

Passive-aggressive in Indo-European

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1. Outline

- Did PIE have a passive?
- What is a passive?
- Why are we doing this?
- Passives in Hittite, Tocharian, and “inner-IE”
- Conclusion

2. Did PIE have a passive?

2.1. General consensus: while PIE did not have a “formally distinct” passive construction, it did express “passive meaning” through middle morphology (Neu 1968b, Jamison 1979a, Kulikov and Lavidas 2013). There is, however, some confusion surrounding the productivity and age of this construction, centering around the following notions:

- The passive use of middle morphology was marginal or late
- The passive use of middle morphology was not a “real” passive because of the rarity of overt demoted agents in passive constructions
- Even if there was an overt demoted agent, the evidence of the daughter languages w.r.t. the expression of the demoted agent varies too much to allow for a PIE reconstruction

E.g. Neu 1968b: 6-7: “Formal gesehen kann das Passivum als einfache Umkehrung des Aktivums verstanden werden (...). Daß derartigen Umkehrungen aber nichts Ursprüngliches anhaftet, zeigt die Tatsache, daß z.B. im Altlateinischen eine Agensbezeichnung nur sehr selten zu finden ist.”
110: “Das Indogermanische hatte die passive Diathese noch nicht ausgebildet.”

... but as we know, frequency ≠ grammaticality (≠ productivity)

1. a. The ship was sunk (by captain Schettino/by the hurricane)
b. *The ship was sunk by itself

While passives like 1a) do not “frequently” occur with overt demoted agents/causers, all versions of 1a) are grammatical. 1b) shows that passives have an **implicit external argument**, even if it remains unexpressed. The grammaticality/ungrammaticality of 1a) vs. 1b) has nothing to do with the relative frequency of both.

- This test also serves to separate passives from anti-causatives, which are morphologically distinct in English, but not in the older IE languages (Schäfer 2008, Alexiadou & Anagnostopoulou 2009, Alexiadou & Doron 2012, Alexiadou et al. 2015, thus already Jankuhn 1969).

2. a. The ship sank (*by captain Schettino/*by the hurricane)
b. The ship sank by itself

Other diagnostics:

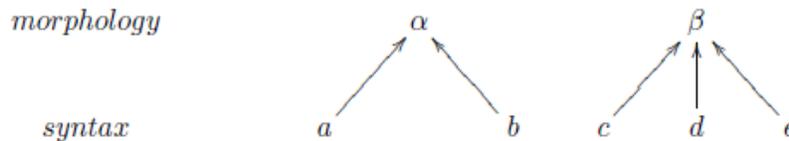
- Compatibility with agent-oriented adverbs (*intentionally, deliberately...*): passives yes, anti-causatives no
- Compatibility with control clauses: passives yes, anti-causatives no

We therefore do not believe that the frequency of demoted agents is relevant to the reconstruction of the passive (except in the obvious way in which it makes reconstruction difficult).¹

2.2. Another problematic notion: the idea that a “real” passive needs designated passive morphology (e.g., the Vedic *-yá*-passive, the passive aorist in Vedic and Greek, the periphrastic *ant*-passive of Hittite, etc.).

- But passives are morphologically syncretic with other (intransitive or detransitivized) constructions cross-linguistically, including the well-known passive/anti-causative and passive/reflexive syncretism (cp. Haspelmath 1990), cp. Fig. 1 (from Grestenberger 2014)

Fig. 1: “Voice syncretism”: different syntactic contexts are mapped to the same morphological exponent (e.g.: c = reflexive, d = anticausative, e = passive; β = non-active/“middle” morphology)



3. What is a passive?

3.1. Typological/comparative surveys: Shibatani 1988, Fox and Hopper 1994, Abraham and Leisiö 2006, Alexiadou and Schäfer 2013, Kiparsky 2013.

3.2. Some traditional lines of research concerning passives:

- The passive promotes the internal argument of a transitive active verb to subject position; agent-demotion is a by-product of this promotion (Perlmutter and Postal 1984, Comrie 1988)
- The passive demotes the external argument/“absorbs” accusative case; object-promotion is a by-product (Baker 1988, Baker et al. 1989)
- The passive is built on (contains the structure of) the corresponding active (Collins 2005, Bruening 2013) and/or selects transitive input structures
- (passive) Voice heads vary w.r.t. selectional properties in different languages (Alexiadou and Doron 2012, Alexiadou et al. 2015)

3.3. The last point is relevant to “voice syncretism”: languages differ in whether their passives are compatible with transitive input structures.

¹ We are in good company concerning the question of frequency: “Studying the relative frequency [, e.g.,] of the two types of clause (transitive/intransitive) in, e.g., the Vedic corpus, simply tells us how frequently the authors of the relevant texts wanted to express which kind of meaning. This is on the face of it no more ‘syntax’ than is a study of how frequently the authors wanted to express the meaning ‘duck’.” (Hale 2016)

- In some languages, only transitive verbs passivize (= the input to passives is the functional projection Voice that has merged an external argument); “high passive”, e.g., German, English, Modern Standard Arabic),
- Other languages only have a lower (non-active or “middle”) Voice head that is incompatible with an external argument and typically combines different non-active interpretations (anticausative, reflexive, passive), e.g., Modern Greek, Palestinian Arabic (Bruening 2013, Alexiadou & Doron 2012, Alexiadou 2013, Alexiadou, Anagnostopoulou & Schäfer 2015).²

3.4. Given that most of the older IE languages have “syncretic” voice morphology (= “middle”), it’s likely that they have “low” rather than “high” passives.

3.5. Canonical functions of “low” voice heads/non-active morphology (Alexiadou & Doron 2012, Zombolou & Alexiadou 2014, Grestenberger 2014, ex. from Grestenberger 2016)

3.5.1. Anti-causatives

- Sanskrit: *várdhate* ‘grows’ (itr.): *várdhati* ‘grows sth’ (tr.), *vártate* ‘turns’ (itr.): *vártati* ‘turns’ (tr.), etc.
- Greek: ἐρεύθομαι ‘become red’: ἐρεύθω ‘make red’, αἴθομαι ‘burn’ (itr.): αἴθω ‘burn something’, etc.

3.5.2. Reflexives and reciprocals

- Hittite: 3pl.medio-pass. *zahhandā* ‘they hit each other’: 3pl.act. *zahanzi* ‘they hit sth.’
- Sanskrit: *śumbhāti* ‘beautifies, makes beautiful’: *śumbhate* ‘makes oneself beautiful’; with differing stem-forming morphology: *pávate* ‘washes oneself’: *punāti* ‘washes sth.’
- Greek: λούομαι ‘wash myself’: λούω ‘wash sth.’

3.5.3. Indirect reflexives and self-benefactives

- Sanskrit: *yájate* ‘sacrifices sth. for one’s own benefit’: *yájati* ‘sacrifices sth.’, *bhárate* ‘takes/carries sth. for oneself’: *bhárati* ‘carries’
- Greek: φέρομαι ‘carry for myself; win’: φέρω ‘carry’, τίθεμαι ‘make, place something for myself’: τίθημι ‘put, place’, etc.

3.5.4. Passives

- Hittite: *halziya(ri)* ‘is called’: *halzāi* ‘calls’
- Sanskrit: *stáve* ‘is (being) praised’: *stáuti* ‘praises’
- Greek: βάλλομαι ‘am (being) hit’: βάλλω ‘hit’, ῥήγνυμαι ‘am (being) broken’ (also anticaus. ‘break’): ῥήγνυμι ‘break sth.’, etc.
- Latin: *amor* ‘am (being) loved’: *amō* ‘love’, *capior* ‘am (being) seized’: *capiō* ‘seize’, etc.

3.6. Passive is one of the canonical contexts for non-active morphology in “low” Voice languages, but it is more restricted in its distribution than in “high” Voice languages like English.

² The two structures are illustrated here based on Alexiadou 2013:

a) [_{PassP} Passive [_{VoiceP} Voice [_{vP} v [Root]]]]
b) [_{VoiceP-Non-Act} VoiceNon-Act [_{vP} v [Root]]]

- Alexiadou & Doron (2012) argue that this is because passives in these languages are derived from *roots* rather than transitive verbs. W.r.t. demoted agents, they note:

“According to Zombolou (2004) and Alexiadou et al. (2006) only the following verb classes accept an agentive ‘by’-phrase in Greek but disallow a causer PP and ‘by itself’ (...): Verbs of change of possession (e.g. *dino* ‘give’), verbs of transfer of message (e.g. *leo* ‘tell’), ‘take’ verbs, verbs of instrument of communication (e.g. *tragudo* ‘sign’), ‘remove’ verbs (e.g. *diohno* ‘expel’), and murder and poison verbs (e.g. *dolofono* ‘murder’).”

3.7. It seems that in “low Voice” languages, only prototypically agentive verbs passivize—“aggressive passives”.³

4. Why are we doing this?

4.1. Despite the long tradition of research on the synchronic variation w.r.t. passive and passive-like constructions, the *reconstruction* of the passive in PIE is an open question

4.2. We agree with the findings of Jamison 1979ab concerning the expression of agency in passives, but note her reluctance when it comes to reconstructing (finite) passive constructions:

“Since all the ancient IE languages have a way to express agency, we might expect to be able to reconstruct a formal phrase type for PIE as well, even in the absence of precise equations. (...) In the absence of both word-for-word equations and equations of formal types, even the existence of the category of agency with the finite passive has only been tentatively posited for PIE.” (Jamison 1979a: 217)

4.3. This raises interesting questions concerning syntactic reconstruction and the reconstruction of verbal argument structure & alternations:

- What counts as the syntactic equivalent of a word equation?
- How many do we need to be certain that a particular syntactic construction was of PIE age? (note that there aren’t too many exact equations for the self-benefactive use of middle/non-active morphology either, which is generally reconstructed for PIE)
- How does argument structure/argument licensing change over time?

4.4. These problems (and more) have been addressed by Hale 2007, Van Gelderen 2011, 2014, Walkden 2014. Walkden points out that what is relevant for syntactic reconstruction is whether lexical items with similar syntactic features (e.g., verbs with a [NonAct] feature) occur in similar syntactic environments in the relevant daughter languages: “Evidence, then, can be adduced from distributional patterns of the lexical items in question, i.e., the syntactic environments in which they can be found in the daughter languages. As with phonology, surface formal similarity is not enough, although it is a useful criterion.” (Walkden 2014: 59)

4.5. We attempt to show that this kind of morphosyntactic reconstruction/reconstruction of argument structure alternations is possible even in the “absence of precise equations”. Syntactic equations for our purposes (voice alternations) are:

³ Heidi Harley beat us to this great title in her 2014 talk *Aggressive Passives: Voice and implicit arguments in Hiaki* (NELS 45).

- Non-cognate verbs with the same argument structure iff they “occur in similar syntactic environments in the relevant daughter languages” (see Walkden)
- Cognate verbs with the same argument structure if they “occur in similar syntactic environments in the relevant daughter languages”, but have different (*einzelsprachlich* productive) stem-forming suffixes
- Prepositional and non-prepositional demoted agents iff the case marking on the agent NP diachronically corresponds (independent of whether there is a preposition)

We apply these criteria in the next sections.

5. Passives in Hittite

5.1. Properties

- Passive use of “medio-passive”/non-active inflection
- Periphrastic passive (*ant*-participle + finite BE-auxiliary)
- Demoted agent: instrumental or ablative (Neu 1968b, Hoffner & Melchert 2008), usually *IŠTU* “from, by”

- (1) *karš-* ‘cut’: *karšzi* ‘cuts’
 KBo 47.239 III 14-15:
 nu-war-at-kan
 prtcl.-quot.-3pl-prtcl.
 “Their feet were cut off.”

GÌR.MEŠ	arḥa	karšantat
foot.pl	off	cut.3pl.pret.mid

5.2. With agents (ex. from Neu 1968b):

- (2) *ḥull(e)-* ‘defeat’:
 KUB XVII 28 IV 45:
 mān ERÍN^{MEŠ ḤI.A} IŠTU LÚKÚR ḥullantari
 when troop.pl by enemy defeat.3pl.pres.mid
 “When the troops are defeated by the enemy.”

- (3) *zāḥ-/zaḥḥ-* ‘hit, beat’
 KUB V 1 IV 72:
 KARAS^{ḤI.A}-kan TA ^DU UL zaḥtari
 army-prtcl. abl. storm god NEG beat.3sg.pres.mid
 “The army is not (going to be) beaten by the enemy.”

5.3 Causer/inanimate agent:

- (4) *damašš-* ‘oppress’: *damašzi* ‘oppresses’
 KUB 14.12 obv. 3:
 nu-wa KUR ^{URU}Ḥatti ḥinganaz arumma mekki
 prtcl.-prtcl. land Ḥatti plague.abl.sg highly much.ADV
tamaštat
 oppress.3sg.pret.mid
 “And the land Ḥatti was very much oppressed by the plague.”

- (5) *warnu-* ‘burn sth.’: *warnuzzi* ‘burns sth.’
 KUB 8.25 i 3, 9:
 KUR-yaš^{A.ŠA} kuraš **IZI-it** **warnutari**
 land.gen.sg. field.nom fire.intr. burn.3sg.pres.mid
 “The field of the land is/will be burned by/with fire”

6. Passives in Tocharian

6.1 Properties

- Passive use of “middle”/non-active morphology
- Case of the demoted agent: perlativ (in instrumental use); in TA: instrumental for inanimate (causers)
- Passive use of present middle participle in TB *-mane* TA *-mām*

- (6) TB *kārst* ‘cut’: 3sg.prs.act *karsnaṃ* ‘cuts’
 CEToM THT 3 b5:
 mant śāmnāṃts śaul kos śaiṃ ksa kaunaṃts
 thus man.gen.pl life.nom.sg as much as live.3sg.prs.act any day.gen.pl
 meṅaṃts kätkorne **kārsnātr** attsaik postām
 month.gen.pl passing.loc.sg cut.3sg.prs.mid completely afterwards
 “Thus [is] the life of men, however many live, in the passing of days and months it will completely be cut off afterwards.”

- (7) TA *klyos* ‘hear’: 3pl.prs.act *klyosāmseñc* ‘they hear’
 CEToM A 258 a5:
 sām wašem poñcāmtri wältseṃ ārkisoṣṣaṃ **klyosnāštār**
 as voice.nom.sg all three-thousand-fold world.loc.sg. 3sg.prs.mid
 “As the voice is heard all over the three-thousand-fold world...”

- (8) TB *yām* ‘do’: 3sg.prs.act *yamaṣṣām* ‘does’
 CEToM THT 305 a7:
 mā yamašälle **yamasträ** nano⁴
 NEG do.gen.nom.sg. do.3sg.prs.mid in turn
 “The thing not to be done is done in turn.”

6.2 Animate agent in perlativ:⁵

⁴ = Uv., 4.19b: *akṛtyam kriyate punaḥ*.

⁵ For the instrumental usage of the perlativ cp.:

- (1) TB CEToM IOL Toch 247 a5: antapi kenīsa kem teksa
 both knee.perl.dual earth.obl.sg touch.3.sg.prt.act
 “With both knees he touched the earth.”

- (2) TA CEToM A 229 b7: (...) ārsi kāntwā ritwāssi kanašäl
 Toch. A tongue.perl.sg. compose.inf. tune.comit.sg.
 “...to compose it by means of Tocharian A accompanied by a tune.”

- (9) TB *lākā* ‘see’: 3sg.prs.act *lkāskem* ‘sees’
 CEToM THT 590 b2:
 mākte **lkāntār** ka **ālyaucesa** wnołmi cai
 how see.3pl.sub.mid indeed another.perl.pl being.nom.pl this.nom.pl
 “How indeed are these beings seen by each other?”

- (10) TA *yārtā* ‘drag’: act. n/a
 CEToM A 55 b2:
kuṣṭ-lwākā tā =śī **yārtār**
 predator.perl.pl where question-particle drag.3sg.prs.mid
 “Where is he dragged by the predators?”

6.3 Causer/inanimate agent in instrumental (only in TA):

- (11) TA *tsāk* ‘burn’: 3sg.prs.act *tskāṣ* ‘burns sth.’; *sikā* ‘overflow’: n/a
 CEToM A 14 b1-2:
 kuc ne tām mā **poryo** **tskāmsamtār** mā
 that this NEG fire.instr.sg burn.3sg.prs.mid NEG

wāryo **sikamtār** mā lāñcsā pārtsi yāteñc
 water.instr.sg overflow.3sg.prs.mid NEG king.perl.pl take.inf able.3pl.sub.act

 mā penu lyāksā kārñātsi yāteñc
 NEG further thief.perl.pl steal.inf able.3pl.sub.act
 “That it is not burned by fire, not flooded away by water, [that] they cannot be taken away by kings [and that] further they cannot be stolen by thieves.”

7. Passives in “inner-IE”

7.1. Vedic

7.1.1. Properties

- “derivational passive”: -yá-passive
- “Passive aorist”; “statives” (= dentalless middles, not all pass.)
- *ta*-“passives”
- “**Inflectional passives**”: passive function of non-active (“middle”) morphology (skeptical: Gonda 1979, Kulikov and Lavidas 2013)

Jamison 1979a: 3 (on the Rigveda): “There are at least 200 cases in which an instrumental is used with a passive clearly to express agency. About 25 of these are with -yá- passives, 10-15 with aor. passives, and about 20 with passively employed formal middles. The remainder, i.e., the majority, are found with past participles.”

- (12a) *stu* ‘praise’
 RV 10.65.4d:
 devā **stavante** mānuśāya sūrāyah
 god.nom.pl praise.3pl.prs.mid Manu-kind.dat.sg patron.nom.pl
 “... the gods are praised as patrons to the race of Manu.”

Cp. active in

(12b) RV 8.3.8c-d:

adyā	tām	asya	mahimānam	āyávo	ánu	ṣṭuvanti
today	that.acc.sg	his	greatness.acc.sg	Āyu.nom.pl	prvb	praise.3pl.prs.act

“Today the Āyus praise his greatness (...).”

7.1.2 Agent: instrumental case

(13) *stu* ‘praise’

RV 1.77.5a-b

ev<á>	<a>gnír	gótamebhir (...)	astoṣṭa	jātavedāḥ
thus	Agni.nom.sg	Gotama.instr.pl	praise.3sg.aor.mid.	Jātaveda.nom.pl

“Thus has Agni, (...) the Jātavedas, been praised by the Gotamas, (...)”

(14) *śru* ‘hear’

RV 3.30.16

sám	ghóṣaḥ	śṛṇve	<a> vamáir	amítair
prvb	cry.nom.sg	3sg.prs.mid.	close.instr.sg.	foe.instr.sg.

“All around your battle-cry is heard by the closest foes.”

(15) *dhā* ‘place, put’

RV 6.20.2b:

<a>sur<í>yam **devébhīr dhāyi** víśvam
lordly.power gods.instr establish.3sg.aor.pass all
“All lordly power was established [for you] by the gods”

- Since Vedic has so many “characterized” passives (i.e., innovative passive morphology that is not syncretic with reflexive, self-benefactive, etc.), it is not the best language for showing that non-active morphology alone could be used for passivization.
- We’ve therefore included passives which diachronically go back to PIE middle endings (the “stative”, the passive aorist)

7.2. Greek

7.2.1 Properties

- Derivational passive: “Passive aorist” (-η-, -θη-), also found in intransitive/anticausative contexts
- Inflectional passive/non-active morphology
- Inflectional passives are rarely found with demoted agents, but there are some cases already in Homer (Schwyzer 1943, Jankuhn 1969, Allan 2003)
- Variation in the use of prepositions to express the demoted agent (Jankuhn 1969, Luraghi 1986, George 2005): ὑπό + gen. ‘from, under’, ἀπό + gen. ‘from’, ἐκ + gen. ‘out of’, παρά + gen. ‘from’, πρὸς + gen., dat. ‘from, by’, etc. Partially conditioned by thematic role
- Classical Greek generalizes ὑπό (but Modern Greek: ἀπό)

7.2.2 Examples

- (16) δάμνημι ‘subdue, tame’

Homer, Il. 11.309:

ὧς ἄρα πικνὰ καρήαθ’ ὑφ’ Ἑκτορι δάμνατο
 thus prtcl. many head.nom.pl. by Hector.dat.sg subdue.3sg.ipf.mid

λαῶν

man.gen.pl

“Thus many heads of the men were subdued by Hector”

- (17) πίμπλημι ‘fill’

Homer, Il. 21.15f.:

ὧς ὑπ’ Ἀχιλλῆος Ξάνθου βαθυδιήεντος πλήτο
 Thus by Achilles.gen.sg Xanthos.gen.sg deep-eddyng.gen.sg fill.3sg.aor.mid

ῥόος κελάδων ἐπιμιξ ἵππων τε καὶ ἀνδρῶν.
 stream.nom.sg sounding.nom.sg mixedly horse.gen.pl both and man.gen.pl

“Thus the sounding waters of the deep-eddyng Xanthos were filled by Achilles with/of a mix of horses and men.”⁶

- (18) ποιέω ‘make, do’

Homer, Il. 6.56–7 (Agamemnon to Menelaos):

ἦ σοὶ ἄριστα πεποιήται κατὰ οἶκον πρὸς Τρώων
 prtcl. you.dat best.nom.pl. do.perf.3sg.mid towards house.acc.sg from/by Trojan.gen.pl

“(So) were the best things done to you in your house by the Trojans?”

7.2.3 No preposition (causer, cp. Vedic): βάλλω ‘throw, hit’:

- (19) Homer, Il. 11.674-5:

ὁ δ’ ἀμύνων ἦσι βόεσσιν
 he prtcl. defending.nom those.dat.pl cow.dat.pl

ἔβλητ’ ἐν πρώτοισιν ἐμῆς ἀπὸ χειρὸς ἄκοντι
 hit.aor.3sg.mid in first.dat.pl my from hand.gen.sg dart.dat.sg

“Defending those cows, he was hit among the first ones by a dart from my hand.”

8. A note on participles in passive constructions

8.1. Much of the literature conflates the inflectional/synthetic passive constructions of the older IE languages with the (arguably younger) analytic passives (especially the passive construction with *-τό-)

8.2. We exclude *-τό- from our survey because its non-verbal origin and synchronic properties (root-rather than stem-derived, compatible with unaccusatives, etc.) makes it a priori unlikely that it will have the same properties as the synthetic passive

- *-τό-“participles” make (at least originally) stative passives, synthetic passives = eventive

⁶ Context: Achilles drives the Trojans into the river Xanthos and proceeds to slaughter them, so he’s probably the agent of the filling-the-river-with-body-parts-event.

- Cp. Anagnostopoulou 2003 on the different properties of denominal / deverbal participles in Modern Greek

8.3. Fellner & Grestenberger argue that **-nt-* and **-mh₁no-* were grammaticalized as active and middle participles after Anatolian left the family. Anatolian inherited **-nt-*, which originally functioned as a denominal possessive suffix. In Hittite, the **nt-* suffix is used as a verbal adjective that expresses a state and is primarily object-oriented (corresponding to **-tó-* in inner-IE)

8.4. Hittite *ant-* participles (Frotscher 2013)

a. stative-intransitive verbs: stative-intransitive participle:

- ānt-* ‘(being) hot’: *ai-^{ari}* ‘(be) hot’
- arant-* ‘standing’: *ar-^{ta(ri)}* ‘stand’
- ašānt-* ‘being’; ‘wahr’: *eš-^{zi}/aš-* ‘be’
- kardimiant-* ‘(being) furious’: *kartimmiye/a-^{zi}* ‘being furious’
- šašant-* ‘sleeping’: *šeš-^{zi}/šaš-* ‘sleep’

b. non-stative intransitive verbs (change-of-state, telic verbs of movement etc.): stative-resultative participle:

- akkant-* ‘(being) deceased’: *āk-ⁱ/akk-* ‘die’
- arānt-* ‘(being) arrived’: *ār-ⁱ/ar-* ‘come, arrive’
- kišant-* ‘taken place’: *kīš-^{a(ri)}* ‘take place, become’
- kištant-* ‘(being) extinct’: *kišt-^{āri}* ‘extinguish’
- mauššant* ‘fallen’: *mau-ⁱ/mu-, maušš-^{zi}* ‘fall’

c. transitive verbs: resultative participle, “passive participle”

- appānt-* ‘taken’: *epp-^{zi}/app-* ‘take, seize’
- (i)yant-* ‘made’: *iyē/a-^{zi}* ‘make, do’
- kankant-*, *gangant-* ‘hung up’: *kānk-ⁱ/kank-* ‘hang’
- kunant-* ‘killed, slain’: *kuen-^{zi}/kun-* ‘kill, slay’
- zanu(w)ant-* ‘cooked’: *zanu-^{zi}* ‘cook’ (tr.)

Cp. the **-to-* verbal adjective in the “inner-Indo-European” languages, e.g. ,Vedic *tá-* participles:

a. stative-intransitive:

- sthítá-* ‘standing’: *sthā* ‘stand’
- tviṣítá-* ‘upset’: *tviṣ* ‘be upset’
- plutá-* ‘swimming, floating; floated’: *plu* ‘swim, float’
- suptá-* ‘sleeping’: *svap* ‘sleep’

b. non-stative intransitive:

- gatá-* ‘gone’: *gam* ‘go’
- mugdhá-* ‘confused’: *muh* ‘become confused’
- mṛtá-* ‘deceased, dead’: *mṛ* ‘die’

c. transitive:

- hatá-* ‘slain’: *han* ‘slay, kill’
- uktá-* ‘spoken’: *vac* ‘speak’
- pītá-* ‘drunk’: *pā* ‘drink’
- kṛtá-* ‘made’: *kr* ‘make’

Hittite *nt*-participles and the **-to-* verbal adjective in the “inner-Indo-European” languages are independent of the voice morphology of the finite verbs they are associated with (as opposed to **-nt-* and **-mh₁no-* of Tocharian and the “inner-Indo-European” languages). Therefore, **-to-* verbal adjectives (or compounds) should not be equated with or used as a diagnostic for the properties of eventive passives (as believed in the older literature, e.g. Hettrich 1990).

9. Near word equations

= same root and/or same argument structure/meaning, but possibly different stem-forming suffixes due to synchronic remodeling.

Hittite	Tocharian	Vedic	Greek	
<i>damaštari</i>			δάμναται	‘is subdued, tamed’ (<i>*demh₂</i>)
<i>karštari</i>	^B <i>käršnätär</i>		(τέμνετο, τα/εμνόμενος)	‘is cut’ (<i>*kers</i>)
	^A <i>klyosnäštär</i>	<i>śṛṇve</i>		‘is heard’ (<i>*k^leu</i>)
	^{BA} <i>āštär</i>	(<i>ajyáte, nīyáte</i>)	ἄγεται, ἀγόμενος ⁷	‘is led’ (<i>*h₂ag^h</i>)
<i>warnutari</i>	^A <i>tskämsamtär</i>			‘is burned’
	^B <i>yamasträ</i>	(<i>ākāri, kriyáte</i>)	πεποιήται	‘is/was done’
		(<i>hanyáte</i>)	θίνεται	‘is slain’ (<i>*g^{wh}en</i>)
	^A <i>pärtär</i>	(<i>bhriyáte</i>), <i>bhāramāna</i> - ⁸	φέρεται, φερόμενος ⁹	‘is carried, brought’ (<i>*b^her</i>)

10. Conclusion

10.1. Reconstructing eventive passives as function of PIE non-active morphology is possible, with important qualifications:

- Synthetic/eventive passives vs. (later) stative periphrastic constructions—these should be kept separate
- Absence of overt demoted agent not indicative of whether we’re dealing with a “real” passive
- Morphology vs. syntax: absence of dedicated passive morphology does not mean that passive constructions cannot be expressed (i.e., by non-active morphology)
- Case of demoted agent in synthetic/“verbal” passives: originally instrumental (Hittite, Tocharian, Vedic). The distinction between demoted causers & agents appears to have been introduced later.

⁷ Passive use attested post-Homerically.

⁸ Also “carrying for oneself”.

⁹ Also “carrying for oneself”.

10.2. So why are there so many new analytic (and synthetic) passives in the older IE languages?

- Stative constructions are always liable to reanalysis as eventive constructions (e.g., development of PIE *-tó-, *-nt-, Indo-Ir. *-yá-, Greek -(θ)η-, etc.)
- So as long as there are nominal or verbal stative constructions (not exactly rare in PIE), there is plenty of material that might become available for use as a designated passive
- Crucially, there was no “need” for a specifically passive construction, since this function could be expressed by non-active morphology. Reanalysis does not occur because speakers “need” a particular construction in their grammar.

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