

“Split Deponency” in Proto-Indo-European*

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1. Introduction

The term “deponent” is traditionally applied to verbs that take non-active¹ (middle or passive) morphology, but are semantically and syntactically active (Lat. *dēpōnere* ‘lay aside’, sc. the verb’s passive meaning)² in languages which morphologically distinguish (at least) between a synthetic active and non-active voice. The intuition behind this term is that such verbs exhibit a “voice mismatch” between morphological form and syntactic context. The aim of this paper is to clarify some of the methodological and terminological problems surrounding the use of this term with respect to the older Indo-European languages, and to show that voice mismatches in the Indo-European daughter branches are restricted almost exclusively to primary present stems and do not occur with primary aorist stem formations.

2. Canonical uses of middle morphology

In languages with a morphological distinction between an active and a non-active voice, non-active morphology tends to be found in the same syntactic environments cross-linguistically (see, e.g., Klaiman 1991, Kemmer 1993, Kemmer 1994, Embick 1998, Kaufmann 2007, Meiser 2009, Alexiadou and Doron 2012, Alexiadou 2013, etc.):

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1 “Non-active” is the cover term for passive and middle morphology in languages with a trivalent morphological voice distinction. In the following, I use this term synonymously with the term “middle,” since the languages under discussion have bivalent voice systems. Note that both “middle” and “non-active” are used only to refer to morphological endings, and not to any kind of function associated with those endings.

2 For a thorough discussion of the history of the term see Flobert 1975.

- Anticausatives/inchoatives: verbs designating externally or internally caused changes of state (e.g., Engl. intransitive *break*, *open*, *grow*, *bloom*, Skt. *várdhate* ‘grows’ vs. active *várdhati* ‘grows something’).
- Reflexive verbs (e.g., Engl. *wash (oneself)*, *comb oneself*, Gk. *λούομαι* ‘wash myself’ vs. active *λούω* ‘wash something’, etc.); reciprocal verbs (e.g., Engl. *meet*, *kiss*), indirect reflexives/self-benefactives (e.g., Skt. *yájate* ‘sacrifices, worships for oneself’ vs. active *yájati* ‘sacrifices, worships’, etc.).
- Dispositional or generic middles (e.g., Engl. *This book sells well*).
- (Medio-)passives.

These functions are typically those of “oppositional” middles, in which the meaning of the middle-marked verb is perceived to be in a syntactic alternation with that of the corresponding active-marked verb. In addition to these, Kemmer (1993) and Zombolou and Alexiadou (2014) add the following non-oppositional functions to the canonical uses of middle morphology:

- Denominative and deadjectival verbs.
- Verbs of cognition and perception (“psych verbs,” “experiencer verbs,” e.g., Engl. *know*, *think*, *hear*, *remember*, *smell*, *fear*).
- Verbs of motion.
- Stative verbs.

These verbs are usually non-alternating (non-oppositional), that is, *media tantum*. While the terms “*media tantum*” and “deponent” are often used synonymously, only the latter implies a voice mismatch, while the former does not. In other words, while all deponents are *media tantum*, the opposite does not hold: most *media tantum*, both intransitive and transitive ones, can be understood in terms of the canonical use of non-active morphology (see Alexiadou and Doron 2013, Kallulli 2013). Deponents, on the other hand, do not fall under any of these canonical functions, that is, their non-active morphology cannot be synchronically motivated and they behave syntactically like formally active transitive verbs. In Grestenberger 2014 I argue that this is because their surface subjects are agents, whereas the surface subjects of canonical middles are never agents. While the details of this analysis cannot be repeated here, what is important is that voice mismatches (defined here as agentive transitive verbs with non-active morphology) are a stable feature of active/non-active voice systems (cf., e.g., Embick 1998, Zombolou and Alexiadou 2014), and that they exhibit a mismatch between morphological form and syntactic function (see the papers in Baerman et al. 2007 on deponents and “feature mismatches” more generally). I therefore use the term

“deponent” in the following to distinguish non-canonical from canonical uses of middle morphology.

- (1) Definition of deponency (Grestenberger 2014:65):
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.

The diagnostics for active syntax and an agent subject are 1) an accusative theme, 2) the possibility of passivization (if passive morphology that is distinct from the non-active morphology that causes the mismatch is available), 3) the possibility of agent noun formation, and 4) the compatibility with agent-oriented adverbs. Additional diagnostics may be available in some languages (see Embick 1997: 216–7 on tests for Modern Greek deponents). In the following section, I show that verbs that fulfil these criteria have a curious distribution in Vedic and Greek: they make only a present stem; that is, we never find deponents that are based on an old aorist stem.

3. Deponency in Vedic and Greek

Deponents (as defined above) in Vedic and Greek only make a primary imperfective (present) stem (row b in the following table), while verbs alternating between active and middle usually make both an imperfective and a perfective (aorist) stem (row a), where either can be primary. While a few deponents also have a derived middle aorist (row c), there are no deponents that only have an aorist stem (row d) or where the aorist stem is primary. This observation holds for Indo-Iranian and Ancient Greek.

Table 1. Deponents and aspect

	Pres.act.	Pres.mid.	Aor.act.	Aor.mid.
a. Alternating	✓	✓	✓	✓
b. Deponent 1	✗	✓	✗	✗
c. Deponent 2	✗	✓	✗	✓
d. *Deponent 3	✗	✗	✗	✓

In the following, I demonstrate this pattern for Vedic and Greek. I leave aside for reasons of space a few problematic or uncertain cases that are included as deponents in Grestenberger 2014, but the following collections are representative.

3.1. Vedic

The Rigvedic verbs that fall under the definition of deponency given in (1) are summarized in table 2; besides the present and aorist I also cite the corresponding PIE root from *LIV*² where the etymology is known.

Table 2. Vedic deponents

Root	Present	Aorist	PIE root
<i>idh</i> ‘ignite, kindle’	<i>indhé</i>	opt. <i>idhīmahi</i> (7×), ptcp. <i>idhāná-</i> (48×)	* <i>h₂ejd^h</i>
<i>īj</i> ‘impel’	<i>ījate</i> ^a		* <i>h₂eǵ</i>
<i>īḍ</i> ‘praise’	<i>īḍte</i> ^b		* <i>h₂eṛsd</i>
<i>uh</i> ‘praise’	3pl. <i>óhate</i> ^c	<i>áuhiṣṭa</i> (1×)	* <i>h₁ueg^{uh}</i>
<i>kṣad</i> ‘arrange, serve’	<i>kṣadāmahe</i> (AV)		
<i>gu</i> ‘praise’	<i>jóguve</i>		* <i>geu_{h2}</i>
<i>gras</i> ‘devour’	<i>grásate</i>		* <i>gres</i>
<i>trā</i> ‘protect’	<i>trāyate</i>	<i>trā-s-</i> (10×)	* <i>treH</i>
<i>dā</i> ‘split up, distribute’	<i>dāyate</i>	opt. <i>diṣṭya</i> (1×)	* <i>deh₂(i)</i>
<i>bādh</i> ‘attack’	<i>bādhate</i>	<i>bādhīṣṭa</i> (1×)	
<i>rabh</i> ‘seize’	<i>rābhate</i>	<i>árabdha</i> (1×)	* <i>lemb^h</i>
<i>vand</i> ‘praise’	<i>vāndate</i>	[<i>vandi</i> ^d], opt. <i>vandiṣṭ-</i> <i>māhi</i> (1×)	* <i>uend</i>
<i>sū</i> ‘give birth to’	<i>sūte</i>		?* <i>seuH</i>

a < **h₂i-h₂ǵ-e-toj*; cf. *LIV*²:255–6.

b < **h₂i-h₂isḍ-toj*; cf. *LIV*²:260–1.

c < **h₁é-h₁ueg^{uh}-toj* (*LIV*²:253) or **h₁éueg^{uh}-toj*; cf. Villanueva Svensson 2012:335 n.6.

d Because of its (oppositional) passive reading, this aorist is unlikely to be inherited and should be classified as a “patientive Oppositionsbildung” (Kümmel 1996:97–8). This form is in square brackets because it deviates from the mismatch behavior of the other finite forms.

Only seven of these thirteen deponents have aorist formations, and of these only two have a chance of being old, namely the aorist underlying the optative *idhīmahi* and the participle *idhāná-* and the middle root *árabdha* which is classified as a root aorist by *LIV*² but could also continue an old *s*-aorist (it is classified as such by Whitney 1885:136 and Macdonell 1910:379; cf. also Narten 1964:218–9). Of the remaining five, four are productive *iṣ*-aorists that are attested only once and were created on the spot according to Narten 1964 (*áuhiṣṭa*, *diṣṭya*, *bādhīṣṭa*, *vandiṣṭmāhi*). The aorist stem *trā-s-*, on the other hand, must belong (at least) to Proto-Indo-Iranian, given its Avestan cognates (Ved. 2sg.ipv. *trāsva*, 2pl. *trādhvam* = OAv. *θrāzdūm*, Y.34.7, Y.58.5), but Narten (1964:131–2) doubts

that these forms are evidence for a “live” aorist paradigm (“Die vereinzelt modalen *s*-Aor.-Formen im RV. können wohl ebensowenig wie die nachrgvedischen Ind.-Formen [...] ein im eigentlichen lebendiges *s*-Aor.-Paradigma bezeugen”). In other words, deponency in Vedic is largely a property of the present stem and (to a lesser degree) the perfect stem, but only rarely do deponents make an aorist stem. There are no cases in which a deponent makes only a synchronic aorist stem, or in which the aorist stem is more widely used than the present stem. This distribution is confirmed by the diachrony of these verbs: of the eleven verbs that have root etymologies, eight are classified as “present roots” (i.e., roots for which the present was the primary verbal stem formation) by *LIV*² (**h*₂*e*ǵ, **h*₂*e*ǵsd, **h*₁*ue*ǵ^{uh}, **ge*u*h*₂, **gre*s, **tre*H, ?**ue*nd, ?**se*uH) and only three as “aoristic roots” (**h*₂*e*ǵd^h, **de*h₂(*i*), **le*mb^h). Of the latter, the unextended root **de*h₂ ‘divide, separate’ made an active root aorist attested in *avādat* (MS), etc. (see Narten 1968:130 and *EW*A I:717), which together with the equation Ved. *dāyate* = Gk. δαίωμα ‘distribute’ suggests that deponent behavior was a property of the Graeco-Aryan present stem **dājeto*_i³ rather than of the underlying root.

It is instructive to compare this behavior to that of canonical middles in Vedic, both transitive and intransitive ones. While there are several canonical middles that only make a present stem (or in which the aorist stem is marginal and/or secondary), e.g., *āste* ‘sits’, *gāhate* ‘dives in, enters’, *śāye* ‘lies’, *sācate* ‘joins, accompanies’, there are many more that have a “live” synchronic aorist that continues an inherited aorist. Particularly conspicuous amongst these are canonical middles that are embedded in a “stative-intransitive system” in the sense of Jasanoff 2003. Such systems were based on an intransitive **h*₂*e*-conjugation aorist (usually continued as a “passive aorist” in Vedic), besides which we usually find a *ya*-present in Vedic. I list some of these in the following table (for reasons of space, this list cannot be exhaustive; see Jasanoff 2003:159–73). As in the table above, the counts are taken from Lubotsky 1997 (note that I conflate accented and unaccented forms here since the difference is not important to the discussion).

3 This present ultimately goes back to a **h*₂*e*-conjugation *i*-present 3sg. **déh*₂-*i*-*e*, 3pl. **dh*₂-*i*-*é*nti rather than a zero-grade **éje/o*-iterative (Jasanoff 2003:98–101; see pp.101–2 for the phonological development).

Table 3. Rigvedic transitive canonical middles

Root	Present	Aorist	PIE root
<i>jan</i> ⁱ ‘beget’, mid. ‘be born’	<i>jāyate</i>	(<i>ā</i>) <i>jani</i> (7×)	* <i>ǵenh</i> ₁
<i>juṣ</i> ‘taste, try; like’	[perf. <i>jujōṣa</i> ‘likes’]	3pl. <i>juṣānta</i> (27×); <i>ajuṣran</i> (1×), 2sg. ipv. <i>juṣāsva</i> (58×), etc.	* <i>ǵeys</i>
<i>pad</i> ‘step, fall’	<i>pādyate</i>	3sg. <i>pādi</i> (2×), 3pl. <i>apadran</i> (1×)	* <i>ped</i>
<i>budh</i> ‘wake up’	<i>būdhyate</i>	3sg. <i>ābodhi</i> (11×), 3pl. <i>abudhran</i> (2×)	* <i>b^heuḍ^h</i>
<i>man</i> ‘think, consider’	<i>mānyate</i>	3sg. <i>āmata</i> ^a (1×), 1pl. <i>āmanmahi</i> (9×), 3pl. <i>mananta</i> (1×), etc.	* <i>men</i>
<i>mṛṣ</i> ‘forget’	<i>mṛṣyate</i>	2sg. <i>mṛṣṭhās</i> (1×), 3pl. <i>mṛṣanta</i> (1×)	* <i>mers</i>
<i>ruc</i> ‘shine’	<i>rócate</i>	3sg. (<i>a</i>) <i>roci</i> (3×), ptcp. <i>rucāná-</i> (6×)	* <i>leuk</i>

a Pace LIV²:435, the full grade of the corresponding OAv. *mañtā* must be older than the zero grade of the Vedic form.

All of these are aoristic roots according to LIV², and contrary to the formations in table 2, almost all of the aorists in table 3 have reflexes of the same aorist stem in at least one other Indo-European language (cf. Meiser 2009, who also points out that Proto-Indo-European [canonical] *media tantum* were often based on an old root aorist).

To sum up this pattern, voice mismatches in Vedic are linked to primary present stems, while canonical middles can be based on a primary present or a primary aorist stem.

3.2. Greek

Greek also shows a “split” in deponent behavior, but differs from Vedic in having more *synchronic* deponent aorists than Vedic. The following table illustrates the averbos of Homeric deponents. I leave aside the perfect stem.

Table 4. Homeric deponents

Present	Aorist	Meaning	PIE root
ἀρνέομαι	ἀρνήσαμην	‘refuse, deny’	* <i>h₂res</i>
δαίομαι		‘divide, distribute’	* <i>deh₂(i)</i>
	ἐδηλησάμην	‘hurt, destroy’	
δίζημαι		‘seek’	2. * <i>ieh₂</i>

Table 4 continued

Present	Aorist	Meaning	PIE root
ἔρῳμαι, ἐρύομαι; ῥῳμαι, ῥύομαι; εὐχομαι ^a ἰλάσκομαι (καίνομαι), perf. κέκασμαι κέλομαι λίσσομαι μαίομαι μέδομαι μέμφομαι μήδομαι ^b ὀλοφύρομαι ὄνομαι πένομαι; πονέομαι σίνομαι σκέπτομαι τίνυμαι τιτύσκομαι	εἶρυσ(σ)άμην; (ἐρ)ρῳσάμην εὐξάμην [ἰλασάμην (2×), ἴτῃ] ἐλλισάμην (ἐπ-)εμασσάμην ἐμηςάμην ὀλοφῶράμην ὠνοσάμην — ; πονησάμην ἐσκεψάμην [act. τέτυκον]	‘protect, watch over’ ‘pray, declare’ ‘appease’ ‘surpass, excel’ ‘exhort, command’ ‘beg, pray’ ‘seek, pursue’ ‘take care of’ ‘blame, reproach’ ‘devise’ ‘lament, bewail’ ‘scorn, blame’ ‘work at, attend to’ ‘rob, plunder’ ‘look, examine’ ‘punish, take re- venge’ ‘make ready, pre- pare’	1. * <i>uer</i> (?) * <i>h₁meg^{uh}</i> * <i>selh₂</i> * <i>k/ḱend</i> * <i>kel</i> 2. * <i>lejt</i> * <i>mes</i> * <i>med</i> * <i>med</i> * <i>h₂neh₃</i> * <i>(s)penh₁</i> * <i>spek</i> 3. * <i>k^uej</i> 1. * <i>teuk</i> or * <i>d^heug^h</i>

a An older athematic present stem is attested in Gk. εἶκτο (*Thebaid* fr. 3.3) = OAv. ipf. *aogədā*; cf. table 2 n.c.

b This root also originally made an athematic middle present, the imperfect of which is attested in Hsch. μῆστο· βουλευσατο and forms an equation with the Old Irish “long vowel preterit” *-midair* (Jasanoff 2012).

Thirteen of these twenty-one Greek deponents make a synchronic aorist. However, eleven of these are inner-Greek sigmatic aorists based directly on the corresponding present stem (the present δηλέομαι is not attested in Homer, but must be primary to the aorist ἐδηλησάμην); the aorist ἰλασάμην is based on the stem of ἴλαμαι ‘appease’ (*h.Hom.*); cf. Klingenschmitt 1970 and *LIV*²:530. Only five of the seventeen roots that have a Proto-Indo-European etymology are classified as aoristic roots by *LIV*²: **deh₂(i)* ‘divide, separate’, 1. **uer* ‘fend off, keep away’, 2. **lejt* ‘touch’, **(s)penh₁* ‘stretch, pull’, and both 1. **teuk* ‘strike a blow, beat’

and **d^heug^h* ‘be/make useful’.⁴ The case of **deh₂(i)* has already been discussed above. Whether 1. **uer* ‘fend off, keep away’ is indeed the root that underlies the verbal complex around Gk. ἔρῳμαι is contested (see Hackstein 2002:124–7 for a discussion of this complex; he reconstructs **suerh₃*). Moreover, *LIV*² classifies the root as aoristic based solely on the evidence of the Indo-Iranian subjunctives Ved. *várate*, OAv. *-uuarāni*, but concedes that because of the difficulty of distinguishing the roots 1. **uer* ‘fend off, keep away’, **Huer* ‘lock in, keep safe’, and 1. **uel* ‘lock in, cover up’ in Indo-Iranian, these forms do not necessarily belong to 1. **uer*. Of the remaining roots, **(s)penh₁*, 1. **teuk*, and **d^heug^h* have reflexes of old aorist formations, but the reflexes of **(s)penh₁* (arm. *hani* ‘wove’, OCS *-pęť* ‘stretched’, *LIV*²:578) are uninformative with respect to voice mismatch behavior. The reflexes of 1. **teuk*, and **d^heug^h*, on the other hand, are not always clearly distinguishable in Greek, but the active reduplicated aorist τέτυκον ‘prepared, made ready’, like τιτύσκομαι, is probably best explained as an inner-Greek formation, since Greek had a mildly productive pattern that associated transitive (factitive) σκ-presents with transitive reduplicated aorists (e.g., κικλήσκω ‘call out to’: ἐκέκλετο, διδάσκω ‘teach’: ἐδέδαον, ἀραρίσκω ‘join, fit together’: ἤραρον, εὐρίσκω ‘find’: ἤρπον < **ue-ur(h₁)-e/o-* [on the latter see Beckwith 1994]). If this is the case, τέτυκον cannot be taken as evidence that the root was aoristic.⁵ However, Bendahman (1993:76–8) argues for a connection with **d^heug^h* and analogical deaspiration. That this root was aoristic is suggested by the thematic aorist Gk. ἔτυχον ‘reached, obtained’, but even if τιτύσκομαι ultimately belongs to the same root its deponent behavior is clearly connected to its inner-Greek averbo and is hardly a counterargument to the generalization that deponency is linked to imperfective roots with primary presents. Similar concerns hold for 2. **lejt* for which the only extant aorist formation is Gk. ἐλιτόμην. While this may go back to an older thematic aorist **lit-e/o-*, the fact that it is attested much more sparsely in Homer than the present λίσσομαι (2× vs. 67×, see van de Laar 2000:209) and not at all afterwards could mean that the present stem **lit-je/o-* was in fact the older formation. To conclude, none of the deponents in table 4

4 *LIV*²:148 gives the meaning as ‘*treffen*’ based on the Greek thematic aorist ἔτυχον ‘chance upon, happen to be at’, but it is difficult to get the meaning of Ved. *duhé* ‘gives milk’ and Go. *daug* ‘be fit for, *taugen*’ from this meaning.

5 The other form cited by *LIV*²:640 as evidence for an aorist root 1. **teuk* is OCS *-tęče* ‘struck’ < formally proto-Slavic **tuket*, but this is weak evidence for an old root aorist at best. Synchronically, this form is integrated into the paradigm of the sigmatic aorist as the 2/3.sg. and presumably continues an imperfect.

have inherited an old aorist, and only in two cases is there reason to believe that the underlying PIE root was aoristic (**d^heug^h* and 2. **leit*).

4. Results

In the previous two sections, I have argued for the generalization that voice mismatches in Vedic and Greek display an aspectual “split”: they are found only with primary present stems to imperfective roots, while Vedic shows that canonical middles can have either a primary present or a primary aorist stem. Greek continues this pattern, but allows more new aorist formations based on such deponent presents than Vedic does. We have already seen evidence that deponents differ from canonical middles in that the latter can be based on an old aorist (table 3). To further confirm that deponents deviate not only from canonical middles, but also from canonical active transitive verbs whose syntactic behavior they share, we must compare the aoristos of inherited transitive verbs with active morphology. The following table gives an overview of inherited formally active transitive verbs classified as “aoristic” by *LIV*². I only give samples of the reflexes of the inherited root aorists.

Table 5. Inherited active transitive verbs

Aorist	Present	PIE root
Ved. <i>ádāt</i> ‘gave’, Gk. <i>ἔδω[κε]</i> ‘gave’	Ved. <i>dādāti</i> ‘gives’, Gk. <i>δίδωμι</i> ‘I give’	* <i>deh₃</i> ‘give’
Hitt. <i>tēzzi</i> ‘speaks, states’, ^a Ved. <i>ádhāt</i> ‘set, placed’, Gk. <i>ἔθη[κε]</i> ‘set’	Ved. <i>dádhāti</i> ‘sets, places’, Gk. <i>τίθημι</i> ‘I set down, place’	* <i>d^heh₁</i> ‘put, place’
Hitt. <i>kuerta</i> ‘cut’, Ved. <i>ákar</i> ‘did, made’	Ved. <i>kṛṇóti</i> ‘does, makes’	* <i>k^uer</i> ‘cut off’
Ved. <i>ágrabhīt</i> ‘seized’	Ved. <i>grbhñāti</i> ‘seizes’	* <i>g^hrebh₂</i> ‘seize’
Ved. <i>abhet</i> ‘split’	Ved. <i>bhináti</i> ‘splits’, Lat. <i>findō</i> ‘I split’	* <i>b^hejd</i> ‘split’
Ved. 2g. <i>astarīs</i> ‘spread sth. out’ (AV), Gk. <i>ἐστόρεσα</i> , <i>ἔστωσα</i> ‘strewed’	Ved. <i>stṛṇāti</i> ‘spreads sth.’, Gk. <i>στόρνυμι</i> ‘I strew, spread’, Lat. <i>sternō</i> ‘I strew’	* <i>sterh₃</i> ‘spread out’
Gk. <i>ἔτεμον</i> ‘cut’	Gk. <i>τάμνω</i> ‘I cut’, Lat. <i>temnō</i> ‘I despise’	* <i>temh₁</i> ‘cut’

a Hitt. *tēzzi* and *šan(a)hzi* are presents that were backformed from the inherited roots aorists: see Eichner 1975:82.

Table 5 continued

Aorist	Present	PIE root
Ved. <i>dārśam</i> ‘I saw’, OAv. <i>darəsəm</i> ‘I saw’, Gk. <i>ἑδρακον</i> ‘I looked at’	[Gk. <i>δέρκομαι</i> ‘I see’; Ved. <i>páśyati</i> ‘looks at’]	* <i>derk</i> ‘look at, see’
Hitt. <i>šanaḥzi</i> ‘seeks’, Ved. <i>ásanat</i> ‘obtained’	Ved. <i>sanóti</i> ‘obtains, wins’, Gk. <i>ἄννυμι</i> ‘achieve, succeed’	* <i>senh</i> ₂ ‘reach, obtain’

What this collection is meant to show is that aoristic roots freely made transitive aorists *and* presents (all roots except for **derk*, which is suppletive, have inherited present stem formations, often more than one). In other words, the fact that deponents are restricted to a primary present stem formations was neither a property of their middle morphology (since we have seen that canonical middles made both primary presents and primary aorists; cf. table 3) nor of their transitive syntax (since transitive agentive verbs made primary aorists; table 5). The “split” in stem formation must therefore be due to the combination of middle morphology and agentive transitive syntax, or voice mismatch behavior.

So far, this generalization merely has the status of an observation. It strongly suggests, however, that voice mismatch behavior is a property of verbal stems, not of roots. In that case one must ask why this should only apply to present stems and not to aorist stems. The reason may ultimately be the well-known fact that the Proto-Indo-European present had more present-stem forming suffixes at its disposal than the aorist (*-*e/o-*, *-*eje/o-*, *-*je/o-*, *-*ne/-n-*, *-*ské/o-*, reduplication, full reduplication, *-*se/o-*, etc.). These were originally linked to particular Aktionsart types. Rix (1986) argues that the Proto-Indo-European tense-aspect system goes back to an older system that was based solely on Aktionsart, and that the different Aktionsart-forming suffixes were then integrated into the present stem once the verbal system switched to a tense-aspect system. If this is correct, the link between deponency and the present stem in Vedic and Greek may ultimately be reducible to a link between deponency and (verbal-stem forming) Aktionsart suffixes, and the connection to the present stem rather than the aorist stem may simply be a quirk of the particular development these suffixes underwent in proto-Indo-European.⁶

6 The idea that voice mismatches are triggered by verbal-stem forming morphology is developed in more detail in Grestenberger 2014. Note that while the connection to the present (rather than the aorist) stem is only recoverable in Greek and Indo-Iranian, a more general connection be-

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tween deponency and verbal stem formation can also be demonstrated for languages that have a different aspectual system but a similar voice system, like Hittite, Latin, and Modern Greek.

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