Misbehaving verbs: deponents, voice, and the properties of vP

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Introduction: the big picture

- Synchrony vs. diachrony: to what extent can synchronic language states be explained through their diachrony?
- Conversely, how does UG constrain possible diachronic developments at any given synchronic stage?
- How do *mismatches* between morphological form and syntactic function fit into this? Synchrony or diachrony?

Today's talk focuses on a *synchronic* syntax-morphology mismatch of particular voice systems — but the "bigger picture" must include their diachrony.

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- Lat. *dē-pōnere* 'lay aside', sc. the verb's non-active "meaning"
- A common feature of the voice systems of older Indo-European (IE) languages: Sanskrit, Greek, Latin, Hittite, Old Irish, Tocharian ... and some modern IE languages (Modern Greek, Modern Albanian).

What are deponents?

(1) Latin alternating vs. deponent verbs:

	a. Pres.act.	b. Pres.pass.
Alternating	am-**ō** 'I love'	am-**or** 'I am (being) loved'
Deponent		hort-**or** 'I encourage'

- *hortor* should mean 'I am (being) encouraged' — but it means 'I encourage'
- a lexical idiosyncracy

What are deponents?

(2) **Latin**: *hortor* 'incite, encourage': Plautus, *Mercator* 695–697:

sed **coquos**, quasi in mari solet hortator
but cooks.acc.pl like in sea.abl be.wont.to.3sg.pres inciter.nom
remiges **hortarier**, ita **hortabatur**
rowers.acc.pl incite.inf.**pass** so incite.3sg.ipf.**pass**

"But just like at sea a rowing-master (lit. 'inciter') is wont to urge the rowers, so he urged the cooks"

Why do we have the intuition that something has "gone wrong" with the voice morphology of these verbs?

What are deponents?

Latin, Ancient Greek, Vedic Sanskrit, Modern Greek, etc. ... have a **bivalent voice system** in which an opposition between active and non-active voice is expressed through verbal inflection together with tense and agreement features → "Greek-type voice system"

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(3) Ancient Greek: Active—Non-active endings (present sg., athem.)

	Active	Non-active
1	*-mi*	*-mai*
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- "non-active" is a cover term for what is usually called "middle" or "mediopassive" morphology in these languages
- Pre-theoretically, we have some notion of the syntactic contexts in which we expect active vs. non-active morphology

What are deponents?

... but it is easy to find (near-)synonyms with differing voice morphology, e.g.:

(4) Active/non-active (near-)synonyms in IE languages

Language	Non-active verb	Active verb	Meaning
Latin	*hortor*	*moneō*	'encourage, incite'
	fūror	*clepō*, *rapiō*	'steal, rob'
Sanskrit	*várdhate*	*bhávati*	'grows/becomes'
	grásate	*átti*	'devours/eats'
Hom. Greek	*erúomai*	*phúlassō*	'protect, guard'
	érkhomai	*eĩmi*	'come, go'
Modern Greek	*eborevome*	*adallasso*	'trade'
	katarieme	*anathematizo*	'curse'

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- Why do we find different voice morphology in what appear to be identical syntactic contexts?

Voice mismatches

- How can we account for voice mismatches/syntax-morphology mismatches?

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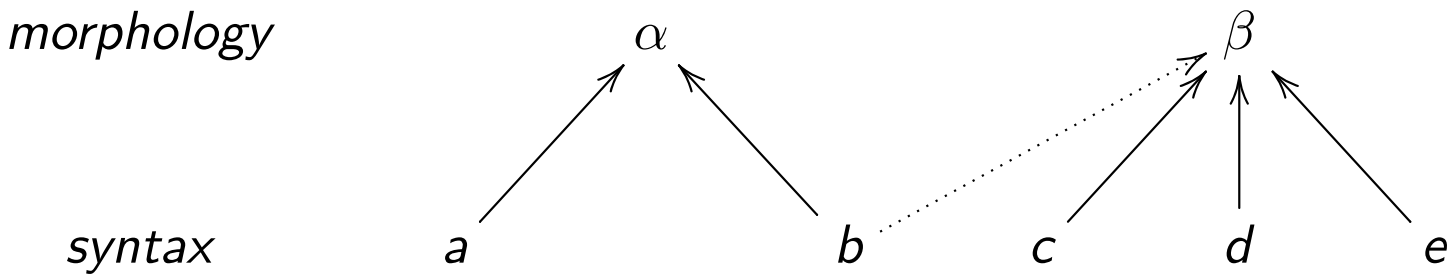

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- How can we account for voice mismatches/syntax-morphology mismatches?

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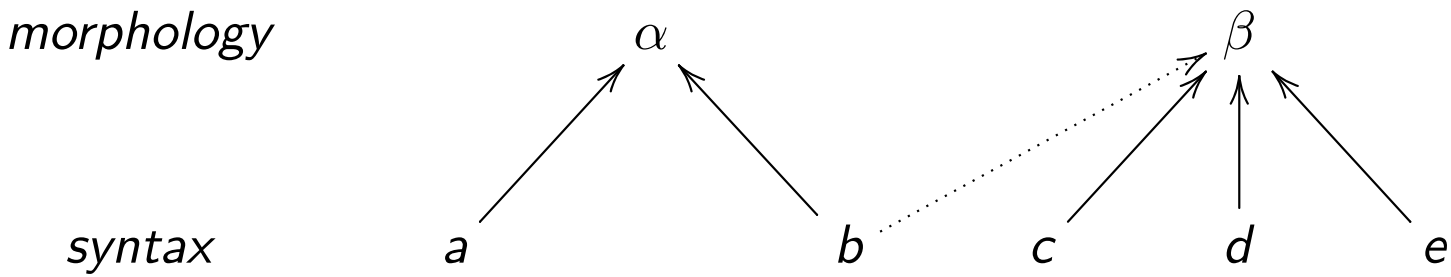

The broader questions:

- What governs the distribution of active vs. non-active morphology in these languages?
- Can we predict the canonical distribution of active/non-active morphology?

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- Deponency is constrained by synchronic and diachronic properties of "Greek-type" voice systems

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Structure of this talk:

1. Introduction
   - Background ✓
   - Outline ✓
   - Canonical vs. non-canonical uses of voice morphology
2. Theoretical background: a post-syntactic approach to voice morphology
3. Deriving deponents
   - Voice and v
   - Deponency as reanalysis
   - Self-benefactives
4. Evidence from non-finite contexts
   - Mismatch suspended
   - Mismatch continued
5. Conclusion

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(6) Canonical functions of non-active morphology

a. Anticausatives
b. Reflexives & reciprocals
c. Self-benefactives
d. (Dispositional/generic constructions)
e. (Medio)passives

Canonical uses of non-active morphology

(7) Voice alternations in Ancient Greek

Function	Non-active	Active
Anti-causative	*daío-mai* 'burn, blaze' (itr.)	*daí-ō* 'burn sth.'
Reflexive	*loúo-mai* 'wash myself'	*loú-ō* 'wash sth.'
Self-benefactive	*phéro-mai* 'carry (away) for myself'	*phér-ō* 'carry, bear'
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(8) Voice alternations in Modern Greek

Function	Non-active	Active
Anti-causative	*sikon-ome* 'rise'	*sikon-o* 'raise'
Reflexive	*plen-ome* 'wash myself'	*plen-o* 'wash'
Self-benefactive	*promithev-ome* 'supply myself'	*promithev-o* 'supply'
Passive	*skoton-ome* 'am killed'	*skoton-o* 'kill'

Same morphology in different syntactic environments: **voice syncretism** (Embick 1998)

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- Better to keep the terms *media tantum* and *deponents* distinct

Theoretical background: Voice and v

A postsyntactic approach to voice morphology

Formalizing the generalizations concerning *canonical contexts for non-active morphology*:

(10) alternating

a. anti-causative
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Is there a unifying generalization for these contexts?
$\rightarrow$ Their surface subjects $\neq$ agents.

A postsyntactic approach to voice morphology

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- Embick 1998, 2004, Kallulli 2006, 2007, 2013: non-active morphology is sensitive to whether *v* has an external argument.

Spell-Out condition on non-active morphology:

(12) $v \leftrightarrow v\text{-X}/\_$ No external argument (Embick 2004: 150)
"Non-active voice is assigned when *v* does not introduce an external argument"
("-X" = morphological exponence of "non-active" in a given language)

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(... $\approx$ VoiceP, e.g., Harley 2013)

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Similar: non-active morphology indicates that an external argument has been suppressed (Kallulli 2006: 216: "Unaccusative morphology suppresses the first feature in v"); non-active morphology binds the external argument (Oikonomou 2014, based on Bruening 2013).

- Not pursued here — difficult to explain *media tantum* under this approach (see Appendix)

Flavors of *v*

Further assumption: two types of *v*

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(13) Definition: canonical uses of non-active morphology: *v*[ag] does not introduce an external argument

Active vs. non-active: basic distribution

This framework gives us the following basic distribution of voice morphology in a Greek-type voice system (cp. Kallulli 2013: 349):

(14) Distribution of active vs. non-active morphology:

	+ext.arg.	-ext.arg.
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- Deponents are "mismatch verbs" because their surface subject is an agent, but they surface with non-active morphology — not predicted by (14).

Deponents

(15) Definition of deponency (Grestenberger 2014)
"In an active—non-active voice system, a deponent is a syntactically active verb whose surface subject is an agent and whose finite forms are morphologically non-active."

Deriving deponents

Deriving deponents

Deponents (narrow definition) have an external argument.

- They make agent nouns (examples below)
- They are compatible with agent-oriented adverbs
- They passivize (under specific circumstances) → see the Appendix

Generalization:

(16) Deponents can passivize if passive morphology that is distinct from the morphology triggering the mismatch is available.

Deriving deponents

Observation: Voice mismatch in deponents = linked to their *verbalizing* morphology.

(17) Vedic alternating and deponent verb stems

Alternating		Deponent	
Stem	Meaning	Stem	Meaning
várdh-a-$^{\text{act./NAct.}}$	'grow'	*rábh-a-*$^{\text{NAct.}}$	'seize'
bhár-a-$^{\text{act./NAct.}}$	'carry'	*grás-a-*$^{\text{NAct.}}$	'devour'
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This suggests that the "trigger" of deponent behavior is located between the verbalizer V and *v*.

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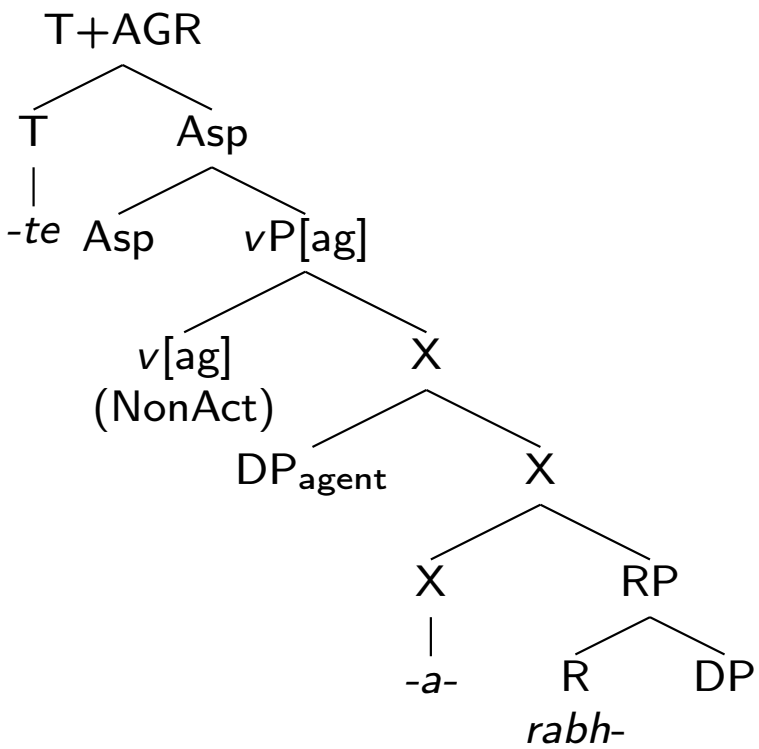
Illustrated for Ved. *rábhate* 'seizes':

(18)



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- ... but deponents behave like agentive verbs (they make agent nouns, passives, have agent-oriented adverbs) because they merge a *non-canonical* agent DP.
- Where does this DP come from? What's "XP" in (18)?

Deponency as reanalysis

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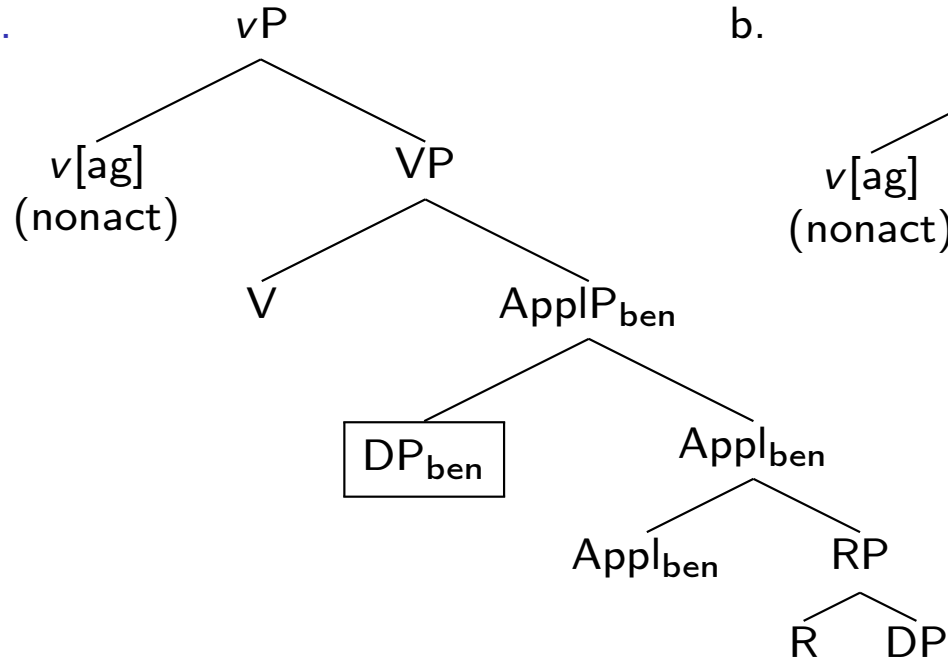

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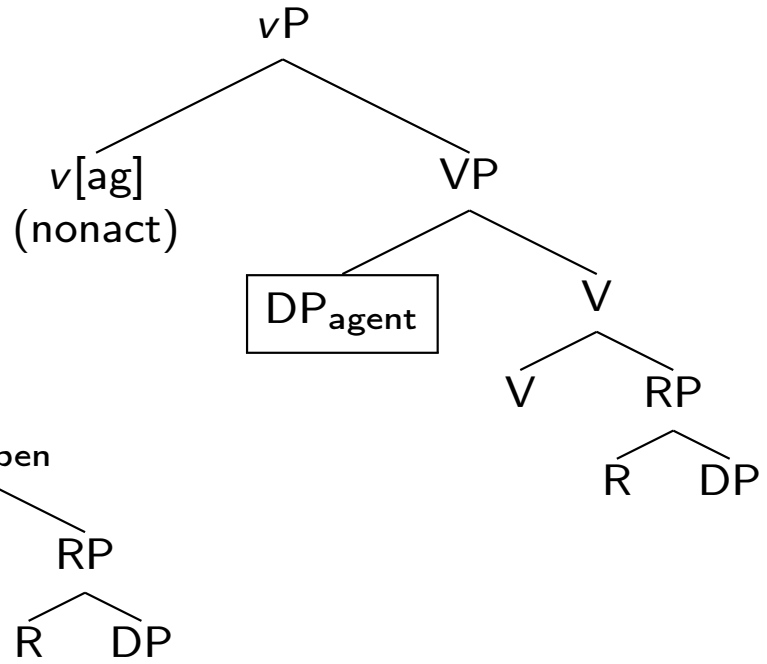

(19-a) based on Pylkkänen 2008: "low applicatives" (also Bosse et al. 2012)

Self-benefactives

Self-benefactives in Greek-type voice systems: the surface subject = experiencer/benefactive argument merged by Appl_{ben} (**movement analysis of self-benefactives**):

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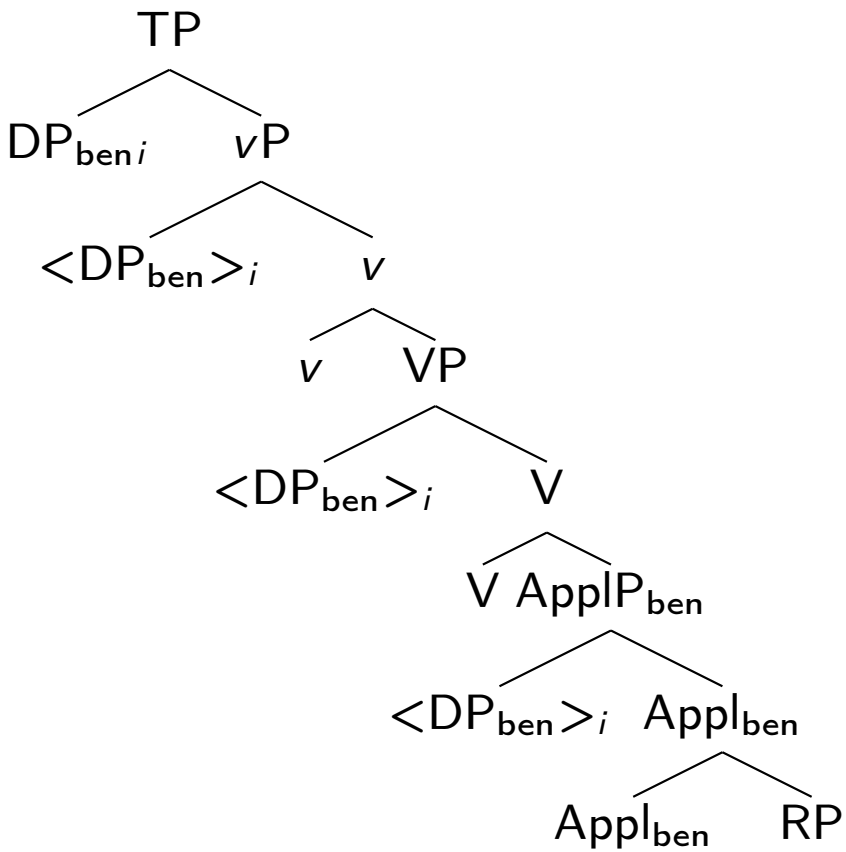

Self-benefactives: Greek

Benefactives and self-benefactives both have nominative subjects and accusative objects—they only differ in their voice morphology:

(21) Ancient Greek

a. Self-benefactive: Herodotus, *Histories* 4.130.1:

taûta mén nun epì smikrón ti **ephéro-nto**
therefore part now in small.acc something.acc bring.ipf-3pl.**NAct**
toũ polémou
this.gen war.gen

"Therefore they (the Persians) gained little in this war"

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b. Benefactive: Herodotus, *Histories* 4.133.2:

ándres Íōnes, eleutheríēn hḗkomen humîn
men.pl Ionian.pl freedom.acc be.present.1pl.act you.dat.pl
phéro-ntes
bringing.pres-ptcp.nom.pl.**act**

"Ionians, we are here to bring you freedom"

Self-Benefactives: Vedic

(22) Vedic (translations from Jamison and Brereton 2014):

a. Self-benefactive: RV 1.3.11c

yajñáṃ **dadh-e** sárasvatī
sacrifice.acc place.perf-3sg.perf.**NAct** Sarasvatī.nom

"Sarasvatī has received our sacrifice." (< "has taken/placed for herself")

b. Benefactive: RV 4.20.9d

<á>thā **dadhā-ti** dráviṇaṃ jaritré
also+to.prvb place-3sg.pres.**act** wealth.acc singer.dat

"and he establishes material property for the singer."

- The benefactive takes active morphology, the self-benefactive takes non-active morphology
- Expected if their surface subjects are merged in different positions

Reanalysis

- Starting point of reanalysis: loss of self-benefactive semantics (= Appl_{ben})

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The acquirer is confronted with a transitive, agentive construction with *non-canonical* non-active morphology. The acquirer either

- "normalizes" the voice morphology, resulting in morphologically active transitive verbs
  - Ex.: Ancient Greek → Modern Greek: non-act. *eksēgeomai* 'I interpret' → act. *eksigo*; non-act. *kharizomai* 'I present with' → act. *kharizo*, etc.

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  or
- acquires a verb with non-canonical voice morphology → **deponent**

Summary

- Deponents (narrow definition) are agentive
- Their surface subject starts out as "low agent" due to reanalysis of what used to be an experiencer/benefactive argument below *v*P
- This reanalysis is possible because voice morphology (in Greek-type languages) is not "feature suppression": it just marks the absence of an external argument in *v*[ag

Additional evidence: non-finite formations

Evidence from non-finite contexts: deponent participles

Variation in deponent participles

- The puzzle: some non-finite forms of deponents appear to give up the voice mismatch.

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  - Present participles of Latin deponents use the same participial suffix as participles of formally active verbs, (23-c.)

(23) Latin alternating vs. deponent verbs: the basic paradigm

	a. Pres.act.	b. Pres.pass.	c. Pres.ptcp.
Alternating	am-ō 'I love'	am-or 'I am (being) loved'	ama-**nt**- 'loving'
Deponent		hort-or 'I encourage'	horta-**nt**- 'encouraging'

Papangeli and Lavidas 2009, Pesetsky 2009: deponency depends on finite T.

Variation in deponent participles

- Cross-linguistic investigation of non-finite forms of deponents (focus on participles, verbal adjectives) in Hittite, Vedic Sanskrit, Homeric Greek, Latin and Modern Greek shows variation in whether or not the mismatch is preserved (Grestenberger 2014, Grestenberger 2015)

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- What triggers this variation? When does deponency surface in non-finite forms?
- Prediction: deponency surfaces in deverbal formations that include *v*P
  - ... because that's the locus of the voice mismatch

Mismatch suspended: Agent nouns

- Deponents behave like formally active agentive verbs and form agent nouns, using the same suffix as the regular active verbs.

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(24) Vedic agent nouns, suffix *-tár-*:

alternating		deponent	
root	agent noun	root	agent noun
dā 'give'	*dā-tár-* 'giver'	*trā* 'protect'	*trā-tár-* 'protector'
nī 'lead'	*ne-tár-* 'leader'	*īḍ* 'praise'	*īḍi-tár-* 'praiser'
rakṣ 'protect'	*rakṣi-tár-* 'protector'	*kṣad* 'serve'	*kṣat-tár-* 'server'

Baker and Vinokurova 2009: agent nominalizations do not include the Voice head (here: *v*)

Mismatch suspended: verbal adjectives

- Vedic, Ancient Greek, Modern Greek, Hittite have "stativizers" that attach directly to the root
  - Ved. *-tá-*, AG *-tós*, MG *-tos*, Hitt. *-ant-*

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The verbal adjectives of deponents pattern with active transitive verbs in having a passive reading.

(25) Vedic verbal adjectives in *-tá-*

alternating		deponent	
root	verbal adj.	root	verbal adj.
han 'slay'	*ha-tá-* 'slain'	*gras* 'devour'	*gras-itá-* 'devoured'
vac 'speak'	*uk-tá-* 'spoken'	*bādh* 'beset'	*bādh-itá-* 'beset, hemmed in'
pā 'drink'	*pī-tá-* 'drunk'	*labh* 'take'	*-lab-dha-* 'taken' (< **labh-ta-*)

Nominalizer below *v*P

Anagnostopoulou (2003), Alexiadou and Anagnostopoulou (2008), etc.: adjectival suffix in MG *tos*-participles ("stative participles") takes a RootP (RP) complement.

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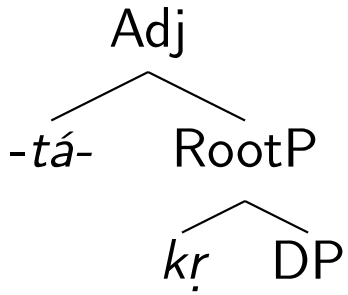
- Only the internal argument is included → derives the "theme-orientedness" of these formations (intransitive subject/transitive object)
- No verbalizing morphology, no *v*P → deponents are predicted to pattern with regular transitive verbs

Nominalizer below *v*P

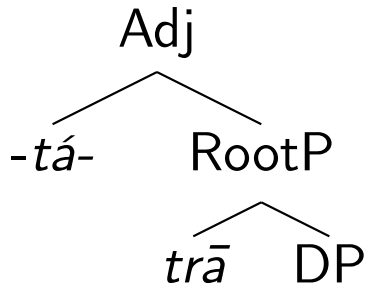
Ex.: Vedic verbal adjectives in *-tá-*:

(26)

a. non-deponent:
kṛ-tá- 'made'



b. deponent:
trā-tá- 'protected'



Besides MG *-tos* and Vedic *-tá-*, this is also the structure of the Ancient Greek *to*-participle and the Hittite *ant*-participle.

Mismatch continued: Vedic and Greek

- Vedic & Greek: active vs. non-active (middle) participial forms in the present, aorist, and perfect paradigm.
  - Vedic: active *-ant-/-at-*, non-active *-āna-/-māna-*
  - Greek: active *-(o/e/a)-nt-*, non-active *-(o/a)-menos*.

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  - Greek: active *-(o/e/a)-nt-*, non-active *-(o/a)-menos*.
- Deponent participles always select the **non-active** suffix and continue the mismatch

Mismatch continued: Vedic

(27) *day* 'distribute', RV 1.130.7:

atithigvā́ya śámbaraṃ girér ugró ávābharat
Atithigva.dat Śambara.acc mountain.abl mighty.nom down.pushed
mahó **dhánāni** **dáya-māna** **ójasā** (...)
great.acc prizes.acc distributing-**NAct**.ptcp.nom might.instr

"The mighty one pushed Śambara off the mountain for Atithigva, distributing the great prizes with might (...)"

Mismatch continued: Greek

(28) *dízēmai* 'seek sth.' : ptcp. *dizḗmenos* 'seeking', Od.1.261-2:

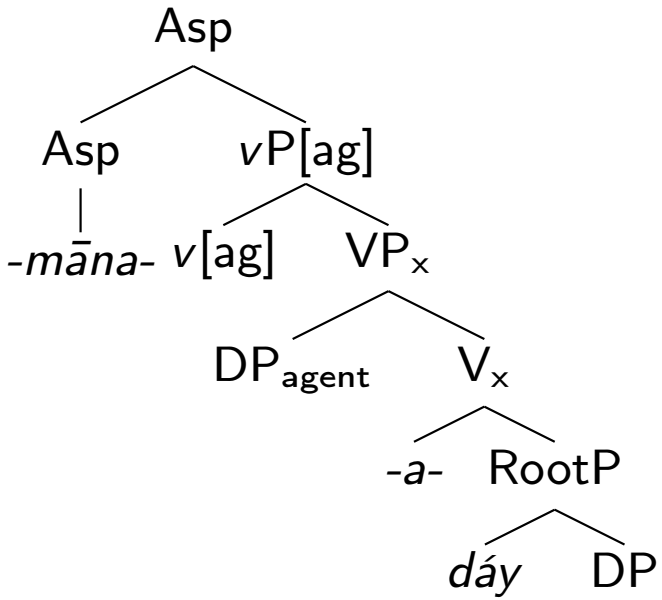
ǒikheto gàr kaì keĩse thoês epì nēòs Odusseùs
go.3sg.ipf part and there swift.gen on ship.gen Ulysses.nom
phármakon androphónon dizḗ-menos
poison.acc man.slaying.acc seeking-**NAct**.ptcp.pres.nom

'And then Ulysses went into his swift ship, seeking (some) man-slaying poison."

Nominalizer above *v*P

Structure for Vedic/Greek deponent participles (participial suffix spells out Asp if there is no verb movement to T, cf. Embick 2000, Bjorkman 2011):

(29) Vedic: *dáy-a-māna-* 'distributing'



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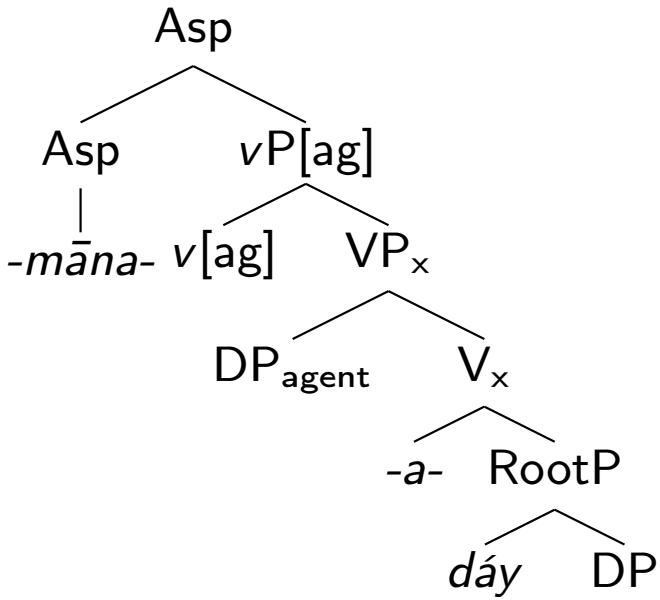

Spell-Out rules for Vedic participles:

(30) a. Asp ↔ *-(m)āna-*/_*v*[ag][-ext.arg]
b. Asp ↔ *-ant-* : elsewhere

Mismatch suspended? Latin

Latin deponents use the same morphology as non-deponents in some non-finite contexts. The mismatch appears to be suspended. Example: Lat. **present** participles in *-nt-* found both with deponent and with formally active verbs:

(31) Latin non-finite forms

	Present			Perfect	
	Pres.act.	Pres.pass.	Pres.ptcp.	Perf.act.	Perf.pass.
Altern.	*am-ō* 'I love'	*am-or* 'I am loved'	***ama-nt-*** 'loving'	*am-āv-ī* 'I have loved'	*amātus sum* 'I was loved'
Dep.		*sequ-or* 'I follow'	***seque-nt-*** 'following'		*secūtus sum* 'I have followed'

Latin

... but the **perfect** participles of deponents continue the mismatch behavior:

(32) *sequor* 'follow', perf.ptcp. *secūtus*: Livy, *Ab urbe condita* 4.20.5:

omnes ante me **auctores** **secu-tus** ...
all.acc before me authors.acc followed-**NAct**.perf.ptcp.nom

"Having followed all authors before me ..." (not: "having been followed")

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omnes ante me **auctores** **secu-tus** ...
all.acc before me authors.acc followed-**NAct**.perf.ptcp.nom

"Having followed all authors before me ..." (not: "having been followed")

- The Latin present "active" participle cannot be used as evidence that deponency is generally suspended in non-finite contexts

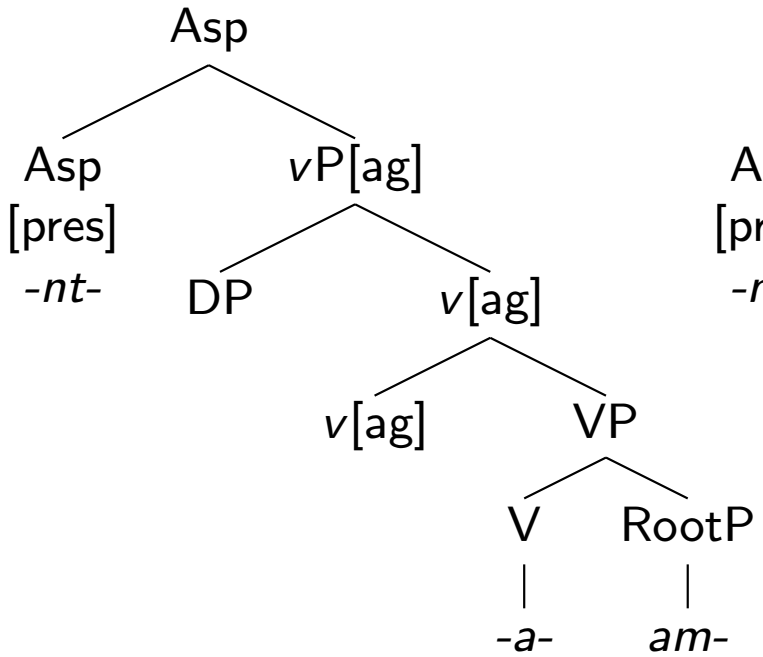
Latin

Additional assumption for Latin *-nt-*: not sensitive to whether or not *v*[ag] has a specifier:

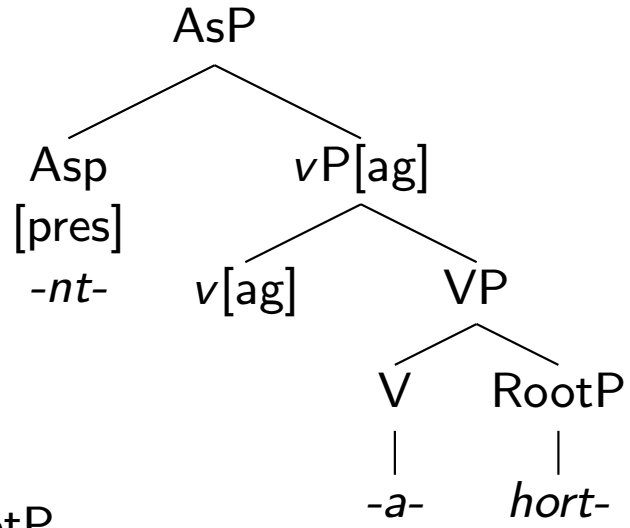
(33) Asp $\leftrightarrow$ *-nt-*/[pres]

Syncretism: in the context of Asp[pres], the nominalizer is always spelled out as *-nt-* (cp. Embick 2000: 218)

(34) a. Non-deponent: *ama-nt-*



b. Deponent: *horta-nt-*



Latin

Embick (2000): *-nt-* and *-tus* are allomorphs of Asp; *-tus* = underspecified for Voice and Asp:

(35) a. *-nt-* ↔ Asp[pres]
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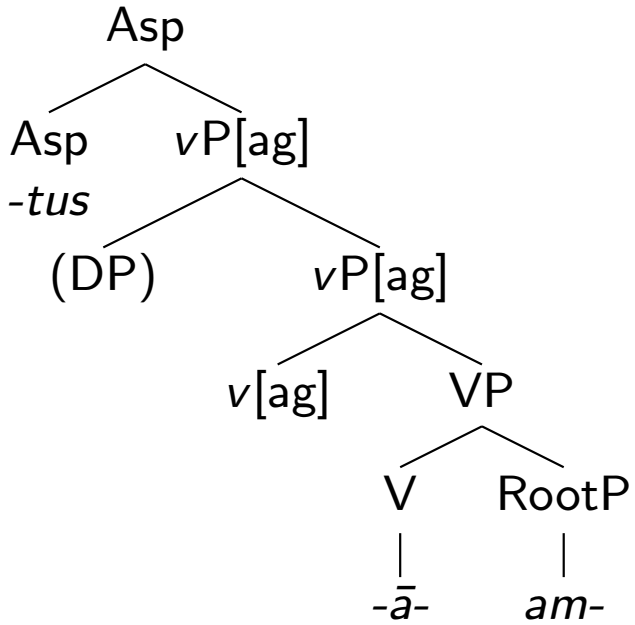
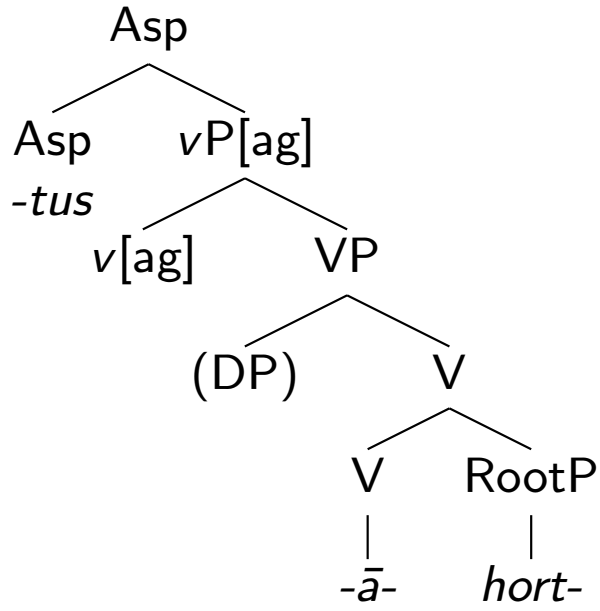
Structure of non-deponent and deponent *tus*-participles:

(36) a. *am-ā-tus* 'loved'



b. deponent *hort-ā-tus* 'exhorted'



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(37) Generalization: If a nominalizer in a given language attaches above *v*P([ag]), deponent behavior is preserved in the nominalization. If a nominalizer attaches below *v*P([ag]), deponent behavior is suspended in the nominalization.

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(38) Morphosyntax of deponent participles in "Greek-type voice systems":

syntax	includes *v*P	no *v*P
act.	Gk. *-menos*, Ved. *-(m)āna-*, Lat. *-nt-/-tus*	
pass.		Gk. *-tos*, Ved. *-tá-*, Hitt. *-ant-*

Does this analysis also make the right predictions for a live language with the same voice system, like Modern Greek?

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- Yes! (see the Appendix)

Conclusion

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  - Additional assumption for Latin: syncretism in participial morphology, independent evidence

= deponency is constrained by *synchronic* principles of (Greek-type) voice morphology

Implications

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  - Verbs that can potentially be "misanalyzed" as agentive: (oppositional) self-benefactives; experiencer verbs, speech verbs.
- This explains the cross-linguistic correlations in deponent verb classes: only verbs with a certain argument structure can become deponents.

= deponency is *diachronically* constrained by possible reanalysis paths of (Greek-type) voice systems

(39) Deponents: verb class correlations in IE

Vedic	Hittite	Latin	AGreek	MG	Meaning
trā́yate	*paḫšari*	*tueor*	*erúomai*		'protect'
bā́dhate			*íptomai*	*epititheme*	'attack, beset'
		imitor		*mimume*	'imitate'
		ulcīscor	*tī́numai*	*ekdikume*	'take revenge on, avenge'
rábhate, *pátyate*		*adipīscor*, *nancīscor*	*aínumai*, *dékhomai*	*sfeterizome*, *karponome*	'take, appropriate'
		comminīscor, *māchinor*	*mḗdomai*	*skarfizome*	'contrive, devise'
ī́ṭṭe, *vándate*			*eúkhomai*		'praise'
		ūtor		*metahirizome*, *kapilevome*	'use'
kṣádate		*fungor*	*titúskomai*		'prepare, carry out'
	ḫannari	*perīclitor*	*aitiáomai*, *prokalízomai*		'challenge, contest, test'

Implications

- This analysis also explains why languages with a voice system like, e.g., English and French do not have deponents: deponency depends on voice syncretism
  - ... because voice syncretism generally allows acquirers to interpret non-active forms in different ways (anti-causative, reflexive, passive ...)

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- It predicts how deponency interacts with non-finiteness in participial formations and nominalizations
  - A diagnostic for the internal structure of participles in voice syncretism-languages

Thank you!

Acknowledgments

Many thanks to Elena Anagnostopoulou, Isabelle Charnavel, Hannes Fellner, Sabine Iatridou, Jay Jasanoff, Craig Melchert, Despina Oikonomou, Jeremy Rau, Michael Weiss and the Concordia linguistics faculty and students for comments and criticism.

Appendix

Media tantum

Sanskrit grammarians distinguish between three types of verb classes w.r.t. voice morphology:

- *ubhayapadin*-verbs (U): can take both active and middle endings (*ubháya-* 'both'), = *alternating verbs*, e.g., *vṛdh* 'grow', *kṛ* 'make', *bhṛ* 'carry'.
- *parasmaipadin*-verbs (P): *activa tantum* (*parasmai* 'for somebody else'), e.g., *as* 'be', *ay* 'go', *ad* 'eat'.
- *ātmanepadin*-verbs (Ā): *media tantum* (*ātmáne* 'for oneself'), e.g., *ā́ste* 'sits', *śáye* 'lies', *bā́dhate* 'fends off'

(40) Sanskrit P-, Ā-, and U-verbs, ca. 500 BCE (*Dhātupaṭha* of Pāṇini and Candra, from Liebich 1922)

	# of roots	%
P	1,038	51.9
Ā	485	24.9
U	478	23.9
Total	2,001	100

Media tantum

- Zombolou and Alexiadou 2014: 1,348 verbs out of approx. 5,500 verbs in Modern Greek are "deponent" (= take only middle endings"), = ca. 20%
  - Reflexive & reciprocals: 33% (*aftoeksipiretume* 'serve oneself', *adelfoskotonome* 'brother-kill each other', ...)
  - anticausatives/inchoatives: 19% (*ekrignime* 'explode', *enilikionome* 'become an adult'...)
  - cognitive verbs: 13% (*fovame* 'fear', *esthanome* 'feel' ...)
  - unaccusatives: 9% (*erhome* 'come' ..)
  - passives: 8% (*iliokeome* 'be burnt by the sun')
  - statives: 7% (*ironevome* 'be ironic', *tsigunevome* 'be stingy' ...)
  - **active-like** (= agentive): 11%, e.g., *metahirizome* 'use', *ekmetalevome* 'exploit' ...

→ Non-alternating canonical media tantum are a stable feature of syncretic voice systems

- Not clear which arguments were "suppressed" in, e.g., Ved. *śáye* 'lies', MG *erhome* 'comes', *esthanome* 'feel', etc.

Passivization

Generalization: Deponents can passivize if passive morphology that is distinct from the morphology triggering the mismatch is available.
Vedic: bivalent system, but a distinct passive suffix is available in the present stem, (41-c).

(41) a. Present active:

*bhár-a-**ti***
carry-V-3sg.nonpast.**act**

"carries sth."

b. Present middle:

*bhár-a-**te***
carry-V-3sg.nonpast.**NAct**

"carries oneself/for one's own benefit/*is being carried"

c. Present passive:

*bhri-yá-**te***
carry-pass-3sg.nonpast.**NAct**

"is being carried"

Passivization

Deponent verbs show that it is the suffix *-yá-* that passivizes, and not the middle morphology. Deponents behave like active transitive verbs in being able to form a *yá*-passive in their imperfective stem.

(42) Vedic deponent passives

Root	Deponent	Passive
īḍ	*ī́ṭ-**ṭe*** 'praises'	*īḍ-yá-**te*** 'is being praised'
	praise-3sg.nonpast.**NAct**	praise-pass-3sg.nonpast.**NAct**
idh	*ind-**dhé*** 'kindles'	*idh-yá-**te*** 'is being kindled'
	kindle-3sg.nonpast.**NAct**	kindle-pass-3sg.nonpast.**NAct**
rabh	*rábha-**te*** 'seizes'	*rabh-yá-**te*** 'is being seized'
	seize-3sg.nonpast.**NAct**	seize-pass-3sg.nonpast.**NAct**

Passivization: Greek

- Greek: bivalent system, but the aorist stem forming suffix -***thē***- develops into a passive marker in (post-Homeric) Greek
- Deponents make passive aorists using this suffix:

(43) Deponent *dōréomai* 'give, endow with', Herodotus, *Histories* 8.85.3:

Phúlakos dè euergétēs basiléos
Phulakos.nom part benefactor.nom king.gen
an-e-gráph-ē kaì khṓrēi **e-dōré-thē**
down-past-write-3sg.aor.pass and land.dat past-endow-3sg.aor.**pass**
pollêi
much.dat

"Phulakos was recorded as benefactor of the king and endowed with much land."

→ deponent passive *edōréthē* 'was endowed' : non-deponent passive *anegráphē* 'was recorded'

Modern Greek

Deponent participles, both in *-tos* and in *-menos*, behave like the participles of non-deponent transitive verbs. *-tos* occurs in negated participles of deponent and non-deponent verbs (ex. from Papangeli and Lavidas 2009: 201):

(44) a. Non-deponent *pleno* 'wash':

pli-menos — a-pli-tos
washed unwashed

b. Deponent *metahirizome* 'use':

metahiris-menos — a-metahirist-tos
used unused

Behavior of *-tos* = expected given Anagnostopoulou's analysis.

Modern Greek

(Potential) Problem: *menos*-participles of deponents are passive.

(45) Non-deponent *grafo* 'write':

a. To gramma ine grammeno
The letter.nom is written
"The letter is written"

b. To grammeno gramma
The written letter

(46) Deponent *metahirizome* 'use':

a. To lexiko ine metahirismeno
The dictionary.nom is used
"The dictionary is used"

b. To metahirismeno lexiko
The used dictionary

Anagnostopoulou 2003: some *menos*-participles contain Voice; the mismatch should surface.

Modern Greek

Anagnostopoulou 2003: *target state* participles in *-menos* do not contain Voice and are incompatible with agentive *by*-phrases and agent-oriented adverbs, but can be used with *parameno* 'remain' and *fenome* 'appear'. These diagnostics hold for deponent participles.

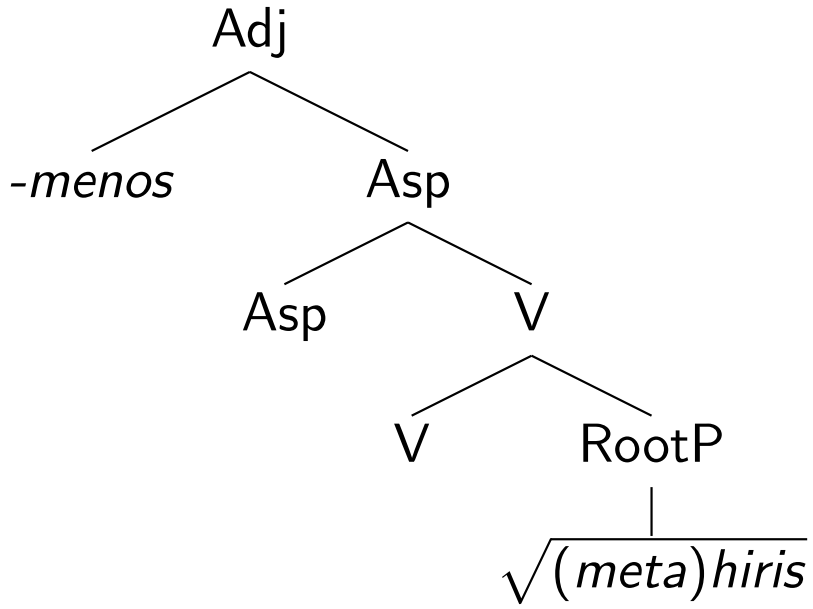
(47) a. To lexiko fenete metahirismeno
the dictionary appears used
'The dictionary seems used'

b. ? O ergatis paramene ekmetalevmenos
the worker remains exploited
'the worker remains exploited'

Acceptability seems to depend on whether speakers use *-menos* with non-productive verbs

Structure of *-menos*

(48) Based on Anagnostopoulou 2003:



→ The mismatch is not expected to surface in target state participles: *menos*-participles to deponents are syntactically *passive*

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