# A Revised History of the Greek Pluperfect

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A Revised History of the Greek Pluperfect

For a few decades, the dominant view of the origin of the Greek active pluperfect – if enough attention was paid to this category for any view to be called dominant – was that of Nils Berg, who in an article published in 1977 claims that the so-called alphathematic endings in Homer, 1sg. -εα (e.g., πεποιθεί ‘believed, trusted in’), 2sg. -εαϛ,1 and 3sg. -ει (e.g., ἐπεποιθεί), as well as thematic 3sg. -ε (e.g., ἐγέγονε(ν) ‘called out, shouted’), derive from an undifferentiated perfect-cum-pluperfect in Proto-Indo-European. Berg’s scenario, which makes crucial use of a sleight-of-hand analogy with the sigmatic aorist, has many problems, as one of us (Katz) points out in a 2006 paper before proposing an alternative account based on the idea of an athematic pluperfect in PIE itself – a hypothesis most fully developed by the other author (Jasanoff) in his 2003 book. Among the attractions of setting up a pluperfect for the protolanguage is that it allows a unified tale to be told about the complex Greek data, one in which the PIE pluperfect is the ultimate parent of both the alphathematic singular and the athematic dual and plural forms (e.g., 1pl. ἐπέπιθημεν) of the “normal” pluperfect in Greek. As will be seen in what follows, the pluperfect paradigm of the verb ‘to know’ (PIE *yeid-), with its unique Homeric 3sg. ᾔδη, can be explained in these terms as well.2

But Katz’s scenario suffers from a problem of its own, as anyone who so much as glances at his paper will see. In a footnote that takes up more than a page, Katz (2006, 13-15 n. 30) twists and turns and ultimately fails to dispel doubts about an issue of meter, explained below, that is serious enough to raise questions about the solidity of the overall analysis. The purpose of the present contribution, which we dedicate with affection and respect to our distinguished

1 Outside the verb ‘to know’, on which see below, no 2sg. active pluperfect is actually attested in Homer, though note the unmetrical varia lectio ἐτεθύρακτει reported by Eustathius for Od. 24.90, where the standard reading is θηγόσω ‘would have marveled’.

2 Rather than use space in the pages that follow to repeat many ancillary facts, proposals, and references (textual and scholarly) that can be found in Katz (2006), we refer readers to that paper. Schwyzter (1939, 776-779) provides the best starting point for information about the range of attested pluperfects.
friend José Luis García Ramón, is to propose an improvement that maintains
the core of the Katz/Jasanoff account of the rise of the early Greek pluperfect
while avoiding the metrical pitfall.

We begin by noting that Rigvedic forms such as 1sg. avedam ‘knew’, 2sg.
ájagan ‘came’, and 3sg. (á)didhēt ‘looked’, as well as GAv. 3sg. urūraost ‘reject-
ed, repelled’, which are described in the grammars as pluperfects or perfect
injunctives, can be formally understood as imperfects of the perfect. According
to Jasanoff (1994, 153-154 and passim; 1997; 2003, 34-43 and passim), late
PIE itself formed a tense of this type, the function of which was to serve as the pre-
terite to the perfect in its role as a stative present. On this view, for which there is
trace evidence in Germanic (Go. ogs) and possibly Anatolian (Hitt. wewakta),
as well as in Indo-Iranian and (as claimed here) Greek, the PIE pluperfect was
built from the perfect by substituting the secondary active endings of the present
and aorist systems (1sg. *-m, 2sg. *-s, 3sg. *-t, etc.) for those of the perfect “ac-
tive” (1sg. *-h₂e, 2sg. *-th₂e, 3sg. *-e, etc.). To the extent that a middle of the
perfect is recognized for the proto-language (see Jasanoff 2003, 43-45), the pro-
cess here was the same: the secondary middle endings (1sg. *-h₂e, 2sg. *-th₂e,

3 Hitt. wewakta is the irregular 3sg. preterite corresponding to 3sg. pres. wewakki
‘demands (repeatedly)’. Jasanoff (2003, 11, 36-38) traces these forms directly to a
PIE pluperfect (*yeyök-t) and perfect (*yeyök-e), respectively. As several schol-
ars have pointed out, however, there are problems with this analysis: the accent of
the verb wewakk- is probably on the reduplication syllable (see Kloekhorst 2008,
1011), and the root *yesk- was not of a semantic type to form a resultative-stative
perfect (see García Ramón 2006, 32-33). For these reasons we now group
wewakk- with the “intensive” formations that partly share the morphology of the
perfect in Indo-Iranian (e.g., Ved. nɔnāva’roars’) and Greek (e.g., μέμυκε ‘lows’).
Forms of this kind had normal h₂e-conjugation imperfects rather than true plu-
perfects in the parent language (see below) but often – as was perhaps the case
with wewakta – acquired pluperfect-like preterites analogically.

4 It should be noted that the 3pl. of the PIE active pluperfect was aberrant, with
e-grade rather than zero grade of the root and the ending *-rs rather than *-nt;
the diagnostic form is GAv. cikōitǝrǝš ‘appeared (vel sim.),’ with analogical rete-
on of -k- (see Jasanoff 1997; 2003, 39-40 and passim). Though interesting for
what they tell us about the history of the perfect system within the protolanguage,
the special features of the 3pl. are of no importance for Greek, where they were
lost without a trace.

5 Compare now Weiss (2010, 110): “The resultative [i.e., perfect] stem developed a
past form with the secondary endings and the prefixed augment (at least) in the
form of Indo-European ancestral to Greek and Indo-Iranian.”
3sg. *-or, etc.), optionally accompanied by the augment, were substituted for those of the perfect middle (1sg. *-h₂er, 2sg. *-th₂er, 3sg. *-or, etc.).

In early Greek, the unmarked active pluperfect is alaphathematic in the singular and athematic in the plural. The much rarer thematic pluperfect (e.g., Hom. 1sg./3pl. ἀ/ἤνωγον [cf. Cypr. 3pl. a-no-ko-nc] ‘ordered’, 3sg. ἄνωγε(ν), 3sg. (ἐ)γέγωνε(ν), and 3pl. (ἐ)μεμψζον ‘bleated’) constitutes a class apart, being largely associated with the “intensive” perfects of verba dicendi vel sonandi. Despite the potential appeal of deriving the thematic pluperfect from the same source as the alphathematic/athematic forms (as per Katz 2006), we now (compare note 3) prefer to regard intensive perfects of the type ἄνωγα, γέγωνα, and μέμψζα as reflecting reduplicated h₂e-conjugation presents rather than perfects sensu stricto in the parent language, with preterites that were not properly speaking pluperfects at all, but normal h₂e-conjugation imperfects in 1sg. *-h₂e, 2sg. *-th₂e, 3sg. *-et] (see Jasanoff 2003, 86-90; forthcoming). On this view, the 3sg. h₂e-conjugation imperfect in *-et would have been the source of the Greek 3sg. thematic “pl perfect” in *-ε and the point of departure for the creation of the thematic pluperfect as a whole. We will not discuss these forms further here.

In Homer, the active non-singular and the entire middle of the normal pluperfect are formed according to the template (+ augment) weak perfect stem + secondary endings. Athematic pluperfect forms of the type 3du. ἐτίκτην ‘resembled’, 1pl. ἐπέπιθμεν, and 3sg. mid. (ἐ)πεπυστο ‘understood’ are thus in close

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6 Dag Haug, a student of Berg’s who does not accept our view that the pluperfect is an inherited category (see most recently Haug 2008, 298), discusses the semantic development of Greek perfects and pluperfects in a couple of recent papers and has interesting things to say about the relationship between time and diathesis in the (plu)perfect system. We note, though, that if García Ramón (1990, 13-15, with notes on 19-20) is right to understand 3sg. ἐφθιεν at II. 18.446 as an old pluperfect (< *ἐφθείε 'was wasting away'), then Haug (2008, 299) is not correct to state that “not a single verb in Homer has both an active and a middle pl perfect” (cf. 3pl. ἐφθιόθεν(α) [II. 1.251] ‘died’ and, with the prefixes ἀπ- and ἐξ-, 3sg. -ἐφθεό). The distinction is important: h₂e-conjugation presents, like presents of the more familiar types, had a well-entrenched distinction between primary and secondary endings (e.g., 1sg. *-h₂ei vs. *-h₂e and 3sg. *-e vs. *-et]; the perfect, until very late in the day, did not. When the need was finally felt for secondary perfect forms, recourse was had to the secondary endings of the mi-series: e.g., 1sg. *(e)μοίδ-प, 2sg. *(e)μοίδ-κ, 3sg. *(e)μοίδ-त, etc. ‘knew’.

7 Though starting from very different assumptions, our interpretation of these forms presents obvious points of contact with the classic treatment of Tichy (1983). The “super-thematic” type in 1sg./3pl. -εον is briefly discussed below.
accord with their Indo-Iranian and proposed PIE counterparts. The problem from a historical point of view is the active singular, in which the strong perfect stem is followed by the distinctive endings -εα, -εαϛ, -ει. Synchronically, these endings were interpreted by speakers of Greek as consisting of the perfect endings preceded by -ε-, an analysis that led to the post-Homeric spread of -ε- to the plural as well (1pl. -εμεν, 2pl. -ετε, 3pl. -εσαν; cf., e.g., Attic ἔπεοθέσαν and, with the familiar -κ-, ἐλελόθεσαν 'had loosened, undone'). 9 The source of this vowel, however, is unclear.

Complicating the interpretation of the standard pluperfect paradigm in -εα, -εαϛ, -ει is the partly distinctive pluperfect of the verb 'to know', forms of which are attested in Homer in 1-3sg. and 3pl. In the three plural persons, the predicted forms – aside from the surprising long augment, on which see below 10 – are preserved in Classical Attic: 1pl. ἤσμεν, 2pl. ἤστε, 3pl. ἤσαν. 11 All these go back to *ἐῳδ-, with -ο- for -δ- in the first and third persons (cf. already unaugmented Hom. 3pl. ἴσαν [4x] for expected *(ϝ)ίδα(ν) < *-ϝδ-) based on the other instances in the paradigm where the *-δ- of the root directly preceded another dental (e.g., ἤστε < *ἐῳδ-τε). In the singular, however, the paradigm is notably irregular. The Homeric forms are 1sg. ἤδεα and/or ἤειδα (4x); 2sg. ἤειδης (II. 22.280) and ἤειδοθ' (α) or εἴδοθ' (α) (Od. 19.93); and 3sg. ἤδη and/or εἴδη (21x), ἤειδη (Od. 9.206), and ἤειευ(ν) and/or εἴευ(ν) (6x). 12 This confusing ar-
ray has three interesting properties: (1) e-grade of the root (ἠειδ- [and presumably also ἀδ-, with contraction] < *ἠϝειδ- and/or εἰδ- < *ϝειδ-); (2) the unexpected 2sg. endings -ης and -ησθα; and (3) the unexpected 3sg. ending -η rather than -ει.

Put in the most concrete terms, our task is to explain how partial paradigms of the type

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and how the specific partial paradigm

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In both cases, it is easy to see why the preforms on the left would have been natural candidates for replacement: the historically expected second- and third-person forms were morphologically opaque, and the unaugmented first-person form – the syllabic nasal of which would have developed into *-a’ (i.e., [â]) and then *-a – would at an early date have fallen together with its correspondent in the perfect proper.

For the main paradigm Katz (2006) proposes a three-step analogical scenario:

1. “clarification” of 2sg. *(e)pepōis*(s) and 3sg. *(e)pepōis*(t) to *(e)pepōit’es*(s) and *(e)pepōit’es*(t), respectively;

2. extension of the new quasi-stem *pepōit’es*- to 1sg. *(e)pepōit’es*(h)a, whence *(e)pepōit’es*(h)αι/*(ἐ)πεποθεα; and

3. extension of alphathematic inflection to 2sg. *(e)(h)a/ *(e)ας and 3sg. *(e)(h)ε/* *(e)ε.

For the verb ‘to know’, on the other hand, Katz starts from a stem *ϝειδη- that is not a “stative” akin to Lat. uidère and OCS viděti ‘see’, as many scholars would have it, but rather, as suggested by Jasanoff (1991, 117 n. 34 and esp. 1997, 125 n. 20; 2003, 36 n. 20), a back-formation from the paradigm of the perfect optative ϝειδείην, -είης, -είη: aor. pass. indic. *(e)ϝάνην, -ης, -η
The final -η of 3sg. ἤδη/εἴδη and ἤεδη and the -η of 2sg. ἤεδης and ἤησθα/εἴδησα are thus for Katz quite separate from the usual pluperfect ending -εί. He attributes the 3sg. variant ἤδεε(ν) and, by implication, 1sg. ἤεδεα (for expected ἤδην or ἤ(ή)είδην) to the influence of the standard (ἐ)πεποίθεα paradigm.

As Katz himself admits, none of this is straightforward, depending as it does on a phonological development specific to dental-final roots, the so-called dental + dental rule (the choice of the perfect stem πεποθ- [< PIE *h2eiddʰ] is thus not accidental), and on a non-proportional analogy to generate the sigmatic 2sg. in *-εις and 3sg. in *-εις. The latter forms are needed to account for the 1sg. in *-εις/*-ε(θ)υε, which serves in turn as the basis for the creation of the alphathematic 2sg. in *-ε(θ)υε/*-εις and 3sg. in *-ε(θ)υε/*-εε. But herein lies the fatal problem – the metrical issue to which we alluded above. In principle, the -ει of (ἐ)πεποίθει, etc. could indeed go back to *-εε, direct evidence for which is traditionally seen in Hom. ἤδεε(ν) and in the corresponding pl perfect ending in Herodotus (ἡδεε, ἐληλύθεε 'came', etc.). These forms, however, can also be explained analogically – and (as we now recognize) they must be so explained in the light of a striking distributional fact. In Homer, as is well known, the 3sg. active pluperfect shows a strong predilection for verse-final position (see, e.g., Chantraine 1958, 437); it is no accident that the specific form ἐπεποίθει makes its sole epic appearance at the end of II. 16.171. Yet verse-final position is the one place in the hexameter where the metrical sequence –˘˘ is disallowed. Despite the conventional wisdom, therefore, and whatever the merits of Katz’s – or, for that matter, Berg’s – analogical scenario,14 it is highly unlikely that forms like (ἐ)πεποίθει do go back to *<>(ἐ)πεποίθεε.

In what follows, we offer what we believe is the required revision of the Katz/Jasanoff solution, which we continue to regard as fundamentally correct. In particular, we continue to explain the (ἐ)πεποίθεα and ἤδεα partial paradigms sketched above as inner-Greek replacements of, respectively, *(e)pepóitʰ, etc. and *(e)woïdʰ, etc. We also continue to interpret the stem *(e)είδην as a backformation from the optative and to assume analogical interaction between the historically distinct paradigms of (ἐ)πεποίθεα and ἤδεα, the second of which – and only the second of which – originally had forms in *-εις. The main difference

14 For Berg, too, the source of -ει is *-εε, only this is for him a last-minute inner-Homeric extension of the supposedly temporally indifferent inherited (plu)perfect ending *-ε.
between the account below and the theory Katz published in 2006 lies in the greater role we assign to the verb ‘to know’, and in particular to 1sg. ἦδεα.

As we have seen, the inherited 1-3sg. pluperfect of the root *γείδει- would at some stage of Greek have had the structure *(e)ϝώιδα(0)*, *(e)ϝώίς (< *-ss)*, *(e)ϝώίς (< *-st)*, with merger of the 2sg. and 3sg. forms. An early response to the homophony was perhaps the optional extension of the 2sg. ending *-(s)tʰα from the perfect proper into the pluperfect, giving rise to a new *(e)ϝώιστθα* that then became the locus of the spread of -σθα to other secondary forms (e.g., 2sg. impf. ἦσθα ‘were’ and impf./aor. (ε)φῆσθα ‘said’ beside ἦς and (ε)φης). For the purposes of the discussion that follows, we take the “initial setting” of the singular pluperfect paradigm of οἶδα to have been

\[
\begin{align*}
\text{1sg.} & \quad *(e)ϝοιδα(n) \\
\text{2sg.} & \quad *(e)ϝοις \sim *(e)ϝοισθα \\
\text{3sg.} & \quad *(e)ϝοις.
\end{align*}
\]

Very little of this survives in quasi-attested *(η)ϝείδεα, etc. One of the major innovations of historical Greek, and the easiest to discuss because it is the most self-contained, is the long augment, on which see Chantraine (1958, 479-481). According to Chantraine and others, η- is the usual form of the augment before digamma. But this is not an explanation, and it conspicuously fails to hold for ἐλδον < *(ε)ϝιδον, the aorist built to the same root as οἶδα. The best evidence for the long augment before digamma, in point of fact, comes precisely from what are sometimes considered to be unreduplicated pluperfects: e.g., ἠϝικτα and ἠϝικε, (*pf. (ϝ)έκται and (ϝ)έκε*), respectively, ἠὠλπε and ἠὠργε, (*pf. (ϝ)沨ε and (ϝ)沨ε*), the last three with quantitative metathesis.17 These forms, in our opinion, illustrate the effects of an

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15 This is perhaps the easiest way to explain the non-trivial spread of -σθα as a secondary ending. A mechanical proportion would have been possible if the 1sg. ending *-a* of the perfect and the 1sg. ending *-a* of the pluperfect had already merged.

16 The line between giving Greek preforms in Roman letters and in Greek ones is subjective, but from here on, most constructs from the not-too-distant past will be given in Greek.

17 Chantraine (1958, 479-480) is hesitant about these forms: “Ailleurs la graphie présente une métathèse de quantité comme en attique […]. Certains plus-que-parfaits sont peu clairs: ἠϝικε (B 58, etc...); la forme comporte un (ϝ) initial, ainsi δ 654 πάντα ἠϝικε qui peut recouvrir soit πάντα (ϝ)έκται sans augment, soit πάντα ἔκται (ϝ)έκε, la graphie avec (ϝ) serait un atticisme; mais il a pu exister un *(η)ϝικε* sans redoublement, cette forme est supposée par ἐπ(ϝ)έκται (ω 295) et par ἡϝικε attesté en attique Thucydid VII 75, Χένοφων Hellen. VII, 5, 22.” In
early Greek sound law that contracted the sequence *ewes/*οε/*ες/* to *ες/*ος/*ες/*. By this development, which must have been earlier than the standard rules governing the loss of digamma in Attic-Ionic, pre-Greek *ες/*ος/*ες/* became the superficially unreduplicated pluperfect *ος/*ες/* (>/ος/*ες/*). *ες/*ος/*ες/* (*/IE *yek-) became *ος/*ες/* (>/ος/*ες/*), and so on. With *ς/*ες/* established in the “unreduplicated” pluperfects of all roots in initial digamma other than *φειδ-, it was analogically extended to the pluperfect of *φειδ- itself, where the absence of reduplication was genuinely old. 10

The first step in the replacement of the inherited pluperfect of oίδα by the etacized stem *φειδη- may have been the partial encroachment of the formally transparent perfect optative *φειδεη-, which in the manner of optatives generally would have been potentially employable as an iterative preterite (cf. Eng. would), on the territory of the opaque pluperfect indicative *ς/*ες/*ος/*(ος/*ες/*). The optative stem *φειδεη-, it is hardly necessary to add, was not the phonological reflex of PIE *yid-ič- (*/φιζη*) or even of its “improved” Lindeman-variant version *yid-ič- (*/φιζη*), as in Ved. vidyāt, Gāv. vidhiat, and Go. wit. Virtually all expected instances of the optative sign *ς/*ες/* were replaced in Greek by -ες/*, -ος/*, or -ως/*, with the first being the unmarked choice.11 The full grade of the root in *φειδη- simply copied the vocalism of the subjunctive *φειδεη/ο-.

10 The “Addenda et Corrigenda” to the 5th edition (1973), however, he writes, “Il faut renoncer à l’hypothèse d’un augment long et d’une forme sous [sic; read ‘sans’] redoublement pour expliquer έόκει tiré de *νόμει, et de même pour έόγει et έόλει” (518; compare now Chantraine 2013, 463) – but the alternatives he offers are not uniformly satisfactory.

11 It is not impossible that the change of *ewes-* to *ες/* is related to the loss of *w-* before a labial in the famously digamma-less εμει ‘vomit’ (vis-à-vis, e.g., Skt.梵- and Lat. ucmere < PIE *yemh-; see, e.g., Chantraine 1958, 156). Here, too, may belong οιδί ‘be married’, if, as Katz has suggested in a talk titled “Greek ψιδιο and its digamma”, the verb is connected to Ved. वपुस- ‘wonder’, वपुसाः- ‘wondrous’, and the root vap- ‘strew’ (*/IE *yep-). The most recent and fullest published account of a similar kind of dissimilation in Greek is Nikolaev (2007, 169 and passim), not all of whose conclusions we necessarily accept.

12 Prominent loci for the replacement of *ς/* (i.e., */ς/*) by *ς/* (i.e., */ς/*) would have included (1) the verb ‘to be’, where PIE *ς/*-ič- (Lindeman-variant) would first have given *e(si)y- and then *heι(y)-/*/ς/* (analyzed as *ς/*i(y)-, with later analogical elimination of the rough breathing); and (2) the aorist of the root *ς/*-ič- ‘put’, where *θι/* (*/h/*-ič-) blended with 1-2pl. θεμεν, θετε (< */dheh-ih-) to yield θει/*. On the latter development see further Jasanoff (1991, 106-108).
With the optative *ϝειδείη functioning as what might be called the “modally colored” preterite of *ϝοῖδα, the stage would have been set for the back-formation of a more convenient non-modally colored preterite. Jasanoff, as we have seen, formerly invoked the aorist passive for this purpose, and Katz followed him. But a semantically more appropriate model would have been the verb ‘to be’:

pres. opt. εἴην, εἰής, εἰή : impf. ἦς, ἦδ(θα), ἦς

where X = *(ἡ)ϝείδηα, *(ἡ)ϝείδησ(θα), *(ἡ)ϝείδηϛ.

The proportion did not operate in the plural, where the inherited pluperfect forms *(ἥ)ϝιδμεν, etc., unlike the hypershort 2-3sg. *(ἔ/ἡ)ϝοις, presented no special difficulties of parsing or processing. Of the newly etacized forms, 1sg. *(ἡ)ϝείδηα and 2sg. *(ἡ)ϝείδησ(θα) would have been stable; the latter is effectively attested in Hom. ἰείδης (II. 1x) and ἰδησθ(α)/ἐίδησθ(α) (Od. 1x). But 3sg. *(ἡ)ϝείδης, with its synchronically unmotivated final -ς, would have cried out for further fixing. Under pressure from such pairs as 2sg. aor. pass. (ἐ)φάνηϛ : 3sg. (ἐ)φάνη, 2sg. impf./aor. (ἐ)φήσ(θα) : 3sg. (ἐ)φη, 2sg. impf. ἐτίθης : 3sg. ἐτίθη ‘put’, and (only slightly further afield) 2sg. impf. ἐφεσες : 3sg. ἐφεσε ‘carried’, the final consonant was lost, yielding

As a point of historiographical interest, note the once common belief that what we now call the alphathematic pl perfect was a periphrastic formation: “Bis vor Curzem galt die Ansicht, die Plusquamperfecta auf -εα seien aus einer Zusammensetzung erwachsen, deren zweiten Theil das Präteritum ἐτα, ἤν des Verbms substantivum bilde” (Mekler 1887, 79 – who distances himself from this position).

3sg. ἦς < *(ή)εστ is the Common Greek form, retained in a number of dialects.

The phonology of the forms here can be only approximate since it is impossible to know when the creation of the *(ἡ)ϝείδηα paradigm took place relative to other early developments, such as the elimination of *b- in the optative of the verb ‘to be’ and the extension of e-grade to the optative of ‘to know’.

As indeed did 3sg. ἦς itself, replaced in Attic-Ionic by ἦ(ἴ)ν.

The historically expected forms ἐτίθης and ἐτίθη lead a shadowy existence in actual Greek: Veitch (1879, 634) cites instances in Homer and Plato, but standard editions print ἐτίθεις and ἐτίθει and do not mention the athematic alternatives in the apparatus. For this sort of fluctuation in μ-verbs, compare Hackstein (2002, 99-100). We thank Olav Hackstein for his kind assistance.
This is the paradigm we posit for Proto-Attic-Ionic; it is probably even older (see below).

The normal pluperfect (*\(\epsilon\)πεποίθη") would not have been directly affected by these developments.\(^{25}\) But once the endings *-ηα, *-ησ(θα), *-η had established themselves in the pluperfect singular of the common verb ‘to know’, they would have proved useful elsewhere. Without analogical repair, roots ending in a stop would have been subject to severe truncation in the 2-3sg. pluperfect. We have already seen this in the case of 2sg. *\(\epsilon\)πεποίθη < *-\(\delta\)s and 3sg. *\(\epsilon\)πεποίθη < *-\(\delta\)t; the reduction would have been still more drastic when the root ended in a labial, velar, or labiovelar, giving rise to forms like *\(\epsilon\)λέλοιψ, *\(\epsilon\)λέλοι (: pf. λέλοιπε ‘leaves (behind)’ < PIE *leik₂-) and *\(\epsilon\)τέτρηξ, *\(\epsilon\)τέτρη (: pf. τέτρηξε ‘is in an uproar’ < PIE *dʰreχ₂), etc. Our proposal is that to eliminate the inconvenience of such forms, the 1-3sg. endings of the pluperfect of the verb ‘to know’ – *-ηα, *-ησ(θα), *-η – were generalized to the active pluperfect as a whole. The result was a pluperfect paradigm recognizably ancestral to the one we know:

| 1sg. *\(\epsilon\)πεποίθηα | 1pl. *\(\epsilon\)πέπιθαμεν |
| 2sg. *\(\epsilon\)πεποίθησ(θα) | 2pl. *\(\epsilon\)πέπιστε |
| 3sg. *\(\epsilon\)πεποίθη | 3pl. *\(\epsilon\)πέπιθαν |

Forms such as the new 3sg. *\(\epsilon\)πεποίθη, with the metrical sequence (\(\text{-}\)\(\text{-}\)\(\text{-}\)), would have been ideally suited for use in verse-final position. The ἐπεποίθη of II. 16.171, in our view, recovers just such a form. More generally, the reason why 3sg. pluperfects tend to cluster in verse-final position in Homer, we suggest, is that at the time the poems were composed, they ended not in *-\(\epsilon\)ι < *-\(\epsilon\)ε but in monophthongal *-η.\(^{26}\)

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\(^{25}\) This is the simplest assumption. In principle, the perfect optative as a whole could have played the role that is here attributed to *\(\epsilon\)πεποίθη alone. In that case, perfect optatives of the type *\(\epsilon\)πεπ(\(\epsilon\)σ)θηαν and *\(\epsilon\)λλ(\(\epsilon\))θηαν-, etc. would have gone to the back-formed pluperfects *\(\epsilon\)πεπ(\(\epsilon\)σ)θηα and *\(\epsilon\)λλ(\(\epsilon\))θηα, etc., after which, as an extra step, the new forms would have an acquired analogical -o-grade from the perfect indicative.

\(^{26}\) A conclusion anticipated by Chantraine (1958, 438): “Il n’est pas impossible qu’elle [= 3sg. -ει] recouvre un plus-que-parfait ancien en η, qui serait issu du
The final steps in the emergence of the attested pluperfect were the change of *-ηα to *-εᾱ by quantitative metathesis, the analogical adjustment of *-εᾱ to *-εᾱ to conform to the normal form of the 1sg. ending elsewhere, and the generation of analogical alaphathematic forms in the 2sg. (-εᾱς) and 3sg. (-ει < -εε). It is not without interest that the “contest” between the hiatal 1sg. in *-εα and the monophthongal 3sg. in *-η was resolved in favor of the former; other things being equal, it would have been just as natural, and perhaps more so, for the 3sg. form to remain *(ε)πεποίθη and the 1sg. to be remade as **(ε)ποίθη. Perhaps the ending *-η was too strongly associated with the aorist, while -εε/ει, with its implication of an “epsilon-contract” quasi-present stem of the shape πεποιθε-, aligned better with the past stative value of the early pluperfect – which is to say, made sense as an imperfect of the perfect. It is probably no accident that, quite separately, 3sg. impf. ἐτίθη, mentioned above, was refashioned to ἐτθεί.

How old were these developments? Since quantitative metathesis was a purely Attic-Ionic development, the full sequence of events set forth above would have to have been confined to this dialect group. But there is no reason why the remade pl perfect of οἶδα (i.e., *(η)ϝείδηα, *-ησ(θα), *-η, etc.) could not have been pandialectal or why the 1-3sg. endings *-ηα, *-ησ(θα), *-η could not have been extended to the normal pluperfect (*-(ε)ποίθηα, etc.) at an equally early date. The most interesting occurrence of a normal pluperfect outside Attic-Ionic is 3sg. απολωλη ‘died’ in a forth-century B.C. inscription from Heraclea. Schwyzer (1939, 778) cites απολωλη as proof of a Doric paradigm – “dor. -η, -ηϛ, -η (as -εε: herakl. ἀπολ ωλη)” – for which, however, it is the only evidence. And despite the confidence with which Schwyzer and Ringe

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27 In the verb ‘to be’, Homer has two or three instances of 1sg. impf. ἐᾱ alongside ἦα (see, e.g., Chantraine 1958, 71, 287-288); Herodotus has ἐᾰ (2.19), to judge from occasional other apparently alaphathematic forms, such as 2pl. ἐᾰτε. A form of the type *(ε)πεποίθει would not, of course, have fit into the hexameter.

28 It is worth noting that all Homeric pl perfects of the shape (˘)˘‒(˘)˘ (e.g., (ε)ποίθει) that are not verse-final are found at the bucolic diaeresis, which implies that they should be scanned (˘)˘‒(˘), i.e., with -εε (see Katz 2006, 14 n. 30, with references). These are respectively old forms as well, representing the second stage in the progression *-η → -εε > -ει.

29 Ringe (1984, [II.]508-510) gives an excellent overview of the scant evidence for active pluperfects in Greek inscriptions. Note that the evidence for such forms outside Attic-Ionic is entirely epigraphic.
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(1984, [II.]509; compare also [I.]272) state that its ending goes back to */-εε/*-ει, Dor. -η can just as well come from */-ει. In principle, therefore, ἀπολωλη can – and we suspect does – reflect a paradigm in */-ηα, */-ηο(*θι), */-η, with the same endings as the pluperfect of οἶδα.

Beyond this there is very little. If we leave aside one super-thematic Phocian form, 3pl. εφεστακεον (4c B.C.) ‘were in charge’, on which see immediately below, there may well be no evidence at all for interesting dialectal pluperfects. Such late Phocian forms as 3sg. ειλαφει (2c B.C.) ‘received’, 3sg. ηιδει (1c A.D.), 1pl. ηδειμεν (1c A.D.), and 3pl. παραγεγονεσαν (2c B.C.) ‘were near’ are probably Atticisms, as are late Doric 3sg. forms like εγεγραφει (2c B.C.) ‘wrote’ and εισχηκει (1c B.C.) ‘had’. 30 As for εφεστακεον, pace Ringe (1984, [II.]509), this does not provide “independent evidence for the existence of an active pluperfect in -εον outside of Attic-Ionic”; it is a “super-thematic” pluperfect (see Katz 2006, 11-12 n. 27) of the same type as 3pl. ἡνωγεσον (II. 7.394), 3pl. εξειμέκρεων (Od. 12.395, v.l.), 3pl. *ἐλελήκεων (for ἐπελήκευν ‘cheered (vel sim.)’ at Od. 8.379; thus Nussbaum 1987), and above all 1sg./3pl. (ἐ)γεγωνεν (v.l. -εον at Od. 17.161), attested three times in the Οδύσσεια. The hiatus in these forms, whatever their precise morphological history, has nothing to do with the hiatus in the normal pluperfect endings -εα, -εας, -εε/*-ει. The super-thematic pluperfect is a formal expansion or renewal of the simple thematic pluperfect (ἤνωγα, etc.); it is significant that all four of the forms in -εον in Homer correspond to verba sonandi with intensive perfects (ἄνωγα, μέμῡκα, λέληκα, γέγονα). Both the thematic and the super-thematic types spread at the expense of the normal pluperfect in the individual dialects. In formal terms, Phoc. εφεστακεον is simply the super-thematic counterpart of the 3sg. thematic plpf. επηστακε, attested three times in East Aeolic (see Katz 2006, 22, with references to Ringe). 31

30 See Ringe (1984, [II.]509), who, however, tries to make something of some of these forms: “The remaining non-periphrastic Phokian forms [besides εφεστακεον] are all late and have endings which (aside from 3sg. -ei) betray the influence of the Attic koine […]. There are [also] a number of late Doric 3sg. forms in -ei which possibly corroborate the evidence of ἀπολωλη […]. However, these can owe their ending to the influence of the Attic koine” (italics added). It is not apparent to us why Ringe believes that the Phocian 3sg. forms are native while the others are not. For details and some discussion of the forms in question, see Ringe (1984, [I.]214-215, 218-219, 224, 225, 234-235, [II.]287, 297, 318).

31 A full account of these forms has yet to be written. Two facts are obviously significant: (1) as noted, the verbs that made super-thematic pluperfects also made intensive perfects and simple thematic pluperfects, so that that their 3sg. “present” (e.g., ἄνωγε(ν) ‘orders’) and (augment aside) “preterite” (ἄνωγε(ν) ‘ordered’) were identical; and (2) the specific verb γεγον- made a full-blown contract pre-
It is time to summarize our findings:

(1) Greek inherited a reflex of the PIE pluperfect, formed by optionally adding the augment and substituting the secondary active endings (1sg. *-m, 2sg. *-s, 3sg. *-t, etc.) for those of the perfect.

(2) At an unknown but probably early date, the hypershort pluperfect singular of the verb ‘to know’ was replaced by an innovated sub-paradigm in 1sg. *-ηα, 2sg. *-ησ(θα), 3sg. *-η (for earlier *-ς), back-formed from the optative *ϝειδη on the model of the verb ‘to be’.

(3) The long augment in the new pluperfect *ηϝειδη was analogically imported from forms like *ηϝοικ- and *ηϝοργ-, where *ἐω was the phonologically regular reflex of *ἐωσ.

(4) Likewise at an unknown date, the endings *-ηα, *-ησ(θα), *-η were extended to the non-thematic pluperfect as a whole. Homeric forms such as verse-final ἐπεποίθη recover underlying *(ἐ)πεποίθη, etc.

(5) Following quantitative metathesis, an alphathematic singular paradigm in 1sg. -εα, 2sg. -εας, 3sg. -εε (> -ει) was created in Attic-Ionic. Homeric occurrences of *(ἐ)πεποίθη, etc. at the bucolic diaeresis recover forms in -εε (e.g., *(ἐ)πεποίθεε), which are old but not as hoary as those in *-η (e.g., *(ἐ)πεποίθη).

We hope that by restoring the pluperfect to full membership in the family of inherited verbal categories in Greek, we have closed a gap in the history of Indo-European morphology that our honorand has done so much to illuminate.

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sent γεγονός (see, e.g., Chantraine 1958, 347-348), with attestations in both literary and inscriptive sources (see Ringe 1989, 146-147 n. 13). We would speculate that the iterative present meaning ‘call, make oneself heard’ led to the creation of the morphological iterative present γεγονός (cf. also γεγονός), with an imperfect ((ἐ)γεγονός, -εε, -εε, etc.) that conveniently allowed a distinction to be made between the present and past readings of the ambiguous 3sg. γέγονε. From γέγον-, and perhaps a few other verbs with the same profile, the imperfect in -εν became mildly productive. Compare Nussbaum (1987, 238 n. 23 and esp. 248-250) and Ringe (1989, 146-147 n. 13).


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