Mind *-ya- own business:
On the passive/anticausative syncretism in Indo-Iranian

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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)

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 ≯ 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 ≯ θ.

The Voice cycle

▶ Diachronic generalization w.r.t. the rise of new voice-marking strategies:
v-related morphology/material base-generated in the vP (light verbs,
verbalizers, object reflexives) is reanalyzed as belonging to the VoiceP

    ▶ Halm 2020, Alexiadou 2021, Grestenberger 2023, Grestenberger & Kamil 2024

(1)   Upwards Reanalysis and the Voice cycle

TP

T   AspP

Asp   VoiceP
(e.g., ACT/PASS)

Voice vP
(e.g. CAUS/INCHOA)

v √
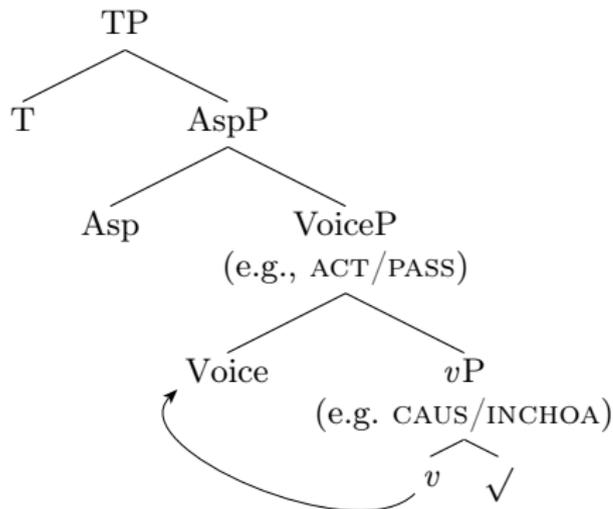
Voice syncretism

(2) 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

(3) 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
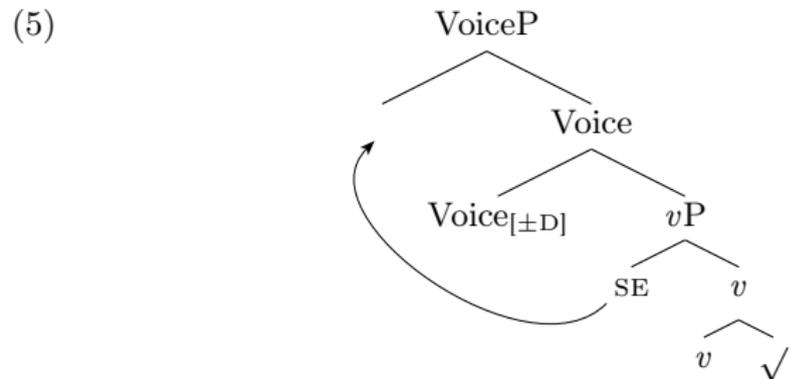
Example: Reanalysis of Lat. $s\bar{e}$ > Romance SE from reflexive pronoun/theme > "argument expletive" (Schäfer 2017)

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

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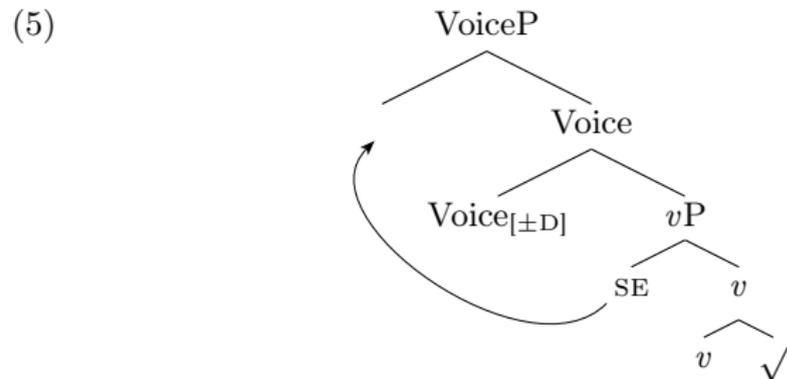
▶ Voice syncretism arises diachronically when the innovative construction keeps the older function

   ▶ E.g., Engl. *get* 'obtain' > CAUSE > BECOME > PASS (e.g., Fleisher 2006).

(6)   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) – (7), ex. from Schäfer (2008)

(7)   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

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'
vāstra-iie-ⁱtī̆	'grazes'	*vāstra-*	'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	maⁱn-**iie**-tĕ̆	'thinks'	Gk. μαίνομαι, OIr. -*mainethar*
mri-**yá**-te	mir-**iie**-te	'dies'	Lat. *morior*, OCS *u-mьrjetъ*
búdh-**ya**-te	bū̆ⁱδ-**iie**-te	'awakes'	
vac-**yá**-te	vaš-**iie**-tē̆	'moves about, jumps'	
jắ-**ya**-te	za-**iia**-	'is born'	OIr. (rel.) *gainethar*
pád-**ya**-te	paⁱδ-**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
  - ▶ Jasanoff (2003) links this class to the IIr. reflexes of "stative-intransitive" *h_2e-conjugation aorists

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'
ríṣ-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 *-i̯e/o- outside Indo-Iranian (type reconstructed with suffix accent in LIV²), with a "Caland-ish" (property concept) flavour (Rau 2009: 140–1, 2013):

(8) a. *śúṣ-ya-ti* 'become dry': αὕω '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-**ýa**-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. φθῑ́νω	'diminish/destroy'
pū́r-ya-te	Khot. pīr-	pṛṇā́ti	OAv. pərənā-	'become full/fill'
jī́-ya-te	YAv. -z-iia-	jinā́ti	YAv. zināṯ	'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'
*śrū̆-**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, (9).
- ▶ Indo-Iranian cognates, but not in other IE branches

Passive -iia- in Avestan

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

a. active endings
kir-**iia**- 'be made' $\sqrt{kar}$ 'make'
$k\partial r\partial\theta$-**$iia$**- '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' $\sqrt{x^{v}ar}$ 'eat'
$\bar{a}f$-**iia**- 'be reached' $\sqrt{\bar{a}p}$ 'reach'
$g\partial r\partial u$-**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-*

(10)   *tōi ābiiā* **bairiiā̊ntē** *vaŋhə̄uš ā dəmānē manaŋhō*
        "Despite these two [? Karapans & Kavis?], they **shall be brought** (in)to
        the home of good thought." (Y. 32.15)

▶ Problem: R(a)

(11)   *ā mā [ā]idūm vahištā (...) ašā vohū manaŋhā yā* **sruiiē** *parə̄ magaonō*
        "Come hither to me, You best ones ... with truth, (and) with good thought
        for which I am heard beyond the sacrificers" (Y. 33.7; Humbach 1991)

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

▶ Kümmel (1996: 154); LIV²: 334; Jasanoff (2003: 170): 3sg. "stative" *sruuai*
  (cp. Ved. *śr̥ṇvé*) > *sruiiai*

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.

(12)   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)

(13)   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** <u>by the Viśvāmitras</u>"

(14)   RV 9.81.12d:

    s_uāyudháḥ   <u>*sotŕ̥bhiḥ*</u>   **pū-ya-te**   *vŕ̥ṣā*
    of.good.weapons.NOM pressers.INSTR purify-PASS-3SG.MID bull.NOM

    "The bull of good weapons **is purified** <u>by the pressers</u>."

(transl. Jamison & Brereton 2014)

Passive agents with -*yá*-passives

Avestan:

(15)   Yt. 1.29 (YAv.):

ā̆rmaⁱtōiš   <u>dōⁱθrābiia</u>   **auuā̆-str-iia-ta**   maⁱriiō̆
Ārmaiti.ɢᴇɴ eye.ɪɴꜱᴛʀ.ᴅᴜ down-throw-ᴘᴀꜱꜱ.ɪᴘᴠ-3ꜱɢ.ɴᴀᴄᴛ villain.ɴᴏᴍ

"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 attested in OAv.) – in YAv., (15) is closest to an animate agent (though instr.
dual is syncretic with dat. and abl.); 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*

(16)   Vedic, RV 9.85.5a

    kánikradat   *kaláśe*   <u>*góbhir*</u>   **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)

(17)   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-ā̆t
    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, (18) (Delbrück 1888: 405; Hock 1982:
  131, 1986: 22; Tikkanen 1987: 147f.)

▶ whereas in anticausatives the controller is the surface subject (Hock 2019, 2022)

(18)   *na   vā*   [PRO$_i$ *a-hiṅ-kṛt-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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- ▶ Vedic -*yá*- (Kulikov 2011): PASS > ANTICAUS via agentless/impersonal passives of verbs of perception (and motion)

(19)   Anticausatives from passives, Kulikov (2011: 234–41; cit. after Bahrt 2021: 213)

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

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)
- ▶ Vedic -*yá*- (Kulikov 2011): PASS > ANTICAUS via agentless/impersonal passives of verbs of perception (and motion)

(19)   Anticausatives from passives, Kulikov (2011: 234–41; cit. after Bahrt 2021: 213)

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

- ▶ 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 (20)— so if anything a *lexical* change of specific roots, not of a functional morpheme.

(20) *ádha bahú   cit táma   úrmyāyās 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, (22).

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

(21)   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-* ($<$ *-$i̯e/o$-) reconstructable for PIE.

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What specifically changed in these constructions?

ANTICAUS > PASS

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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:

(22)   <u>śvātrén̯a</u>   yát   pitrór   **múc-ya-se**   pári
       swelling.INSTR when father.LOC.DU release-YA-3SG.MID on
       "when you (Agni) **get free** <u>through swelling</u> 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**"

(23)   yathā́ phena   <u>udak-ena</u>   (...) **ni-jas-ya-ti**
       as   foam.NOM.SG water-INSTR   PRVB-disappear-V.IPFV-3SG.ACT
       "Just as the foam (...) **disappears** <u>by means of water</u>" (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

(24)   *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)

Reanalysis: instrumental NPs

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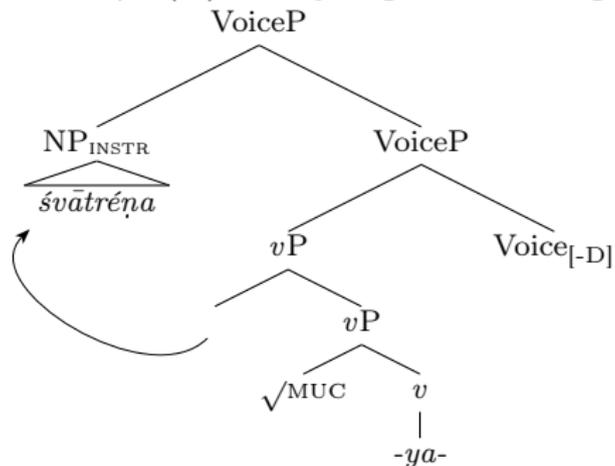
Reanalysis: instrumental NPs & passives

▶ A VoiceP adjunct implies Voice$_{[-D]}$ (see Appendix) 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

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

        b.
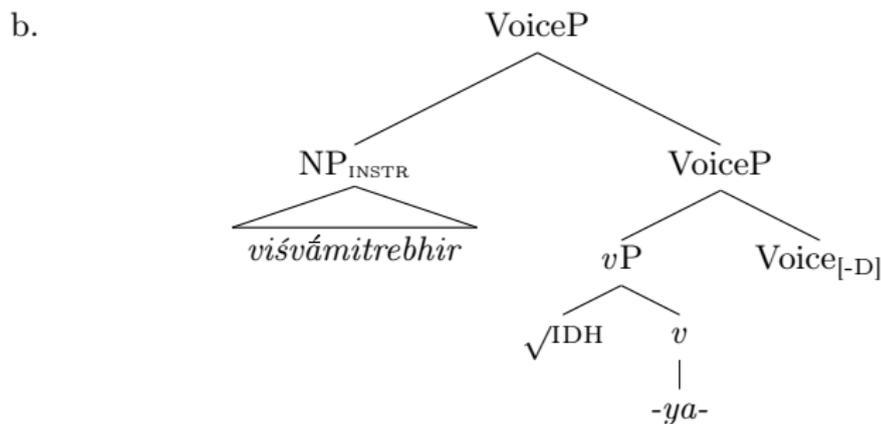
Passive agents in inflectional/middle-marked passives

▶ 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)

(27)   *evá agnír*   <u>*gótamebhir*</u>   *r̥tāvā́*   *víprebhir*
thus Agni.NOM Gotama.INSTR.PL truthful.NOM inspired.INSTR.PL
astoṣ-ṭa   *jātávedāḥ*   (...)
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)

(28)   *mazdå*   (...) *yā̆*   *zī* **vāuuərəz-ōi**
wise.NOM.SG   REL.PRON.NOM.ACC.N for do.PF-3SG.NONACT
pairī.ciθīt̠   <u>*daēuuāiš-cā*</u>   <u>*mašiiāiš-cā*</u>
around.consider.2SG.AOR.OPT daēva.INSTR.PL-and mortal.INSTR.PL
"May the Wise One (...) consider (what) **has been perpetrated** (all) around (here) <u>by Daēvas and mortals</u>" (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)

(29)
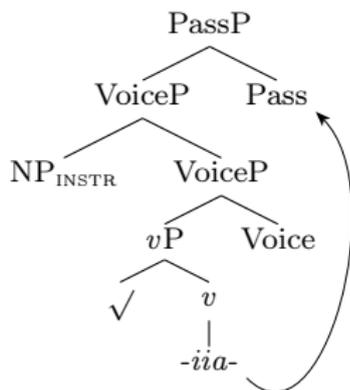
- ▶ Parallel development in Old Persian (West Iranian) and Epic Sanskrit/middle Indic

Old Persian & Epic Sanskrit *-ya-passives

(30)   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'

(31)   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/voice cycle:
  ► vP adjunct → VoiceP adjunct/argument (Proto-Indo-Iranian)
  ► v → 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!

FWF V850-G "The diachrony of verbal categories and categorizers"
(https://lauragrestenberger.com/categorizers-in-diachrony)

Marked anticausatives

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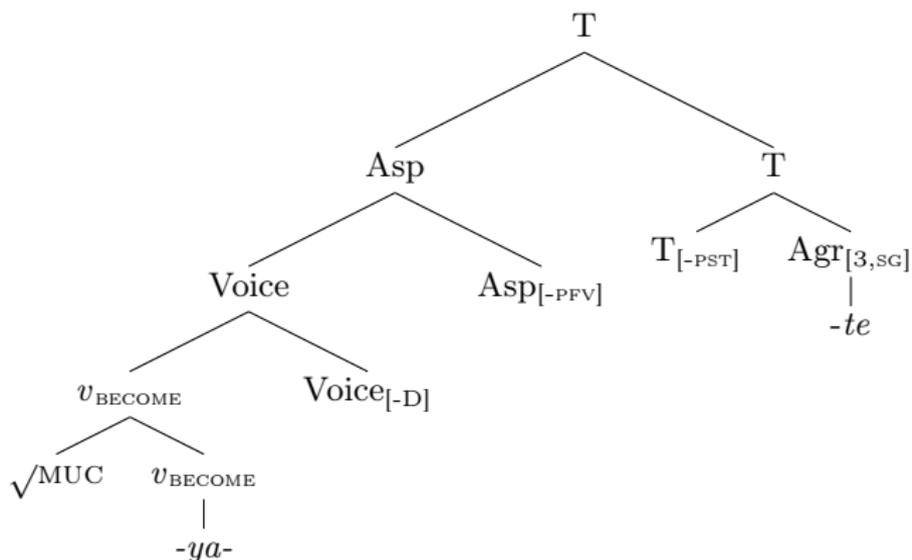
Marked anticausatives

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):

(33)   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:

(34)   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 → active morphology by Elsewhere

(35)   *náś-ya-ti* (ACT) 'disappears'
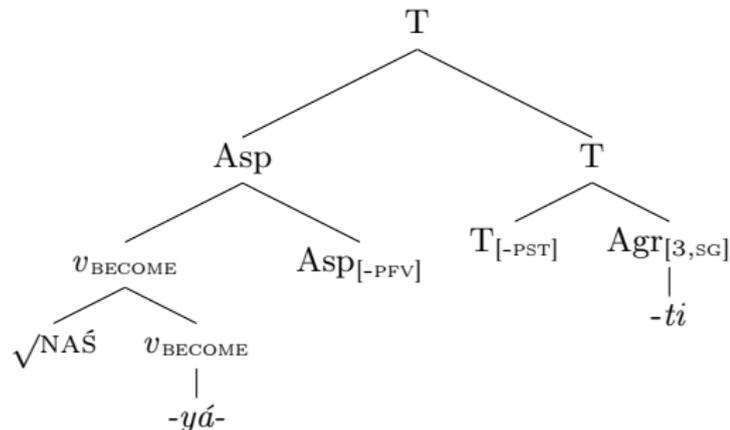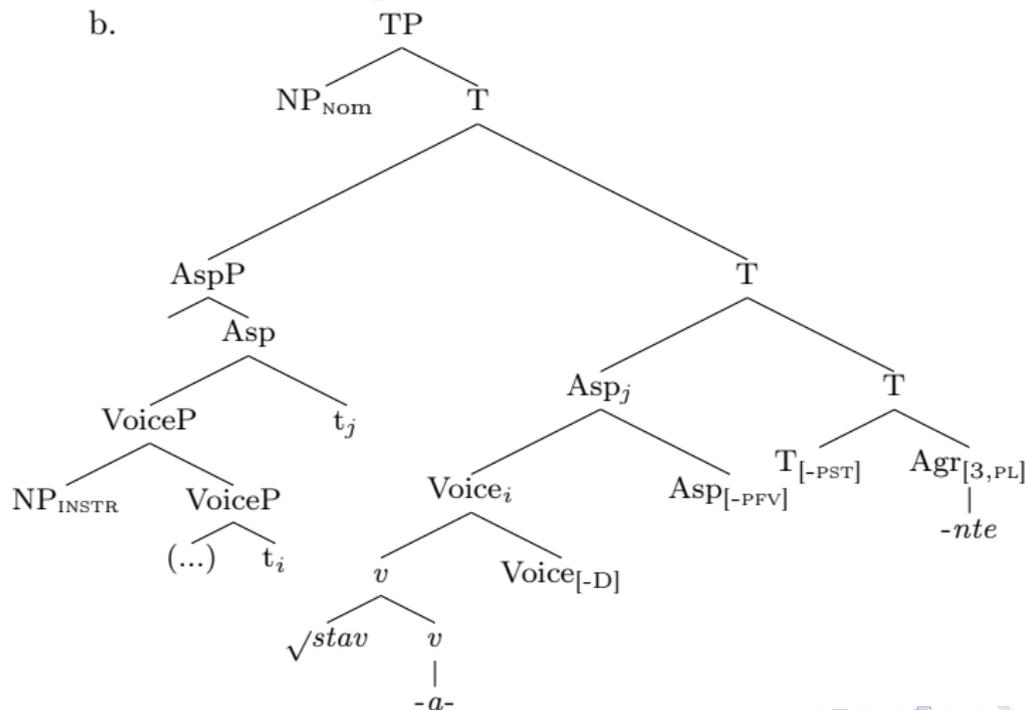
Passive agents in inflectional/middle-marked passives

(36)   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.

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