Indo-Iranian anticausatives and passives in *-ya-* revisited

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Today's problem: IIr. *-ya-

- ▶ Several different & disparate functions: denominal verb formation, primary (class IV) verbalizer, anticausative, imperfective passive ...
- ▶ Development of these functions from PIE & within IIr. unclear

  "The ultimate relation between passives and anticausatives may not be resolvable based on the evidence of Sanskrit; the formal aspects of the Indo-European antecedents are not fully settled; and, as noted, the development of a distinct passive is an innovation (…) whose earlier history cannot be documented." (Hock 2022: 186–7)

- ▶ Morphophonology/morphosyntax: root vs. suffix accent, active vs. middle endings

The bigger picture

▶ Unidirectionality of reanalysis: are both ANTICAUS > PASS and PASS > ANTICAUS viable "grammaticalization paths", as claimed in the literature?

▶ Do argument & event structure changes also follow directional "grammaticalization paths"? Should we expect them to?

The bigger picture

▶ Unidirectionality of reanalysis: are both ANTICAUS > PASS and PASS > ANTICAUS viable "grammaticalization paths", as claimed in the literature?

▶ Do argument & event structure changes also follow directional "grammaticalization paths"? Should we expect them to?

→ Unidirectionality would be extremely useful for comparative reconstruction of morphosyntactic properties of the proto-language.

Today's goals

- ▶ Revisit the anticausative/passive syncretism of Indo-Iranian *-ya-verbs to argue that (uni)directionality holds for changes in the event structure/voice domain, contra claims that these verbs show evidence for counterdirectionality
  - ▶ both ANTICAUS > PASS and PASS > ANTICAUS (Kulikov 2011, 2012; Hock 2019, 2022)
- ▶ While anticausative/inchoative morphology can become passive morphology (or rather, syncretic anticausative-passive morphology), the reverse is not true: PASSIVE $\not>$ ANTICAUSATIVE[1]
- ▶ Indo-Iranian *-ya-forms are fully compatible with the well-documented ANTICAUS > PASS reanalysis once voice syncretism is taken into account and the relevant diagnostics for each context are adequately identified.

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[1] Cf. Honeybone (2016): θ > f but f $\not>$ θ.

Voice syncretism

(1)   Voice Syncretisms: Situations in which distinct syntactic alternations (e.g.
       passive and reflexive) are realized with identical morphology (Embick 1998)

► Voice syncretism is widespread among the world's languages
   ► Haspelmath 1990; Kemmer 1993; Alexiadou & Doron 2012; Zúñiga & Kittilä 2019;
     Bahrt 2021; Inglese 2021; Oikonomou & Alexiadou 2022 ...
► **Passive morphology is almost always syncretic**: only 2 out of the 222
  languages in the sample of Bahrt (2021) have a non-syncretic passive

(2)   Passive syncretism (Haspelmath 1990; cit. after Bahrt 2021: 57)

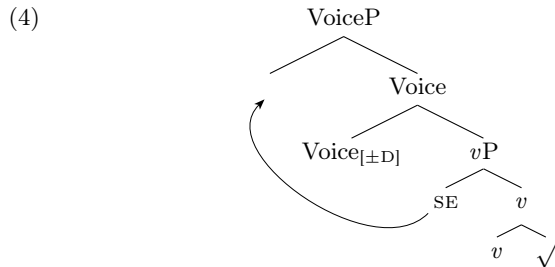|	Marking	REFL	RECP	ANTC	PASS	ANTP
Udmurt	-śk	+	+	+	+	+
Greek	*	+	+	+	+	
'O'odham	*	+	+	+	+	
Tigre	tə-	+	(+)	+	+	
Motu	he-	(+)	(+)	+	+	
Kanuri	tə-, -tə	+		+	+	
Latin	*	+		+	+	
Slave	d-	+			+	
Rukai	ki-	+			+	
Worrorra	-ieŋu	+	+		+	
Tuareg	mə-		+		+	
Danish	-s			+	+	
Uyghur	-il			+	+	
Nimboran	-da			+	+	

Voice syncretism: diachrony

Example: Reanalysis of Lat. $s\bar{e}$ > Romance se from reflexive pronoun/theme >
"argument expletive" (Schäfer 2017)

(3) $[_{v\text{P}}\ s\bar{e}_{[\text{D,arg}]}\ ] \rightarrow [_{\text{Voice}_{[\text{expl}]}\text{P}}\ se_{[\text{D}]}\ ]\ \rightarrow [_{\text{Voice}_{\text{agent}}\text{P}}\ se_{[\text{D}]}\ ]$
    reflexive   anticaus   "SE-passive"

Voice syncretism: diachrony

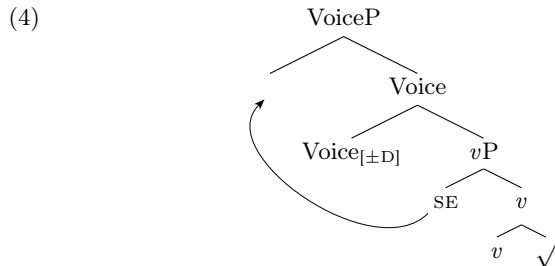Example: Reanalysis of Lat. $s\bar{e}$ > Romance se from reflexive pronoun/theme > "argument expletive" (Schäfer 2017)

(3) $[_{vP}\ s\bar{e}_{[D,arg]}\ ] \rightarrow [_{Voice_{[expl]}P}\ se_{[D]}\ ] \rightarrow [_{Voice_{agent}P}\ se_{[D]}\ ]$
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(4)

Voice syncretism: diachrony

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      reflexive   anticaus   "SE-passive"

(4)   VoiceP

                              Voice

                    Voice$_{[\pm D]}$ vP

                                   SE v

                                        v $\sqrt{}$

▶ Voice syncretism arises diachronically when the innovative construction keeps the older function
  ▶ E.g., Engl. *get* 'obtain' > CAUSE > BECOME > PASS (e.g., Fleisher 2006).

(5) a. Sally got drunk
     b. Sally got hit (by a car/by a stranger)

Background: Anticausatives

▶ spontaneous event/change of state without an external cause(r) (≈ agent)
▶ **marked** vs. **unmarked** anticausatives (Alexiadou & Anagnostopoulou 2004; Schäfer 2008, 2009; Alexiadou et al. 2015) – (6), ex. from Schäfer (2008)

(6)   Marked vs. unmarked anticausatives

	marked		unmarked	
French	**s'**agrandir	'become bigger'	cuire	'cook'
	s'améliorer	'improve'	fondre	'melt'
	se couvrir	'become covered'	grandir	'grow'
German	**sich** vergrößern	'enlarge'	schmelzen	'melt'
	sich ausdehnen	'extend'	kochen	'cook'
	sich verändern	'change'	austrocknen	'dry out'
Modern	kommatiazo-**me**	'tear'	asprizo	'whiten'
Greek	miono-**me**	'decrease'	kokinizo	'redden'
	veltiono-**me**	'improve'	klino	'close'

Functions of *-yá-

Indo-Iranian *-ya- is found in five different contexts:

1) Denominal verbs

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	a. Vedic		
*vasna-**yá**-ti*	'haggles'	*vasná-*	'price'
*gopā̆-**yá**-ti*	'protects'	*go-pā́*	'cattle-protector'
*bhiṣaj-**ya**-ti*	'heal'	*bhiṣáj-*	'healer'
	b. Avestan		
*srāuuah-**iie**-ⁱtī̆*	'desires fame'	*srauuah-*	'fame'
*vā̆stra-**iie**-ⁱtī̆*	'grazes'	*vā̆stra-*	'pasture'
*bišaz-**iia**-*	'heal'	**bišaz-*	'healer'

▶ Verbalizing function of *-yá-* (< *-i̯é/ó-) also in the Anatolian, Greek, Italic, Celtic, Germanic, Balto-Slavic ... branches of IE, so very likely one of the oldest/inherited functions of this suffix.

IIr. *-yá-

2) Root-derived non-alternating middle verbs (= *media tantum*)

Vedic	Avestan		IE
man-**yá**-te	ma^{i}n-**iie**-tĕ̆	'thinks'	Gk. μαίνομαι, OIr. -*mainethar*
mri-**yá**-te	mir-**iie**-te	'dies'	Lat. *morior*, OCS *u-mьrjetъ*
búdh-**ya**-te	bū̆^{i}δ-**iie**-te	'awakes'	
vac-**yá**-te	vaš-**iie**-tē̆	'moves about, jumps'	
jā́-**ya**-te	za-**iia**-	'is born'	OIr. (rel.) *gainethar*
pád-**ya**-te	pa^{i}δ-**iia**-	'falls, steps down'	

▶ Root (mostly) R(Ø)

▶ The accent is sometimes on the root, sometimes on the suffix — the latter arguably reflects the older situation (LIV^2)

▶ This class has solid correspondences between Vedic and Avestan, as well as cognates in other IE languages → inherited

IIr. *-yá-

3) Root-derived non-alternating active verbs (= *activa tantum*)

Vedic		Avestan	
náś-ya-ti	'disappear'	*nas-iie-ⁱti*	'disappear'
pū́-ya-ti	'become rotten'	*pu-iie-ti*	'become rotten'
rís-ya-ti	'become damaged'	*ⁱriš-iie-ⁱti*	'become damaged'
tŕ̥p-ya-ti	'be(come) satiated'	(*trəf-iie-ⁱti*	'steal')
dŕ̥h-ya-ti	'become solid'	*friθ-iie-ⁱti*	'become rotten'
kṣúdh-ya-ti	'become hungry'	*-ⁱriθ-iie-ⁱti*	'die'
śúṣ-ya-ti	'become dry'		
púṣ-ya-ti	'bloom'		

▶ R(∅), accent on the root
▶ Some Vedic–Avestan correspondences, but more productive in Indic (than Ir.)
▶ Semantically clear subcategory: intransitive (unacc.?) change-of-state/inchoative verbs ('become X')

IIr. *-yá-

3) Root-derived non-alternating active verbs (= *activa tantum*)
  ▸ Some cognates with *-ịe/o- outside Indo-Iranian (type reconstructed with suffix accent in LIV^2), with a "Caland-ish" (property concept) flavour (Rau 2009: 140–1, 2013):

(7) a. *śúṣ-ya-ti* 'become dry': αὔω 'dry' (Hdn.; tr.), OCS *i-sъšǫ* 'become dry'; adj. Gk. αὖος; Lith. *saũsas*
     b. *tŕ̥ṣ-ya-nt-* 'thirsty': Go. *þaursjan* 'be thirsty'; adj. Ved. *tŕ̥ṣu-* 'eager'
     c. *ní jas-ya-*, *dás-ya-ti* 'diminish, perish' (*sgʷesh₂): OCS *u-gašetъ* 'go out, become extinguished', adj.: Ved. *á-jasra-* 'unextinguishable'

IIr. *-yá-

4) Syncretic anticausative/passive verbs

a. Vedic

*múc-**ya**-te*	'gets free'	*muc-**yá**-te*	'is released'
*pác-**ya**-te*	'becomes ripe'	*pac-**yá**-te*	'is cooked'
*chíd-**ya**-te*	'tears' (itr.)	*chid-**yá**-te*	'is cut off'
*kṣí-**ya**-te*	'diminish, perish'	*kṣī-**yá**-te*	'is vanquished'
*jí-**ya**-te*	'suffers loss'	*jī-**yá**-te*	'is defeated
*pū́r-**ya**-te*	'become full'	*pūr-**ŷa**-te*	'be filled (by)'

b. Avestan

*pir-**iie**-te*	'gets even'	*pir-**iie**-te*	'is paid'

▶ anticausative reading tends to have root accent, passive reading suffix accent (thus, e.g., Gonda 1951) — but Kulikov (2012) argues that accentuation varies according to manuscript tradition/school rather than meaning (cf. Hock 2022)

▶ This ambiguity is only found with causative alternation/achievement verbs, *not with* agentive accomplishment verbs, and it isn't really there in Avestan (but that may be an artifact of the attestation)

IIr. *-yá-

4) Syncretic anticausative/passive verbs: Indo-Iranian type; but the anticaus. readings have cognates outsides Indo-Iranian

▶ Often forms the oppositional anticausative to a transitive nasal infix-class causative

Ved. -ya-	IE cognates	Ved. -n(a)-	IE cognates	
múc-ya-te	Gk. ἀπο-μύσσω	*muñcáti*	Lat. *ē-mungō*, Lith. *munkù*	'release, become/ set free'
chíd-ya-te	Gk. σχίζω (tr.)	*chinátti*	Lat. *scindō*	'split, tear' (tr.)
kṣí-ya-te	Hsch. φθίει	*kṣiṇāti*	Gk. φθΐνω	'diminish/destroy'
pŕ̥-ya-te	Khot. *pīr-*	*pr̥ṇā́ti*	OAv. *parənā-*	'become full/fill'
jī́-ya-te	YAv. *-z-iia-*	*jinā́ti*	YAv. *zinā̆t*	'suffers/inflicts loss'

IIr. *-yá-

5) Passive verbs

Vedic		Avestan	
kri-yá-te	'is made'	*kir-iia-*	'be made'
bhri-yá-te	'is brought, carried'	*ba^i r-iia-*	'be carried'
han-yá-te	'is killed'	*jan-iia-*	'be killed'
stri-yá-te	'is dispersed'	*str-iia-*	'be dispersed'
śrū-yá-te	'is heard'	*sru-iia-*	'be heard'
kr̥t-yá-te	'is cut'	*kərəθ-iia-*	'be cut'

▶ R(∅), accent canonically on the suffix
▶ Obligatory middle endings in Vedic; Avestan *-iia-* varies between active and nonactive endings, (8).
▶ Indo-Iranian cognates, but not in other IE branches

Passive -*iia*- in Avestan

(8)   Avestan -*iia*-passives (Kellens 1984: 125–30)

a. active endings
*kir-**iia**-* 'be made' $\sqrt{kar}$ 'make'
*kərəθ-**iia**-* 'be cut' $\sqrt{kart}$ 'cut'
*jan-**iia**-* 'be killed' $\sqrt{jan}$ 'kill'
*da-**iia**-* 'be given' $\sqrt{d\bar{a}}$ 'give'
*yez-**iia**-* 'be sacrificed' $\sqrt{yaz}$ 'sacrifice'

b. nonactive endings
*ba^{i}r-**iia**-* 'be carried' $\sqrt{bar}$ 'carry"
*sru-**iia**-* 'be heard' $\sqrt{sru}$ 'hear'
*x^{v}a^{i}r-**iia**-* 'be eaten' $\sqrt{x^var}$ 'eat'
*āf-**iia**-* 'be reached' $\sqrt{\bar{a}p}$ 'reach'
*gərəu-**iia**-* 'be seized' $\sqrt{grab}$ 'seize'

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da-***iia***- 'be given'	√*dā* 'give'
yez-***iia***- 'be sacrificed'	√*yaz* 'sacrifice'

b. nonactive endings
ba^{i}r-***iia***- 'be carried'	√*bar* 'carry"
sru-***iia***- 'be heard'	√*sru* 'hear'
x^{v}a^{i}r-***iia***- 'be eaten'	√*x^{v}ar* 'eat'
āf-***iia***- 'be reached'	√*āp* 'reach'
gərəu-***iia***- 'be seized'	√*grab* 'seize'

▶ Some passive stems are attested with both active and nonactive endings, e.g., the ones from √*kar* 'make', √*star* 'throw down', √*zan* 'beget' ...

▶ It's not always clear which one is older and which is younger

▶ Of the ca. 25 passive stems attested in Avestan, only two are attested already in Old Avestan, and both happen to take the middle endings.

OAv. passive *-iia-*

(9) Y. 32.15:
anāiš ā vī.nənāsā yā karapō.tåscā kəuuītåscā
auuāiš aibī yə̄ṇg daṇtī nōiṯ jiiātə̄uš xšaiiamnə̄ṇg vasō
tōi ābiiā bairiiåṇtē *vaŋhə̄uš ā dəmānē manaŋhō*

"Because of such (actitivies), the group of Karapans and Kavis is lost
through (the activities of) those whom they (in their turn) want to harness
(so as) not to be at willl in control of (their) lives.
Those, (however), **will be shifted towards those two** (integrity and
immortality) into the house of good thought." (Humbach 1991: 135)

"(It is) by those (actions of yours that) the titles of "karapan" and "kauui" are
ruined here. /
(But) *in spite of those, the ones whom (the bad ones) want to *trap
(because) not in control at will of (their) livelihood /
will on account of these two (titles) be carried into the abode of good
thought" (Skjærvø 2006: 97)

▶ Problems: R(a); interpretation of *ābiiā* (instr.du. of cause or dat. dual?)

OAv. passive -*iia*-

(10)   Y. 33.7:
       ā́ mā́ [ā́]idū́m vahištā́ (...) ašā́ vohū́ manaŋhā́ **yā̆ sruiiē̆** parə̄ magaonṓ

       "Come hither to me, You best ones ... with truth, (and) with good thought
       for which I am heard beyond the sacrificers" (Humbach 1991: 137)

       "Ask *me* for my best (utterances), ... through the Order (of my sacrifice and
       my) good thought, **by which I am** (at this very moment) **being heard**
       before the master of the gift exchange" (Skjærvø 2006: 89)

► Kellens (1984: 126); Humbach (1991); Skjærvø (2006): 1sg. -*iia*-passive

► Kümmel (1996: 154); LIV²: 334; Jasanoff (2003: 170): 3sg. "stative" *sru̯u̯ai
   (cp. Ved. śṛṇvé; bruvé) > *sruiiai
   ► "durch die Wahrhaftigkeit und das Gute Denken, **die** über die Gabenreichen
     hinaus **berühmt sind!**" (Kümmel 1996: 155)
   ► Problem: **yā̆** = instr.sg. or nom.pl.n.?

Interim summary

5 types of *-ya-:

1) Denominal verbs
2) root-derived non-alternating middles (mostly itr.)
3) root-derived non-alternating actives (itr. CoS/inchoatives)
4) syncretic anticausatives/passives (obligatory middle endings)
5) passives (obligatory middle endings in Vedic; variation in Avestan)

Given that all contexts except for passive are found outside of Indo-Iranian, this looks like a clear-cut case of ANTICAUS > PASS reanalysis that resulted in a new, syncretic passive construction in Indo-Iranian.

▶ ANTICAUS/INCHOATIVE > PASSIVE grammaticalization path is well-established in the typological literature (Kuteva et al. 2019; Grestenberger & Kamil 2024)

▶ Therefore it seems plausible that 2) and/or 3) gave rise to 4)–5) through a reanalysis of -ya- as a passive marker.

ANTICAUS > PASS?

But there are several problems:

► While the verbs in class 3) take the *active* set of endings, consistent with the behavior of intransitive CoS-verbs cross-linguistically (Alexiadou & Anagnostopoulou 2004; Schäfer 2008), 4)–5) always take the *middle* endings in Vedic.

► But 5), the canonically passive class, varies between active and middle endings in Avestan, and it's not clear why.

(11)   Middle *yá*-passives in Vedic vs. active *iia*-passives in Avestan

	Vedic	Avestan	
	*kri-yá-**te***	*kir-iie-ⁱ**ti***	'is made'
	*kr̥t-yá-**te***	*kərəθ-iiā̆-**t*** (subj.)	'is/shall be cut'

► So either class 2) gave rise to the passive reading and Iranian has innovated active endings, or class 3) did and Vedic has innovated. Or maybe both classes played a role?

Further problems

- ▶ Hock (2019, 2022) argues that since it is impossible to determine for each individual stem of type 4) whether the anticausative or the passive reading is the older one, ANTICAUS > PASS vs. PASS > ANTICAUS cannot be decided/is ambiguous.
- ▶ Kulikov (2011) argues that there is evidence for a "counterdirectional" development of PASS *-ya-* > ANTICAUS *-ya-* via an intermediate impersonal (passive) stage.

Research questions:

- ▶ Can we disambiguate the passive from the anticausative reading of *-*ya*- and determine which one is older?
- ▶ Can we show that passive *-ya-* became anticausative *-ya-* in late Vedic (e.g., for a specific class of verbs)?
  - ▶ specifically, an anticausative *marker*, not just individual "lexicalized" verb stems
- ▶ Was the passive reading originally associated with the nonactive or the active endings?

Passive agents with *-yá*-passives

Vedic: ca. 25 overt agent phrases with *yá*-passives (Jamison 1979a)

(12)   RV 3.1.21a-b:

  (...) *jātávedā*   <u>*viśvā́mitrebhir*</u>   **idh-ya-te**
        Jātavedas.NOM.SG Viśvāmitra.INSTR.PL kindle-IPFV.PASS.3SG.NACT
  á-jasraḥ
  NEG-exhaustible.NOM.SG

  "Jātavedas, the inexhaustible, **is kindled** by the Viśvāmitras"

(13)   RV 9.81.12d:

  $s_u\bar{a}yudháḥ$ <u>*sotŕ̥bhiḥ*</u>   **pū́-ya-te**   *vŕ̥ṣā*
  of.good.weapons.NOM pressers.INSTR purify-PASS.3SG.MID bull.NOM

  "The bull of good weapons **is purified** by the pressers."

  (transl. Jamison & Brereton 2014)

Passive agents with -*yá*-passives

Avestan:

(14)   Yt. 1.29 (YAv.):

　　　　$\bar{a}rma^i t\bar{o}i\check{s}$　　<u>$d\bar{o}^i\theta r\bar{a}biia$</u>　　**auuā-str-iia-ta**　　　　　　$ma^i rii\bar{o}$
　　　　Ārmaiti.GEN eye.INSTR.DU down-throw-PASS.IPV-3SG.NACT villain.NOM

　　　　"le vaurien est abattu par les yeux d'Ārmaiti" (Kellens 1984: 128)/
　　　　"the villain **is brought down** by/through the eyes of Ārmaiti"

▶ No OAv. ex. with animate agents in the passive (but there are only two passive *iia*-forms anyway)

▶ in YAv., (14) is closest to an animate agent (though instr.dat.abl.dual are syncretic); a few examples with clear instrument/means phrases (only with passives, not anticaus.)

Instrument adjuncts with *-yá*-passives

- ▶ Instrument/means phrases generally considered a diagnostic for passive rather than anticausative reading
    - ▶ Engl. *The ship was sunk with/by a torpedo* vs. **The ship sank with/by a torpedo*

(15)   Vedic, RV 9.85.5a

    kánikradat   *kaláśe*   *góbhir*   **aj-ya-se**
    roar.INT.PTCP.ACT.NOM.SG.M pot.LOC cow.INSTR.PL anoint-PASS-2SG.MID

    "Ever roaring, you **are anointed** [/driven] <u>with cows</u> (= milk, LG) in(to) the tub" (Jamison & Brereton 2014)

(16)   Avestan, V. 4.50 (YAv.):

    <u>*aiiaŋhaēnāiš*</u>   <u>*karətāiš*</u>   *azdibiš*   *paⁱti*
    metal.INSTR.PL knife.INSTR.PL bone.INSTR.PL towards.PP
    auua.kərəθ-ii-ā̃t
    down.cut-PASS.IPFV-SUBJ.3SG.ACT

    "he **shall be cut down** to the bones <u>with metal knives</u>"

Other diagnostics

- ▶ (Implicit) passive agents control the (null) subject of nonfinite adjunct clauses (= absolutives, converbs) in Vedic prose, (17) (Delbrück 1888: 405; Hock 1982: 131, 1986: 22; Tikkanen 1987: 147f.)
- ▶ whereas in anticausatives the controller is the surface subject (Hock 2019, 2022)

(17) *na   vā̆*   [PRO$_i$ *a-hiṅ-kr̥t-ya*   ] *sāma*   ***gī̆-ya-te***
      NEG PTCL   NEG-hiṅ-make-CVB   sāman.NOM.SG.N chant-PASS-3SG.MID
      "For the sāman is not chanted (by a person$_i$) [PRO$_i$ not having made (the sound) *hiṅ*]." (ŚB 1.4.1.1; cit. after Hock 2019)

PASS > ANTICAUS?

Bahrt (2021) lists only two potential examples of PASS > ANTICAUS (implicitly PASS > syncretic Voice)

- ▶ Proto-Tungusic *-*bu* PASS & CAUS > Evenki -*v* PASS, CAUS & ANTICAUS (Malchukov & Nedjalkov 2015)
  - ▶ But Bahrt himself points out that this could also be a CAUS > ANTICAUS development (cf. Engl. *get*) via a causative-reflexive stage (cf. Yap & Iwasaki 2003, Yap & Ahn 2019 on CAUS > PASS vs. CAUS > MID)

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- ▶ Proto-Tungusic *-*bu* PASS & CAUS > Evenki -*v* PASS, CAUS & ANTICAUS (Malchukov & Nedjalkov 2015)
    - ▶ But Bahrt himself points out that this could also be a CAUS > ANTICAUS development (cf. Engl. *get*) via a causative-reflexive stage (cf. Yap & Iwasaki 2003, Yap & Ahn 2019 on CAUS > PASS vs. CAUS > MID)
- ▶ Vedic -*yá-* (Kulikov 2011): PASS > ANTICAUS via agentless/impersonal passives of verbs of perception (and motion)

(18)   Anticausatives from passives, Kulikov (2011: 234–41; from Bahrt 2021: 213)

Root		-*ya*-stem	a. PASS reading	b. ANTICAUS reading
dŕś	'see'	*dŕś-yá-*	'be seen'	'be visible, appear'
śrū̄	'hear'	*śrū̄-yá-*	'be heard'	'be audible, famous'
vid	'find'	*vid-yá-*	'be found'	'be findable, exist'

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▶ By Kulikov's own translation, these are not anticausatives.

▶ generic passive or "dispositional middle" (Alexiadou & Doron 2012)

PASS > ANTICAUS?

▶ Hock (2019, 2022) criticizes that it is not clear from the passages cited when Kulikov chooses the passive vs. the "anticausative" reading.

▶ Moreover, the dispositional middle reading of perception verbs is also found in nonactive forms of these verbs that do not take *-ya-*, such as (19)— so if anything a *lexical* change of specific roots, not of a functional morpheme.

(19) *ádha bahú   cit táma   ū́rmyāyās tiráḥ śocíṣā*
      so   dense.ACC.N even darkness.ACC.N night.GEN across glow.INSTR

      dadṛś-e   *pāvakáḥ*
      see.PF-3SG.MID pure.NOM

      "so even across the dense darkness of the night the pure one **is visible with his flame**." (RV 6.10.4d, transl. Jamison & Brereton 2014)

PASS > ANTICAUS?

The dispositional middle reading is in general associated with nonactive morphology in languages with voice syncretism, (21).

▶ Lekakou 2005; Alexiadou & Doron 2012; Alexiadou et al. 2015

(20) a. migdal ayfel lo nir'a   mi-šam
          tower   Eiffel not see.SMPL.MID from-there
          "The Eiffel tower was not visible from there/was not seen from there"
          (Hebrew, Alexiadou & Doron 2012: 14)

      b. afto to vivlio diavazete   efkola.
          this the book reads.NONACT easily
          "This book reads easily." (Modern Greek, Alexiadou & Doron 2012: 16)

▶ Crucially, in dispositional middles "the external argument is eventually bound in the context of a possibility modal" (Alexiadou & Doron 2012: 26), while there is no external argument in anticausatives

▶ Other classes of verbs cited by Kulikov (*uc-yá-te* 'is said/sounds, is called'; motion verbs like *sic-ya-te* 'pours/is poured', *kīr-ya-te* 'scatters/is scattered') are either also of this type or instantiate the passive/anticaus. syncretism (type 4)).

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→ There is no evidence for PASS > ANTICAUS in Indo-Iranian

ANTICAUS > PASS

Good reasons to assume that passive use of -*ya*- developed from anticausative use of -*ya*-:

▶ Typologically well-established "grammaticalization path" (Kuteva et al. 2019; Bahrt 2021; Inglese 2022, 2023)

▶ Follows from the expected directionality of the voice cycle (v/argument alternating morphology → voice morphology)

▶ suggested by internal reconstruction: passive use of -*ya*- only in Indo-Iranian, intransitive CoS verbs in -*ya*- ($< *$-$\underset{\circ}{i}e/o$-) reconstructable for PIE.

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What specifically changed in these constructions?

- ▶ Proposal: anticausatives were reanalyzed as passives in contexts in which they could be construed as either spontaneous or externally caused
- ▶ ambiguity of **instrumental adjuncts** as crucial context for this reanalysis

Two types of anticausatives

Both the marked and the unmarked anticausatives were compatible with
event-modifying instrumental cause/manner NPs:

(21)   *śvātréṇa*   *yát*   *pitrór*   **múc-ya-se**   *pári*
        swelling.INSTR when father.LOC.DU release-YA-3SG.MID on
        "when you (Agni) **get free** through swelling on your parents (the kindling
        sticks)." (RV 1.31.4c; Hock 2022: 173)

▶ Jamison & Brereton (2014): "when through your swelling in your two parents
[=the kindling sticks] you **are set free**"

(22)   *yathā́ phena*   udak-ena   (...) **ni-jas-ya-ti**
        as   foam.NOM.SG water-INSTR   PRVB-disappear-V.IPFV-3SG.ACT
        "Just as the foam (...) **disappears** by means of water" (AVP 4.16.6;
        Kulikov 2012: 537)

Reanalysis: instrumental NPs

- ▶ Proposal: the event-modifying instrumental NP was reanalyzed as adjunct to VoiceP → "inanimate agent"
- ▶ This resulted in type 4), the "*muc*-class" with ANTICAUS/PASS syncretism

(23)   *índo*   *yád*   *ádribhih*   ***su-tá-ḥ***
        drop.VOC when stone.INSTR.PL press-PTCP.PASS-NOM.SG.M
        (RV 9.24.5a)

- ▶ Jamison & Brereton 2014: "O drop, when **pressed** by the stones ..." (inanim. agent)
- ▶ Geldner 1951: "O Saft, wenn du mit Steinen **ausgepresst**" (instrument)

Passive agents in inflectional/middle-marked passives

- ▶ A minor "extension", since instrumental agent NPs were already independently used in inflectional/middle-marked passives, where instr. marking of agents was the inherited strategy (Jamison 1979b; Grestenberger & Fellner 2023)

(24)   *evá agnír   gótamebhir   ṛtāvā́   víprebhir*
        thus Agni.NOM Gotama.INSTR.PL truthful.NOM inspired.INSTR.PL
        astoṣ-ṭa   *jā̄távedāḥ*   (...)
        praise.PFV-3SG.NACT Jātavedas.NOM
        "Thus **has** Agni, the truthful one, the Jātavedas, **been praised**
        by the Gotamas, inspired poets" (Vedic, RV 1.77.5a-b; transl.
        Jamison & Brereton 2014)

(25)   *mazdā̊*   (...) *yā̄*   *zī̄   **vā̄uuərəz-ō̄i***
        wise.NOM.SG   REL.PRON.NOM.ACC.N for do.PF-3SG.NONACT
        pairī̄.ciθī̄t̰   *daēuuā̄iš-cā̄*   *mašii̯ā̄iš-cā̄*
        around.consider.2SG.AOR.OPT daēva.INSTR.PL-and mortal.INSTR.PL
        "May the Wise One (...) consider (what) **has been perpetrated** (all)
        around (here) by Daēvas and mortals" (Avestan, Y. 29.4; transl.
        Humbach 1991: 121)

Avestan -*iia*-

- ▶ If reanalysis of intrumental NPs in marked anticausatives is the source of the *-*yá*-passive, this would suggest that the Avestan *active* endings of the *iia*-passive are an innovation
- ▶ Possibly the result of loss of the active/nonactive alternation on the endings & the reanalysis of -*iia*- as a designated *passive* Voice head (≈ PassP of Bruening 2013)
- ▶ Parallel development in Old Persian (West Iranian) and Epic Sanskrit/middle Indic

Old Persian & Epic Sanskrit *-*ya*-passives

(26)   Old Persian passives (Skjærvø 2020)

        *a-kar-iya-*Ø   *a-bar-iya-*Ø

        PST-do-PASS-3SG.ACT   PST-carry-PASS-3SG.ACT

        'was done'   'was carried'

(27)   Epic Sanskrit passives (Oberlies 2003)

        pac-ya-ti   *muc-ya-ti*

        cook-PASS-3SG.ACT   release-PASS-3SG.ACT

        'is cooked'   'is released'

▶ In both cases, this coincides with an ongoing loss of the active–nonactive alternation on the endings

Conclusion

- ▶ Old Indo-Iranian (*)-*yá*-passives as a textbook example of the ANTICAUS > PASS reanalysis, resulting in a descriptively well-established type of **voice syncretism**
- ▶ Directionality of reanalysis/voice cycle (details cf. Appendix):
    - ▶ vP adjunct → VoiceP adjunct/argument (Proto-Indo-Iranian)
    - ▶ v (verbalizer) → Voice/Pass (Proto-Iranian, or separate innovations of Western and Eastern branches?)
    - ▶ Loss of the Spell Out condition triggered by Voice$_{[\pm D]}$ and generalization of the *active* endings in the *ya*-passive (Old Persian, Avestan, Sanskrit)
- ▶ No evidence for PASS > ANTICAUS once voice syncretism and "dispositional middle" readings are excluded

Thank you!

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FWF Der Wissenschaftsfonds.

Marked anticausatives

(28)   *múc-ya-te* (NACT) 'becomes free' (act. *muñc-á-ti* 'releases sbdy/sth')
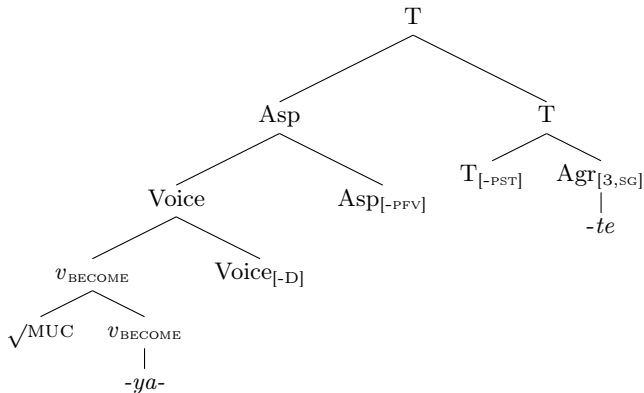
Marked anticausatives

This class surfaces with nonactive morphology through the general Spell-Out condition that holds for the T/Agr endings in Vedic/Indo-Iranian (Grestenberger 2021):

(29)   Spell-Out condition on nonactive morphology (Alexiadou et al. 2015: 101–2, Embick 1998, 2004a)
         Voice → Voice[NonAct]/ _ No NP specifier

More formally: a condition on the exponence of T/Agr:

(30)   Spell-Out condition on nonactive morphology
         $T/Agr[\phi,\pm past,Q] \leftrightarrow T/Agr[\phi,\pm past,\text{NONACT}]/Voice_{[-D]}(...) \frown \_$

▶ active morphology = Elsewhere

▶ in nonactive anticausatives, Voice is semantically empty → "expletive Voice" (Schäfer 2008, 2009, 2017)

Unmarked anticausatives

Unmarked anticausatives/CoS verbs have no Voice layer $\rightarrow$ active morphology by Elsewhere
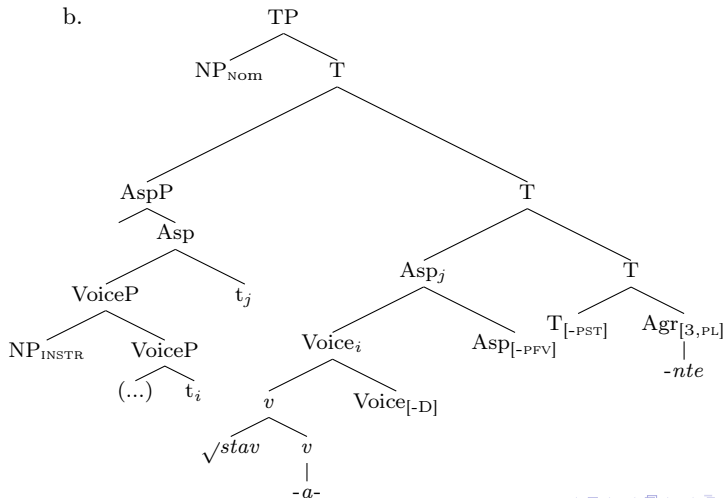
(31)   *náś-ya-ti* (ACT) 'disappears'
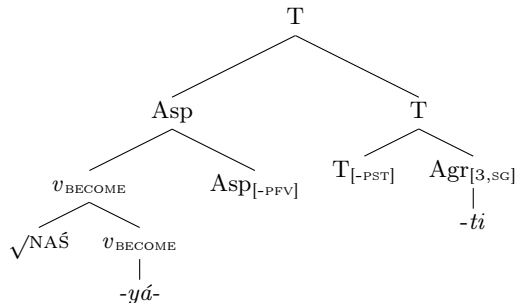
Passive agents in inflectional/middle-marked passives

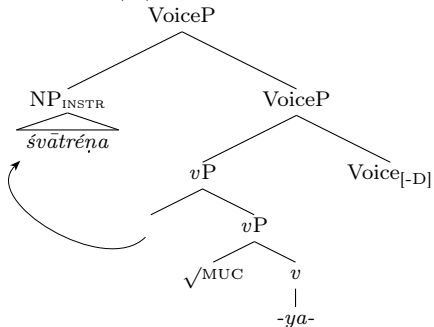(32)   Synthetic I/inflectional passive, Vedic/Avestan

    a. Y_{NOM} (X_{INSTR}) *stav-a-nte*   "Y are praised (by X)"

           praise-IPFV-3PL.NONPST.NACT

    b.

Reanalysis: instrumental NPs

(33)   *śvā́tréṇa* (...) *múc-ya-* 'get free through swelling'/'be released by swelling'
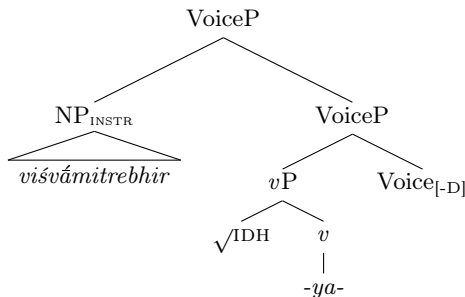
Reanalysis: instrumental NPs & passives

- ▶ A VoiceP adjunct implies that Voice$_{[-D]}$ is present in the structure, hence the obligatory middle endings of this type

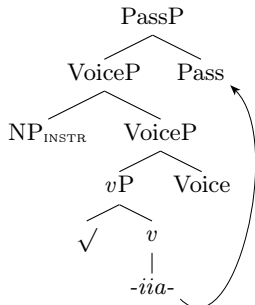- ▶ Further extension to agentive roots + animate agent instrumental NP → type 5), -yá-passives

(34) a. <u>viśvā́mitrebhir</u> **idh-ya-te**
          Viśvāmitra.INSTR.PL   kindle-YA-3SG.MID
          "he **is kindled** <u>by the Viśvāmitras</u>" (RV 3.1.21)

      b.

Reanalysis: loss of middle endings in Iranian

(35)

▶ Spell Out condition on Voice head is lost

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