The Two Faces of *gʷʰen-[1]

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§1.   Introductory overviews of the PIE verbal system often speak of roots as having an inherent *Aktionsart* that determined whether they would make a root present or a root aorist.[2] According to this idea, *h_1ei- 'go' made an active root present (cf. Ved. *éti*, Gk. *eĩsi*) because it was durative and atelic, while *g^weh_2- 'step' made an active root aorist (Ved. *ágāt*, Gk. *ébē*) because it was punctual and telic. Similarly, in the middle, *$ḱei$- 'lie' made a root present (Ved. *śáye*, Gk. *keĩtai*, etc.) because it was durative-stative and atelic, while *leg^h- 'lie down' made a root aorist (Gk. *lékto*) because it was punctual and telic. Despite a certain circularity—the *Aktionsart* of a root is often only "known" from whether it formed a root present or root aorist—some version of this account is probably correct. It is hard to think what a plausible alternative might be.

Consistent with the overall picture is the fact that most well-documented verbal roots form a root present or a root aorist, but not both. In the rare cases where both a root present and a root aorist are attested from the same root, the present is usually of the "Narten" type and can be regarded as "characterized" (i.e., derived) vis-à-vis the non-Narten aorist. Such a case is *$u̯elh_1$- 'choose'. The present, reconstructible as *$u̯ēlh_1$-/*$u̯ĕlh_1$-, appears in Lat. *uult* 'wants' subj. *uelim*, Go. opt. *wili* 'wants', and probably OCS *velitъ* 'orders' (< opt. *$u̯élh_1-ih_1$-); the non-Narten root aorist *$u̯(e)lh_1$- is seen in Ved. 3 sg. mid. *avr̥ta*, opt. *vurīta*, OAv. 2 pl. act. *varǝtā*, etc. Another root of this kind is *$k^{(w)}i̯eu$- 'set/set oneself in motion', with a Narten profile in the present (Ved. mid. ptcp. *cyávāna-*, OAv. 3 pl. *ś̌auuaite* 'they undertake', Gk. 3 sg. *séu(e)tai* 'speeds'), but also a root aorist (Gk. 3 sg. *súto*, *éssuto* 'rushed out', Hesych. *súthi· elthé*). Further examples of verbs with both a root present and a root aorist, some more convincing than others, are discussed by KÜMMEL (1998). In the case of *steu- 'proclaim solemnly', which Kümmel does not discuss, a Narten present (Ved. *stáuti* 'praises; OAv. *stāumī* 'I praise', Gk. middle *steũtai* 'boasts') is coupled with an Indo-Iranian passive aorist (*ástāvi* 'has been praised'), the continuant of a PIE "stative-intransitive" aorist *stóu-/*st(é)u-.[3] Other forms of the root aorist of this root—notably, the expected active 3 sg. *stéu-t, pl. *stuu̯-ént—do not occur.

§2.   What we do *not* expect to find is a root with both a root aorist and a "normal" (i.e., non-Narten) root present. Confounding this expectation, however, is the familiar root *gʷʰen-, traditionally glossed 'strike, slay'. The active root present 3 sg. *gʷʰén-ti, pl.

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[2]   Statements to this effect can be found, e.g., in SIHLER 1995: 492, CLACKSON 2007: 133-135, and WEISS 2009: 377-9.

[3]   Some familiarity is assumed here with the picture of the IE verb presented in JASANOFF 2003. On the Indo-Iranian passive aorist in particular, see note 7.

g^{wh}n-énti, directly preserved in Ved. *hánti*, *ghnánti*, YAv. *jaiṇti*, *-γnəṇti*, and Hitt. *kuenzi*, *kunanzi*, is justly regarded as one of the safest morphological reconstructions in the PIE verbal system. But the inherited averbo of *g^{wh}en-* did not consist exclusively of its present. Unusually for a verb with a primary root present, *g^{wh}en-* also formed a full array of other tense stems. Four of these are of special interest:

1) a reduplicated aorist *g^{wh}eg^{wh}n-e/o-*: cf. YAv. 3 sg. *-jaγnaṯ*, 3 pl. pres. *-jaγnəṇte*, Gk. *épephnon*. The juxtaposition of a root present with a reduplicated aorist is unique; non-Narten root presents typically lack old aorists altogether.[4] In Vedic, *hánti* has a suppletive aorist *ávadhīt*, recalling pairs like *ásti* 'is' : aor. *ábhūt* 'became' and Gk. *keĩtai* 'lies' : aor. *lékto* 'lay down'. But the Avestan pairing *jaiṇti* : *-jaγnaṯ*, which recurs in Gk. *theínō* 'strike' : *épephnon* 'slew', is probably at least as old as the Vedic suppletion. *Pace* GARCÍA RAMÓN 1998: 149-150, 154 and KELLENS 1984: 195, neither Gk. *pephne/o-* nor YAv. *jaγna-* is explainable as an imperfect.

2) a perfect *g^{wh}eg^{wh}(ó)n-*: Ved. *jaghā́na*, ptcp. *jaghanvā́ṃs-*, etc., YAv. ptcp. *jaγnuuā́h-*, Gk. perf. mid. *péphatai*, OIr. *geguin*. KÜMMEL (2000: 606) takes all these to be post-PIE, mainly on the grounds that an old perfect ought not to have been formed from a transitive root meaning 'strike' or 'slay'. But the original function and distribution of the perfect are still very much a topic of discussion (see below). Given the marked *non*-association of root presents with perfects in PIE generally, the three-way agreement of Indo-Iranian, Greek, and Celtic is striking.

3) a "stative-intransitive" root present 3 sg. *g^{wh}n-ó(r)*, pl. *g^{wh}n-(ē)ró(r)*:[5] YAv. *ni-γne* 'is slain', pl. *-γnāire*, Hitt. 3 sg. pret. *kunati* 'was killed(?)' (pres. *kunāri*).[6] Middles of this type—"schwundstufige Wurzelstative" in the *LIV* classification system, with intransitive, often passive meaning and the dentalless 3 sg. ending *-o*—are not productive in either Indo-Iranian or Anatolian. It is hardly conceivable that *-γne* and *kunati* (assuming the form is genuine) could have been independently created.

4) a stative-intransitive root aorist 3 sg. *g^{wh}ón-e*: YAv. *jaini* 'was slain'. The phonologically correct YAv. reflex of PIE *g^{wh}ón-e* would have been *gāini*;[7] *jaini*,

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[4] No stock can be set by cases like the purported *léiǵʰ-ti* 'licks' : aor. *lḗiǵʰ-s-* (*LIV* 404), where the *s*-aorist, being productive, could easily be post-IE. A potentially older pair is seen in Ved. *yā́ti* 'rides, goes', aor. *ayāsam*, where there is reason to think the *s*-aorist—or rather, its PIE precursor, the "presigmatic aorist"—may be old (cf. JASANOFF 2003: 186-188). But here the possibility cannot be excluded that *yā́ti* was a Narten present *i̯ḗh₂-ti*.

[5] *-ēro* was apparently a PIE byform of the 3 pl. middle ("stative") in *-ro*, standing in the same relation to the 3 pl. perfect/protomiddle in *-ēr* (< *-ers*) as *-ro* stands in relation to the 3 pl. perfect/protomiddle in *-ṛ*. Vedic has only *-(i)re*; a trace of *-āre*, however, is probably to be seen in the 3 du. mid. in *-āte* (= Av. *-āite*), with *-ā-* taken from the plural.

[6] I am indebted to Heiner Eichner for reminding me of *kunati*, on which see NEU 1968: 101 f. The form, unfortunately, is a hapax, and the passage (KUB 34.45+ Vs. 11) is not entirely clear.

[7] Apart from the ending, which must have replaced *-a* < *-e* or *-o* under the influence of the 1 sg. in *-i*. The basic discussion of the stative-intransitive root aorist, a *h₂e*-conjugation (< protomiddle) category with *o* : *e*/zero ablaut, is in JASANOFF 2003, 144-173. Its most conspicuous reflexes are the Indo-Iranian passive aorist and the Tocharian class V (*-ā-*) subjunctive, on which see more recently JASANOFF 2012.
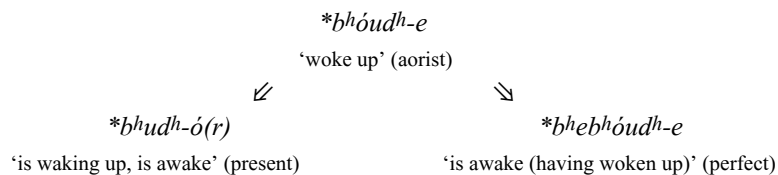
if old, would have to have been remade under the influence of pres. *jaiṇti* 'slays', to which it serves as synchronic passive. There is every reason to believe that this is in fact what happened. Pass. aor. *jaini* (← *gāini*) stands in the same relationship to "stative" *-ŋne* as OAv. pass. aor. *srāuuī* 'was famed as' to stative *sruiiē* 'is famed as', or Ved. pass. aor. *áceti* 'has appeared' to stative *cité* 'is apparent'. A creation *ex nihilo* is unlikely.

§3.   The four tense stems just itemized—the reduplicated aorist, the perfect, the stative-intransitive root present, and the stative-intransitive (> IIr. "passive") aorist—are not just a random assortment of forms. This is clear from a comparison of *$g^{wh}en$-* with the root *$\underline{u}ek^w$-* 'say', which makes a different present (Ved. *vívakti*), but has almost exactly the same profile outside the present. The non-presential forms of *$\underline{u}ek^w$-* include

1) a reduplicated aorist *$\underline{u}euk^w$-e/o-* (cf. Ved. *ávocat*, OAv. *-vaocaṯ*, Gk. *é(w)eipon*);

2) a perfect *$\underline{u}e\underline{u}(ó)k^w$-* (cf. Ved. *vavāca*, OAv. 1 pl. *vaoxəmā*, YAv. mid. *vaoce*);

3) perhaps a stative-intransitive root present *uk^w-ó(r)* (cf. OAv. 3 sg. impv. *ūcąm*, if not rather assignable to pass. aor. *vācī*);[8] and

4) a stative-intransitive root aorist *$\underline{u}ók^w$-e* (cf. Ved. *avāci*, OAv. *vācī*).

The first and last of these are clearly old. The match of *ávocat* and *é(w)eipon* is one of only a small handful of equations (*-jaɣnaṯ* = *épephnon* is another) linking reduplicated aorists. Ved. *avāci* = OAv. *vācī* is the only passive aorist common to Indic and Iranian.
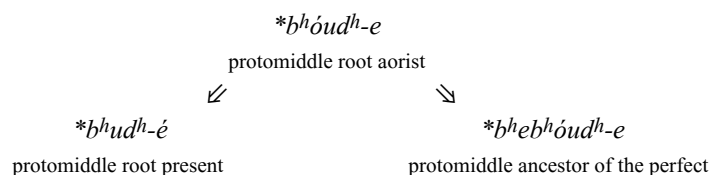
§4. In JASANOFF 2003: 155 ff. I discussed "stative-intransitive systems"—derivational complexes consisting of a perfect, a stative-intransitive aorist, and a stative present in 3 sg. *-o(r)*.[9] The core of the stative-intransitive system of the root *b^heud^h-* 'awake' can be visualized as a schema

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$b^hóud^h$-e

'woke up' (aorist)

↙   ↘

b^hud^h-ó(r)   *$b^heb^hóud^h$-e*

'is waking up, is awake' (present)   'is awake (having woken up)' (perfect)

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where the basic form, *$b^hóud^h$-e*, represents the stative-intransitive aorist ancestral to Ved. pass. aor. *ábodhi* (pl. *ábudhran*). Projecting this back to the pre-PIE stage where the perfect, middle, and *h_2e*-conjugation endings were represented by the endings of the still undifferentiated protomiddle, we obtain
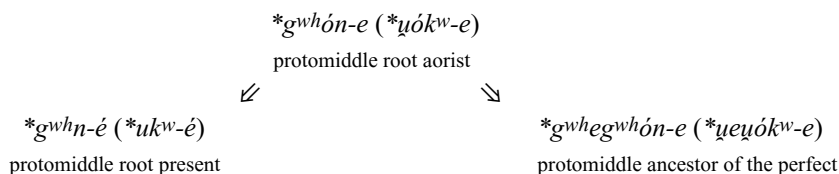
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[8] It is not clear how one would distinguish between the 3 sg. impv. of a stative-intransitive root present (uncontroversially seen in *duhā́m* 'let her give milk' (: indic. *duhé*)) and the 3 sg. impv. of a passive aorist, which would presumably have had zero grade as well. KÜMMEL (1996: 19, 151) classifies *ūcąm* as a passive aorist.

[9] *ie/o*-presents of the type Ved. *búdhya-* 'awake', *mriyá-* 'die', which were included in the original definition of stative-intransitive systems, are omitted from the present discussion.

$$*b^h\acute{o}ud^h\text{-}e$$

protomiddle root aorist

↙ ⇘

$$*b^hud^h\text{-}\acute{e} \qquad\qquad *b^heb^h\acute{o}ud^h\text{-}e$$

protomiddle root present   protomiddle ancestor of the perfect

My claim in 2003 was that the protomiddle aorist *$b^h\acute{o}ud^h$- ~ *$b^h(\acute{e})ud^h$- (3 sg. *$b^h\acute{o}ud^h$-e ‘woke up’) gave rise within the parent language to two first-order derivatives: 1) a reduplicated version of itself with resultative-stative meaning, the later perfect; and 2) a zero-grade protomiddle present, later medialized to the (non-resultative) stative-intransitive root present 1 sg. *b^hud^h-$h_2\acute{e}(r)$, 2 sg. *b^hud^h-$th_2\acute{e}(r)$, 3 sg. *b^hud^h-$\acute{o}(r)$, . . . 3 pl. *b^hud^h-$r\acute{o}(r)$.[10]

§5.   The immediate import of these observations for the question of "presential" vs. "aoristic" roots is that if *b^heud^h- had a stative-intransitive system, then so did *$g^{wh}en$- and *μek^w-:

$$*g^{wh}\acute{o}n\text{-}e\ (*\underline{u}\acute{o}k^w\text{-}e)$$

protomiddle root aorist

↙ ⇘

$$*g^{wh}n\text{-}\acute{e}\ (*uk^w\text{-}\acute{e}) \qquad\qquad *g^{wh}eg^{wh}\acute{o}n\text{-}e\ (*\underline{u}e\underline{u}\acute{o}k^w\text{-}e)$$

protomiddle root present   protomiddle ancestor of the perfect

And if *$g^{wh}en$- formed a protomiddle (> stative-intransitive) root aorist *$g^{wh}\acute{o}n$-e beside the uncontroversial active root present *$g^{wh}\acute{e}n$-ti, we have a clear counterexample to the principle that a PIE root could make a primary root present or a primary root aorist, but not both. The root *$g^{wh}en$- evidently had two personas or "faces." The presential persona was associated with the active endings *-m(i), *-s(i), *-t(i), etc. and aspectually imperfective; the aoristic persona was associated with the h_2e-series of endings and aspectually perfective. Making sense of this oddity will be the object of the discussion that follows.

§6.   Much of the surface complexity of the "classical" IE verbal system derives from the fact that an archaic two-voice system, characterized by the m- and h_2e-series of endings, was transformed within the protolanguage into the familiar two-voice system that we know from the attested languages. Some h_2e-series (= protomiddle) presents and aorists were formally renewed as middles and thereafter patterned as such; others, not renewed as middles, were reinterpreted as actives. While the original value of the m- and h_2e-endings is not directly recoverable, there is reason to suspect that the protomiddle may have been patient-oriented and intransitive, perhaps associated at some stage with ergative alignment (cf. JASANOFF forthcoming b: 7´-11´). The ancestor of a protomiddle formation like the perfect, under this assumption, would have been intransitive, both in sentences of the type

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[10] Not found in Indo-Iranian, but presupposed by Lith. 3 p. *bùdi* ‘is/are awake, watch(es)’, OCS *bъditъ* ‘is awake’, with BSl. *-i-* extracted from 3 pl. *-intai* < *-n̥toi* ← *-roi*.

MONSTER_{NOM.}		*$g^{wh}eg^{wh}óne$
monster		strike (pre-perfect)

lit., 'the monster lies stricken, has been stricken (*vel sim.*)'; and in sentences like

HERO_{AGENTIVE (ERGATIVE?)}	MONSTER_{NOM.}	*$g^{wh}eg^{wh}óne$
hero	monster	strike (pre-perfect)

lit., 'at the hands of the hero the monster lies stricken, has been stricken (*$g^{wh}eg^{wh}óne$*)'. Transitivity came about when sentences of the latter type were reanalyzed as

HERO_{NOM.}	MONSTER_{ACC.}	*$g^{wh}eg^{wh}óne$
hero	monster	strike (perfect)

i.e., 'the hero has struck down the monster'. No such development of secondary transitivity would have been possible when only a single argument (= the patient) was present. This is the simplest way to explain the fact that a single originally intransitive protomiddle form may be reflected by a transitive form in one language and an intransitive form in another. Thus, e.g., Hitt. *ḫi*-conj. 3 sg. *wāki* 'bites' (tr.) and Toch. B subj. 3 sg. *wākaṃ* 'will bloom' (intr.) both go back to a PIE protomiddle aorist 3 sg. *$\mu óh_2g$-e* 'broke (intr.)'. Transitive *wāki* reflects the two-argument construction, intransitive *wākaṃ* the construction with one argument.[11]

§7. Sometimes a single protomiddle form has two descendants—one formally renewed as a synchronic middle and the other, relatively unchanged, patterning as an active. A simple example is the protomiddle thematic 1 sg. *$b^héro$-h_2e*. Renewed by the addition of *-r*, 1 sg. *$b^héro$-h_2e-r* gave Lat. 1 sg. pass. *feror*, while unextended *$b^héro$-h_2e*, with phonologically regular apocope, gave the ordinary thematic active in *-o-h_2* (Lat. *ferō*, Gk. *phérō*, etc.). Another example is the treatment of the protomiddle root present 3 sg. in *-e* (*b^hud^h-é*, etc.). We have already seen the "medialization" *b^hud^h-é* → *b^hud^h-ó(r)* (§4). In some lexical items, however, the 3 sg. in *-e* was retained and made the basis for the creation of a new thematic active. Thus, the root *k^weit-* 'appear, become clear' formed a protomiddle aorist 3 sg. *$k^wóit$-e* (cf. Ved. *áceti*) and a derived protomiddle present *k^wit-é*. The derived present had both a middle reflex *k^wit-ó(r)* (cf. Ved. *cité*) and an active reflex *k^wit-é[t]*; the latter became the transitive *tudáti*-present OCS *čьtǫ* 'count, read, make famous' < *k^wit-é/ó-*. In the similar but interestingly different case of *μeid-* 'notice, see', the protomiddle aorist 3 sg. *$\mu óid$-e* 'became visible/perceptible' gave rise to a derived protomiddle present *μid-é*, which led to a stative-intransitive root present *μid-ó(r)* (cf. Ved. *vidé* 'is found/known as') and a *tudáti*-present *μid-é/ó-*. Here, however, the *tudáti*-present was re-grammaticalized as the familiar thematic aorist Ved. *ávidat*, Arm. *egit* 'found' and Gk. *é(w)ide* 'saw' (cf. JASANOFF forthcoming a: 201-203).

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[11] This account of the transitivity of forms like Hitt. *wāki*, developed at greater length in JASANOFF forthcoming b: 8´-9´ et passim, supersedes the earlier explanation in JASANOFF 2003: 172.

§8. Returning to the stative-intransitive system of *$g^{wh}en$-, we can now better appreciate the interconnections among the main protomiddle-based forms:

YAv. *jaini* was the reflex of the 3 sg. protomiddle aorist *$g^{wh}ón$-e* and originally meant, as a protomiddle, 'sustained a blow' (*vel sim.*);
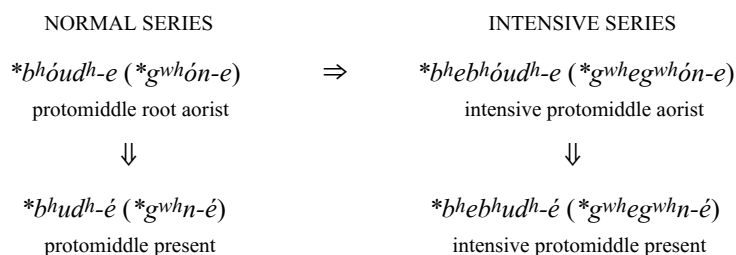
YAv. *ni-γne* and probably Hitt. *kunati* (implying pres. *$kunāri$*) were reflexes of the medialized 3 sg. protomiddle present *$g^{wh}n$-é* and originally meant 'gets hit, sustains blows';

Ved. *jaghā́na* and OIr. *geguin* were reflexes of a protomiddle "pre-perfect" 3 sg. *$g^{wh}eg^{wh}ón$-e*, derived by reduplication from the aorist *$g^{wh}ón$-e*. Whatever the precise value of this form, it must originally have been intransitive, like the Greek perfect middle *péphatai*.

Not accounted for in this list is the remaining important non-presential form, the reduplicated thematic aorist *$g^{wh}eg^{wh}n$-e/o-* (> YAv. *-jaγnaṱ*, Gk. *épephnon*). The reduplicated aorist was clearly part of the stative-intransitive complex as well. One obvious indication of this is the systematic pairing of reduplicated aorists with old-looking stative perfects in Greek: cf. aor. *dedaeĩn* 'teach' : pf. ptcp. *dedaṓs* 'skilled'; *lelatheĩn* 'make forget' : pf. *lélēthe* 'is unnoticed/unnoticing'; *tetukeĩn* 'prepare' : pf. ptcp. Myc. *tetuk^hwoha* 'made'; *arareĩn* 'fit together (tr.)' : pf. *árāre* 'is joined'; *enenkeĩn* 'bring' : *enénokhe* 'has brought'; etc. In JASANOFF forthcoming b: 20-27 I argued that the distributional link between the reduplicated aorist and the perfect was ultimately an outgrowth of the fact that the protomiddle ancestor of the classical perfect—the "pre-perfect"—was itself a type of aorist. The reduplication of the pre-perfect was probably originally intensive: if aor. *$b^hóud^h$-e* meant 'woke/has woken up', then its derivative *$b^heb^hóud^h$-e*, likewise an aorist, meant 'woke/has woken up *completely*'; if *$ųóh_2g$-e* meant 'broke/has broken (intr.)', then *$ųeųóh_2g$-e* meant 'broke/has broken *to bits*'; if *$g^{wh}ón$-e* meant '(has) sustained a blow', then *$g^{wh}eg^{wh}ón$-e* meant '(has) sustained a *severe* blow'; and so on. It is easy to see how the classical resultative-stative sense of the perfect could have developed from an intensive aorist formation of this type. If someone wakes up (aor.) or sustains a blow (aor.), there is a measurable chance that he or she will still be awake (perf.) or lying stricken (perf.) an hour later. But there is an even greater chance that the resulting state will persist if the waking up was "complete" or the blow "severe." The shift from intensive change-of-state aorist to resultative stative present was a late, apparently post-Anatolian, shift of focus from the event proper to its strongly implied aftermath.[12]

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[12] As argued in Jasanoff forthcoming b: 27´-29´, the reduplicated verbs that formally resemble most perfects in Anatolian, e.g., Hitt. *lilakk-* 'fell', Luv. *ḫišḫi(ya)-* 'bind', and Hitt. *šipant-* 'pour' (< *$s(p)e(s)p$-; cf. FORSSMAN 1994), are all eventive, suggesting that the ancestor of the perfect was still an ordinary eventive category at the time of the separation of Anatolian from the rest of the family.

§9. The question of the origin of the thematic reduplicated aorist *gʷʰegʷʰn-e/o- now practically answers itself. The simple and reduplicated protomiddle root aorists (3 sg. *gʷʰón-e 'sustained a blow' : 3 sg. *gʷʰegʷʰón-e 'sustained a severe blow') were parallel formations. It can be surmised, therefore, that just as the simple protomiddle root aorist engendered a zero-grade protomiddle root present (3 sg. *gʷʰón-e ⇒ *gʷʰn-é; cf. *bʰóudʰ-e ⇒ *bʰudʰ-é, *u̯óid-e ⇒ *u̯id-é, *u̯ókʷ-e ⇒ *ukʷ-é, etc.), the reduplicated protomiddle aorist, before itself becoming a resultative stative, gave rise to a reduplicated protomiddle present (*gʷʰegʷʰón-e ⇒ *gʷʰegʷʰn-é; so too *bʰebʰóudʰ-e ⇒ *bʰebʰudʰ-é, *u̯eu̯ókʷ-e ⇒ *u̯eukʷ-é, etc.). The three-term schema of §4 can accordingly be rewritten as a more structured diagram, with parallel intensive and non-intensive "tracks":

NORMAL SERIES		INTENSIVE SERIES
*bʰóudʰ-e (*gʷʰón-e)	⇒	*bʰebʰóudʰ-e (*gʷʰegʷʰón-e)
protomiddle root aorist		intensive protomiddle aorist
⇓		⇓
*bʰudʰ-é (*gʷʰn-é)		*bʰebʰudʰ-é (*gʷʰegʷʰn-é)
protomiddle present		intensive protomiddle present

Of interest now is the treatment of the forms in the last line. As discussed in §7, simple protomiddle presents of the type *bʰudʰ-é, *gʷʰn-é, etc. could either be medialized, in which case they gave root stative presents in 3 sg. *-ó(r) (cf. *bʰudʰ-ó(r), *gʷʰn-ó(r) (YAv. -γne), *kʷit-ó(r) (Ved. cité), *u̯id-ó(r) (Ved. vidé)); or they could be reinterpreted as transitive thematic actives, in which case they yielded tudáti-presents (*kʷit-é/ó- (OCS čьtǫ)) or thematic aorists (*u̯id-é/ó- (Ved. ávidat, Gk. é(w)ide)). The reduplicated protomiddle presents *bʰebʰudʰ-é, *gʷʰegʷʰn-é, etc. would in principle have had the same two possible reflexes:

1) reduplicated "stative" presents in *-ó(r) (*bʰebʰudʰ-ó(r), *gʷʰegʷʰn-ó(r), etc.). Forms of this type may have been the source, or one of the sources, of the classical perfect middle (cf. Ved. bubudhé, Gk. péphatai; also YAv. vaoce 'is called' < *u̯eukʷ-ó(r)). If so, however, the specifically resultative sense of the perfect middle would have to have been secondarily introduced from the perfect active.[13]

2) transitive thematic stems of the type *bʰebʰudʰ-é/ó- 'wake completely', *gʷʰegʷʰn-é/ó- 'deal a severe blow to, hit hard', *u̯eukʷ-é/ó- 'say firmly', etc. Reduplicated "tutudáti-presents" of this type are not a reconstructible PIE formation.[14] But thematic stems with e-reduplication, re-grammaticalized as aorists,

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[13] Note that resultative meaning must be assumed for the reflex of the perfect middle even in Celtic, where the forms in question pattern as deponent preterites: cf. 3 sg. pret. génair (← *ǵeǵnh₁-ór) 'was born' and do·ménair (← *memn-ór) 'thought'.

[14] If such forms (or their not yet thematized predecessors) ever existed, it is possible that they would have been absorbed into the similar-looking, but i-reduplicated "mímnō-type" (cf. JASANOFF 2003: 128-132).

were the source of the classical reduplicated aorist, including the familiar pairs *-jaɣnaṭ = épephnon* and *ávocat = é(w)eipon*.[15]

§10. The non-presential "face" of the root *$g^{wh}en$-* thus emerges with greater clarity. A robust stative-intransitive profile was maintained by this root down to the breakup of PIE, with every primary structure point represented by one or more attested forms:

$$*g^{wh}ón\text{-}e \text{ (YAv. } jaini) \quad — \quad *g^{wh}eg^{wh}ón\text{-}e \text{ (Ved. } jagháṅa, \text{ OIr. } geguin)$$

$$*g^{wh}n\text{-}é \text{ (YAv. } \text{-}ɣne, \text{ Hitt. } kunati) \quad — \quad *g^{wh}eg^{wh}n\text{-}é \text{ (YAv. } \text{-}jaɣnaṭ, \text{ Gk. } épephnon)$$

If anything stands out as deviant in the averbo of *$g^{wh}en$-*, it is not the reduplicated aorist, the perfect, or the unreduplicated passive forms, but the active root present *$g^{wh}én$-ti*.

How is the oddly split personality of *$g^{wh}en$-* to be explained? Two theoretical possibilities come to mind:

1) the present stem *$g^{wh}en$-/*$g^{wh}n$-* was originally an aorist that got displaced to the present; and

2) at the moment when pre-PIE roots were being assigned to the emergent present and aorist categories, something about the semantics of the protomiddle led the protomiddle-based forms, and only these, to be assigned to the aorist.

The first option does not seem very likely. For the aorist stem *$g^{wh}én$-/*$g^{wh}n$-* to "migrate" to the present system, it would have to have replaced an earlier characterized present/imperfect (**$g^{wh}n$-sḱé/ó-? **$g^{wh}eg^{wh}(é)n$-?) that presumably already served in this capacity. This would run contrary to the normal tendency of characterized presents to prevail over root presents. The second possibility is more plausible. Prior to the grammaticalization of the present : aorist opposition, the non-telic root *$g^{wh}en$-* probably covered a range of meanings that may have ranged from unmarked 'hit, strike' to iterative 'beat'. Thus, when the time came to assign the root formations to the present or aorist, the active *$g^{wh}én$-ti* (or its pre-PIE predecessor), which focused on the action of the verb as performed by the agent, would naturally have been aligned with the present. In the passive-like protomiddle *$g^{wh}ón$-e* (or its pre-PIE predecessor), on the other hand, where the focus was on the effect produced by the action of the verb on the patient, the potentially ongoing and/or repeated character of the action was less prominent in actual discourse than the fact that the patient had been violently affected. Here, in some contexts, speakers would have tended to interpret PIE *$g^{wh}ón$-e* as an aorist. As tendencies hardened into rules, a grammatical contrast arose between sentences of the type

HERO   hit/strike/beat   MONSTER (*active*)

where the verb was assigned to the present system, and sentences of the type

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[15] The "correct" position of the accent in the reduplicated aorist, hard to recover directly from the Vedic evidence (cf. inj. *vócat*, etc. vs. opt. *vocéma*, etc.), thus shows itself to have been on the thematic vowel.

MONSTER   get hit/struck/beaten   (by HERO)   (*protomiddle*)

where the potential iterative reading was suppressed and the verb was assigned to the aorist.[16]

§11. If this picture is correct, the much-discussed question of whether *$g^{wh}en$*- fundamentally meant 'hit, strike, beat/(wiederholt) schlagen' or 'strike down, slay/erschlagen' can be resolved in favor of the non-telic reading.[17] At the time when root formations were aligned with aspect categories, the active/transitive stem *$g^{wh}én$*- ~ *$g^{wh}n$*- retained its original meaning and was interpreted as a present. The originally intransitive protomiddle root inflection, however, developed the telic sense 'be slain, get killed' and was assigned—or, conceivably, re-assigned—to the aorist. Later transitive formations based on the protomiddle, such as the reduplicated aorist and the active perfect, naturally therefore have the telic sense 'slay, kill' as well. The difference between active-based forms meaning 'hit, strike' and protomiddle-based forms meaning 'slay, kill', though lost in most languages, is still visible in the contrast between Gk. pres. *theínō* 'strike' and aor. *pephneĩn* 'kill'.[18]

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[16] As a point of typological interest, the contrast between ordinary and progressive forms of the passive in English ('is/was struck' vs. 'is/was being struck') was a late (mid-eighteenth-century) innovation. The progressive forms were still "avoided by the best writers" as recently as the early twentieth century.

[17] As rightly maintained, but without systematic consideration of the position of the aorist-based forms, by GARCÍA RAMÓN 1998.

[18] The significance of this pair lies not in the fact, trivial in itself, that the present means 'strike' and the aorist means 'kill', but in the fact that *theínō*, with presential meaning, continues the function of a PIE primary root present (3 sg. *$g^{wh}én$-ti*), while *pephneĩn*, with aoristic meaning, continues the function of a PIE primary root aorist (3 sg. *$g^{wh}ón$-e*). The juxtaposition of the two root formations in a single system is the anomaly addressed in this paper.

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