

# Reconstructing Proto-Indo-European deponents

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## 1 Introduction

The term ‘deponents’ is traditionally applied to verbs that take non-active (middle or passive) morphology, but are semantically and syntactically active (Lat. *dē-pōnere* ‘lay aside’ (sc. the verb’s passive meaning), *verbum dēpōnens*<sup>1</sup>) in languages which morphologically distinguish (at least) between an active and a synthetic non-active voice.

The goals of this talk:

- Clarify methodological and terminological problems in discussing deponents in PIE
- Give an account of what “canonical” use of the middle voice meant in (late) PIE
- Show that PIE had instances of “non-canonical” use of the middle voice, i.e., true deponents
- Argue that non-canonical use was restricted to certain tense-aspect stems

### 1.1 Canonical uses of the middle voice

As recognized widely in the literature (e.g. Klaiman 1991, Kemmer 1993, 1994, Embick 1998, Kaufmann 2007, Alexiadou and Doron 2012, etc.), middle (or “non-active”) voice tends to have the same set of functions cross-linguistically in languages that have an active–non-active voice opposition.

- (1) a. Anticausatives/inchoatives: Verbs designating spontaneous, non-externally caused changes of state verbs (i.e., Engl. intransitive *break*, *open*, *grow*, *bloom*, etc.)  
b. Naturally reflexive verbs (Eng.; *wash*, *comb*), naturally reciprocal verbs (Engl. *meet*, *kiss*), indirect reflexives (self-benefactives)  
c. Dispositional middles (Engl. *This book sells well*)  
d. Medio-passives (Engl. *get*-passive)

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<sup>1</sup>Apparently “eine der naivsten und dilettantischsten Bezeichnungen in der grammatischen Terminologie der Alten.” (Brugmann 1895, 111). For a thorough (and more balanced) discussion of the history of the term see Flobert 1975.

NB these functions are typically those of “oppositional” middles, in which the meaning of the middle is (somehow) opposed to the meaning of the active. E.g.,

- (2) a. Sanskrit *várdhate* ‘grows’ (itr.) — *várdhati* ‘grows’ (tr.)  
*váhate* ‘drives, moves’ — *váhati* ‘drive sbdy./sth.’
- b. Greek λούομαι ‘wash myself’ — λούω ‘wash sth.’  
Sanskrit *yájate* ‘sacrifices for him-/herself’ — *yájati* ‘sacrifices’
- c. (?) E.g. RV 6.10.4d ... *śócíṣā dadṛśe pāvakáh* “the pure one is visible by his glow” (or d.)
- d. E.g. RV 6.26.7c *tváyā yát stávante ... vīrāḥ* “when the heroes are (being) praised by you...”

Moreover, Kemmer (1993) and Zombolou and Alexiadou (2012) add the following non-oppositional functions of the middle voice that can be considered canonical:

- (3) a. Denominative and deadjectival verbs (e.g., Engl. *hammer*, *flatten*, *redde*n, etc.)
- b. Verbs of cognition and perception, “psych verbs”, “experiencer verbs” (e.g., *know*, *think*, *hear*, *remember*, *smell*, *fear*, ..)
- c. Verbs of translational motion (*run*, *climb*, *approach*,...)

### 1.1.1 “Mismatches” between syntax and morphology

Beside the canonical/oppositional functions of the middle, the typological & theoretical literature usually recognizes transitive deponents as instances of non-canonical use of middle morphology (e.g., Embick 1998, Zombolou and Alexiadou 2012).

- (4) Generalization: Synthetic active–non-active voice systems have transitive deponents
- (5) Modern Greek:
  - a. Anticausative: *keo* ‘burn’ (tr.) — *kegome* ‘burn’ (itr.)
  - b. Reflexives: *pleno* ‘wash’ — *plenome* ‘wash oneself’
  - c. (Medio)passive: *skotono* ‘kill’ — *skotonome* ‘be killed’

... but also “non-canonical” verbs like *metahirizome* ‘use’, *eberevome* ‘trade’, *epititheme* “attack”.

- This is important for the PIE middle in light of Oettinger (1992)’s claim that PIE did not have transitive deponents.

It has been argued that these deponents are instances of “feature mismatch”<sup>2</sup>, that is, they display a mismatch between morphology and expected syntactic function. I will use this terminology in the following to distinguish canonical from non-canonical uses of middle morphology.

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<sup>2</sup>Cp. the papers in Baerman et al. (2007).

## 1.2 Summary: Canonical vs. non-canonical middles

If being a deponent means “laying aside” the canonical function associated with middle (or, in general, non-active) morphology, then the term should only be used for verbs with non-canonical syntax and meaning.

Table 1: Uses of the middle

	Canonical	Non-canonical
Oppositional middles	<i>Media tantum</i>	Deponents
Anti-causative/inchoative	Anti-causative/inchoative	Active, transitive, agentive
Reflexive, reciprocal, self-benefactive	Reflexive, reciprocal, self-benefactive	
Dispositional	Dispositional	
Medio-passive	(Medio-passive)	
	Denominal/deadjectival	
	Psych verbs, verbs of emotion and cognition	
	Verbs of (translational) motion	

(6) Definition of deponency (general)

“In an active—non-active voice system, all finite forms of a deponent verb are morphologically non-active, but syntactically active and do not instantiate any of the canonical uses of non-active voice.”

Criteria for active syntax:

- Accusative direct objects
- External argument = agent
- Passivization possible
- Agent noun formation possible
- Agent-oriented adverbs possible

**Feature mismatch verb:** A verb that fulfils the definition of deponency in (6).

## 2 PIE deponents

### 2.1 Deponency and aspect

Deponents (as defined above) in PIE almost without exception only made an imperfective (“present”) stem (line b. in the following table), while verbs alternating between active and middle usually make both an imperfective and a perfective (“aorist”) stem (a.). While a few deponents also have a middle aorist (c.), there are no deponents that *only* have an aorist stem (d.). This holds for at least Indo-Iranian, Ancient Greek, and Latin.

Table 2: Deponents and aspect

	pres.act.	pres.mid.	aor.act.	aor.mid.
a. Alternating	✓	✓	✓	✓
b. Deponent 1	✗	✓	✗	✗
c. Deponent 2	✗	✓	✗	✓
d. Not attested: Deponent 3	✗	✗	✗	✓

## 2.2 Case study 1: Vedic

Corpus: Rigveda.

- (7) Definition of deponency – Vedic:  
 “All tense-aspect stems take the middle endings and have active syntax and there is no oppositional active, except for a morphological (-*áya-*) causative.”

Table 3. Present (+perfect) deponents

Root	Meaning	Present	Perfect	PIE root
<i>īkṣ</i>	‘see’	3du.ipf. <i>aíkṣetām</i>		* <i>h<sub>3</sub>ek<sup>u</sup></i>
<i>īj</i>	‘impel’	<i>ījate</i>		* <i>h<sub>2</sub>eġ</i>
<i>īḍ</i>	‘praise’	<i>īḍte</i>	<i>īḍé</i>	* <i>h<sub>2</sub>eġsd</i>
<i>īs</i>	‘rule, own’	<i>īse, īṣte</i>		* <i>Heġk̂</i>
<i>kṣad</i>	‘serve sth. (to)’	<i>kṣadāmahe</i> (AV)	<i>caḥṣadé</i>	* <i>kṣed</i>
<i>gu</i>	‘praise’	(int.) <i>jóguve</i>		* <i>geuġ<sub>2</sub></i>
<i>gras</i>	‘devour’	3du.ipv. <i>grásetām</i>	<i>jagrasāná-</i>	* <i>gre(n)s</i>
<i>tams</i>	‘shake, pull apart’	Int.subj. <i>tantasaíte</i>	<i>tatasré</i>	* <i>tens</i>
<i>pat</i>	‘rule’	<i>pátyate</i>		(* <i>potġ-e-</i> )
<i>mámh</i>	‘give, donate’	<i>mámhate</i>	<i>māmahé</i>	

Table 4. Present/perfect+aorist deponents

Root	Present	Perfect	Aorist	PIE root
<i>idh</i> ‘kindle’	<i>indhé</i>		opt. <i>idhīmahi</i> (7x)	* <i>h<sub>2</sub>eġd<sup>h</sup></i>
<i>trā</i> ‘pro- tect’	<i>tráyante</i>	<i>tatre</i>	[sub. <i>trāsate</i> , etc. (10x)] <sup>3</sup>	
<i>dā</i> ‘split up, distribute’	<i>dáyate</i>		aor.opt. <i>diṣīya</i> (1x) <sup>4</sup>	(* <i>deh<sub>2</sub>-i-</i> )

<sup>3</sup>Narten 1964, 131f. argues that the Rigvedic forms are not evidence for a productive *s*-aor. paradigm; the ipv. *trāsva* and *trādhvam* are analyzed as belonging to a middle root present by Whitney (1885) and Macdonell (1910).

<sup>4</sup>Root aor.opt. *adīmahi* in VS, TS, KS, MS, see Narten 1964, 138ff.

<i>bādh</i> ‘at-tack’	<i>bād̄hate</i>	<i>babādhé</i>	<i>bād̄hiṣṭa</i> (1x)	
<i>rabh</i> ‘seize’	<i>rabhante</i>	<i>rārabhe</i> <sup>5</sup> , <i>rebbiré</i>	<i>árabdha</i> <sup>6</sup> (1x)	* <i>lemb<sup>h</sup></i>
<i>vand</i> ‘praise’	<i>vándate</i>	<i>vavanda/vavande</i>	<i>vandi</i> (1x), opt. <i>vandiṣīmáhi</i> <sup>7</sup> (1x)	* <i>uend</i>
<i>vṛ</i> ‘choose’	<i>vṛṇ̄ité</i>	<i>vavṛṣé</i>	<i>avri</i> (1x), <i>vṛta</i> (1x), <i>varanta</i> (1x) <sup>8</sup>	* <i>uelh<sub>1</sub></i>
<i>śam</i> ‘work, perform’	<i>śamāyate</i>	<i>śaśamé</i>	<i>ásamiṣṭa</i> <sup>9</sup> (2x)	* <i>ḱemh<sub>2</sub></i>

### 2.2.1 Media Tantum

NB I only summarize *transitive* media tantum here, since these could potentially mistaken for deponents (and some are, in fact, borderline cases). Unambiguous cases like *śáye* ‘lies’ are therefore not included here.

This also means that transitivity alone is not a reliable diagnostic for deponent status.

Table 5. Vedic transitive media tantum (canonical)

Root	Present	Perfect	Aorist	PIE root
<i>uh</i> ‘notice, consider’	<i>óhate</i>		<i>áuhiṣṭa</i> (1x)	* <i>h<sub>1</sub>ueg<sup>uh</sup></i>
<i>kam</i> ‘love’	<i>kāmayáte</i>	<i>cakamāná-</i>		* <i>keh<sub>2</sub> (-m-)</i>
<i>kā</i> ‘love’	<i>káyamāna-</i>	<i>caké, cakāná-</i>		* <i>keh<sub>2</sub></i>
<i>gāh</i> ‘reach, dive in’	<i>gāhate</i>			* <i>g<sup>(u)</sup></i>
<i>cyu</i> ‘move’ (itr./tr.)	<i>cyavante</i> <sup>10</sup>	<i>cucyuvé</i>	<i>cyoṣṭāh</i> (1x)	* <i>k<sup>u</sup>ie<sub>u</sub></i>
<i>tuś</i> ‘rush, hurry (to)’	<i>tośate</i>			
<i>duhunāy</i> ‘harm sbdy.’	<i>duhunāyáte</i>			
<i>nas</i> ‘return’	<i>násate</i>		Opt. <i>nasīmahi</i> (1x)	* <i>nes</i>

<sup>5</sup>1x perf.act. in RV 8.45.20.

<sup>6</sup>The root later makes an *s*-aorist, and this is how Whitney (1885) and Macdonell (1910) interpret this form, cp. Narten (1964, 218).

<sup>7</sup>“Neubildung”, Narten 1964, 237.

<sup>8</sup>Aor.subj.act. (3x), aor.opt.mid. (2x).

<sup>9</sup>Modelled on *ájaniṣṭa* and apparently passive in RV 5.2.7, Narten (1964, 254), Geldner (1951).

<sup>10</sup>Act. *cyávam* (1x) in RV 1.165.10.

<i>man</i> ‘think, consider’	<i>mányate</i>	2du. <i>mamnāthe</i>	<i>ámata</i> , <i>mananta</i> (2x, subj. 22x?), <i>amamṣata</i> (17x)	* <i>men</i>
<i>mud</i> ‘enjoy’	<i>módate</i>	[1x act. <i>mumóda</i> ]	opt. <i>mudīmahi</i> (1x)	* <i>meud</i>
<i>mṛṣ</i> ‘forget’	<i>mṛṣyate</i>	<i>mamárṣa</i>	<i>mṛṣthāḥ</i> (1x), <i>mṛṣanta</i> (1x), <i>marṣiṣthāḥ</i> (1x)	* <i>mers</i>
<i>spṛdh</i> ‘fight’	<i>spárdhante</i>	<i>pasṛdhré</i>	<i>asṛdhran</i> (2x)	* <i>sperdh</i>

### 2.2.2 Summary

Vedic deponents tend to be restricted to imperfective formations; aorists (in particular old aorists) are more likely to be found with media tantum.

### 2.3 Case study 2: Greek

Corpus: Homer, *Iliad* & *Odyssey*.

(8) Definition of deponency – Greek:

“All tense-aspect stems take the middle endings and there is no oppositional active.”

Table 6. Present+aorist deponents

Present	Aorist	Meaning	PIE root
ἀκέομαι	ἠκέσατο	‘heal, repair’	
ἀλέ(υ)ομαι	ἠλεύατο	‘avoid, flee’	
ἀνάινομαι	ἀνήνατο	‘refuse, deny’	
ἀρνέομαι	ἀρήσασθαι	‘refuse’	* <i>h<sub>2</sub>res</i>
ἄρνημαι	ἄρόμην; ἤρατο	‘win, carry off’	* <i>h<sub>2</sub>er</i>
δατέομαι	δάσσαντο	‘divide up’	
δέχομαι, [3pl. δέχεται]	ἔδεξάμην; δέκτο	‘accept, receive’	* <i>dek̂</i>
δύναμαι	δυνήσατο; ἐδυνάσθη	‘be able to (do)’	* <i>deuh<sub>2</sub></i>
ἐρέυγομαι	ἤρυγεν	‘belch out’	* <i>(h<sub>1</sub>)reug</i>
ἔρῳμαι, ἐρύομαι, ῥύομαι	ἐρύσατο, εἰρύσατο, ἐρύσσατο	‘protect, shield’	* <i>uer</i>
εὔχομαι, [εὐκτο]	εὐξάμην	‘pray’	* <i>h<sub>1</sub>ueg<sup>uh</sup></i>
(ἴπτομαι)	ἴψαο	‘oppress’	
κτάομαι	ἐκτήσατο	‘acquire’	(* <i>tek</i> )
λίσσομαι	ἐλλισάμην	‘beg, pray’	* <i>leit</i>
μαίομαι	ἐπ-εμάσατο	‘seek’	* <i>mes</i>
μήδομαι, μέδομαι	μήσατο	‘plan, devise’	* <i>med</i>
μητίομαι	μητίσασθαι	‘devise’	

ὀδύρομαι	ptcp. ὀδυράμενος	‘lament, bewail’	
ὀλοφύρομαι	ὀλοφύρατο	‘lament, bewail’	
ὄνομαι	ὠνοσάμην; ὠνατο	‘scorn’	* <i>h<sub>2</sub>neh<sub>3</sub></i>
πονέομαι	πονήσατο	‘work at, attend to’	* <i>(s)penh<sub>1</sub></i>
σκέπτομαι	ptcp. σκεψάμενος	‘look about, examine’	* <i>spek̂</i>
ψεύδομαι	ptcp. ψευσάμενος	‘lie, deceive’	

Table 7. Present-only deponents

Present	Meaning	PIE root
αἴνυμαι	‘take’	* <i>h<sub>2</sub>ai̯</i>
βούλομαι, βόλομαι	‘wish, will’	* <i>g<sup>u</sup>elh<sub>3</sub></i>
δίζημαι	‘seek’	* <i>ieh<sub>2</sub></i>
δίομαι	‘put to flight, chase off’	
(ε)ἔλδομαι	‘desire, wish for’	* <i>h<sub>1</sub>ueld</i>
ἐρέπτομαι	‘feed on’	* <i>(h<sub>1</sub>)rep</i>
καίνυμαι	‘excel, surpass’	[* <i>k/k̂end</i> ]
κέλομαι	‘exhort, command’	* <i>kel</i>
λάζομαι	‘take’	* <i>sleh<sub>2</sub>g<sup>u</sup></i>
μνάομαι	‘be mindful of; court’	* <i>mneh<sub>2</sub></i>
ὄσσομαι	‘see’	* <i>h<sub>3</sub>ek<sup>u</sup></i>
πένομαι	‘work at, attend to’	* <i>(s)penh<sub>1</sub></i>
σίνομαι	‘rob, plunder’	
τιτύσκομαι	‘make ready, prepare’	

### 2.3.1 Media tantum

Again, only transitive cases included.

Table 8. Transitive media tantum

Present	Aorist	Meaning	PIE root
ἄγμαι, ἀγάομαι	ἠγάσατο	‘admire’	
ἄζομαι		‘be in awe of’	* <i>H<sub>1</sub>aĝ</i>
αἰδομαι, αἰδέομαι	ἠδέσατο; αἰδεσθεν	‘be in awe of, fear’	* <i>h<sub>2</sub>eis<sub>̂</sub>d</i>
ἐπίσταμαι		‘know, understand’	
ἠγέομαι	ἠγήσατο	‘lead, go before’	* <i>seh<sub>2</sub>g/<sub>̂</sub>ĝ</i>
θηέομαι	θηήσαντο	‘gaze at’	
ἰκνέομαι	ἴκετο	‘reach, come to’	* <i>seik̂</i>

(πατέομαι)	ἐπασ(σ)άμην	‘taste’	
πεύθομαι, πυνθάνομαι	ἐπυθόμην	‘learn’	* $b^h eud^h$
σέβομαι, (σεβάζομαι)	σεβάσατο	‘be in awe of, fear’	* $tieg^u$

Table 9. Denominal/deadjectival (canonical)

Present	Aorist	Meaning
αἰτιάομαι		‘accuse, blame’
γουνάζομαι, γουνόομαι		‘implore’
δια-σκοπιάομαι		‘spy out’
ἐργάζομαι	εἰργάζετο	‘work’
[λωβάομαι]	2pl. λωβήσασθε	‘outrage, mistreat sbdy.’
μαντεύομαι	μαντεύσατο	‘prophesy’
μυθέομαι	μυθήσατο	‘relate, tell’
νεμερίζομαι		‘be indignant at, angry with’
οἰνίζομαι		‘procure wine’
ὀπίζομαι		‘revere’
τεχμαίρομαι	τεχμήρατο	‘assign, ordain’
[τεκταίνομαι]	τεκτήνατο	‘do carpentry’
χαρίζομαι	opt. χαρίσαιτο	‘bestow, gratify’

## 2.4 Preliminary conclusion

- Vedic deponents are based on an imperfective stem and avoid aorists, Vedic *media tantum* can be based either on a perfective or an imperfective stem.
- Greek deponents and *media tantum* both form productive aorists (*s*-aorists,  $\theta\eta$ -aorists). However, only *media tantum* can be based on an old root aorist (not productive), e.g., ἄλτο, ὄρτο ...

## 3 Proto-Indo-European deponents

Based on the evidence from Greek (tables 6. & 7.) and Vedic (tables 3. & 4.), we can already reconstruct a number of “mismatch verbs” (deponents) that in all likelihood go back to PIE, provided we exclude cases of “canonical” use of the middle voice.

1. \* $h_2eisd$  ‘praise, revere’: Ved.  $\acute{i}tte$  ‘implores, beseeches’, perf.  $\bar{u}lé < *h_2i-h_2isd-ai$ ; Hom. αἰδέομαι ‘be reverent of, fear’ (αἰδέομαι)
2. \* $deh_2-i-$  ‘distribute’ (\**i*-present, Jasanoff 2003, 104f, with metathesis of \* $dah_2i- > *dai\grave{h}_2-$ ), Ved.  $dáyate$  ‘distributes’ (also *ava-dyáti* (YV) ‘takes away’); Gk. δαίωμαι ‘distribute’.



3. *\*h<sub>3</sub>ek<sup>u</sup>* ‘behold, catch sight of’: Ved. *īṣ* < desiderative *\*h<sub>3</sub>i-h<sub>3</sub><sup>u</sup>-se/o-*, Ved. *īkṣate*; Gk. *ᾔσσομαι* < *\*h<sub>3</sub>k<sup>u</sup>-iē/o-*, fut. *ᾔψομαι*.
  4. *\*Heik̂* ‘appropriate, seize’: Toch. B *aištār* ‘recognizes’; Ved. *īśe* ‘owns, has power over’ (< perf. *\*Hi-Hik̂* ← *\*He-Hik̂*), OAv. *isē*.
  5. *\*h<sub>1</sub>ueg<sup>uh</sup>* ‘speak solemnly’: Ved. *óhate*, OAv. *aogədā*, Gk. *εὔχομαι* (older athematic *εὔχτο*) < *\*h<sub>1</sub>e-h<sub>1</sub>ug<sup>uh</sup>*- (LIV<sup>2</sup>, 253, Villanueva Svensson (2012, 335))<sup>11</sup>.
  6. *\*peh<sub>2</sub>-s* ‘protect’<sup>12</sup>: *s*-present or desiderative *\*peh<sub>2</sub>-s-*: Hitt. *pahš*<sup>13</sup>; Toch. A class II pres. *pāštār/pāštār*, 3pl. *pāsantār* (Jasanoff 2012, Malzahn 2010a, 699).
  7. *\*mag<sup>h</sup>* ‘be able to, enable, achieve’: Ved. *ā mahe*<sup>14</sup> < *\*mag<sup>h</sup>-oi*; Gk. *μάχομαι* ‘fight’ (+ dat.); OCS *mogō*; Goth. *mag*, ‘be able to’.
  8. *\*med* ‘measure, discern’: Gk. *μήδομαι, μέδομαι* ‘devise’, *μήσατο*, OAv. aor.subj. *masatā*; OIr. *míðithir* ‘judge’; Lat. *medeor* ‘help’.
  9. *\*potie/o-* ‘be master over, own’: inherited denominative deponent (*\*póti-* ‘lord, master’): Ved. *pátyate*, Lat. *potior*.
  10. *\*ues* ‘graze, eat’: Hitt. *wešiyattari* ‘grazes’ (tr./itr.) (Kloekhorst (2008, 1007f.): denominative to *weši-* c. ‘pasture’?); Lat. *vēscor* ‘nourishes oneself (with), eats’ (+ abl., acc.)
- ... and maybe:
11. Ilr. *\*trā* ‘protect’: Ved. *tráyate*, OAv. *θrāzdūm* (= Ved. *trādhwam*), etc.
  12. *\*gres/grens* ‘devour’: Ved. *grásate* (perf. mid. opt. *jagrasīta*) = Greek *γρώω* ‘eat, gnaw’<sup>15</sup>?
  13. *\*h<sub>2</sub>neh<sub>3</sub>* ‘scorn’: Gk. *ᾔνομαι, ᾔνοσάμην*; Hitt. *ḫannari*.
  14. *\*uer* ‘protect; fend off, stop’: Gk. *ἔρῦμαι, ἐρύομαι*, perf. *εἴρῦμαι*; Ved. *várate* (aor.subj.), *vāráyate*.

Crucially, these have a very different profile from canonical middles, for example, the *media tantum* of stative-intransitive systems which are based on a *\*h<sub>2</sub>e*-conjugation aorist: they are based on present/imperfective stems rather than aorist/perfective stems and lack old aorist formations altogether.

<sup>11</sup>But a full grade athematic *\*h<sub>1</sub>eug<sup>uh</sup>-tor* would also give the Greek and Indo-Iranian forms.

<sup>12</sup>The root *\*peh<sub>2</sub>* is not exclusively deponent, Indo-Iranian has an active root present Ved. *pāti*, OAv. *pāt* and a subjunctive *pāsati*, cp. also the “*si*-imperative” Hitt. *pahšī* < *\*peh<sub>2</sub>-si* < haplogitized *\*peh<sub>2</sub>-se-si*, Jasanoff (2012), etc.

<sup>13</sup>Classified by LIV<sup>2</sup>, 460 as active *mi*-verb, but active forms are practically non-existent until the Neo-Hittite period. Kloekhorst (2008, 612) points out that *pahš-* takes on the active *hi-* rather than the *mi*-inflection when it is finally transformed into an active verb (the form *pahḫašmi* cited by LIV<sup>2</sup> is actually attested only once, whereas *pahḫašhi* is much more frequent).

<sup>14</sup>Act. optative *mahema* attested twice in the RV.

<sup>15</sup>The Cypriot Greek act.ipv. *γρώσθι* ‘devour!’ is apparently late, Masson (1983, 280).

### 3.1 Further evidence for aspectual “split deponency”

A subset of Greek (full-grade) deponent presents have zero-grade thematic aorists, more often active than middle:

Table 10. Greek: R(∅)-Thematic aorists : R(e)-presents

Present	Aorist	Meaning
δέρκομαι	ἑδρακον	‘see’
ἑρέυγομαι	ἤρυγον	‘belch out’
ἔρχομαι	[ἤλυθον]	‘come’
μείρομαι	ἔμμορε <sup>16</sup>	‘divide, share’
ἔπομαι	ἑσπόμην	‘follow’

This is part of a wider pattern pairing full-grade thematic presents (active, middle, *tantum*) with zero-grade (active) thematic aorists:

Table 11.

Present	Aorist	Meaning
πεύθομαι	ἑπυθόμην	‘learn’
τρεφóμαι	ἔτραφον	‘grow’
πέλομαι	ἔπλεν	‘become’
στείχω	ἔστιχον	‘step’
τρέπω	ἔτραπον	‘turn’
πείθομαι	ἑπιθόμην	‘obey’
φεύγω	ἔφυγον	‘flee’

Independent of the prehistory of the thematic aorist (on which see Jasanoff To appear), the fact that a subset of old deponents show up with active thematic aorists in Greek could be further evidence that these formations were “defective” in PIE, that is, they did not have a designated middle aorist in the proto-language.

#### 3.1.1 Summary

Separating *media tantum* from deponents via the definition of the canonical function of the middle voice, in connection with syntactic criteria, allows us to distinguish between different types of middle paradigms.

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<sup>16</sup>Cp. van de Laar (2000, 214, fn. 771).

Table 12. Media tantum & deponents

	<i>media tantum</i>	<i>deponents</i>
canonical	✓	✗
transitive	✗?	✓
have old aorists	✓	✗
Examples	$*\hat{k}e\hat{i}$ , $*h_1er$ , $*men$	$*deh_2-i-$ , $*He\hat{i}K$ , $*h_2ei\hat{s}d$ , ...

### 3.2 Implications

- In reconstructing the distribution of the PIE active ( $*-mi$ ,  $*-si$ ,  $*-ti$ ) vs. (proto-)middle set of endings ( $*h_2e$ ,  $*-th_2e$ ,  $*-e$ ), we should distinguish between canonical and non-canonical uses of the latter.
- We need to pay particularly close attention to the treatment of media tantum and deponent verbs once the split of the  $*h_2e$ -set into a new active conjugation (3sg.  $*-e$ , e.g., the Hittite  $\hat{h}i$ -conjugation, the active perfect, the thematic conjugation ...) and a renewed middle set of endings (3sg.  $*-o$ ,  $*-to$ ) occurred.
- In order to do this, we first need to establish how the Indo-European languages synchronically treat media tantum and deponent verbs and what their averbos look like in these languages.

Two case studies to show what happens if we fail to distinguish canonical from non-canonical middles: Rix (1988), Meiser (2009).

#### 3.2.1 Aorist-based deponents? Meiser (2009)

Contrary to what I have been saying, Meiser (2009) argues that deponency in PIE was often restricted to an old root aorist:

“Weit häufiger als “durchgängige Deponentien” finden sich allerdings Paradigmen, bei denen lediglich der Grundstamm – in aller Regel der WA (...) – (mindestens früheinzelsprachlich) ausschließlich medial flektiert, ...”

Problems:

- Meiser doesn’t distinguish between *media tantum* (i.e., canonical use of the middle voice) and deponents (i.e., non-canonical use of the middle voice).
- Meiser leaves out old thematic present formations and zero-grade middles (‘stative-intransitive presents’), even if they are attested in several languages.

Once this is taken into account, the picture that emerges is compatible with what I argued above: Only *media tantum* (canonical) can be based on the aorist stem, not deponents (non-canonical).

In the following, I give a summary of Meiser’s list. I have added thematic presents that can be assumed to be old, as well as “stative-intransitive” presents where they exist. I have also (for now) excluded roots from Meiser’s list that are only attested in one branch.

Table 13. Meiser’s aorist-based deponents

root	aorist	present	perfect	stat.-itr. pres.
* <i>b<sup>h</sup>eu<sup>dh</sup></i> <sup>17</sup> ‘wake up’	Ved. <i>ábodhi</i> , <i>ábudhran</i> , <i>budhánta</i> “woke up”, Gk. ἐπυθόμην ‘I learned’	Ved. <i>budhya-</i> ‘wake up’, YAv. (-) <i>būīdīia-</i> ‘wake up’, Gk. πεύθομαι ‘learn, perceive’	Gk. πέπυσμα ‘have learned, know’, Ved. <i>bubudhānā-</i> ‘woken up’	OCS <i>bъditъ</i>
* <i>ǵeus</i> ‘try, taste’	Ved. <i>juṣāṇā-</i> , <i>ajuṣata</i> , <i>juṣanta</i> , <i>ajuṣran</i> ‘like, try’	Gk. γεύομαι ‘taste’ <sup>18</sup>	Ved. <i>jujóṣa</i> ‘has tried, likes’, Goth. <i>kaus</i> ‘tested’	
* <i>h<sub>1</sub>ger</i> ‘wake up’	Gk. ἔγρετο ‘woke up’ <sup>19</sup>	Ved. <i>járase</i> <sup>20</sup>	Ved. <i>jāgāra</i> ‘is awake’, YAv. <i>jaγāra</i> , Gk. ἐγρήγορα	
* <i>jet</i> ‘take up position’	Ved. <i>yatāná</i> - <sup>21</sup> , TB subj. V <i>yātaṃ</i> (?)	Ved. <i>yátate</i> , Lat. <i>nītor</i> <sup>22</sup>	Ved. <i>yetire</i> ‘are standing firmly’, OAv. <i>yōiθomā</i>	TB <i>yototār</i> , TA <i>yatatār</i> <sup>23</sup> (?)
* <i>leg<sup>h</sup></i> ‘lie down’	Hitt. <i>lāki</i> (tr.), Gk. ἔλεκτο, OCS <i>-leže</i>	Gk. λέγεται (Hsch.), [TB pres. II <i>lyasām</i> ‘lies’ < them.act.?], OIr. <i>laigid</i> , Goth. <i>ligan</i> (< * <i>-ie/o-</i> )	Gk. λελοχούα, Goth. <i>lag</i>	Hitt. <i>lagāri</i> , <sup>24</sup> OCS <i>-ležitъ</i>
* <i>leuk</i> ‘shine’	Hitt. <i>lukta</i> <sup>25</sup> ‘dawns’, Ved. <i>rucāná</i> - <sup>26</sup> , TA <i>lyokāt</i> <sup>27</sup>	Ved. <i>rócate</i> , YAv. ptcp. <i>raocint-</i> , TB subj. II <i>lyuštār</i> (< * <i>leuk-e-</i> )	Ved. <i>ruróca</i>	TB <i>lyuketār</i> ‘shines’

<sup>17</sup>Meiser (2009, 327) (aorist deponent), Villanueva Svensson (2006) (aorist-based paradigm), Jasanoff (2003, 155).

<sup>18</sup>Meiser (2009, 324)

<sup>19</sup>But this root does not have traces of a root aorist anywhere else, and a thematic aorist would not be unexpected in Greek.

<sup>20</sup>Young formation according to Jamison (1983, 127).

<sup>21</sup>No other aorist forms attested.

<sup>22</sup>< \**ni-ie-te-*, LIV<sup>2</sup>, 314.

<sup>23</sup>Malzahn (2010a, 787).

<sup>24</sup>Jasanoff (2003, 166, 170)

<sup>25</sup>“Stative-intransitive” aor., Jasanoff (2003, 166).

<sup>26</sup>No finite aor. forms in Vedic.

<sup>27</sup>“Presigmatic” aorist with *o/ø*-ablaut (\**louk-to*, root initial palatalization irregular), Jasanoff (2003, 180).

* <i>h<sub>2</sub>eiḍ<sup>h</sup></i> 'ignite' (tr./itr.)	Opt.mid. <i>idhīmahi</i> 'may we ignite (sth.)', ptcp. <i>idhāná</i> <sup>28</sup>	Ved. <i>indhé</i> (< * <i>inddhé</i> ); Gk. <i>αῖθομαι</i> 'burn' (itr.) – <i>αἶθω</i> tr., Ved. <i>édhate</i> <sup>29</sup>		
* <i>men</i> 'think'	Ved. <i>ámata</i> , OAv. <i>manṭā</i> , Gk. [ἐμάνην] <sup>30</sup>	Ved. <i>mámyate</i> ; <i>manuté</i> , OAv. <i>mainiñtē</i> , Gk. <i>μαίνομαι</i> , OIr. <i>do-</i> <i>moinethar</i>	Gk. μέμονα, Lat. <i>meminī</i> , Ved. plupf. <i>ámaman</i> , YAv. <i>mamne</i> , Goth. <i>ga-man</i> 'remembers' <sup>31</sup>	OCS <i>мѣнитъ</i> , Lith. <i>mini</i> , Goth. <i>munaiþ</i>
* <i>nes</i> 're- turn'	Ved. opt. <i>sám</i> <i>nasīmahi</i> 'may we reunite', Gk. pctp. <i>ἄσμενος</i>	Ved. <i>násate</i> , Gk. <i>νέομαι</i> , Goth. <i>ga-</i> <i>nisan</i> ; Ved. <i>nínisate</i> , Gk. <i>νίσομαι</i> (?)	Gk. <i>ga-nas</i> <sup>32</sup>	
* <i>ped</i> 'fall'	Ved. <i>apadran</i> , OCS <i>padŕ</i> 'they fell'	Ved. <i>pádyate</i> , YAv. subj. <i>paiddiāite</i>	Ved. <i>parāda</i> , OE <i>ge-fæst</i>	
* <i>peh<sub>2</sub>ĝ</i> 'become solid'	Gk. ἐπάγη, Arm. <i>s-</i> <i>p'acaw</i> 'girded him- self' (?)	Ved. <i>pāraje</i> , Gk. <i>πήγνυμαι</i>	Gk. πέπηγε (?)	
* <i>pelh<sub>2</sub></i> 'ap- proach'	Gk. πλῆτο	Yav. <i>pəṛəne</i> 'go against', Gk. <i>πίλναμαι</i> , Lat. <i>pellō</i> , OIr. <i>ad-ella</i> 'visits'	Lat. <i>pepulī</i> ?	
* <i>sperḍ<sup>h</sup></i> 'run away'	Hitt. <i>išparzasta</i> 'escaped', Ved. <i>ásprḍhran</i>	Ved. <i>spárdhate</i>		
* <i>ueiþ</i> 'begin to shake'	Ved. <i>vipāná</i> <sup>33</sup>	Ved. <i>vé pate</i> , YAv. - <i>vaēpəṇti</i> 'are throwing away' (opp. act.)	Ved. <i>vivipre</i> <sup>34</sup>	

Leaving aside the Greek-only and Indo-Iranian-only paradigms (all of which have a synchronic present or perfect-as-present stem, NB), as well as those roots in which a putative middle root aorist paradigm is only represented by a middle participle, this leaves us with the following roots:

<sup>28</sup>3sg.aor.subj. *idhaté*?: RV 7.1.8a *á yás te agna idhaté ánikam* " ... who makes your face glow, O Agni, ...", strange accent for 3sg., but Oldenberg (1912, 4) rejects interpretation as 3pl. or dat.sg. of ptcp. (cp. the parallel passage RV 10.69.3 *yát te mánur yád ánikam sumitráḥ samīdhé agne* "yor face, O Agni, that Manu, having good contracts, has kindled/has made to glow."). Macdonell (1910, 338, fn. 4): *present* subj. with "irregular accent and weak root (...) for \**indhate*, beside *inádhaté* formed from *idh-* according to the infixing nasal class." Thieme (1958, 153, fn. 5) = Kl. Schr. 164 suggests an analogy "plur. *bhavanti*: sing. *bhavati*, plur. *vindanti*, sing: *vindati*= plur. *indhate*: X (= *idhate*), that is: it springs from the assumption: plural = singular plus one n."

<sup>29</sup>Thieme (1958) = Kl. Schriften 160-9.

<sup>30</sup>Gk. η-aorists = replacements of middle root aorists, Jasanoff (2002/2003, 163).

<sup>31</sup>But not Hitt. *mēmai* 'speaks', which is from \**me-moH-i* ('stammer'), Jasanoff (2003, 118).

<sup>32</sup>Toch. A *nas-*, B *nes-* not from a perfect (*pace* LIV<sup>2</sup>, 454), but from Narten-present, Jasanoff (2003, 74).

<sup>33</sup>No other traces of a root aorist paradigm.

<sup>34</sup>Young formation according to Kümmel (2000, 498f.).

- Roots associated with a “stative-intransitive”  $*h_2e$ -aorist (Jasanoff 2003):  $*b^heud^h$  ‘wake up’,  $*\hat{g}eus$  ‘try, like’,  $*leg^h$  ‘lie down’,  $*leuk$  ‘shine’,  $*men$  ‘think’,  $*ped$  ‘fall’.
  - Functionally canonical middles, *media tantum*
- Inchoatives, spontaneous events:  $*h_1ger$  ‘wake up’,  $*peh_2\hat{g}$  ‘become solid’.
- Translational motion:  $*\hat{j}et$  ‘take up position’,  $*nes$  ‘return’,  $*pelh_2$  ‘return’,  $*sperd^h$  ‘run away’.

In other words, all of Meiser’s examples of aorist-based “deponent” paradigms are actually instances of the canonical use of the middle voice as defined in section 1.2.

- Because Meiser conflates *media tantum* and deponents, the problem of “feature mismatch” disappears – basically, everything that takes middle morphology is considered a canonical middle.

### 3.2.2 Rix (1988): Stative and middle

Rix (1988, 104): The late PIE middle had three functions, “A) The deponent function or the middle tantum, B) the reflexive function, and C) the passive function.”

Because Rix is unable to give a non-circular definition of any of these, he simply splits up these “functions” and assumes three distinct voice categories for pre-PIE:

- PIE middle: reflexive and passive
- PIE stative: deponents (not defined), “states”:  $*\hat{k}ei$  ‘lie’,  $*h_1\bar{e}s$  ‘sit’, but also  $*h_1er$  ‘move’,  $*d^heug^h$  ‘be useful’ ...

Problems:

- The category “stative” includes many non-stative formations, as well as formations that could easily be considered canonical middles.
- Rix has to reconstruct two sets of non-active voice endings instead of just one.
- ... and this still does not explain what the “deponent” function was, which he explicitly excludes.

## 4 Conclusion

- Understanding deponents as instances of “feature mismatch” helps us detect the demarcation line between canonical and non-canonical use of the PIE middle voice
- Deponent and media tantum paradigms exhibit language-specific variation, as the case studies of Vedic and Greek have shown
- Both deponents and media tantum can be reconstructed for PIE
- Deponent and media tantum verbs had different averbos in PIE: Media tantum could be based on an aorist stem, while deponents (“mismatch” cases) clearly prefer the imperfective aspect (both on the synchronic and the diachronic level).

... why? You’ll have to wait for my dissertation.<sup>35</sup>

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<sup>35</sup>Or ask me later :)

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