

On the syntax of the participles of Indo-European deponent verbs

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1 Introduction

(1) participial and verbal-adjective forming suffixes in PIE:

	*-(e)nt-	*-mh ₁ no-	*-tó-	*-uos-/-us-
“active”	Ir., Gk., Lat., Gmc., B.-Sl., Toch.			Ir., Gk., Toch.
“middle”		Ir., Gk., Toch.		
“theme”	Hitt.		Ir., Gk., Lat., B.-Sl., Gmc.	

- “Active”: subject-oriented and associated with active finite paradigms
- “Middle”: associated with middle finite paradigms and “middle” functions
- “theme”: theme- or object-oriented/“passive”

Two ways of approaching the distribution of *-(e)nt- vs. *-mh₁no- (leaving aside Anatolian for now):

1. syntactic selection: *-(e)nt- is inherently active, *-mh₁no- is inherently middle
 - Prediction: *-(e)nt-participles will always surface with active syntax, -mh₁no-participles with middle syntax.
 - ... because the two participle suffixes are specified for Voice
2. morphological selection: participles associated with formally active finite verbs select *-(e)nt-, participles associated with formally middle finite verbs select *-mh₁no-.
 - Prediction: *-(e)nt-participles will always surface with the same syntactic behavior as the corresponding finite active paradigm; -mh₁no-participles with the same syntactic behavior as the corresponding middle finite paradigm.

→ Deponent participles provide evidence for 2.

→ Participial morphology itself not specified for Voice

2 Active vs. middle participles

2.1 Background

- **Voice mismatch:** morphology and syntax don't match.
- In Indo-European, voice mismatches are usually cases of **deponency**, in which a formally middle/non-active verb is syntactically active:
 - Agentive, transitive verbs whose non-active morphology cannot be motivated synchronically, usually found besides semantically very similar formally active verbs.

(2) Active/non-active (near-)synonyms

Language	Deponent	Meaning	Expected meaning	Active verb
Hitt.	<i>tuhša(ri)</i>	'cuts (off)'	*'gets cut off'	<i>kuerzi</i>
Ved.	<i>grásate</i>	'devours'	*'is (being) devoured'	<i>átti</i> 'eats'
Gk.	ἐρύομαι	'protect, guard'	*'am (being) protected'	φύλασσω
Latin	<i>hortor</i>	'encourage, incite'	*'am (being) encouraged'	<i>moneō</i>
	<i>fūror</i>	'steal, rob'	*'am (being) robbed'	<i>clepō, rapiō</i>

2.2 The “active” participle

Brugmann (1892: 370, 423): *-nt-: “Dieses Suffix bildete seit der idg. Urzeit alle activen Participia mit Ausnahme des part. perf.”

(3) Active syntax & active participial morphology:

- Thematic: Ved. *bhárant-*, Gk. *φέρων*, Lat. *ferēns*, etc.
- Athematic: Ved. *ghnánt-*, Av. *γnant-*, Gk. aor. ptcp. *δοῦς, θείς* < **dh₃-ént-*, **d^hh₁-ént-*
- Causative present participles: Ved. *-áyant-*, Lat. *monēns*, etc.
- Participles of transitive *s*-aorists: *sákṣat-* (*sah*), *dákṣat-* (*dah*), Gk. *δειχῶς*, etc.
- Desiderative/Future: Ved. *dāsyánt-*, *vaksyánt-*, Av. *vaxšiiant-*

Cases where the active participial morphology does not match the syntax:

(4) Vedic (cp. AiG II,2: 163ff.):

- járant-* ‘old’ (Gk. *γέρων* ‘old man’); synchronically *jáрати* ‘make old’ : *járate* ‘become old’ (Caland-associated *nt*-formation, Rau 2013)
- vṛdhánt-* ‘growing’ (itr., RV also *vṛdhāná-*; synchronic present *várdhati* ‘cause to grow’ : *várdhate* ‘grow’ (itr.))

(5) Greek:

- ἰών ‘coming, going’ vs. ἐρχόμενος vs. aor.ptcp. ἐλθῶν
- Aor.ptcp. μιγείς ‘mixing, mingling’ (itr., also μιγήμενος, Hom.) : aor. ἐμίγη
- μέδων ‘ruler’ from μέδομαι ‘think of, take care of’

(6) Latin: (see Leumann 1977: 583):

- vertēns* ‘turning’ (tr./itr.): *vert-ō* ‘turn’ (tr.) : *vert-or* ‘turn’ (itr.)
- volvēns* ‘rolling’ (tr./itr.): *volv-ō* ‘roll’ (tr.) : *volv-or* ‘roll’ (itr.)
- liquēns* ‘fluid’ : *liqu-or* ‘become fluid, melt’ (vs. *liqueo* ‘be clear’ and (later) *liqu-ō* ‘make fluid, melt’ (tr.))
- gignentia* ‘growing things, plants’ (Sall.), as if from Gk. *γίγνομαι* ‘come into being, be born’ rather than Lat. *gignō* ‘produce, bring forth’

e. Deponent participles: *sequor*—*sequēns*, *hortor*—*hortāns*, *loquor*—*loquēns*, etc.

2.3 The “middle” participle

- for the reconstruction **-mh₁no-* see, e.g., Klingenschmitt (1975), Mayrhofer (1986: 130f.), Weiss (2009: 437), Pinault (2012), (2013), Melchert (2014); Lowe (2012): some Vedic =*ana-* forms are not participles, but denominal Caland-adjectives (*-āna-* < **-eh₁-no-*)

Brugmann (1892): **-mno-*, **-meno-*, **-mono-*: “Mit diesem Suffix waren in uridg. Zeit participia med. (pass.) der themavocalischen Tempusstamme gebildet, ...” (p. 154), “seit idg. Urzeit mit demselben Sinne, den die medialen Personalendungen hatten.” (p. 423)

(7) “Middle” syntax & middle morphology:

- Ved. *bhāramāṇa-* ‘carrying for oneself; (being) carried’, Av. *barəmna-* ‘being carried’, Gk. *φερόμενος* ‘winning for oneself; being carried’
- Ved. *yájamāna-* ‘sacrificing, worshipping (for oneself)’, Av. *yažəmna-* ‘worshipping’, [Gk. *ἄζομενος* ‘worshipping’]
- Ved. participles to passive *-yá-*stems (always take middle morphology)
- Some fossilized cases in Latin (Leumann 1977: 322, Weiss 2009: 437, Pinault 2013): *alumnus* ‘nursling’ < **h₂al-o-m_hno-* (synchronically *alō* ‘nourish, feed’ : *alor* ‘be nourished, fed’), *fēmina* ‘woman’ < **d^heh₁-mh₁neh₂¹*, *calumnia* ‘slander’ (< *?*k/^hkl_h1-u-mh₁no-*, Lat. *caluor* ‘deceive’, LIV²: 349.
- OPr. *po-klausī-manas* ‘being heard’

Cases where the middle participial morphology does not match the syntax: **deponent participles**

- Vedic:

- īḍ* ‘praise’, RV 10.66.14ab:
vasiṣṭhāsaḥ pitṛvād vācam akrata devāñ īḍānā ṛṣivāt svastāye
“The Vasiṣṭhas have made speech in the manner of their father, invoking the gods in the manner of that seer for well-being.”²
- bād^h* ‘oppress, attack, fend off’, RV 1.35.3cd:
ā devō yāti savitā parāvāto ’pa vīśvā duritā bādhamānaḥ
“God Savitar drives hither from afar, thrusting away all obstacles.”

- Greek

- δίζημα* ‘seek sth.’ : ptcp. *διζήμενος* ‘seeking’, Od.1.261-2:
ῥῆχετο γὰρ καὶ κεῖσε θοῆς ἐπὶ νηὸς Ὀδυσσεὺς φάρμακον ἀνδροφόνον διζήμενος
‘And then Ulysses went into his swift ship, seeking (some) men-slaying poison.’
- τίνωμαι* ‘avenge, punish, chastize’ : ptcp. *πινόμενος*, Od.24.326:
λώβην τινόμενος θυμαλγέα καὶ κακὰ ἔργα
“ ... avenging (their) grievous insults and bad deeds.”

¹Semantically difficult, see Pinault 2013.

²Translations from Jamison and Brereton (2014).

2.3.1 The Latin perfect participle

... similar to the Vedic & Greek cases in that it preserves the Voice mismatch:

- (12) *sequor* ‘follow’, perf.ptcp. *secūtus* ‘(have) followed’, Livy, *Ab urbe condita* 4.20.5:
omnes ante me auctores secutus, ... exposui
 “Having followed all authors before me, I have stated (that) ...”

- (13) *com-minīscor* ‘invent, devise’, perf. *commentus sum* ‘(have) devised’: Plautus, *Truculentus* 85:
eo nunc commenta est dolum
 “For this reason she has now devised this deceit”

- (14) *loquor* ‘speak, say’, perf. *locūtus sum* ‘(have) said’: Plautus, *Trinummus* 563:
quid hic est locutus tecum?
 “What did he discuss with you?”

- The middle participles (or “perfect passive” in Latin, if we want to call it that) have the same syntactic behavior as the corresponding active forms.
- This suggests that approach 2. (morphological selection) is correct and that the late IE “active” and “middle” participial suffixes were not inherently marked for Voice.
- If approach 1. were correct (syntactic selection), we would expect that the selection of the middle/passive participial suffix triggers “middle” syntax and suspends the mismatch:

- (15) Not what we get:
- ṛt̥te* ‘praises’ — *ṛḍāna-* *‘(being) praised’
 - bād̥hate* ‘attacks’ — *bād̥hamāna-* *‘(being) attacked’
 - τίνομα ‘avenge, punish, chastize’ — τίνουμενος *‘(being) punished’
 - sequor* ‘follow’ — *secūtus* *‘having been followed, persecuted’

... or we would expect that deponent verbs have formally active participles:

- (16) Also not what we get:
- bād̥hate* ‘attacks’ — **bād̥hant-* ‘attacking’
 - τίνομα ‘avenge, punish, chastize’ — *τίνύς ‘punishing’
 - sequor* ‘follow’ — ?? ‘having followed, persecuted’

Counterexamples: (15) has been claimed for Vedic, (16) for Latin.

2.3.2 Vedic “counterexamples”

Delbrück (1888: 264), AiG II,2: 270, Kulikov (2006): Some Vedic *-āna*-participles of formally middle, but syntactically active (transitive) verbs are passive (i.e. they seem to instantiate the pattern in (15)).

- *hinvé* ‘I impel, spur’, but 3sg. *hinvé* ‘is impelled, spurred’ : *hinvānā-* ‘impelling, spurring’ (10x); ‘impelled, spurred’ (18x)
 - The Voice fluctuation of the participle reflects that of the finite paradigm (Kulikov 2006: 46, Kümmel 1996: 141).
- *áyukta* ‘yoked’ (tr.), but pass.aor. *áyoji* ‘was yoked’: aor.ptcp. *yujānā-* ‘yoking’ (14x); ‘yoked’ (8x) (Kümmel 1996: 90, Kulikov 2006: 46-7)

- The transitive readings of *yujāná-* belong to the athematic middle aorist, the passive readings belong to the “passive aorist”.
- 3sg. *sunuté* ‘presses’, 3sg. *sunvé* ‘is pressed’: *sunvāná-* ‘pressing’; ‘pressed’ (RV 9.101.13, Kulikov 2006: 50, Kümmel 1996: 123ff.); also aor. *ásāvi* ‘was pressed’: *svāná-* ‘pressed’.
- 3sg. *indhé* (< **ind-dhé* < **indh-té*) ‘kindled, lit up’ (tr.), vs. 3sg. *indhé* (= *indh-é*) ‘is kindled, lights up’ (itr., RV 7.8.1): ptcp. *indhāna-* ‘kindling’ (5x); ‘kindled’ (3x) (Kulikov 2006: 53, Lowe 2013)
- Similar cases:
 - *ásarji* ‘was discharged, set free’: *srjāná-* ‘set free, released’
 - *ádarśi* ‘appeared, was seen’: *drśāná-* ‘visible’
 - (*a*)*roci* ‘shone’: *rucāná-* ‘shining’ (Lowe 2012: 93: derived Caland-adjective of *ruc*)
 - *stavé* ‘is praised’: *stāvāna-* ‘praised’ (18x); *ástāvi* ‘was praised’: *stuvāná-* ‘being praised’
 - ?unattested **ádi* ‘was eaten’: aor.ptcp. *adāná-* ‘being eaten’ (hapax in RV 4.19.9)

Summary: Vedic middle participles do not provide evidence for approach 1., apparent “mismatches” between the syntax of the finite and the participial forms happen when different present/aorist stems share the same participial morphology

- (17) “Stative”—middle pairs: The finite forms have distinct passive vs. middle morphology (in the 3sg.)

<i>gr̥ṇé</i>	‘is/gets praised’	<i>gr̥ṇt́é</i>	‘praises’ ³
<i>śr̥ṇvé</i>	‘is heard, famed as’	<i>śr̥ṇut́é</i>	‘hears’
<i>bruvé</i>	‘is spoken’	<i>brūt́é</i>	‘speaks’
* <i>indh-é</i>	‘lights up’	* <i>indh-té</i>	‘lights sth. up’]

... both the “stative” and the middle participle will surface with *-āna-*.

2.3.3 Latin “counterexamples”

The pattern (16) is allegedly attested in Latin: Deponent participles take the same participial morphology as active participles in the present:

- (18) *hortor—hortāns, sequor—sequēns, loquor—loquēns*

1. This looks like what is predicted by approach 1.: Latin deponent participles select the *active* participial suffix because they are syntactically active.
2. Papangeli and Lavidas (2009), Pesetsky (2009): (18) is evidence that Voice mismatches only occur in finite syntactic contexts.

Ad 1): Latin does not have a designated present *passive* participle, the pattern in (19-a.) rather suggests that *-nt-* is underspecified for Voice (Embick 2000).

³Also ‘is praised’, e.g., RV 5.41.10.

(19) Latin participles

	a. Present		b. Perfect	
	Pres.act.	Pres.pass.	Perf.act.	Perf.pass.
Altern.	<i>am-ō</i> 'I love'	<i>am-or</i> 'I am loved'	<i>am-āv-ī</i> 'I have loved'	<i>amātus sum</i> 'I was loved'
Ptcp.	<i>amā-ns</i> 'loving'			<i>amātus</i> 'loved'
Dep.		<i>sequ-or</i> 'I follow'		<i>secūtus sum</i> 'I have followed'
Ptcp.		<i>sequē-ns</i> 'following'		<i>secūtus</i> 'having followed'

- Embick (2000: 216ff.): *-tus* = underspecified for Voice and Aspect (cp. Weiss 2009: 437)
- See ex. (6) for more cases where *-ns* does not have the expected active syntax

Ad 2): – The (19-b.) pattern shows that *-tus* preserves the Voice mismatch, so non-finiteness alone cannot explain (19-a.)

– Greek and Indo-Iranian (ex. (8-11)) provide further evidence that Voice mismatches are continued in non-finite formations

3 Conclusion

- Reflexes of **(e)nt-* and **-mh₁no-* in Greek, Indo-Iranian, and Latin are not inherently marked for Voice
- Deponent participles provide more evidence for the view that the selection is motivated entirely by the corresponding finite forms (synchronically)
- Non-finiteness does not suspend Voice mismatches

Appendix: **(e)nt-* in Hittite

... functionally corresponds to the reflexes of **-to-* in Ilr., Greek, Lat., etc.: passive for transitive verbs, itr./subject-oriented for intransitive verbs:

- (20) Intransitive *ant*-participles:
- akkant-* 'having died, dead' (*āk-/akk-* 'die')
 - uwant-* 'having come' (*we-/uwa-* 'come')
 - arant-* 'standing' (*ar-* 'stand')
- (21) Transitive *ant*-participles:
- appant-* 'seized, taken' (*epp-/app-* 'seize')
 - piyant-* 'given' (*pai-/pi-* 'give')
 - taruppant-* 'assembled' (*tarupp-* 'collect, assemble')

The participles of deponents pattern with regular transitive verbs and have a passive reading:

- (22) Deponent *ant*-participles:
- paršiyant-* 'broken' (*parš(i)-* 'break')
 - huettiant-* 'pulled' (*huett(i)-* 'pluck, pull')

c. *tuhšant-* ‘cut off’ (*tuhš-* ‘cut off’)

This is exactly parallel to the behavior of, e.g., Ved. *-tá-* and Gk. *-τός*:

- (23) Ved. *tá-*: transitive non-deponents: *ha-tá-* ‘slain’ (*han*), *uk-tá-* ‘spoken’ (*vac*), *pī-tá-* ‘drunk’ (*pā*)
- (24) Ved. *-tá-*: transitive deponents: *gras-itá-* ‘devoured’ (*gras*), *bādh-itá-* ‘beset, hemmed in’ (*bādh*), *-lab-dha-* ‘taken’ (*labh*)
- (25) Gk. *-τός*: transitive non-deponents: *θετός* ‘placed, set’ (*τίθημι*), *ποιητός* ‘made’ (*ποιέω*), *τρητός* ‘pierced, perforated’ (*τετραίνω*)
- (26) Gk. *-τός*: deponents: *ἔξαιτος* ‘picked; choice’ (*ἔξάνυμαι*), *μνηστή* ‘wooed one’ (f.) (*μνάομαι* ‘woo, court’), *εὐχτός* ‘(thing) prayed for, desired’ (*εὐχόμαι*)

This pattern should not be taken as evidence that mismatch behavior is suspended in non-finite formations. Deponents continue to pattern with formally active transitive verbs. The “passive” or object-oriented reading arises because the functional projection that triggers (active vs. middle) Voice morphology in finite forms (*vP* or VoiceP) is absent in **to*-formations and Hitt. *-ant-*, but present in Ved. *-(a)nt-* vs. *-(m)āna-* and Gk. *-ων* vs. *-μενος*; this is summarized in (27).

- (27) Morphosyntax of deponent participles in Indo-European

	includes <i>vP</i>	no <i>vP</i>
syntactically active	Gk. <i>-μενος</i> , Ved. <i>-(m)āna-</i> , Lat. <i>-ns/ -tus (-tūrus)</i>	
syntactically passive		Gk. <i>-τος</i> , Ved. <i>-tá-</i> , Hitt. <i>-ant-</i>

This analysis is elaborated in chapter 5 of Grestenberger (2014: 276ff.) (based on, e.g., Embick 2000, Anagnostopoulou 2003, Alexiadou and Anagnostopoulou 2008).

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