanoff, Jochem Schindler and Calvert Watkins for having read a draft of this paper and offered many useful criticisms and suggestions in addition to those acknowledged in the body of the text. Final responsibility for the contents naturally is mine.

¹⁾ In Hitt. *tēkan/takna-* the occasional spelling of the oblique stem as *ta-a-ak-na-* suggests that the cluster has been broken up by anaptyxis, either in Anatolian or already in Indo-European. By assuming that the vowel insertion is of IE date, we may also account for Toch. A *tkam*: if the inserted vowel became Proto-Tocharian *ä* or *u*, a **täkan-* or **tukan-* would give Toch. A *tkam* by regular syncope. On these and related forms see Schindler, Die Sprache 13 (1967) 191f., and NSF Report HARV-LING 02-75 (Indo-European Studies II), Harvard University, Cambridge, Mass., (1975) 40f. (henceforth simply I-E Stud. II).

verb. The Roman numerals designating the various conjugation classes are those of Krause-Thomas, Tocharisches Elementarbuch (TE) I, except that I follow Lane in assigning the nasal-infix forms of A to Class VII.

1. A *kātk-* 'arise'. Pres. act. 3 sg. *kātānkāš* VII; subj. 3 sg. *kātkaš* V; pret. 3 sg. *kātāk* I.
2. AB *kātk-* 'rejoice', caus. 'gladden'. A pres. act. 2 pl. *kāckāc*, B 3 sg. *kāccām* II; B pret. 3 pl. *kāccāre* I. Caus. A pres. act. 3 sg. *kāckāš* VIII, B mid. 3 sg. *kātkāstār* IX; A pret. absol. *kākātkšurāš*, B pple. *kakātkāššū* IV.
3. AB *kātk-* 'cross over; pass (of time)', caus. 'cause to cross over'. A pres. act. 3 pl. *kātkāne*, B 3 sg. *kātānkām* VII and *kātkanam* VI; A subj. 3 sg. *kātkaš*, B *kātkaš* V; A pret. 3 sg. *kāc*, B *šatka* I. Caus. B pres. 3 sg. *šatkāššām* IX; B pret. mid. 2 sg. *šātkatai*, A pple. *šāšātkusām* II.
4. B *kārtk-* '?'. (caus.) pres. act. 3 sg. *kārtkāššām* IX; vbl. subst. *kekārtkor*.
5. AB *kutk-* 'fill out, give substance to'. B pres. mid. pple. *kutānkemane* VII; B pret. act. 1 pl. *šutkām*, A pret. mid. 3 sg. *kutkāt* I. Caus. B pret. pple. *šēšutku* II.
6. A *lutk-*, B *klutk-* 'turn (intr.)', caus. 'cause to become'. B pres. mid. 3 pl. *kluttānkentār* VII. Caus. A pres. act. 3 sg. *lutkāšš-ām* VIII, B *klutkāššām* IX; A pret. 3 sg. *lyockās* III, B pret. 2 sg. *klyautkasta* II.
7. A *lotk-*, B *klautk-* 'turn (away) (intr.); return; become', caus. 'turn away (tr.)'. A pres. act. 3 sg. *lotānkāš* VII, B pres. mid. 3 sg. *klautkotrā* IV; A subj. 3 sg. *lotkaš*, B *klautkaš* V; A pret. act. 3 sg. *lotāk*, B *klautka* I. Caus. B pres. 3 sg. *klautkāššām* IX.
8. A *tātk-* '?'. (caus.) inf. *tātkāssi* VIII; pret. mid. 3 sg. *tatātkāt* II.
9. AB *nātk-* 'thrust (away); urge'. B pres. act. 3 sg. *nāttānkām* VII and *natkanam* VI; subj. 3 sg. *nātkam* V; pret. mid. 2 sg. *nātkatai* I. Caus. A inf. *nātkāssi* VIII; pret. mid. 3 sg. *nanātkāt*, pple. *ñāñitku* II.
10. B *pātk-* 'give up, lay aside'. Opt. *pātkoy* V; pret. abs. *papātkarmem* I.
11. AB *putk-* 'divide'. A pres. act. 3 sg. *putānkāš*, B 3 pl. *puttānkem* VII; A subj. 1 sg. *poikam*, B *putkau* V; A pret. pple. *putko*, B *putkau* I. Caus. B pres. mid. 3 pl. *putkāskentār* IX; pret. pple. *pepputku* II.
12. AB *pyutk-* 'come about, occur'. (caus.) A pres. act. 3 sg. *pyutkāšš-ām* VIII, B *pyutkāššām* IX; A pret. 3 sg. *papyutāk*, B *pyautka* II, A *pyockās* III.
13. AB *prutk-* 'be shut, clogged', caus. 'shut, clog'. B pres. mid. 3 sg. *prutketār* III; A subj. act. 3 sg. *protkaš*, B mid. 3 sg. *prutkātār* V; A pret. act. 3 pl. *protkar*, B *prautkar* I. Caus. B pres. act. 3 sg. *prutkāššām* IX; A pret. 3 pl. *paprutkār*, B 3 sg. *prautka* II.
14. AB *plātk-* 'swell; arise; overflow'. B pres. mid. pple. *plyetkemane* II/III; subj. 3 sg. *pletkāš* I; pret. 3 pl. *pletkar-c* III; pret. pple. A *paplātku*, B *plātku*.
15. A *plutk-* 'arise', caus. 'cause to overflow'. Pret. 3 sg. *plyockās* III. Caus. pret. 3 pl. *paplutkār* II.

16. AB *mārtk-* 'shave (the head)'. B (subj.) vbl. subst. *markalñe* V; A pret. act. 2 sg. *mārtkāšt*, B mid. 3 sg. *mārtkāte* I.
17. B *mutk-* 'strengthen (?)'. B (subj.) inf. all. *mutkāttēs* V; pret. 3 pl. *mutkāre* I.
18. B *mlutk-* 'escape'. Subj. mid. 1 sg. *mlutkāmar* V.
19. A *yātk-* '?'. Ger. *yātkal*.
20. A *yutk-* 'become upset, worry'. Pres. mid. 2 sg. *yutkatār* III; (subj.) vbl. subst. *yutkālune* V; pret. pple. *yutko* I.
21. A *ritk-/rātk-*, B *rātk-* 'arise', caus. 'raise; cause to arise'. B pres. act. 3 pl. *rāttānkem* VII. Caus. A pres. mid. pple. *ritkāsmām* VIII; pret. pple. *raritku*, *rarātku* II.
22. AB *rutk-* 'tear loose/open, strip; eradicate'. A pres. mid. 1 sg. *rutānkāmār*, B *ruttānkemār* VII; B subj. act. 3 sg. *rautkaš*, A vbl. subst. *rutkālune* V; A pret. act. 3 pl. *rotkar*, B mid. 3 sg. *rutkāte* I.
23. AB *lātk-* 'cut off'. A pres. act. 3 sg. *lātānkāš* VII, B *lātkanam* VI; B (subj.) inf. *lātkatsi* V; B pret. mid. 2 sg. *lātkatai*, A pret. pple. *lālātku* I.
24. AB *litk-* 'retreat, withdraw', caus. 'remove'. A (subj.) vbl. subst. *litkālune* V; pret. pple. A *litko*, B *litku* I. Caus. B pres. 3 sg. *lyitkāššām* IX, subj. 3 pl. *lyaitkem* I/II; A pret. pple. *lyalyitku* II.
25. AB *wātk-* 'part (intr.); decide', caus. (1) 'separate (tr.)', caus. (2) 'decree, command'. A pres. mid. 1 sg. *wātkamār* III, B act. 3 sg. *wātkāššām* IX; A subj. act. 3 sg. *watkaš* V, B *wotkāš* I; A pret. act. 3 sg. *wāk*, B 1 sg. *wātkāwa* I. Caus. (1) A pret. 1 sg. *wackwā*, B 3 sg. *otkasa* III. Caus. (2) A pres. act. 3 sg. *wātkāš* VIII, B *wātkāššām* IX; A pret. 3 sg. *wotāk*, B *yātka* II.
26. A *wkātk-* '?'. Subj. vbl. subst. *wkātkālune* V.
27. A *wrātk-* 'boil, cook'. Pres. act. 3 sg. *wrātānkāš*, mid. pple. *wrātānkāmām* VII.
28. AB *sātk-* 'spread' (intr.), caus. 'spread' (tr.). A pres. mid. 3 sg. *sātkatār*, B *sātketār* III; A pret. act. 3 sg. *stāk*, B 3 pl. *sātkāre* I. Caus. A pres. act. 3 pl. *sātkseñe* VIII; pret. 3 pl. *sasātkār* II, B pret. mid. 1 sg. *sātka-samai* III.
29. A *snotk-*, B *snātk-* 'permeate, infuse'. Pret. pple. A *sāsnotku*, B *snātku* I.
30. AB *spāltk-* 'strive (for), be zealous'. A pres. mid. 3 pl. *spāltānkentār* VII, B *spalkkaskentār* IX; B pret. mid. 3 sg. *spalkāte* I.

The table below summarizes the present-class membership of those *-tk-* verbs for which it can be determined. The placing of *plātk-*, *mlutk-* and *litk-* in Class III is tentative. The present participle in B *plyetkemane* could belong to Cl. II as well as to III. For B *mlutk-* 'escape' compare A *mlusk-* 'idem', Cl. III. AB *litk-* 'retreat, withdraw' is derived from A *lit-* B *lait-/lit-* 'depart, perish', Cl. III and IV respectively. Since the causative formations of Cl. VIII and IX are productive in Tocharian, they are of no use in

determining the original present-class inflection of a verb and have been omitted from this table.

Present Conjugation Classes of *-tk*-Verbs

II	III	VI
AB <i>kātk</i> - 'rejoice' AI	AB <i>sātk</i> - MI	B <i>kātk</i> - AI
	A <i>yutk</i> - MI	B <i>nātk</i> - AT
	A <i>wātk</i> - MI	B <i>lātk</i> - AT
	B <i>prutk</i> - MI	
		VII
	B <i>plātk</i> - MI	A <i>kātk</i> - 'arise' AI
	B <i>mlutk</i> - MI	AB <i>kātk</i> - AI
	AB <i>litk</i> - MI	B <i>kutk</i> - ?T
		B <i>klutk</i> MI (A VIII)
IV		B <i>nātk</i> - AT
B <i>klautk</i> - MI		AB <i>putk</i> - AT
		B <i>rātk</i> - AI
		AB <i>rutk</i> - MT
		A <i>lātk</i> - AT
		A <i>lotk</i> - AI
		A <i>wrātk</i> - A?
		A <i>spāltk</i> - MI (B IX)

A = Active M = Middle T = Transitive I = Intransitive

In addition to the verbs A *mlusk*- and AB *lit*-/*lait*-, there are also nominal forms related to the *-tk*- verbs: A *kācke*, B *katkarūna* 'joy' to *kātk*- 'rejoice'; A *lotāk*, B *klautke* 'way, manner' to A *lutk*-, B *klutk*- 'turn'; A *potāk* 'hand' ²⁾, B *pautke* 'tribute' to *putk*- 'divide, distribute'; A *putāk* 'discord' to the same verb; A *protāk*, B *prautke* 'prison, lock' to *prutk*- '(be) shut'; A *wātkāts*, B *wātkāltse* 'decisive' to *wātk*- 'decide'; A *letāk* and *letkār* 'separately' to *litk*- 'withdraw'; and A *spaltāk*, B *spel(t)ke* 'striving, zeal', A *spātkasu*, B *spelkkessu* 'striving for, zealous' to *spāltk*- 'strive'. Further more problematic cases will be discussed below.

II.

To my knowledge there have been three previous treatments of the Tocharian *-tk*- verbs. The first is that of K. Schneider, IF 58 (1941) 45f., who takes as his starting point the *-tk*- verbs of Class VII, which show a nasal infix: e. g. A *putānkāṣ* 'divides', B *kāttānkām* 'crosses over'. He then proceeds to search for etymologies from IE roots in a final dental for these and other *-tk*- verbs. Concluding

²⁾ For a possible explanation of the unexpected semantic development see Lane, JAOS 85 (1965) 69.

on the basis of these etymologies that the final *-k*- is not part of the root, Schneider goes on to attribute to the *-k*- suffix an 'intensiv-iterativen, inchoativen Verbalaspekt'. He claims that there are other cases of a final *-k*- with this function in Tocharian, but cites no examples. He further suggests the possibility that this *-k*- suffix may have resulted from a false abstraction from the IE **-sk-* suffix. Schneider concludes with etymologies for several Tocharian *-sk*- verbs.

As will become clear from the following discussion, any attempt to derive all the *-tk*- verbs from existing IE roots in a final dental produces a few good etymologies and many dubious ones. Schneider himself implicitly recognizes this in deriving *pyutk*- 'come to pass, from IE **bheuḥ* 'grow, be(come)' via a nominal stem like that of Skt. *bhūti*- '(well-)being'. Beyond this there is little to say. Schneider's suggestion that the *-k*- of *-tk*- has somehow been abstracted from *-sk-* is intriguing, but he makes no attempt to actually prove this hypothesis.

The *-tk*- verbs are also discussed by Pedersen, Toch. 170-73, who likewise takes the nasal presents of Cl. VI and VII as the starting point of the formation. He asserts that these verbs are denominative, citing examples like A *putāk* 'discord', alongside AB *putk*- 'divide' and A *lotāk*, B *klautke* 'manner' beside A *lotk*-, B *klautk*- 'turn; become'. Pedersen also recognizes the parallelism between the *-tk*- verbs and some of those in *-sk*- (A *mrosānkātār*, B *mrausknātār* 'becomes disgusted'), but he views this connection as secondary. No source for the *-tk*- suffix is offered, partly because Pedersen is unsure about the phonetic shape of the IE preform. For the formation of denominatives by the addition of *-nā*-, he compares Germanic forms such as ON *myrkna* 'grow dark' < *myrkr* 'dark' and Goth. *(ga)hailnan* 'get well' < *hails* 'healthy'. The transfer from Cl. VI (*-nā*-) to Cl. VII (nasal infix) would have been in imitation of thematized forms of inherited nasal-infix verbs³⁾.

This account is unsatisfactory on several counts. Pedersen cannot explain the shape of the *-tk*- suffix nor suggest a likely IE origin for it. The formation of Cl. VI (> Cl. VII) *-tk*- verbs by a denominative *-nā*- suffix does not explain why we find at least five *-tk*- presents in Cl. III and IV. This becomes all the more serious when

³⁾ Such as B *pik*- 'write, paint' (Cl. VII 3 pl. *pinkem* ~ Lat. *pingunt*). Pedersen does not cite this verb here, but cf. his Toch. 160.

we note that the latter form a unified class formally and functionally: they are all intransitive middles with stative or inchoative meaning. On the other hand, the *-tk-* verbs of Cl. VI and VII are a varied lot in terms of diathesis, transitivity and semantics. This state of affairs does not square with the idea that those of Cl. VI and VII are original, and those of Cl. III and IV secondarily derived from them. Note in particular that the comparison with Germanic predicts just the opposite: the nasal forms should be consistently inchoative middles, while one might expect the forms not characterized by *-nā-* to show some variety in diathesis and semantics.

Furthermore, if the *-nā-* in these forms is denominative, it is surprising that it does not appear outside the present indicative. The non-present forms of Cl. VI *-tk-* verbs are just like those of any Cl. VI verb: cf. A *kātk-* 'cross over' subj. 2 sg. *kātkat*, pret. 3 pl. *kātkar*, pret. pple. *kātko* just like *tār-* 'release' subj. 3 sg. *tārkaš*, pret. 3 pl. *tārkar*, pret. pple. *tārko*. It is true that IE denominatives were originally limited to the present, but the typical practice in the various languages is to build a complete conjugation on the characterized present stem. Compare the formation of the Germanic nasal verbs cited by Pedersen: Goth. *fullnan* 'become full', pret. 3 sg. *fullnōda*, opt. 3 sg. *fullnai*, inv. 2 sg. *fulln*, pres. pple. *fullnands*; ON *vakna* 'wake up', pret. 3 sg. *vaknaði*, *losna* 'get loose', subj. 3 pl. *losni*. Within Tocharian one may compare the behavior of the denominative verbs of Cl. XII (with suffix *-ññ-*): B *añma-ññ-* 'wish' (< *añme* 'wish'), impf. mid. 2 sg. *añmaññitar*; AB *tuñki-ññ-/tāñkw-aññ-* 'love' (< *tuñk-/tāñkw-* 'love'), A impf./pret. act. 1 sg. *tuñkiññā*, subj. vbl. subst. *tuñkiññlune*; B impf. act. 2 sg. *tāñkwaññit*, inv. 2 sg. *ptāñwāññe*; B *kwipe-ññ-* 'be ashamed' (< *kwipe* 'shame'), pret. mid. 3 sg. *kwipeññate*⁴). We therefore have some right to expect that a denominative *-nā-* would be reflected outside the present indicative.

Pedersen's explanation of the transfer from Cl. VI to Cl. VII is also problematic. The infixed forms of A are athematic (ending in *-ā-*), which is unexpected if they have been formed in imitation of thematized forms like B 3 sg. *pinkām*, 3 pl. *pinkem*.

The fullest account of the *-tk-* verbs is that of Lane, JAOS 85 (1965) 66f. (reprinted in *Studies in Historical Linguistics in Honor of George S. Lane*, 88ff.). Unlike Schneider and Pedersen, Lane

⁴) The extension of the suffix to the non-present forms is not universal: *kawā-ññ-* 'desire' (< *kāwo* 'desire') has a Cl. I preterite: *kawāte*.

does not concentrate on the nasal presents of Cl. VI and VII, but rather emphasizes the variety of present-class inflection. He does follow Pedersen in citing the related nominal forms, some of which he considers to be independent of the verb. In a subsequent etymological survey Lane attempts to supply plausible IE nominal bases for all the *-tk-* forms. Noting that many of these turn out to be **-to-* participles, Lane finds support for this derivation in the fact that all the Tocharian stems with unambiguous vocalism show the expected zero-grade. For the following *-k-* suffix, he compares the various IE formations where verbal adjectives in **-to-* are extended by **-ko-*: Grk. *κριτικός* 'discerning, critical' < *κρίτος* 'picked, chosen', Lat. *donāticus* < *donātus* both 'presented, given'. One would expect the front vowel *i* to palatalize the preceding *t* in Tocharian. While one could date the loss of the vowel before the palatalization, Lane prefers to assume the vocalism of Baltic *-aka-*, Slavic *-oko-*, Germanic *-aga-* (where the sequence of thematic vowel plus *-ko-* has been abstracted as a unitary suffix)⁵).

Lane clarifies the relation of Cl. VI (*-nā-*) to Cl. VII (nasal infix). Given a difficult sequence *-tknā-*, there were a couple of alternative solutions⁶). One was to break up the sequence by vowel insertion: B *kātkanam* (< **kātāknām*). The other was to metathesize: A *lotānkāš* (via **lotpāš*). In A the metathesized form remained athematic. In B it was secondarily thematized after the model of the inherited nasal infix type, which had already been thematized, as elsewhere: B *kāt(t)ānkām* for expected **kātānkām* (< **kātānkām*) after the model of *pinkām* 'writes, paints' ~ Lat. *pingit*.

Lane's reconstruction of verbal adjectives in **-tokos* is formally plausible, although they are not attested elsewhere in this shape. However, he offers no parallels for the crucial syncope of *-o-* needed to produce the sequence *-tk-*. The denominative explanation also faces the same objections as it does in Pedersen's formulation, a point Lane himself is well aware of. He doubts the comparison with the Germanic type of *gahailnan*, because many of the Tocharian

⁵) In Germanic compare OHG *nōtag* 'forced' and OSax. *kraftag* 'powerful' to the Gmc. *i*-stems **naup̥/đi* and **krafti* (Brugmann, *Grundr.* 2.244). For the rather sparse examples of Baltic *-aka-* and Slavic *-oko-* see respectively Skardžius, Lietuvių Kalbos Žodžių Daryba 125, and Vaillant, *Gram. comp.* 4.462–3, 543. One could also point to Skt. *-aka-*: see Wackernagel-Debrunner II. 2 § 44f.

⁶) Note, however, that neither step was obligatory: B *nātknam* 'pushes (away)' preserves the original situation.

-tk- verbs show no nasal affix. He still believes in an ultimate denominative origin, but admits that he cannot account for the various present formations actually found with *-tk-* verbs in Tocharian.

Since part of the motivation for a denominative explanation is the existence of nouns in *-tk-*, something should be said at this point about their relationship to the *-tk-* verbs. Pedersen simply assumes that the verb stems are secondary from the nouns without presenting any evidence for the claim⁷). Lane's argumentation on this point is not entirely clear. He first suggests that all the cases which point to an old *o*-stem (A \emptyset = B *-e*) are independent of the verb. But he claims later that A *potäk*, B *pautke* must be derived from the verb *putk-*, since they show a strong grade as in the subjunctive: A *potkam*, B *pautkau*. On the other hand, A *putäk* 'discord' with its zero-grade could be the basis for the verb stem, not a derivative from it. If zero-grade is made the criterion for the noun being independent of the verb, then A *putäk* is in fact the only case which may be cited as evidence for deriving the verb stems from nouns.

It is by no means clear, however, that a zero-grade form like *putäk* cannot also be derived from the verb stem. Compare A *päl(t)säk*, B *palsko* 'mind' < AB *pälsk-* 'think'. Here we are certainly dealing with an *-sk-* present (see details below), and the noun is secondary. The formation reminds us of Skt. *prcchā-*, Arm. *harç*, OHG *forſca* 'question, inquiry' from the stem of *prcchāti* 'asks' or Skt. *icchā* 'desire', Arm. *aic* 'investigation', OHG *eisca* 'seeking' to *icchāti* 'seeks, desires'. While I would not insist that the Tocharian is also an *ā*-stem, it is clear that we have a nominal derivative from a characterized verb stem with zero-grade. In the same way, then, *putäk* may be derived from *putk-*, and the only evidence for deriving the *-tk-* verbs from the corresponding nouns disappears. On the other hand, we have unambiguous examples of nominal forms derived from *-tk-* verbs (B *katkauña*, AB *wätkäls/wätkältse*). In the absence of counterevidence we may thus derive all the related nominal forms from the *-tk-* verbs.

III

While Lane's summary of the conjugation classes of *-tk-* verbs is generally accurate, his stress on the variety of present-class membership is misleading. As noted above, the productive formations of Cl. VIII and IX are of no significance in determining the original present inflection of the *-tk-* verbs. Any verb in B can potentially form a Cl. IX present, and in A a corresponding Cl. VIII present. Furthermore, not all of the derived forms show a causative sense: B *korpotär* (IV), *kärpastär* (IX) both mean 'descend'. Given this situation, one is not surprised that in some cases the base verb has disappeared: AB *mi-* 'harm' shows only A *miyäs*

⁷) In the case of the nasal presents, of course, the denominative suffix for Pedersen is *-nā-*, but this will not account for the rest.

(VIII), B *miyiššäm* (IX). Thus a case like AB *pyutk-* 'occur' (only A VIII/B IX) tells us nothing about the original distribution of the *-tk-* presents.

When we remove the Cl. VIII/IX presents from consideration, much of the 'variety' in the *-tk-* present inflection disappears. As we have already seen, the nasal 'infix' presents of Cl. VII are derived from Cl. VI *-nā-* presents. The distribution of verbs between Cl. III and IV is a function of the root vocalism: those with *ā*, *i* or *u* in Cl. III, those with *ā*, *ai/e* or *au/o* in Cl. IV. Thus with a single exception (AB *kātk-* 'rejoice' Cl. II), all the *-tk-* presents fall into one of two groups: Cl. III/IV or Cl. VI/VII.

Faced with the alternatives of Cl. III or Cl. VI as the original locus of the *-tk-* verbs, the choice seems clear. Aside from the obvious greater ease in explaining derivation by addition instead of deletion of a suffix, there is the fact mentioned above: the Cl. III *-tk-* verbs form a coherent functional and semantic group of stative and inchoative intransitive middles, while those of Cl. VI/VII show a great variety in diathesis, transitivity and semantics. If the Cl. III *-tk-* verbs are to be derived from those of Cl. VI by deletion of *-nā-*, it is hard to see why the variety of the original formation was lost. In fact, the very lack of coherence in the Cl. VI/VII type suggests that it is a conglomeration of more than one original formation. This possibility will be pursued below.

Recalling the pair B *mlutk-*, A *mlusk-* 'escape' and Schneider's suggestion of a relationship between *-tk-* and *-sk-*, it seems advisable to look at the present-class distribution of Tocharian *-sk-* verbs with a similar function, i. e. intransitive middles:

Conjugation Classes of *-sk-* Verbs (Intransitive Middles)

II	III	VI
A <i>tāsk-</i> 'resemble'	AB <i>māsk-</i> 'be'	B <i>mrausk-</i> 'become disgusted'
	AB <i>musk-</i> 'disappear'	
XII	A <i>mlusk-</i> 'escape'	
B <i>wāsk-</i> 'move'		
	IV	VII
	A <i>prask-</i> 'be afraid'	A <i>wāsk-</i> 'move'
		A <i>mrosk-</i> 'become disgusted'

While there are only seven examples, their pattern of distribution bears a striking resemblance to that of the *-tk-* verbs. B *wāsk-* 'move, stir' stands outside the pattern in Cl. XII, but A *wāsānkātär* Cl. VII points to an older **waskātär* Cl. IV (cf. B *klaut-*

kotār = A **lotkatār* → *lotānkāš*). This is supported by the fact that B *wāsk-* has a Cl. V subjunctive (Ger. II *wāskalle*)⁸).

A *tāsk-* 'resemble' call for special comment. The verb is attested only in the present middle participle *tāskmām*, which according to its inflection may be either Cl. II or IV. Krause-Thomas assign it to the latter, presumably because the corresponding verb in B *tās-* is Cl. III: *tasetār*, *tasemane*. But the root vocalism of *tās-* is irregular for Cl. III, suggesting that its membership in this class is secondary. If it originally belonged to the Cl. III/IV type, it would be inflected as a Cl. IV: **tosotār*, **tosomane*; cf. *plānt-* 'be satisfied', *plontotār*, *plontomane*. Furthermore, a closer look shows that the root vocalism of A *tāskmām* is also irregular for Cl. IV. Compare the present participles of genuine Cl. IV verbs: *armām*, *trapmām*, *praskmām*, *wanlmām*, *sparcwmām*. All of these show *a* in the root versus the *ā* of *tāskmām*, which agrees rather with *kātlmām* to *kātk-* 'rejoice' (Cl. II!). Therefore A *tāsk-* is unambiguously Cl. II. It is to be derived from **tak-ske/o-* and related to Hitt. *dākki* 'resembles' (for *-ksk-* > *-sk-* see below).

The expected Cl. II inflection in B would be **tāštār*, **taskemane*. However, a third singular in *-štār* is ambiguous (cf. *klyauštār* 'hears' < *klyaus-*). Therefore on the pattern *klyauštār*: *klyausemane* one could form **tāštār*: *tasemane*. The latter in turn is ambiguous, being either Cl. II or III. The semantics of the root could lead to a reinterpretation of *tasemane* as Cl. III, producing *tasetār*. The attestation of both *tāsk-* and *tās-* suggests that the present participle was by far the most commonly used form, making the transfer from II to III that much easier. Whether or not this is the proper explanation for B *tās-*, A *tāsk-* with its Cl. II inflection is a genuine exception to the general pattern of intransitive *-sk-* verbs, just like AB *kātk-* 'rejoice' among *-tk-* verbs.

Of the remaining intransitive middles in *-sk-*, four have an inchoative sense: *musk-* 'disappear', *mlusk-* 'escape', *mrosk-/mrausk-* 'become disgusted', *wāsk-* 'move, stir'. Two express a state: *māsk-* 'be' and *prask-* 'be afraid'⁹). The original locus of intransitive middle *-sk-* verbs also appears to have been Cl. III/IV. This distribution and the partial transfer into Cl. VI/VII parallel to that of the *-tk-* verbs are prima facie evidence for an etymological connection between *-sk-* and *-tk-*.

IV

The question now becomes: how did the form *-tk-* develop and how did it become productive? J. Jasanoff, I-E Studies II, 111,

⁸) Cl. V subjunctives are typical for *-tk-* verbs (16 of 18 attested) and intransitive middles in *-sk-* (6 of 6). This reflects their present indicative inflection in Cl. III, IV, VI, VII. See Krause-Thomas, TE I §§ 411.4 and 412.

⁹) In B the Cl. V subjunctive of *prask-* has taken over the function of the indicative: *prāskau* (1 sg. subj.), *prāskat* (2 sg. indic.). Note that A also has a Cl. V subjunctive: Ger. II *pārskāl/prāskāl*.

has suggested that the formation originated in *-sk-* derivatives from roots in a final dental, where *-tk-* was the regular phonological result of *-t-sk-*: e. g. *yut-sk-* > A *yutk-* 'become upset, worry' < IE **ǵeudh-* 'move rapidly' (likewise for the root Van Windekens, Lex. 137 and Schneider, loc. cit.). Lane, loc. cit., repeats Van Windekens' gloss 'be sad' for *yutk-* and objects to the etymology on semantic grounds, citing only Skt. *yudhyāti* 'fights' and Lat. *iubeō* 'order' (< **ǵoudhēie-* 'set in motion'). However, one may marshal support for the derivation from the side of both Indo-European and Tocharian. Schneider points out other instances where the root refers to mental agitation: Lith. *jáudinti* (refl.) 'be(come) excited'; Skt. *ud-yódhati* 'well up (of water)' but also 'start up angrily' (cf. also Av. *yaozaiti* 'become agitated (water and emotions)' and OPer. *yaudatiy* 'get stirred up').

Furthermore, the only Tocharian occurrence with a complete context also points more toward 'worry, become agitated' than 'be sad'. In the *Šaḍḍanta-Jātaka* (A 66a1-b1)¹⁰) King Mahendrasena is concerned about the marriage of his daughter Bahdrā. Since her beauty and other virtues are known far and wide, he is afraid that whichever suitor he chooses as her husband, he will be in trouble: *šomāp lānt em kēprene cu, ālyek yāsluṣ tāke-ñi. šmeñc štwar-wāknā ratkāssāl [- - - - -] caṣ nāṣ krāso cu ṣurmaṣ pātsānkātsi tpār štānkam lymā āleyam śanwenyo. ppālskār, ckācar, mānt ya[l ñi?]* 'If I give you to one king, the others will be my enemies. They will come with their fourfold armies [...]. In order to think over this vexation on your account, I have sat high in the palace with my chin in my hand. Think, daughter, what am [I to do]?'—Bhādra, who has been born with the wish to be Brahmaddatta's wife, replies: *nātāk, tam ṣurmaṣ tu mar yutkatār . . . svayamparaṃ tsālporāṣ ṣñi mānwā pats yāmmār. mar tñi nātse kumnāṣ!* 'Lord, do not worry on that account . . . having attained *svayamvara* (self-choice), I will choose a husband according to my own judgment. No danger shall come to you!'—One fragmentary passage, A 111a1, seems to concern a similar situation: [*jtāmyo yutkos lmos ṣeṣ* 'Worried/upset by that, she (had) sat . . .'. While it is difficult to determine whether the sense is inchoative 'become upset' or durative 'worry', the general meaning of mental agitation is clear. Semantically, then, the derivation *yutk-* < **yut-sk(o)-* < **ǵeudh-* is sound.

In testing the validity of the proposed phonological rule *-t-sk-* > *-tk-*, we are essentially limited to the formation under discussion, since just such a sequence would occur nowhere else. However, one can easily conceive of other outcomes of *-t-sk-* whose existence would constitute counterevidence.

¹⁰) Textual citations preceded only by A or B refer to the respective editions of the Toeh. Sprachreste by Sieg and Siegling. Other abbreviations are those of Krause, Westtoch. Gram. 310–12.

One possibility is that the sequence would be preserved as *-tsk-*. There is evidence that the sequence *-t-s-* falls together in Tocharian with the affricate *ts* resulting from the palatalization of IE dental stops: A *lut-* 'drive away' forms a Cl. VIII (*-s-*) present, whose third plural active is *lutseñc* < **lut-s-onti*. Furthermore, there is no synchronic constraint in Tocharian barring a sequence *-tsk-*. Compare the forms of the verb AB *tsäk-* 'burn' (< **dheg^{wh}*) where syncope of the vowel produces *-tsk-*: A *tskalune*, B *tskemar*, *tsketsi*. Therefore we need to ask: are there any verb stems in *-tsk-* pointing to an underlying *-t-sk-*?

There is only one possible candidate: A *päl(t)sk-* 'think'. Is it from *-t-sk-*? The answer appears to be no. First of all, the appearance of *-tsk-* instead of *-sk-* is sporadic even in A, and the corresponding form in B is always *pälsk-*. Second, Tocharian shows many examples of epenthesis in a sequence of sonant plus *s*: B *kemtsa* perl. to *kem* 'earth', *keltsa* 3 sg. pret. to *käl-* 'endure', A *yämtsät* 3 sg. pret. mid. to *yäm-* 'do', *ältsät* and *älsät* 3 sg. pret. mid. to *äl-* 'keep at a distance'. The form *pältsk-* is thus easily explainable from *pälsk-*¹¹).

Etymologically, the verb has been derived from IE **bhel-* 'bright' (Van Windekens, Lex. 85). For the semantics compare first of all Skt. *sam-*, *ni-bhālayati* 'looks at', Grk. *παμφαλάω* 'look at with amazement', attributed to the same root. The connection of light and vision is widespread in IE: cf. Grk. *λέσσω* 'look at' to *λευκός* 'bright' and *ἀγάζω* 'see clearly' to *ἀγνή* 'brightness'. For the passage from 'perceive, see' to 'think' compare Skt. *cétati* 'perceives', *cétate* 'reflects' or Grk. *σκέπτομαι* 'look at; consider' > ModGrk. 'think'. One need not go so far for a comparison, however. Toch. AB shows *pälk-* 'grow bright' (< IE **bhelg-*; cf. Skt. *bhārgas-* 'brightness') and *pälk-* 'see' (suppletive to *läk-*). In view of the development *-ksk-* > *-sk-* to be discussed below, one should consider the possibility that *pälsk-* 'think' is from **pälk-sk-*. All three stages of semantic development would then be attested within Tocharian. In any case, there is no evidence to suggest that A *päl(t)sk-* should be derived from **pält-sk-*, and it does not constitute a counterexample to the proposed rule *-t-sk-* > *-tk-*.

Another possibility to be considered is that *-t-sk-* goes to *-sk-*. As intimated above, there is evidence for *-ksk-* > *-sk-*. Schneider,

¹¹ For the epenthesis after liquids compare the Hittite compound *pir-šahhanaš* spelled *pirzahhanaš* and the nom. sg. *hašterza* 'star' < **h₂(a)stēr +s*. See also the Luvian examples in Laroche, Dictionnaire de la langue louvite 133.

loc. cit., and Van Windekens, Lex. 141, have plausibly related AB *trāsk-* 'gnaw' to Grk. *τρώγω* 'idem', presupposing **trāk-sk-*. AB *pārsk-* 'be afraid' is undoubtedly to be related to Goth. *faurhts*, ON, OE, OHG *forht* 'afraid' via **pārsk-sk-* (Holthausen, IF 39 (1921) 65). We have already seen A *tāsk-* 'resemble' < **tāk-sk-*, cognate with Hitt. *dākki* 'matches, resembles'¹²). Van Windekens, Lex. 142, also derives A *trisk-* 'resound' from **trik-sk-*, comparing Grk. (σ) *τρίζω* 'shriek'. However, the use of the word in the texts (subjects 'music', 'heaven and earth', 'world') suggests a deep, resonant sound more than a shrill, piercing one. Furthermore, the Cl. I (athematic!) inflection raises considerable doubt as to whether this is a genuine *-sk-* verb at all. It may be a purely onomatopoeic creation. The three solid examples of *-ksk-* > *-sk-* mean that we should also consider whether any of the Tocharian *-sk-* verbs represent *-t-sk-*. A survey of the forms shows the following results:

- B *pāsk-* 'protect' < **pā-sk-* ~ Lat. *pascō*; cf. Hitt. *paḫš-* 'protect';
- B *nāsk-* 'bathe' < **snā-sk-*; cf. Skt. *snāti* etc.;
- AB *trāsk-* 'gnaw' < **trāk-sk-* < **trōg-sk-*; cf. Grk. *τρώγω*;
- AB *pārsk-* 'be afraid' < **pārsk-sk-* < **pṛk-sk-*; cf. Goth. *faurhts* etc.;
- AB *pälsk-* 'think' < **pälk-sk-* or **päl-sk-* (see above);
- A *tāsk-* 'resemble' < **tāk-sk-* > **dok-sk-*; cf. Hitt. *dākki* etc.;
- A *trisk-* 'resound' < **trik-sk-* < **(s)trig-sk-*; or onomatopoeic;
- AB *māsk-* 'be' < **mān-sk-* < **mṇ-sk-*; cf. Grk. *μένω*, Lat. *maneō* etc.;
- A *māsk-* 'switch, juggle' < **mā-sk-*; cf. Lith. *móti* 'wave the hand';
- B *misk-/mäsk-* 'exchange' < **mi-sk-*; cf. Skt. *māyate* etc.;
- B *kāsk-* 'scatter' < **kān-sk-* < **g^{wh}ṇ-sk-*; cf. Skt. (vi-) *han-* 'idem';
- B *wārsk-* 'smell' < **wṛ-sk-*; cf. A *war*, B *were* 'smell', OHG *wara neman* 'perceive';
- AB *musk-* 'be lost, disappear' < **mu-sk-*; cf. Lat. *moveō*, Skt. *mīvati* 'move, shove';
- B *yāsk-* 'beg for' < **yāk-sk-* < **iok-sk-*; cf. Skt. *yācati* 'beg';
- AB *wāsk-* 'move, stir' < **wāk-sk-* < **uogh-sk-*; cf. Goth. *gawagjan* 'shake' etc.;
- AB *mrosk-/mrausk-* 'become disgusted' < ?;
- AB *wnisk-/nusk-* 'press' < ?;
- B *ñāsk-* 'desire, demand' < ?;
- B *ārsk-* 'give up' < ?

The first seven verbs in the list require no further comment. The derivation of AB *māsk-* 'be' from **mṇ-sk()*o- goes back to

¹² Laroche, BSL 58 (1963) 65-71, relates Hitt. *dākki* to Hitt. *takš-* 'arrange, fit together, make conform' and derives both from IE **dek-*; cf. especially Grk. *δοκᾷ* 'it seems good' and Lat. *decet* 'it is proper'. For the assignment of Toch. *tāsk-* to this root see already Van Windekens, Lex. 137

Meillet, JA 17 (1911) 456. Van Brock, KZ 85 (1971) 280f., argues that the reflexes of IE **m* and **n* are distinct in Tocharian: while **m* gives *än* (A *känt*, B *kante* 'hundred' < **kmtóm*), non-initial **n* appears variously as Tocharian *ä*, *a* or *ā*, the specific reflex depending on both the IE and Tocharian accent. In making this claim, van Brock rejects the evidence of A *käntu*, B *kantwo* 'tongue' (< **dyghwā*) for **n* > *än*, based on the taboo deformation of the word. I do not see how the metathesis of the consonants could affect the presence or absence of the nasal element in the reflex of **n*. Furthermore, it is implausible that Tocharian would distinguish **m* before a dental (as in **kmtóm*) from **n*. I therefore prefer to retain **n* > *än* and posit **mṛ-sk-* > **mān-sk-* > *māsk-*, with loss of *n* before *s*, a banal change attested elsewhere in Tocharian: cf. A *wes* 'urine' (versus B *wemts* with epenthesis), B *lässi* inf. to *läms-* 'carry out, execute'.

Krause-Thomas treat B *māsk-* 'exchange' (Cl. IX) as the causative of *māsk-* 'be'. They likewise gloss A *māsk-* (Cl. VI) as 'exchange' and claim that it too was originally the causative of *māsk-* 'be'. The attempt to relate the two verbs in A faces a serious formal difficulty: what is the source of the *ā* in *māsk-*? Furthermore, while Tocharian causatives often show an idiomatic sense vis-à-vis the base verb, the development from 'cause to be' to 'exchange' is not obvious.

Finally, A *māsk-* does not really mean 'exchange' in the sense 'trade, barter': A 222a3-4 *opšlyäntu mäsāmsāt-ām want swase. mā cesmī (škam štām-kwreyunt prastā)p kāmšānt mā kāmšānt. mā kālymeya pakunt . . .*¹³ 'It turned around the seasons for them, the wind and rain. And their tree-fruits (?) were not produced by time, were not produced. They (were) not ripened in the proper way . . . ' *kwreyunt* is hapax, and the overall context obscure, but it is clear that the sense of *māsk-* is unfavorable: the permutation of the seasons upsets the natural order of things. — A 230a4-5 *skāyā arth pāssi rakentu nu māskant ñi māk wāknā* 'I tried to preserve the sense, but my words were jumbled in many ways'. Here again the connotation is pejorative: 'switch, juggle'. The words are confused against the speaker's will. The usage of the verb is thus compatible with derivation from IE **mā-*, which meant something like 'wave the hand' hence 'juggle, deceive'. Compare Lith. *móju móti* 'wave, signal with the hand', Latv. *mādit* 'idem', *māditīēs*

¹³ The restorations in parentheses are from the parallel text A 239a1.

'juggle', Russ. *ob-manūt* 'trick, deceive', perhaps Skt. *māyā* 'trick, illusion'. There is no need to force a connection with *māsk-* 'be'.

B *māsk-* (Cl. IX) does mean 'exchange, barter', as in the Buddha's criticism of monks' engaging in commerce: B 337a3 *k_use šamāne naumiye naumiyesa maskāṣṣām* 'What monk shall trade a jewel for a jewel?' The corresponding noun is *misko* 'trade', and the past participle is attested as *memisko*. B *māsk-/misk-* is thus formally ambiguous. It could be from original *māsk-*, with an *i* in some forms (cf. B *pilko* 'gaze' versus A *pālk* to *pālk-* 'see'; TE I § 15b2 has further examples). However, there are also examples of *i* > *ä* before dentals: A *lātkorāṣ* to *litk-* 'withdraw', A *wās*, B *wase* 'poison' < **yiso-*, etc. Therefore *misko* and *memisko* may preserve an original *misk-* outside the finite paradigm. This points to IE **mei-* 'exchange': Skt. *māyate* 'trades', Lat. *mūnus* 'office, duty', etc. (on these forms see Benveniste, Vocab. 1.96f.). So long as we do not control the precise conditioning for the changes *ä* > *i* and *i* > *ä*, no final decision is possible, but the semantics favor derivation from **mei-*.

B *kāsk-* is glossed 'scatter' and 'confuse' (the mind), meanings which do fit the occurrences in the texts: B 142a3 [*ḡwārāñcāṣṣa māṣce ra kākāntār* 'and a fist(ful) of sand is scattered'; B 555a2 [*ne]mc[e]k tu postām cem srukalyñe kaskan-me* 'Afterwards death will surely scatter them'; B 9b8 *cwi palsko kākātrā waipātār auntrā mak(atsi)* 'Whose mind is confused and begins to wander'. However, Sieg points out in the glossary of Toch. Sprachr. B that the verb almost always occurs with *waipātār* 'apart, separately'. Much of the semantic load of 'scatter' is thus carried by the adverb.

Furthermore, several occurrences point to physical violence as one of the semantic components of *kāsk-*: B 22b5 *laurisa eñcwaññe tarne rāskre tsopyem-ne. kaskaññitār-ne waipātār āṣce po lykaške* 'They pierced his skull violently with an iron . . . His head was scattered (apart) all to pieces'¹⁴; B 246b3 *pkaskar-n waipātār kektseñe* (scil. *kektseñ^a*) 'Scatter my body (apart)'; B 5a2 *šem kautāte koklentse waipātār pwentā kākānte* 'The axle of the wagon was split, and the spokes were hurled apart'.

It is also instructive to look at the Skt. equivalent listed by Sieg for *kāsk-*: *vi-kṣip-* 'fling apart, scatter (with violence)' then 'confuse, distract'. Sieg does not cite the specific passage on which he bases the equivalence, so one cannot be certain whether the Tocharian translators were aware of the literal meaning of *vi-kṣip-*, or

¹⁴ *lykaške* 'small' is here used predicatively: '(into) little (pieces)'.

merely of its figurative use. However, the presence of Pali *vik-khipati* 'scatters' and *khipati* 'throws' and Prakrit *vikkhivai* 'throws' (Turner, Comp. Dict. Indo-Aryan Lgs. sub *vikṣipati*) does argue that the physical sense of the verb survived into late Sanskrit. Thus the use of *kāsk-* for *vi-kṣip-* is not without significance in determining the precise meaning of the Tocharian verb.

In view of its overall usage, I propose to derive *kāsk-* from IE **g^{wh}en-* 'strike' via **g^{wh}h₂-sk-* and **k_{ān}-sk-*. For the treatment of *-usk-* compare *māsk-* 'be' discussed above; for initial *k* from a labiovelar in B compare *kām-* 'come' < **g^{wh}em-*. The sense 'scatter' is derived from the fixed collocation *waip₂tār kāsk-* 'smash, hurl apart' > 'scatter'. For the semantic development compare the usage of Skt. *vi-han-*, as often in the R̥gveda: R̥V 1.41.3 *vī durgā vī dvīṣaḥ purō ghnanti rājāna eṣām* 'The kings scatter the dangers and enmities before them'; R̥V 1.36.16 *ghanēva viṣvag vī jahy ārvāṇaḥ* 'As with a cudgel scatter the miserly in all directions'; R̥V 10.83.3 *vī jahi sātrūn* 'Scatter the enemies'.

It is also relevant to the present discussion that Vedic *han-* with various preverbs can mean 'hurl', as in the following example: R̥V 7.18.18 *tigmāṃ tāsmin nī jahi vājraṃ indra* 'Hurl your sharp bolt down upon him, oh Indra'. I therefore find plausible a development of *waip₂tār kāsk-* from 'smash/hurl apart' to 'scatter'. For the transfer of the meaning from *waip₂tār kāsk-* to *kāsk-* alone, compare Lith. *beriu/ber̃ti* 'strew' (< IE **bher-* 'bear'), where the sense 'strew' originated in compounds like *iš-ber̃ti* (see Hermann, *Studi Baltici* 3.65f.).

B *wāsk-* 'smell' is segmentable within Tocharian: compare A *wār-* 'smell' and the noun A *war*, B *were*. The IE root is **uer-* 'perceive': OHG *wara neman* 'perceive', OSax. *warōn* 'perceive; guard'. Latv. *vēru/vērt* 'look, notice'. For the semantics compare Fr. *sentir* 'perceive' in general and also specifically 'smell'.

AB *musk-* 'be lost, disappear' may be derived from IE **meu-* 'move, push away': Lat. *moveō*, Skt. *mīvati*. The original sense of *musk-* would have been 'be removed'. Derivation from the extended stem *muṣ-* of Skt. *muṣnāti* 'steals, robs' cannot be excluded.

Van Windekens, Lex. 165–66, derives B *yāsk-* 'beg for' from IE **iek-* 'speak', comparing for the sense Skt. *yācati* 'ask for, implore'. This would be another case of *-lask-* > *-sk-*: *yāsk-* < *yāk-sk-* < **iok-sk-*.

AB *wāsk-* is glossed as 'move' (intr.), but the meaning needs to be further specified by a look at the actual usage: A 419a2 *mā wāsānkāntār* 'They do not move/shake' (= *na kampyante*); A 86b2 *wāskat tkamñkāt* 'The earth(-god) moved'; A 59b1 *mā penu*

wāsklune ypāt kapsiññis 'Nor did he move his head' (lit. 'make a move of his head'); A 12b3 *māmtne spanyo kliso sne wāsklune kesār-śiśāk tāṣ* 'The maned lion shall be motionless as if asleep'. The abstract *wāsklune* is also accompanied by a negative in its two other occurrences: A 55a2, 218b3. The frequent negative collocation reflects the inchoative sense of the verb: '(be) set in motion, stir'.

The same meaning is visible in the occurrences of the B verb: B 224b2–3 *kelāsta lākle pratinmem wāskatai ma at-ate* 'You bore the suffering; you did not budge from your decision/resolve'; B 143b1 [*ma*]nta *ykemem wāskāntrā* 'He does not move from the spot'.

The frequent negative usage is also seen in the derivative *awāskatte*: B 229a3–4 *sākū lakles-āwaskācce wārsā ite karūmnse arāñc* 'a sympathetic heart full of water immovable by joy and sorrow'.

The meaning 'stir', especially 'be moved, shaken', argues against Van Windekens' derivation, Lex. 155, from IE **uegh-* 'convey, drive'. One should rather relate Toch. *wāsk-* to the Germanic family of Goth. *ga-wagjan* 'shake', OE *wecgan*, OHG *weggen* 'idem'. Compare further Lat. *vexāre* 'shake' and Homeric *γανήοχος* 'earth-shaking'. Meillet, Mél. Andler 249f., argues convincingly that these forms should be attributed to a separate root **uegh-* 'shake, set in motion'.

The remaining *-sk-* verbs are without convincing etymology. For our present purpose, the important fact is that our survey has turned up no compelling examples of *-sk-* verbs from *-t-sk-*.

As a final alternative to *-t-sk-* > *-tk-*, we should deal with the possibility that a sequence *-t-sk-* would have been broken up by vowel insertion, becoming *-täsk-*. This is in fact what happens in the productive causative formation of Cl. IX: B *yatāṣṣām* 'adorns' to *yāt-*, *lyutaskau* 'I drive away' to *lut-* (see already Jasanoff, op. cit. 114, note 8). But this does not preclude a different treatment *-t-sk-* > *-tk-* in older formations. Vowel insertion is also regular for Cl. IX presents from roots in final *n* and *k*, as opposed to the older loss of *n* and *k* before *-sk-* seen above. Compare B Cl. III *māskētār* < **mān-sk-* versus Cl. IX *enāskentār* < *en-* 'instruct, order' and Cl. V *prāskau* < **prok-sk-* versus Cl. IX *prānkāṣṣām* 'rejects' < *prānk-* 'restrain oneself'. Since we have found no examples of *-t-sk-* > *-tsk-* or *-sk-* and no old cases of *-t-sk-* > *-täsk-*, nothing stands in the way of our accepting Jasanoff's suggested rule *-t-sk-* > *-tk-*.

V

Armed with the rule *-t-sk- > -tk-*, we may look for other cases of *-tk-* intransitive middles from IE roots in a final dental, parallel to *yutk- < *yut-sk-*. One sure example is AB *litk-* 'withdraw, retreat', caus. 'remove' *< *lit-sk-*. In this case we are fortunate enough to have the base from which it is derived: A *lit-*, B *lit-/lait-* 'depart; pass (away)'. Krause-Thomas gloss *lit-* as 'herabfallen', but this interpretation needs to be revised.

Sieg, Toch. Sprachr. B, gives Skt. *cyu-* as the equivalent of *lait-*, undoubtedly on the basis of the *Karmavibhaṅga* fragments. In his detailed discussion of these texts, KZ 65 (1938) 1f., Sieg translates the verb as 'fall', but the basic meaning of Skt. *cyu-* is rather 'move' (intr.). In the present contexts it is construed with an ablative to express departure from a state of existence, as is its Tocharian equivalent, *lait-*: F K 3a4 *māksu no yāmor mākeuwa tne onolmi cmentrā nraiynthane istak entwe laitontrā* 'But what is the deed by which men here, if they are born in hell, immediately thereupon pass (from it)?' — F K 7a2 *mandra* (scil. *mant ra*) *lwāsamem pretenmem laitam sāmnamem wat laitam wtense tāmmaskentrā nnok yśāmna nākte(m)mem wat no laitam [nn]ok [y]nākte(m) tāmmaskentrā*¹⁵ 'So too (if) they pass from the animals and preta's. Or (if) they pass from men, they are born again among men. Or (if) they pass from the gods, they are (re)born among the gods.' Note that the rebirth is specifically in the same level of existence as that departed from. No notion of 'falling' to a lower existence is present. The verb is also used to mean 'depart' or 'fall away' in the sense of apostasy: B 333a5–6 *su mā spā šamāne māsketār. mā lālālu mā spā šakets so, lalaitau šamānemem māsketār* 'He is not a monk. He has made no effort, and having departed from the monks, he is no son of Sākya.'

In other cases either 'pass (away)' or 'fall' will fit the context: B 5a4 *mai nī tākam lailāne wrocc-asūnmem lamntuññe* 'Will I perhaps pass/fall from the great royal throne?'; A 58a6 *nāktāñ nākyās wimāntwās litatsy oki skitā[ntār]* 'The gods seem as it were to fall/pass from the divine palaces'; A 307b3 *ptāñkāt kāsṣiyāp kapsiññam nāktāssi litālune napenāssi ritālune lwāssi ā[lu]ne* 'In the body of the Buddha(-god) teacher is the passing/fall of the gods, the seeking of men and the . . . of animals.'

The most common form in B is *lait-* (Cl. IV), an o-grade form to A *lit-* (Cl. III). B also has one instance of *lit-*: B 282b7 *te šarntsa lita su hetubālike bhavāgrā postāññe yai* 'For that reason Hetubālika passed on and went at last to the highest existence'¹⁶. Since *bhavāgra* means 'the ultimate, highest existence'¹⁷, there can be no question here of 'falling' to a lower existence. AB *lit-/lait-* means 'depart, pass (away)' and represents IE **leit(h)-* 'go, pass away'; cf. Av. *raēθ-* 'die', Goth. *ga-leiþan* 'go', ON *lida* 'go; pass away'.

¹⁵ The readings and restorations are those of Sieg, KZ 65 (1938) 29.

¹⁶ *postāññe* may be instead an adjective modifying *bhavāgrā*: 'the last/ultimate bh.'.

¹⁷ Edgerton, op. cit. 407.

When *lit-* is properly defined, its connection with AB *litk-* is evident. Since the former is already a Cl. III inchoative middle, the addition of *-sk(o)-* in this case can hardly mark a change of aspect. The specific nuance of *litk-* seems to be one of active participation of the subject: *lit-* means 'pass away', *litk-* 'withdraw' (intentionally) from the world: A 385b3–4 *vairāgyanukula* · lit-kāluneyis *āyātosum* 'suited for renunciation'. Skt. *vairāgya* is 'disgust', for which a more literal Tocharian equivalent would be A *mrosk-/B mrausk-* 'feel disgust'. — A 247b2 *wināsam-ci šokyo āstram*¹⁸ *šokyo litkont mnu pāltśā[k]* 'I praise your very pure, very aloof/withdrawn sense and mind'; B 587a5 [*]pilko litku rano kāsṣiññe* 'The teacher's gaze (was) also averted'.

The causative equals the corresponding transitive 'remove, drive away': B 212b3–4 *ket ait yoktsi sāmthk-onwaññe pelaiykñeṣṣe lyaitkem teki* 'To whomever you give the dharma-nectar medicine to drink, they will drive away the sickness'; A 359,9 *nirbhāntamalo niramgano* · lyalyitku *warsa sne nākām* '(with) fault removed, without reproach'; A 260b3 [lyali]tkurāṣ *wars pāltśkās* 'having removed fault from the mind'.

Since the proper meaning of *litk-* is 'withdraw, separate oneself', we can add to the *-tk-* derivatives the adverb A *letāk, letkār* 'apart, separately' (the functional equivalent of B *waipite, waipitār* seen earlier): A 461a4 *prthag diśaḥ sphareta* · letkār *kāly[m]e* 'May you scatter in separate directions'; A 175b2 [na]ndenāṣṣ *aci letkār šamnasī yārka* 'Beginning with Nandena, separately the reverence of the monks[. . .]'. A 226a1 *letāk letāk wāknantyo* 'in separate ways'.

Van Windekens, Lex. 55–56, derives *letāk, letkār* from *lāt-k-* 'cut off' and both from an IE **u(e)led-*, comparing MHG *letzen* 'wound'. The *ā* of *lāt-k-* cannot be explained from IE **e*. Convincing examples of Toch. AB *e* from IE **e* are also lacking. In any case, without the verb both the semantics and the source of the *-k-* in the adverb become problematic. On the other hand, *letāk* would be a perfectly normal o-grade nominal derivative from *litk-* (like *protāk < prutk-* etc.), and the semantics are fine. The B form *letaka*, F II M 1b5, cited by Van Windekens, does not exist. See Filliozat, *Fragm. de textes koutch.* 90, and Sieg, KZ 72 (1955) 79.

Van Windekens, Lex. 57, and Lane, loc. cit., relate *litk-* to Goth. *aflinnan* 'retreat (from)', Grk. *λυάζομαι* 'duck, recoil' and Hesych. *λυαμαι · τρέπομαι*. Direct derivation from the existing *lit-* in Tocharian, which fits the sense, involves fewer assumptions. This does not preclude an ultimate connection, since **leit(h)-* is probably an extension of **lei-*.

¹⁸ Text has *āstrām*.

Another probable case of a *-tk-* verb from an IE root in a final dental is AB *wātk-* 'part (intr.); decide', caus. 'separate' (tr.) also 'command'. Van Windekens, Lex. 155 and 159, and Schneider, loc. cit., derive *wātk-* 'command' from IE **(h₂)uēd-* 'speak' (Skt. *vādati* 'idem', Lith. *vadinti* 'call') and all the rest of the forms from IE **uēdh-* 'strike' (Skt. *vadhāti* 'strike, destroy', Av. *vada-* 'wedge for splitting wood', Lith. *vedegà* 'kind of axe').

Separate derivation of the forms meaning 'command' from a verb of speaking is unnecessary. The semantic development does have parallels (cf. Eng. 'tell'), and the function of *-sk-* could have been iterative-durative (the Cl. VIII/IX inflection tells us nothing). On the other hand, there are several cases in Tocharian of the same verb having two semantically differentiated causatives: e.g. B Cl. III *triketär* 'errs'; Cl. VIII *triksām* 'misses (the mark)', Cl. IX (Pret. II) *traika* 'led into error'¹⁹. A shows a similar pattern, but the two causatives are formally identical in the present, both Cl. VIII. Admittedly, the Cl. IX (Pret. II) in such cases is usually the literal causative of the base verb, while Cl. VIII (Pret. III) shows an idiomatic sense. This distribution does not hold true for the causatives of *wātk-*, but note that the situation of the base verb is also different: it is already differentiated. The base verb *wātk-* means not only 'part, be separated', but also 'decide' (cf. Grm. *scheiden: entscheiden*). The two causative meanings correspond to these: 'separate' (tr.) and 'command' (< 'decree'). The development of 'decide' from 'cut' is typical of legal usage: thus both Grm. *entscheiden* and Lat. *dēcidere* (cf. Lat. *litēs secāre*, Fr. *trancher un différend* 'settle a difference'). In a legal context the passage from 'hand down a decision' to 'decree' is simple (cf. again Grm. *entscheiden*), whence 'order, command' (Grm. *bescheiden*). Since all the uses of the verb may be derived from one source, economy leads me to operate with a single root: *wātk-* 'part, be separated'²⁰.

The proposed derivation from IE **uēdh-* 'strike' raises both semantic and formal problems. As Lane notes, the sense of the verbal forms of **uēdh-* is 'strike' or 'destroy', not 'split'. The equation of Vedic *vādhriḥ* and Grk. *ἐδρῖς* 'castrated animal' points to an ancient IE husbandry term, but the operation could have been accomplished by a blow with a club as well as by severing with a blade. Av. *vada-* 'wedge for splitting wood' could be interpreted not as that which splits the wood, but as that which is struck by the heel of the axe or other instrument. While one can-

¹⁹ C. Watkins has reminded me that the pairing of 'miss (the mark)' and 'err' is an interesting semantic parallel to Grk. *ἀμαγράω* and Hitt. *waštāi-*. For the latter as 'miss' (a target) see Neu, StBot 18 (1974) 82.

²⁰ Derivation of *wātk-* 'command' from **(h₂)uēd-* (via **(h₂)uēd-sko-* and **utko-*) also faces the same phonological difficulty as *wātk-* 'part' from **uēdh-* (see below).

not exclude the possibility that **uēdh-* was used to mean 'split', this sense is nowhere directly attested.

On the formal side, both IE and Tocharian would lead us to expect a zero-grade formation with *-sk-* (cf. *litk-*, *yutk-*). While no zero-grade of Skt. *vadhāti* is attested, there is nothing about the shape of the root to prevent an **uēdh-sko-* (cf. *ucchāti* 'dawns' < *vas-* 'shine'). The next question is whether **ut-sko-* (via **utko-*) would yield *wātk-* in Tocharian. I know of no examples supporting such a development, and there is one solid counterexample: B *okso* 'ox' < **uk^wsō*. In both **ut(s)ko-* and **uk^wsō* we have an initial *u* followed by a consonant cluster and *ō* in the next syllable. A different treatment in the two cases is unlikely. The derivation of *wātk-* < **uēdh-* thus faces both semantic and phonological difficulties and depends on an unattested zero-grade of the root.

J. Jasanoff has suggested to me an alternative source: IE **uīdh-* 'divide'. Pokorny, IEW 1127, sets up a corresponding full grade **uēidh-*, but offers no good evidence for it. One does not in fact expect any such full grade, if the oft proposed derivation of **uīdh-* from **uī+dhē-* is correct. In support of this derivation, Hoffmann, Die Sprache 15 (1969) 1f., has shown that Vedic *vidh-* 'satisfy with an offering' < 'distribute, lay out an offering' is best taken from *vi+dhā-*. If the root cited as *vyadh-* 'pierce, bore through' belongs here at all, one may note that the Rigvedic forms are all built on *vidh-*. The full-grade *vyadh-* first appears in the Brahmanas, *vetsyati* only in the Epic language. The latter can hardly be used as evidence for an IE **uēidh-*. Lat. *dīvidō* (< **dis-ūi-dō*) may also be explained from **dhē-*, with the same present inflection as *abdō*, *condō*, etc.

For the Tocharian verb we start from **uī-dh-sk(o)-*, with loss of the root-final laryngeal as in Hitt. *zikkizzi* (/tsk-/), iterative to *dāi-* 'place, put'. For the passage of **witk-* to *wātk-* compare A *lātikorāš* < *litk-*, *rarātke* beside *raritke* and B *rāttānkem* < *ritk-*, and especially B *wase*, A *wās* 'poison' < **uīso-* (cf. Skt. *viṣā-* 'idem').

VI

Besides *yutk-*, *litk-* and *wātk-*, there are a few more *-tk-* verbs with good etymologies from IE roots ending in a dental. These are all Cl. VI/VII and will be discussed below. As noted earlier, many *-tk-* verbs cannot be plausibly derived from roots in a final dental and demand another explanation. I see basically three alternatives for explaining the productivity of the *-tk-* formation:

(1) *-tk(o)-* was somehow abstracted as a unitary suffix on the model of *-sk(o)-* and replaced it in the function of an inchoative marker.

(2) On the model of *lit-*: *litk-*, **yut-*: *yutk-*, *-k(o)-* was taken as an inchoative marker and spread at the expense of *-sk(o)-*. This explanation entails two further considerations:

(a) It predicts that *-k(o)-* could be added to stems other than those in final dental stops. That is, we should find other inchoative middle verbs with a final suffixal *k*.

(b) Even if we find these, we still need to explain the preponderance of *-tk-* verbs. This leads to:

(3) There existed a secondary source of dental stems to which either *-k(o)-* or *-sk(o)-* itself was added.

I had earlier favored the first alternative, but now find it unattractive for two reasons. First, if *-tk-* became the *productive* inchoative suffix, and it is to account for most of the *-tk-* verbs, it is strange that we find no trace of the process. Why do we have no pairs base verb: *-tk-* verb (e. g. **klu-*: *klutk-*, **päl-*: *plätäk-*)? This is, of course, an argumentum ex silentio. The lack of such forms may be due to pure chance. But it would be odd to still have one trace of the older moribund process (*lit-*: *litk-*) and none at all of the supposed later productive one.

A more serious problem is the motivation for the new morpheme cut which produced *-tk-*. Consider what would have been the original situation, when *-sko-* was still the productive inchoative marker:

	Base Verb	Inchoative
Stage I	<i>*wāk-</i> , <i>*mu-</i> , <i>*yut-</i> etc.	<i>wāsk-</i> , <i>musk-</i> , <i>yutk-</i> etc.

As long as the base verbs existed and the formation with *-sk-* remained productive, I see no motivation for abstracting *-tk-*. This only becomes possible if we assume that the functional difference between inchoative and base verb is weakened, and the base verbs are eliminated, with the inchoatives taking their place:

Stage II	<i>wāsk-</i> , <i>musk-</i> , <i>yutk-</i> etc.
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At this point we have a set of verbs in *-sk-* and another in *-tk-*, both forming a coherent semantic and functional group of intransitive middles, mostly but not exclusively inchoative (NB *māsk-* 'be'). The existence of *-sk-* in another function, that of a causative marker, *might* have had two effects: first, it could keep alive the

sense of *-sk-* as a unitary suffix, despite the lack of base verbs, leading to the same analysis for the parallel *-tk-*; second, the use of *-sk-* in another function could favor the spread of *-tk-* as the inchoative marker.

Whatever one thinks about the plausibility of this sort of influence, the above scenario forces us to assume that the formation of inchoatives was first productive, then unproductive (Stage II, where the base verbs were lost), then became productive again. I would not wish to claim that such an event is impossible, but the assumption of a sequence productivity: unproductivity: productivity just in order to explain the abstraction of *-tk-* is patently ad hoc.

Turning to the second alternative, which assumes the spread of *-k(o)-* as the inchoative marker, we first need to look for cases of this *-k(o)-* added to other than dental stems. While there are a couple of plausible examples, it must be said that none are really compelling. Meillet, JA 17 (1911) 461, suggests that B Cl. III *sruketär* 'die', A caus. only 'kill' is derived from IE **sreu-* 'flow' (cf. Skt. *srāvati*, Grk. *ῥέω*). For the sense compare the use of *srávati* to mean 'pass away, disappear' and Plato, Phed. *εἰ ῥέοι τὸ σῶμα καὶ ἀπολλύοιτο* 'if the body should waste away and perish'. Compare also Skt. *kṣarati* 'flows; disappears' versus Grk. *φθείρω* < **φθεῖρω* 'destroy'. Note that the inchoative function of *-k(o)-* would fit nicely with the change of sense: 'flow' is durative, but 'die' is inchoative (change of state).

AB *trik-* 'err' has a suitable meaning and the right inflection (Cl. III *trikatär/triketär*), and Pokorny, IEW 1071, indeed assigns it to the stem **trēi-/tri-* of **ter-* 'rub', implying a suffixed *-k-*. But this derivation remains no more than a guess in view of the unexplained semantics. Similarly AB *spärk-* 'pass away' (B Cl. III *spärketär*) is a likely candidate for suffixed *-k-*, but no convincing IE etymon is available.

B *pruk-* 'jump' (Cl. VI *pruknätär*) is surely to be derived ultimately from IE **preu-* 'jump'; cf. Skt. *práve* 'idem'. However, an extended stem with velar also exists in Germanic and Slavic: OE *frogga* 'frog', Russ. *prýgat'* 'jump, hop'. Similar is AB *mānk-* 'be lacking, inferior' (B Cl. III *mānketär*), which looks like MHG *manē* 'lack', Lith. *meĩkas* 'small'. Tocharian also has a noun: A *maĩk*, B *meĩki* 'lack'. The presence of velar stems elsewhere prevents the use of *pruk-* or *mānk-* as evidence for a suffixed *-k(o)-* in Tocharian.

In summary, there are a handful of possible cases of an inchoative suffix *-ko-* added to stems ending in other than a dental stop, but none of these examples *have* to be explained by this means. Furthermore, even if these verbs could be shown to be derived by a *-k(o)-*

suffix, they would be few compared to the number of *-tk-* verbs. If the latter cannot all be derived from roots in a final dental, and a unitary *-tk-* suffix cannot be easily motivated, what is the source of the remaining *-tk-* verbs?

VII

I have insisted above that many *-tk-* verbs do not have convincing etymologies from Indo-European roots in a final dental. In the narrow sense, however, the IE forms from which I have derived *yutk-*, *litk-* and *wātk-* are not simple roots either. As already suggested, **yidh-* is likely abstracted from **yi+dhē-*. IE **leit(h)-* 'depart, pass away' may be analyzed as **lei-t(h)-*, with the same **lei-* as in Goth. *af-linnan* 'retreat', plus a dental enlargement. Similarly, **ieu-dh-* 'move rapidly, become excited' stands beside **ieu-g* 'idem' (Av. *yaozaiti* 'become agitated', Goth. *jiukan* 'fight'), implying a base **ieu-*. In addition to the system of enlargements, which includes dental stops, there is also evidence for dental suffixes used to form thematic presents: Grk. *πλήθω* 'be full', *ἔσθω* 'eat' (**-dhe/o-*), Lat. *cūdō* 'strike' (**-de/o-*), Lat. *plectō* and OHG *flechtan* 'braid' (**-te/o-*). The pattern of attestation does not always permit us to distinguish an enlargement from a suffix (e.g. Gmc. **walt-* 'roll' > OHG *walzan*, etc.). Both represent productive processes, and many forms are certainly post-Indoeuropean creations. Greek favored **-dhe/o* (see Schwyzler, 1.702f.), while Baltic made wide use of a *d* element (< **d* or **dh*) to form not only ordinary presents but also a new class of factitives and causatives (see Stang, Vgl. Gramm. 325f.).

We may therefore hypothesize that Tocharian built new dental stems in a similar fashion, and that these are the basis of the remaining *-tk-* verbs²¹). Obviously, the nature of Tocharian precludes our determining the precise phonetic nature of the dental or whether we are dealing with enlargements, suffixes or both. In any case, it would be peculiar if Tocharian formed such dental stems only to further suffix them all by **-ske/o-*. Thus our hypothesis predicts that we should find some existing Tocharian verbs with a final suffixal *-t-*. Such cases do indeed exist.

The best example is AB *lut-* 'drive away, remove', which is analyzable within Tocharian. The base is seen in AB *lu-* 'send' and the adverb A *lo*, B *lau* 'away'. The root is that of Grk. *λόω* 'let go', Skt. *lunāti* 'cut off', etc. A *kot*, B *kaut-* 'split' is certainly

²¹) I am indebted to J. Schindler for first suggesting this possibility.

built on the base of A *ko-*, B *kau-* 'kill' (cf. Lith. *káuju/káuți* 'strike', OHG *houwan* 'chop, strike'). Lane, Lg 14 (1938) 26, compares *kaut-/kot-* with Lat. *cūdō* 'strike'. The comparison is undoubtedly correct, but the two verbs need not represent a common IE preform. A *kāršt*, B *kārst-* 'cut off' appears to contain the stem of Hitt. *karš-* 'cut' plus a dental element. Finally, A *nut-*, B *narut-* 'disappear' is to be related to Goth. *naus* 'corpse', Latv. *nāve* 'death' < **nāu-* 'be worn down, die'. One may note that in three of the four examples the *t* has been added to a root in final *-u*. While the reason for this preference is not clear, our hypothesis is supported by the fact that the *-tk-* verbs show a similar preponderance: a dozen end in either *-utk* or *-otk*, and I shall argue below that *nātk-* represents original **nud-ske/o-* as well.

I turn now to specific etymologies of the remaining *-tk-* verbs. I will cite dental stems from other languages where these exist, as in the case of *cūdō* ~ *kaut-*. However, many of these have the appearance of late creations, and they should be taken as representing a productive type rather than as evidence for an IE preform in each and every instance.

Sieg-Siegling-Schulze, Toch. Gramm. 479, compare A *snotk-* to B *snātk-* 'durchdringen', but Krause-Thomas, TE I and II, gloss A *snotk-* as 'müde, schlaff werden' and give *staukk-* as the B equivalent. A comparison of the textual occurrences upholds SSS: A 313a6 *tmāṣṣ Ānand sāsn[o]tku oki wsokone kākkeyo [oppal-yo]kās lālāṣkās asānyo smimām akmalyo nāktas[ś]i [pāttāñā]ktes akmlac lkāmā[m] trānkās*: 'Then, Anand, infused as it were with joy and delight, looking at the face of the Buddha-god of gods with smiling face, with tender, lotus-colored eyes, says:'; A 108a4 *ylāroneyo sāsnotku* 'shot through with frailty'; A 275b4 *ññi akappintwam sāsnotkw oki klo[pyo]* 'imbued as it were with suff[ering] in his own impurities'; B 204b1 *snātkuweṣ tañ pernesa indrinta slek kektseñe* 'Your senses and body are infused with dignity'; B 237a3 *po krentaunasa ite tatākau snāt[ku] perne peñāyai[sa]* 'Being full of all virtues, imbued with splendid dignity'; B 22b7 *snātkwa po pwā[ra ñ](i) kektseṃne nraiṣṣana* 'All the fires of hell have permeated my body'.

Not only the sense, but also the pattern of occurrence of *snātk-* and *snotk-* match perfectly: each occurs only in the pret. pple. and usually accompanied by an instrumental/perlative. Note also the use of *oki* 'as (if)', indicating perhaps a figurative usage.

Formally, B *snätk-* may be derived from **snutk-*. Compare A *papyätku* for *papyutku* and A *rtär*, B *ratre* 'red' < **rudhro-*. A *snotk* would then be to **snutk-* as *lotk-* to *lutk-*. The sense 'permeate, infuse' is easily derived from IE **sneu-* 'seep, drip'. Compare for the dental perhaps Gmc. **snut-* (ON *snýta*, OHG *snuzen* 'blow one's nose'). For the sense compare Grm. *einflößen* 'instil, infuse' < *einfließen* 'flow in'. The original meaning of *snätk-/snotk-* would have been 'seep (into), permeate' as attested in B 22b7. Then, as often with the participle of an intransitive verb, the location can be construed as the object and by passivization become the subject: cf. 'a well trodden path'. Hence the construction of the rest of the examples.

AB *plätk-* and A *plutk-* have been glossed variously as 'hervortreten' (TE II), 'come forth' (Lane), 's'élever, se mouvoir' (Van Windekens) and 'ausbreiten' (Schneider). Van Windekens, Lex. 97, compares Grk. *πάλλω* 'brandish', *πελεμίζω* 'set in motion'. Lane prefers *πελάζω*, *παλάθω* 'approach', *πλησίον* 'near' for reasons which are obscure. Schneider compares A *plätk-* to Skt. *prathati* 'spreads out' and then translates the single occurrence *spät paplät-kunt* = *saptotsadaḥ* as 'sieben ausgebreitete (Sitze)'. Such diversity calls for a look at the actual usage of the verb.

First of all, Skt. *saptotsadaḥ* is a technical term meaning 'seven swellings', i. e., seven swellings on the body, one of the thirty-two *lakṣaṇa*'s, or signs of sainthood (see Edgerton, Budd. Hybrid Skt. Dict. 128). The Tocharian *paplät-kunt* is therefore a substantivized preterite participle 'swollen (things)'. For A *plätk-*, then, we arrive at the meaning 'swell'. The occurrences of B *plätk-* are the following: B 183b3-5 *aksarapāripurir e[va . . .] aralñe iñcew rekine arth plyet-kemane ramt[. . . a]rth plätku lkātär* 'Syllable-filling(?) [. . .] in which word the sense arising as it were [. . .] the sense having arisen is seen'; F S 8b2 [*lñesa klokastamñmen ok-tmane pletkar-c ysāra* ' . . . your blood overflowed from eighty thousand pores'; B 231a2 *perneñesa plätkweṣne . . . wimāmne* 'in a palace overflowing with/abounding in splendor'; B 591b6 [*k]ete no pletkām* ²²⁾ *karu[m]* *aśamne asaṃkhyainta kalpanmaṣṣai lālyis-aškār mauka[m]* 'In whomever sympathy and wisdom develop, by exertion through the eons they will subside again' ²³⁾).

²²⁾ Text has *šetkām*.

²³⁾ One could also assign the phrase 'by exertion through the eons' to the relative clause.

We have a constellation 'swell; develop/arise; overflow'. The obvious IE root is **bhel(h₁)*:- 'swell; gush forth; bloom'. The stems *plyet-*, *plät-* may be derived regularly from **bhleh₁D-*, **bh₁h₁D-*: cf. respectively B *yente* 'wind' < **uēntos* and A *pält*, B *pilto* 'leaf' < **bh₁h₁t-*. The different position of the Fremdvokal in *plätk-* versus *pält* is conditioned by the following cluster. However, there seems to have been a good deal of uncertainty before a consonant cluster. Compare B *kälskälñ(e)* and *kläskälñe* (Krause, WG 237) and A *pläskune* to *pälk-* 'burn'. Therefore either *plätk-* or **pältk-* would have been possible. A dental enlargement of the same root appears in Grk. *παφάζω* 'bubble; splutter', Hesych. *φληδῶντα · ληροῦντα*. Greek shows a similar semantic development in *φληραφος*, -άω 'babble, chatter'; for the *n* compare *ἐκ-φληραι* 'gush forth' (Eur. fgm.) and *φληνώ* 'overflow'.

The use of A *plutk-* suggests connection with the same root: A 395a2 *mämtne nimittaññes brāmnñāśśi Śrāvasti riyā pre sām maṇḍāl plyocksā-m tmā[k . . . manā]rkām cam maṇḍlac kātse wānt-am* 'As before the city Śrāvasti of the n. brahmins the *maṇḍala* arose before them, then they led the boy up to the *maṇḍala*'. Since the *maṇḍala* is sanctified ground where the sacrifice of the boy is to take place, it hardly 'steps forth' to meet them in a literal sense. Rather it rises before them as they walk toward it. — A 356b4-5 *cam klopyno āśānikyāp bodhisatvāp puk [ma]rmañ protkar-ām [-]t-kanā klā. pontsām kapśiññac sotrac oki [ysā]r pārne paplüt-kār-ām. kakāl to[sā]m klopant wasām mosam* 'By that suffering all the veins of the venerable *Bodhisattva* were blocked . . . he fell to the ground. They caused his blood to flow out into his whole body as into a . . . He bore those sufferings for our sake'. The context makes the restoration of *[ysā]r* 'blood' virtually certain. However, since *ysār* is singular, it cannot be the subject of *paplüt-kār*. I therefore choose to take the latter as a causative (which is formally unobjectionable, cf. *paprutkār*), and make the subject either impersonal or *marmañ* 'veins'. The image is clear: when the veins are obstructed, the blood vessels burst, and the blood flows out unchecked into all parts of the body.

While there are cases of *ä > u* in Toch. A in the vicinity of *k* and before *m* (see TE I § 16.1), I know of no examples with preceding *p*. Therefore, rather than try to derive *plutk-* from *plätk-*, I prefer to take *plutk-* from the stem **bhleu-D-* to **bhel-*. For **bhleu-* compare Grk. *φλέ(F)ω* 'gush, teem', *φλώ* 'overflow'. For what it is worth, Greek even has a dental stem: *φλυδάω*. Since A *paplütku*

could be from *plutk-* (cf. *papyätku* for *papyutku*), A may have generalized one stem and B another. In any case the root derivation from **bhel(h₁)-* seems assured²⁴).

Schneider, IF 57 (1940) 200, translates A *wrätk-* as 'cook' and relates it to Lith. *vérdū*, *virti* 'cook, boil'. The word occurs just twice, both times with *šwāl* 'meat': A 399b3 [*škāk šk[ā]k šwāl wrätānkāš* '(S)he is still cooking the meat/The meat is still cooking'; Frg. (Gram.) *šwāl wrätānkāmām* 'cooking meat'. As noted by Pedersen and Lane, the equation is tempting not only for the sense but also because the Lith. verb points to a set root (*ir* < **ṛh₂*), which would be reflected in the Toch. *rā*. On the other hand, we have seen *CRHC* > *CāRC* in Tocharian (see above *plätk-* and *pält*, also B *kärweñe* 'stone' < **g^wṛh₂uon-jo-*; cf. Skt. *grāvan-* 'pressing stone'). Therefore we must reckon with a 'wrong vocalisation' of the laryngeal: **ṛD-sko-*. Given a sequence sonant-sonant-laryngeal, such an occurrence would not be startling. Lith. *vérdū* also shows a dental present, of course.

B *rätk-* 'rise' and A *ritk-/rätk-* (caus. only) 'cause to arise; raise' may be derived via **rit-* from the stem **(e)rei-* 'rise' seen in Goth. *reisan* 'rise', Skt. *rināti* 'lets go', Grk. *ōgīwō* 'stir, arouse'. Lane's doubts about *ritk-* as the original shape are unfounded. The change *ā* > *i* occurs primarily in B and then after labials. On the other hand, we have seen another case of *i* > *ā* before *t*: *lätkorāš* < *līt*-, where the *i* is certain.

The equation of A *lutk-/lotk-* and B *klutk-/klautk-* (with dissimilatory loss of *k-* in A) is supported by the perfect parallelism in the semantic relationship of weak and strong stems. The zero-grade verb (*k*)*lutk-* means 'turn' (intr.) = Skt. *vṛt-*. The *o*-grade base verb *lotk-/klautk-* means 'return; turn away; become' = Skt. *nī-vṛt-*. Interestingly, the formal causative of the zero-grade (*lutkās/klutkāššām*) means not 'turn' (tr.), but 'cause to become; accomplish'. That is, it functions as the causative of the *o*-grade base verb in one of its meanings. The formal causative of the *o*-grade base verb (*klautkāššām*) means 'turn away' (tr.). For examples of all these meanings see the entries in the glossary of Krause-Thomas, TE II.

The B verb *klautk-*, which shows Cl. IV inflection, enables us to recover the original system:

	A	B
III	<i>*lutk-</i>	<i>klutk-</i> (→VI) 'turn'
IV	<i>lotk-</i> (→VI)	<i>klautk-</i> 'turn (away); become; return'
Caus.	<i>lutk-</i>	<i>klutk-</i> 'cause to become'
—		<i>klautk-</i> 'turn away (tr.)'

In this instance, the distinction of zero-grade and *o*-grade was employed to differentiate the basic sense of 'turn' from various secondary uses. The assignment of the formal zero-grade causative to the strong-grade base verb may be secondary, replacing an older 'turn' (tr.). On the other hand, the latter may never have existed, and the two ablaut grades were from the

²⁴) A *pältäk*, B *pältakw* 'drop' (of liquid) is also surely from the same root, but on the basis of other forms in *-kw* (TE I § 110), one should segment after the *t*. The word thus has nothing directly to do with the *-tk-* verbs

first used to supply two different causatives to the strong-grade base verb. Recall that two causatives to one base verb are not uncommon.

Van Windekens' derivation from **g(e)leu-* (cf. Skt. *glauh* 'ball', Grk. *γλουτός* 'buttock') has little to recommend it semantically. Schneider's connection with Lat. *claudere* 'close' makes even less sense. The correct root etymology is that of Pedersen, Toch. 171: IE **k^wel-* 'turn' in the form **k^wleu-* seen in OIr. *cloid* 'turn back, defeat' and also intransitive 'turn (away)'²⁵. I would posit an intermediate **klut-*, whence **klut-sk(o)-*.

As already indicated by Lane, JAOS 85 (1965) 96, and Pedersen, Toch. 288, derivation of *pyutk-* 'occur, come about' from IE **bheuh₂-* 'grow, be(come)' (via **bhū-t-sko-*) seems unavoidable. I have no better explanation for the thoroughgoing palatalization in A than that offered by Lane, loc. cit. (borrowing from B). In B the palatalization is regular in the causative preterite (II), and there are other cases of its penetration into the present: cf. Cl. IX *lyutaskau* < *lut-* 'drive away'.

In the cases treated thus far, the stem up to the dental is attested, and in some instances we have seen dental enlargements elsewhere as well. Other verbs are more problematic. AB *sätk-* means 'spread' (intr.). Van Windekens' translation 's'établir' and his derivation from IE **sed-* 'sit' cannot be upheld. To cite one crucial example: A 312a2-3 *mrācāš šuñkā(š) swāñcenāñ ñä[ktas na]penäs kāksonť oki [puk] šāk källymentwañ satkar* 'The beams (of light) spread from his head and mouth in all ten directions, blinding as it were gods and men'. The semantically attractive IE root would be **seh₁-* 'sow, scatter' (esp. seed). The typical Tocharian use is figurative, referring to fame, gloom or the like (cf. the semantic development of Eng. 'broadcast'). The difficulty, of course, is Toch. *ā* < IE **ə*. The regular reflex of **ə* in Tocharian is *ā*: A *pācar*/B *pācer* 'father' < **pātēr*. I see no unforced way to explain *sätk-* instead of **sätk-* from the expected zero-grade **sət-sk(o)-*. There is some evidence for a stem **seh₁i-/sh₁i-*: Skt. *sāyaka-* 'missile', Lat. *saeculum* 'generation' (both 'the thing cast' in different senses). If a sequence **sh₁iD-* yielded Toch. **sīt-*, a **sīt-k-* could produce *sätk-*, just as *ritk-* > *rätk-*, but such a derivation is anything but certain.

Most investigators have found irresistible the resemblance of AB *prutk-* 'be stopped up, clogged' to Grm. *sperrēn* 'shut, block off', OCS *za-prēti* 'close', etc. Similarly, B *mlutk-* and A *mlusk-* 'escape' have been compared to Grk. *βλώσσω* 'go, come' < **melh₂-* 'come forth'. For the sense 'come forth' Pokorny cites Hesych. *ἐβλω· ἐφάνη* and other less than sure material. The meaning 'escape, come out' fits the only occurrences of the finite verb in Tocharian: B 375a5 *ce tallarñemēñ mlutkāmār* 'I shall escape from this

²⁵) Pedersen also cites Grk. *πολεύω* 'move about', but this is not easily derived directly from **k^wleu-* and is likely a denominative (see Chantraine, Diet. étym. sub *πέλωμαι*).

misery'. A 376a3 [*luneyäš mā mloskaträ* 'does not escape from ...'. A 120a5 *kuprene čas nätseyäš mloskam* 'If I escape from this peril.' The problem here is that neither IE **sper-* nor **melh_s-* shows any trace of a stem in *-eu-*.

The preterite participle *mlutku/mlucku* appears twice with *kuñcit* 'sesame seed' (F II W 7a6, 38b4). Here the meaning 'crushed, pressed' suggests itself, and we might venture derivation from the IE root **mel(h_s)-* 'grind, crush', specifically, from a **mleu-* (cf. Av. *mruta-* 'crushed, weak'). But this would mean setting up two roots in B on the basis of three (effectively two) attestations. We have already noticed the preponderance of stems in *-utk-*. Perhaps in *prutk-* and *mlutk-* not only the dental but also the *u* is a specifically Tocharian addition.

To recapitulate, at least six *-tk-* verbs may be plausibly derived via intermediate dental stems, probably created within Tocharian: *snotk-/snätk-*, *plätk-/plutk-*, *wrätk-*, *klutk-/klautk-*, *ritk-* and *pyutk-*. Less certain are *sätk-*, *prutk-* and *mlutk-*.

VIII

I have assumed in the preceding that *-sko-* was added to dental stems to form Cl. III intransitive middles. The majority of these verbs, however, are actually attested in Cl. VI/VII, suffixed by *-nä-*. The direction of derivation is clear, but the motivation for it is less so. As indicated earlier, the nasal presents show a mixture of active and middle, transitive and intransitive forms, in contrast to the uniformly intransitive middle Cl. III *-tk-* verbs. Since the formal difference between the two classes is the additional *-nä-*, it is one possible source of the functional difference.

There is some independent evidence that the nasal affix may have a transitivizing function. Compare Hitt. *ḫarkzi* 'perishes', *ḫarnikzi* 'destroys'; *ištarkzi* 'is sick', *ištarnikzi* 'makes sick'; also Skt. *rināti* 'lets go', Grk. *ὀρίω* 'stir, arouse' versus Goth. *reisan* 'rise'. One could suppose that *-nä-* was originally added to *-tk-* stems to form transitives corresponding to the Cl. III intransitive middles.

This hypothesis is not borne out by the actual distribution of the forms. First of all, there are no sure cases of an originally intransitive Cl. III verb becoming transitive when suffixed by *-nä-*, despite no lack of likely candidates: A *kätk-* 'arise' AB *kätk-* 'cross over', B *klutk-* 'turn', B *rätk-* 'arise', A *lotk-* 'turn away; become' all remain intransitive. Schneider, loc. cit., translates *wrätk-* 'cook' as transitive, but the context permits an intransitive reading as well (see above). There is a second even more serious difficulty. The five *-tk-* verbs with nasal presents which are transitive show

no signs of having ever had Cl. III inchoative middles: A *lätk-*, B *nätk-*, AB *putk-*, AB *rutk-*, and AB *kutk-*.

All five have reasonable etymologies from IE dental stems. The least imposing is that of A *lätk-* 'cut off', which is compared by Schneider to ON, OHG *latta* 'lath, board' and OIr. *slat* 'lath; rod' (all products of cutting) < **(s)lat-*. Of more interest is the comparison of AB *putk-* 'divide' with Lat. *putāre* 'prune' also 'calculate, think' (Schneider, loc. cit. and Jakobsohn, OLG (1934) 212). Toch. *putk-* is also used to mean 'discern; analyze': A 384a3-4 *māmtne rup okät loṭksä kärsnāš putānkāš, tämnekk asaṃ okät pādārthāntwaṃ šom šom märkampal okät loṭksä prajñūyis cāmpluneyā pältsāk kärsnāš putānkāš* 'Just as it knows and analyzes the (outward) form in eight ways, so through the power of reason the mind knows and analyzes in eight ways each and every (inner) quality in the eight categories.' This case is complicated by the question of how many meanings *putāre* has and to how many IE roots one should assign them. A meaning 'purify' is claimed for *putāre*, and sometimes the sense 'prune' is taken as a specialization of this meaning. But the evidence for 'purify' is weak. The examples are with 'fleece, wool' (*vellus lavata et putata*, Varro, *De re rustica* 2, 2, 18). One can imagine that preparing wool might include cutting or picking off various extraneous material. Thus one can operate with *putāre* 'cut' (esp. cut off unwanted matter like dead branches) and *putāre* 'calculate, think'. Pokorný, IEW 827, assigns the latter to **peu-* 'be rational; investigate' and compares Grk. *πυρρός* 'intelligent' and OCS *pytaŕj* 'interrogate'. But the specific meaning of 'interrogate' (in a legal context) is matched in Hitt. *punuš-* 'ask' (with person as object)²⁶. This specialization appears to be old. On the other hand, Lat. *putāre* 'cut' does not mean 'think' in the sense 'reflect', but rather 'affirm'. Benveniste, Vocab. 1. 153-54, explains the development from *putāre* 'prune' via the collocation *rationem putāre* 'verify a tally' by checking each item, beginning at the bottom and working upward, removing (cutting off) each item as one goes. Thus all the Latin uses can be derived from *putāre* 'cut, prune', which appears to be built on a stem **put-* to **pēu-* 'cut' (cf. Lith. *pjáuju/pjáuŕi* 'cut, harvest')²⁷.

Since the Latin development to 'think, affirm' is not via 'discern, analyze', the non-concrete use of *putk-* in Tocharian is an independent development. We therefore need not start with a **putā-* in Tocharian (from which a **putā-sk-* would surely have remained, see below). We may instead operate with **put-sk-*. The exact form of the suffix will be discussed presently.

AB *nätk-* is usually glossed as 'support', but J. Jasanoff, I-E Studies II, 111, has argued for 'push (away)' instead, deriving *nätk-* from **nud-sk-*; cf. Skt. *nudāti* 'pushes'. The occurrences of the verb in A are unusable, but those in B support the interpretation 'push (away); urge': B 33b2-3 *ompalskoñne päst prānkäššām nat-*

²⁶ For the connection of the Hittite and OCS forms see Ivanov, Obšč. sist. 169.

²⁷ The short *u* of *putāre* is also problematic if one wishes to derive it from **peuh_s-* 'purify' (Skt. *pūtā-*, Lat. *pūrus*).

knaṃ lauṃe aiṣamñe yarke peti ñastār 'He rejects meditation and thrusts away wisdom; he desires honor and flattery'; B 8b1 [palskal]ñ[e]nta pālskomem nātkallona 'Thoughts are to be thrust from the mind'; DA 1a1 yāmornṭa ñitkāre-ne spalk[āt]e-ne ramt arañce rīmem lantsi warttoś 'The deeds spurred him; his heart yearned as it were to go out of the city into the woods'; B 241b5 takarškñesa nātkausa kñce palamai-c, pālalyu. ce yāmorsā laikon-tār-ñ kāntwaṣṣana yāmornṭa '(I pray to you) with a faith prompted by the fact that I have praised you, oh praiseworthy one. By this deed may the deeds of my tongue be washed away.' — I admit to not understanding the point of B 325a1: klyiye ṣamānentse asām nātknāṃ '(If) a woman pushes away the chair of a monk'. However, 'support' makes no better sense.

There are also two nominal forms associated with this verb: (snai) netke and eñatketse (privative e+natk+etse; cf. wt-entse 'for a second time'). These are usually glossed 'without support'. I believe 'without urging, prompting' fits the occurrences better: B 248b2–3 štwēr škānmaṣṣ-āstreṃ keme[ntsa] yaitoṣ] koyntsa cāñ-crona wñasta tsālypelyents pelkiñā ṣāñ krentauna snai netke²⁸) 'With a mouth adorned with forty pure teeth, you uttered your dear virtues without urging for the sake of those who are to be saved'. That is, the Buddha revealed his wisdom voluntarily, spontaneously. HMR 2 sañkik raktsisa ṣam[ā]nentse eñatketse m[ā] ceppi[l]l[e] mā wsaṣṣalle 'A monk is not to step or sit on the mat belonging to the congregation without prompting' (i. e. 'without invitation').

For the passage of *nutk- to nātk- see above and TE I § 22.3.

Van Windekens, Lex. 105, derives AB rutk- 'remove' from IE *reud(h)- and compares ON reyta 'pluck', OE ā-ryddan 'steal, pillage', Grm. Reuter 'robber'. Lane rejects this in favor of a derivation from *rutó- to the stem *(e)reu- 'set in motion' (Grk. ὀρῶν 'rouse, set in motion', Hitt. arnumi '(re)move'). Once again only a survey of the actual use in the texts can settle the matter. The clearest cases involve the elimination of faults: A 300b4 kāntsāsamtrā mañk rutānkāmtrā triṣlune 'We confess our failing and eradicate our error'. A similar object must be supplied in A 371b4: [rutānkāmār deṣit ypāmār 'I eradicate [my . . .] and make confession.' — The subject of A 177a4 is not clear, but note the collocation of rutk- and tsmār 'root': [ṣām tsmārāṣ rutkāluneyam kalkaṣ-am '... it will go(?) in tearing loose/being torn loose from the root.' — A 63a6 also points to a violent connotation: rotkar pākār pāsinās 'They tore open the treasure houses/chests.' For the sense of pāsin = Skt. kośa- compare A 74a1 pāsināñ ypic ñemi 'treasure-chests/houses full of jewels'.

²⁸) The text has netka.

The only clear case in B is 5b4: ṣarye wassi rutkāto 'He removed his upper garment.'

There is also B 51a5: [ṣpo kālymint[sa] rotkā-ne. Sieg, Toch. Sprachr. B, translates 'Nach allen Richtungen bewegten sie ihn fort'. But according to the context of the Sanskrit parallel this makes no sense. Udānavarga VI 16–18 deals with the question of Anand: Is there a fragrance that goes both with and against the wind? The Buddha replies that there is: the fragrance of virtuous deeds. The entire passage is a general statement and should be in the present tense. Neither the past tense nor the third plural subject of rotkā fits at all. The Tocharian text must diverge radically from the original. Thus the object of rotkā is unknown, and the passage cannot be used as evidence for a meaning 'move away' in a spatial sense.

The collocation with 'root' in A 177a4 and the violent connotation of A 63a6 support Van Windekens' derivation from *reud(h)- (cf. OHG riuten, roden 'clear a wood', Av. raōdya- 'idem'). The transferred use 'eradicate, eliminate' is also understandable (cf. Eng. 'rid', Grm. aus-rotten). Finally, the use with clothing is easier to derive from 'strip off' than 'set in motion'. One does not find Hitt. arnu- or Grk. ὀρῶν used to mean 'take off' clothes.

B kutk- occurs twice with sārwece 'form of existence' as object: B 229a2 kutānkmane sārwecam ṣāñ yāmorsa cmelane 'filling out the forms of existence by one's own deed(s) in (one's) births'; B 45a6 po šutkām sarwecam 'We filled out all the forms of existence'.

The only usable occurrence in A is 333a8: [ṣṣ arthaṣṣāl kutko ñom kārsnāl 'The name must be known filled out with meaning'.

The meaning of kutk- is thus something like 'give substance to, realize', perhaps with an image of filling out a predetermined mold. Lane, loc. cit., chooses not to attempt an etymology, and the sparse attestation does bid caution. However, I would like to point out the concrete uses of derivatives of IE *gheu- 'pour' in several languages. Hittite shows a dental stem kutt- 'wall'. Greek employs χυτός alone or χυτή γαία to mean 'mound'. Armenian has jew 'form, figure'. Finally, both Greek and Latin use the root to refer to the casting of metal objects: e. g. Pliny, Nat. 34.83, Theodorus ipse se ex aere fudit 'Theodorus cast (a statue of) himself in bronze'. Both Lat. fundō and Germanic forms like Goth. giutan 'pour' attest to a dental stem *gheud- which could serve as the base of *kut-sk- 'cast in a mold' and more generally 'give form, substance to'.

The attested uses of kutk- are distinctly non-concrete, but the hapax in A kotkumim should also be mentioned in this context: A 316a3 štwār ñemiṣi štwār kotkumim kolā[m?] 'A ship (?) having four jewels and four . . .'. kotkumim is a fem. sg. nom. of a possessive adjective in -um, presupposing a noun *kotāk, which would be to kutk- like protāk to prutk-. Lane, loc. cit., translates 'having four

forms', but this seems a strangely vague companion for 'having four jewels'. One expects something much more concrete and specific. I wonder if we have here a trace of the original sense of *kutk-* 'cast in a mold'. The noun **kotäk* would mean something like 'ornament', i. e. something cast from a precious metal. Unhappily, the fragmentary material for *kutk-* leaves all of this in the realm of speculation.

IX

All six transitive *-tk-* verbs can be traced back to dental stems, but there is not a shred of evidence for an underlying intransitive middle with Cl. III inflection. I have thus far assumed that all the Cl. VI/VII *-tk-* verbs were from old Cl. III presents, partly because all the *-sk-* middles with which they are parallel have this history. But what is the distribution of the active *-sk-* presents whose etymologies were discussed earlier?

Present Conjugation Classes of Active *-sk-* Verbs

I	II	VI	VII	IX	XII
A <i>trisk-</i> I	B <i>pāsk-</i> T B <i>nāsk-</i> I AB <i>trāsk-</i> T B <i>ñāsk-</i> T B <i>anāsk-</i> I B <i>wināsk-</i> T B <i>satāsk-</i> I B <i>alāsk-</i> I	B <i>pālsk-</i> I A <i>māsk-</i> T	A <i>pālsk-</i> I A <i>wnisk-</i> T	B <i>wārsk-</i> T/I B <i>yāsk-</i> T B <i>nusk-</i> T	B <i>kāsk-</i> T

The anomaly of *trisk-* Cl. I has been treated above. The regular Cl. IX *yāsk-* 'beg for', *wārsk-* 'smell' and *nusk-* 'press' tell us nothing, but the Cl. II subjunctives of *yāsk-* and *nusk-* point to old Cl. II presents. The attested middle inflection of *yāsk-* may be interpreted as a genuine middle referring the action to the subject. B *kāsk-* 'scatter' in Cl. XII recalls B *wāsk-* 'stir, move'. For some reason these two verbs were transferred to the odd nasal formation in *-ññ-* rather than to the *-nā-* type of Cl. VI. Despite its Cl. V subjunctive (one would like Cl. II), the transitive meaning of *kāsk-* points to an old Cl. II present. The diagnostic value of the subjunctive for the original present indicative is not absolute anyway (*trāsk-* 'gnaw' Cl. II has a Cl. V subjunctive).

The set of *anāsk-* 'inhale', *alāsk-* 'be sick', *wināsk-* 'praise' and *satāsk-* 'exhale' has a special status. Krause-Thomas, TE I § 379, list them as Cl. IX, with the special feature that the *-sk-* goes through all categories, not just the present. But this means in effect that their inflection is virtually

like that of Cl. II (thematic) *-sk-* verbs, except for surface phonetic differences caused by the extra syllable in the stem. Compare pres. 3 pl. *nāskem* (*nāsk-* 'bathe' Cl. II) and pres. 1 pl. *wināskem* (Cl. IX); Ger. II *alāššülle* (Cl. IX) and Ger. I *naššalle* < **nāššülle* (Cl. II)²⁹; pret. 3 sg. *nāšša* (Cl. II) and *wināšša* (Cl. IX); pret. pple. *papāššu* (*pāsk-* 'protect' Cl. II) and *wewināššu* < **wewināššu* (Cl. IX). Krause cites a different treatment of *-sk-* before *t* in *pāštār* (Cl. II) versus *yamastār* (Cl. IX), but even this difference is not always consistently maintained: both *pāštsi* and *pāssi* are attested as the infinitive of *pāsk-*.

In the case of *anāsk-* we are definitely dealing with a *seṭ* root, and *anāsk-* may be derived directly from **ānāsk-* < **anā-ske/o-*; cf. Skt. *āniti* 'breathes', Lat. *animus*. There is also some evidence for a *seṭ* root in *wināsk-*: Skt. *vātd*, 'desired', *vanitā* 'winner' < IE **uēnh₂-* 'desire; win'. For the meaning 'praise-revere' in Tocharian compare Lat. *venerārī* 'revere' (Toch. B *winā-ññ-* Cl. XII 'take pleasure' reflects the sense 'desire'). We may take *wināsk-* from **wānāsk-* < **uēnā-ske/o-*. The outcome of the complex sequence sonant-sonant-laryngeal was probably influenced by other members of the group like *anāsk-* (cf. the discussion above on *wātłk-*). For the passage of *ā* to *i* after a labial compare B *pilko* 'look' versus A *pālk*, A *piltāk* 'drop' versus B *pāltakw* etc. (TE I § 15.2).

The chief reason for taking *wināsk-* etc. as Cl. IX is the corresponding A *winās-* Cl. VIII, but the latter may be secondary: the Cl. II forms in (C)VCāsk- were reinterpreted as Cl. IX (based on their disyllabic stems), then *winās-* was backformed according to the usual pattern (B IX = A VIII). Thus the *anāsk-* group belongs historically to Cl. II and shows the inherited thematic inflection of IE **-ske/o-* presents (B *pāsk-* 'protect' ~ Lat. *pāscō*). The intransitive sense of *anāsk-* (and presumably *alāsk-* and *satāsk-*) is a function of the root. Similarly, B *nāsk-* 'bathe' (intr.) Cl. II shows inherited thematic inflection and an intransitive meaning inherent in the root: IE **(s)nā-* 'swim; bathe'; cf. Skt. *snāti* 'bathes'. Note that all these intransitive Cl. II *-sk-* verbs show active inflection.

The crucial fact in the present context is that the Cl. II *-sk-* presents with ablaut of the thematic vowel and active inflection also show some transfer to the Cl. VI/VII nasal class. AB *pālsk-* 'think', whether from **pāl-sk-* or **pālk-sk-*, has an iterative-durative sense which is better derived from Cl. II than the stative-inchoatives of Cl. III/IV. There is also independent evidence for transfer from Cl. II to Cl. VI: B *mānts-* 'be sad' shows both Cl. II *memštār* and Cl. VI *mantsanatār*. Therefore not only AB *pālsk-* but also the transitives A *māsk-* 'switch', A *wnisk-* 'press' can be derived from older Cl. II iterative-duratives. There is no need to assume underlying Cl. III/IV intransitive middles which are supported neither by the meaning nor by any other evidence.

²⁹ Krause-Thomas list *alāššülle* as Ger. II (subj.) and *naššalle* as Ger. I (indic.) based on their usage, but formally pres. indic. and subj. fall together in both Cl. II and IX, so the formal equation is still valid.

By the same method we may now derive the five transitive *-tk-* verbs of Cl. VI/VII from old Cl. II active *-sk-* presents. In the case of *nātk-* 'push, urge' an iterative-durative makes reasonable sense. Both *lātk-* and *putk-* could be denominative: cf. perhaps Grk. *μεθύσσω* 'make drunk' < 'ply with wine' and OHG *wascan* 'wash' < 'treat with water', although neither of these is sure. I can offer no motivation for *rutk-* and *kutk-*, but given the rampant productivity of *-sk-* in Tocharian, one need not look for a strongly marked function in all cases. Several of those mentioned above where an iterative-durative sense is plausible may in fact have had no such nuance.

The addition of *-nā-* brings no detectable change in meaning. The old Cl. III middles remain intransitive (even when they take on active inflection), and the old Cl. II transitive and intransitive roots remain unchanged as well. The lack of change with *-nā-* is confirmed for other verbs besides the *-tk-/sk-* type. We have seen *mānts-* already. For a shift from Cl. III to Cl. VI compare B *mārselār*, but A *mārsneñc* 'forget'.

The admission that some Cl. VI *-tk-* verbs come from old Cl. II presents also takes care of the one exception to the *-tk-* pattern: Cl. II *kātk-* 'rejoice'. This verb no longer need be regarded as an embarrassing anomaly, but instead becomes another confirmation of the relationship between *-tk-* and *-sk-*. Schneider, loc. cit., relates *kātk-* 'rejoice' to MDutch *gaden* 'suit, please', OCS *u-goditi* 'please' < **ghodh-* 'suit, fit'. If one attenuates the Tocharian sense to 'take pleasure (in)', which is possible, one may compare Grm. *vergnügen* 'please, delight', based on *genug* 'enough'. Whether or not this is the correct etymology, an iterative-durative for 'rejoice' is suitable, and *-ck-* in A and *-cc-* in B may be the normal palatalization of *-tk-* before the final **-e-* of the stem.

X

The development of the *-sk-* verbs in Tocharian is thus twofold. Transitive and intransitive *-sk-* verbs with active inflection alone or both active and middle forms retain the inherited pattern with ablaut of the thematic vowel (Tocharian Cl. II). Deponent *-sk-* verbs with no contrast of active and middle forms show an inflection with persistent *o*-vocalism (Tocharian Cl. III). The history of this inflectional type cannot be treated here (see Jasanoff, op. cit. and forthcoming), but it may be noted that the formation is

not unique to Tocharian. Hittite shows middles such as 3 sg. *pašškatta* 'he goes' versus active 3 sg. *peškizzi* 'he gives' (Ivanov, Obšč. sist. 139f. and Watkins, Idg. Gramm. III/1, 72f.). Some Cl. III verbs may be traced to old root aorists: e. g. B *lyuketār* 'grows bright'; cf. the Vedic aorist participle *rucāná-* (see Jasanoff, op. cit. 111 for further examples). The development of these Cl. III presents from aorists is typologically comparable to that of the Sanskrit *tudāti* class (for the latter see Renou, Gramm. véd. § 326 and Mél. Vendryes, 309f.). It is to these 'aorist' presents that one should probably attribute the prevailing inchoative sense of the Cl. III *-sk-* (and *-tk-*) verbs. It is unlikely that *-sk-* itself was ever a productive 'inchoative marker' as speculated above in section VI.

The chief point I wish to make here is that the *-tk-* verbs shared the development of those in *-sk-*. When *-sk-*, either ablauting **-ške/o-* or deponent **-sko-*, was added to dental stems, the sequence *-t-sk-* yielded *-tk-*, giving rise to a superficially new stem class. The original distribution of the *-tk-* verbs in Cl. II and III parallel to those in *-sk-* was subsequently obscured by the partial transfer into the nasal classes VI/VII. This shift affected the *-tk-* verbs more than the *-sk-* verbs, but the basic parallelism is still visible, as the charts above show.

In conclusion, our investigation of the *-tk-* verbs has yielded the following results:

- (1) The distribution of the *-tk-* presents is not random, as previously alleged, but shows a concentration in Cl. III/IV (intransitive middles) and Cl. VI/VII (nasal presents).
- (2) The distribution of intransitive middles in *-sk-* is parallel to that of the *-tk-* verbs.
- (3) Stems in *-tk-* may be related to those in *-sk-* by assuming the addition of *-sk-* to dental stems and a pre-Tocharian rule *-t-sk- > -tk-*.
- (4) Some of the dental stems underlying *-tk-* verbs are attested elsewhere (*yutk-*, *litk-*, *wātk-* plus the transitive verbs below).
- (5) Others were built within Tocharian according to a productive pattern and then extended by *-sk-* as per (3): *snotk-/snātk-*, *plātk-/plutk-*, *wrātk-*, *klutk-/klautk-*, *ritk-*, *pyutk-*; perhaps *sātk-*, *prutk-*, *mlutk-*.
- (6) The formation of dental stems in Tocharian is independently attested by *lut-* versus *lu-*, *kot-/kaut-* versus *ko-/kau-* and *nut-/naut-*.

(7) Not all *-tk-* verbs fit the intransitive middle type, specifically *kātk-* 'rejoice' Cl. II and the transitives of Cl. VI/VII: *lātk-*, *putk-*, *nātk-*, *rutk-* and *kutk-*.

(8) The distribution of active *-sk-* verbs corresponds to this second group of *-tk-* verbs.

(9) Thus all *-tk-* verbs may be derived from *-sk-*: the intransitive middles from **-sko-* deponents (Toch. Cl. III), the remainder from regular **-ske/o-* presents (Toch. Cl. II).

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