

Morphological supply in response to systemic demand:

The Greek past iteratives from birth to death

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**Abstract**

The Homeric past iteratives in *-σκε/ο-* have been the object of much discussion, notably with regard to their Indo-European background and the question whether their creation is due to language contact with Anatolian, where the Hittite formations in *-ške-* seem to play a somewhat similar semantic role. In this article, the focus is shifted towards an exploration of the functional placement of the type within the verbal system of early Greek and its relationship with other tense-aspect categories. After a brief overview of the principal semantic values attached to the past iteratives, it is argued that they may best be conceptualized as originating from imperfectivized perfectives. As such they counterbalanced the emergence of perfectivized imperfectives, realized as augmented imperfects, in a four-slot system that resembles the one found in the synthetic past tenses of Modern Bulgarian. Following the repurposing of the augment as a universal past-tense marker and the extension of the *-σκε/ο-* suffix also to imperfective bases, this four-slot system lost its previous equilibrium and this led to the replacement of the morphological expression of past iterativity by the syntactic alternative construction of classical Greek.

## 1. Introduction

Among the countless fascinating features of Homeric Greek, several peculiarities of its verbal system feature prominently. Many phenomena in this domain belong to the wide array of *archaisms* that distinguish Homer's language from that of later periods. In other cases we are dealing with *artificial creations* that respond to the needs of versification. And finally, in its verbal grammar as much as elsewhere, Homeric Greek also contains a *recent*, often specifically Ionic, dialect component, which sets it apart from what is attested in other parts of the Greek world.

However, on closer inspection the classification of many phenomena in Homer's language as "archaic", "artificial", or "recent" proves surprisingly difficult. To give just one example, careful research has shown that while certain types of tmesis are indeed matched by linguistic data in other Indo-European languages, notably Sanskrit, and hence plausibly labelled "archaic", others are exclusive to Homer and therefore stand a good chance of representing an "artificial" extension of the archaic pattern.<sup>1</sup>

Against this background, it does not come as much of a surprise if the Homeric "past iteratives" in *-σκε/o-*, which will be the focus of the present contribution, have also been variously classified as an "archaism", an "artificial element", or an "innovation". It is one aim of the following pages to show that

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<sup>1</sup> See especially Hajnal 2004, with earlier literature.

there is an element of truth in each of these positions. In order to realize this, however, we must not look at the type in isolation, as has often been done in the past. Following a brief review of some basic synchronic and diachronic facts, our central task will instead be to identify the role of the past iteratives within the wider frame of Homeric verbal morphosyntax and to understand the factors behind their rise and fall within the history of the Greek language—although, as we shall see, it is in fact a typologically oriented look *beyond* Greek that will be of particular help here.

## **2. Semantic functions of the past iteratives**

Contrary to what one might expect of an elusive category like this, the past iteratives are actually a rather common formation type in Homer, with some 300 tokens belonging to more than 130 different lexemes.<sup>2</sup> Another three dozen tokens

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<sup>2</sup> For a full list of the Homeric data, see now Bianconi 2019:379–80, replacing Bottin 1969: 121–4, for more detail on the constituency fn. 39 below (with further literature). Certain Homeric forms may of course be artificial creations (cf. especially Kimball 1980 on *πωλέσκετο* ‘would come and go’, *ἀγίνεσκον* ‘they would bring’ etc. with *-εσκε/ο-* instead of *-εεσκε/ο-* after heavy syllables; Kimball 2014 on analogical *κρύπτασκε* ‘would hide’, *ρίπτασκε* ‘would cast’, *ἰσάσκετο* ‘would make herself equal’ after *οὔτασκε* ‘would wound’; Itzész 2008:14–7).

occur in the corpus of Hesiod, and a similar number is still found in the work of the fifth-century historian Herodotus of Halicarnassus.

Formally speaking, the make-up of the past iteratives is fairly simple: a thematic suffix *-σκε/ο-* is added to either an imperfect or an aorist stem. Unless the base form is a root formation, the outcome therefore has two stem formants on top of each other: see for example aorist-based *δόσκε* ‘would give’, *σπείσασκε* ‘would libate’, and *ἴδεσκε* ‘would see’ (based on the root aorist stem behind *ἔδωκε* ‘gave’, the *s*-aorist stem of *ἔσπεισε* ‘libated’, and the thematic aorist stem of *εἶδε* ‘saw’, respectively), or imperfect-based *ἔχεσκε* ‘would have’, *φιλέεσκε* ‘would love’ (with *-σκε/ο-* added to the thematic present stems of *ἔχω* ‘have’ and *φιλέω* ‘love’, respectively).

In terms of function, meanwhile, the usual designation of these forms as “past iteratives” is due to the predominant semantic function they fulfil in epic, no matter if we are dealing with aorist-based or with imperfect-based items (since the latter distinction primarily relates to the perfective/punctual or imperfective/extended nature of the single event that is iterated).<sup>3</sup> In (1), for instance, the suitor Antinoos is complaining to Telemachus about Penelope’s refusal to take a new husband before she has completed a burial dress for Odysseus’ father Laertes (but behind the backs of the suitors, she is of course famously undoing every night any progress she has made during the day):

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<sup>3</sup> See e.g. Monro 1891:47–8, Chantraine 1958:318–25.

- (1) ἔνθα καὶ ἡματίη μὲν ὑφαίνεσκεν μέγα ἱστόν,  
νύκτας δ' ἀλλύεσκεν, ἐπὴν δαΐδας παραθεῖτο. (*Od.* 3.104–5)  
There she would be weaving by day a large web, and at night undo it  
again, once she placed torches next to herself.

In (2), following the death of his friend Patroclus, Achilles is grieving by the seashore while one wave after the other is rolling in:

- (2) Πηλείδης δ' ἐπὶ θινὶ πολυφλοίσβοιο θαλάσσης  
κεῖτο βαρὺ στενάχων πολέσιν μετὰ Μυρμιδόνεσσιν  
ἐν καθαρῶι, ὅθι κύματ' ἐπ' ἠϊόνος κλύζεσκον. (*Il.* 23.59–61)  
But the son of Peleus was lying on the shore of the loud-roaring sea,  
groaning deeply among many Myrmidonians, in an open place where the  
waves were dashing ashore.

These first examples already illustrate one important characteristic of the past iteratives: they commonly occur in passages where a simple imperfect could equally be used. In (1), the normal imperfects ὑφαίνε and ἄλλυε would have to be interpreted in exactly the same “iterative” way as ὑφαίνεσκεν and ἀλλύεσκεν are because the reference to a continuous alternation of work by day and work by

night implies that we are not dealing with one extended weaving (or undoing) act; and in (2), experience also tells us that waves do not all come in one go, so that again an imperfect κλύζον could not possibly be misunderstood. Seen in this light, we may argue that the past iteratives are a *redundant*, though certainly useful, component of the Homeric verbal system.

This impression is reinforced by a passage like (3) where a simple imperfect and a past iterative of one and the same lexeme θέω ‘run’ occur side by side in identical roles.<sup>4</sup> The lines describe the foals that were born from the union of Boreas with the steeds of King Erichthonius. Note that the two parallel main clauses featuring θέον and θέεσκον respectively are preceded by the same type of temporal subordinate clause containing an iterational optative:

(3) αἶ δ’ ὅτε μὲν σκιρτῶιεν ἐπὶ ζείδωρον ἄρουραν,  
ἄκρον ἐπ’ ἀνθερίκων καρπὸν θέον, οὐδὲ κατέκλων·  
ἀλλ’ ὅτε δὴ σκιρτῶιεν ἐπ’ εὐρέα νῶτα θαλάσσης,  
ἄκρον ἐπὶ ῥηγμῖνα ἀλὸς πολιοῖο θέεσκον. (*Il.* 20.226–9)

Whenever they were leaping over wheat-producing land, they would run over the topmost ends of the ears’ crop and not break them down; and

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<sup>4</sup> The “redundancy” of the -σκε/o- formations (as well as the -ške- imperfectives of Hittite: see below) is also stressed by Daues 2009:89.

whenever they were leaping over the wide back of the sea, they would run over the topmost surf of the grey water.

When the term “iterative” is applied to these formations, it covers a number of different things, with one common denominator: the repetition of an event on one or several occasions.<sup>5</sup> Examples such as (1) and (3) illustrate the “frequentative” (sub-)value where the event is simply repeated as such, without there being any assumption that it constitutes the subject’s *habit*. But passage (4), which describes the Boeotian warrior Areïthoos, shows that there can also be unambiguous “habituals” (cf. Engl. *used to*):

(4) ...δίου Ἀρηϊθόου, τὸν ἐπὶ κλησιν Κορυνήτην  
ἄνδρες κίκλησκον καλλίζωνοί τε γυναῖκες,

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<sup>5</sup> Bybee, Perkins, and Pagliuca 1994:160 distinguish “iteratives” (“where an action is repeated on a single occasion”) from “frequentatives” and “habituals” (“which both signal that the repetition occurred on different occasions”), but also note that “the matter of distinguishing a single occasion from multiple occasions is [...] not always straightforward” and that there is a “close semantic connection between iteratives, continuatives, and frequentatives” (cf., with cross-linguistic data, Dressler 1968:56–84). The short overview given above for the Homeric type illustrates this well.

οὔνεκ' ἄρ' οὐ τόξοισι μαχέσκετο δουρί τε μακρῶι,

ἀλλὰ σιδηρεΐηι κορόνηι ρήγνυσκε φάλαγγας. (*Il.* 7.138–41)

...of divine Areithoos, whom men and women with beautiful girdles also called “the club-bearer” by nick-name because he would not fight with arrows and a long spear, but used to break the enemy ranks with his iron club.

At the same time, (5) again demonstrates that unsuffixed imperfects can equally serve as habituals:

(5) πὰρ δὲ ζωστήρ κεῖτο παναίολος, ὧι ῥ' ὁ γεραῖός

ζώνυθ', ὅτ' ἐς πόλεμον φθεισθήνορα θωρήσσοιτο

λαὸν ἄγων, ἐπεὶ οὐ μὲν ἐπέτρεπε γήραϊ λυγρῶι. (*Il.* 10.77–9)

Next to them the colourful girdle was lying with which the old man [= Nestor] used to gird himself whenever he put on his armour for men-destroying war, leading his troops, for he did not give in to sad old age.

In the “distributive” (or “pluractional”) use,<sup>6</sup> an event is repeated within a single temporal frame, either by a series of different actors or affecting a series of different objects. So we hear about Agamemnon:

(6) αὐτὰρ ὃ πεζὸς ἐὼν ἐπεπωλεῖτο στίχας ἀνδρῶν.

καὶ ῥ’ οὕς μὲν σπεύδοντας ἴδοι Δαναῶν ταχυπόλων,

τοὺς μάλα θαρσύνεσκε παριστάμενος ἐπέεσιν (*Il.* 4.231–3)

But he was going on foot up and down through the ranks of his men, and whomever of the Danaans with the swift horses he saw fighting hard, these he strongly encouraged with words, standing next to them.

The idea here is not that Agamemnon spoke to the same fighters repeatedly, but that he encouraged one after the other. Once more, it is not the case that an imperfect θάρσυνε would convey something objectively different: the iterative optative ἴδοι in the preceding clause would safely disambiguate in any case.

However, the use of the suffixed form θαρσύνεσκε ensures that the act of encouraging is viewed as a sequence of separate units. Contrast (7), where the poet is also talking about “distributive” acts of stripping the fallen of their arms, and of the Greeks fleeing in separate groups (ἔνθα καὶ ἔνθα); yet, because the

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<sup>6</sup> According to Pagniello 2007:106, “the distributive sense is evident in some 78 out of an approximate total of 210 past-iterative tokens in Homer”.

simple imperfects ἐνάριζον and φέβοντο are used, the focus is more on the ongoing overall activity than on each scenic element separately:

- (7) ὄφρ' οἱ τοὺς ἐνάριζον ἄπ' ἔντεα, τόφρα δ' Ἀχαιοί  
τάφρωι καὶ σκολόπεσσιν ἐνιπλήξαντες ὀρυκτῆι  
ἔνθα καὶ ἔνθα φέβοντο, δύοντο δὲ τεῖχος ἀνάγκη. (*Il.* 15.343–5)  
While they were stripping them of their arms, the Achaeans encountered  
the dug-out trench and the palisade and were fleeing here and there, and  
withdrawing inside the wall pressed by necessity.

### 3. Non-prototypical usages

So far, then, the label “iterative” seems quite appropriate, for all the sub-categories it encompasses. However, things become more complex in cases like (8) and (9):

- (8) ταῦτ' ἄρα οἱ φρονέοντι παρίστατο Φοῖβος Ἀπόλλων,  
ἄνερι εἰσάμενος αἰζηῶι τε κρατερῶι τε,  
Ἄσίοι, ὃς μήτρως ἦν Ἴκτορος ἵπποδάμοιο,  
αὐτοκασίγνητος Ἐκάβης, υἱὸς δὲ Δύμαντος,  
ὃς Φρυγίηι ναίεσκε ῥοῆις ἔπι Σαγγαρίοιο. (*Il.* 16.715–9)

As he was considering this, Phoebus Apollo stood next to him, looking like a vigorous and strong man, Asius, who was the maternal uncle of horse-taming Hector, the brother of Hecabe and son of Dymas, who lived in Phrygia by the course of the Sangarios.

- (9) εἴθ' ὥς ἠβώοιμι βίη τέ μοι ἔμπεδος εἶη,  
ὥς ὀπότ' Ἑλείοισι καὶ ἡμῖν νεῖκος ἐτύχθη  
ἀμφὶ βοηλασίηι, ὅτ' ἐγὼ κτάνον Ἴτυμονῆα,  
ἔσθλὸν Ἑπειροχίδην, ὃς ἐν Ἥλιδι ναιετάσκειν... (*Il.* 11.670–3)
- Would that I was as youthful and that my strength was still as firm as when a quarrel arose between the Eleans and us about cattle-lifting, in the course of which I killed Itymoneus, the noble son of Hyperochus, who lived in Elis...

In both of these passages, the verbs *ναίεσκε* and *ναιετάσκειν* ‘lived’ (or ‘used to live’) do not convey any iterational nuance: Asius and Itymoneus are not characterized as living on and off in Phrygia and Elis, respectively, but as being permanent inhabitants of these regions. So what *ναίεσκε* expresses in (8) is no more and no less than what the simple imperfect *ἔναεν* expresses in (10):

- (10) Ἄξυλον δ' ἄρ' ἔπεφνε βοῆν ἀγαθὸς Διομήδης

Τευθρανίδην, ὃς ἔναιεν ἐϋκτιμένηι ἐν Ἀρίσβηι... (Il. 6.12–3)

Axylus, meanwhile, strong-shouting Diomedes killed, the son of Teuthras, who lived in well-settled Arisbe...

To account for the apparent irregularity of non-iterative forms like *ναίεσκε/ναιετάασκε*, the label “intensive” is sometimes used. But to create a new label does not mean to explain, and iteration and intensification are in principle two different things.<sup>7</sup> In the case at hand, it is difficult to see what could possibly be “intensive” about Asius and Itymoneus living in a given place. By contrast, feelings and the like *can* of course be more or less intensive. This is why an “intensive” label might feel more appropriate in (11), for example, where *φιλέεσκε* occurs in a description of the nurse Eurycleia’s attitude towards Odysseus’ son Telemachus:

(11) τῶι δ’ ἄρ’ ἄμ’ αἰθομένας δαΐδας φέρε κεδνὰ ἰδυῖα  
Εὐρύκλει’, ὦπος θυγάτηρ Πεισηγορίδαο,

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<sup>7</sup> Even if there can be a conceptual link between the two, since “eine Hauptfunktion des Iterativums ist in vielen Sprachen das Intensivum, indem die Wiederholung eine Verstärkung bedeutet” (Dressler 1968:78). However, the iterative nuance is then not simply “superseded” by an intensive one (cf. e.g. Engl. “intensive” *he eats and eats*).

τήν ποτε Λαέρτης πρίατο κτεάτεσσι ἐοῖσι

[...]

ἦ οἱ ἄμ' αἰθομένας δαΐδας φέρε καί ἐ μάλιστα

δμωιάων φιλέεσκε καὶ ἔτρεφε τυτθὸν ἔοντα. (*Od.* 1.428–35)

At once trusty Eurykleia was bringing him [= Telemachus] burning torches, the daughter of Opos son of Peisenor, whom Laertes had once bought with his possessions [...]; she was bringing him burning torches at once, and she used to loved him most of all servants, and brought him up when he was still a small child.

Here we can either take φιλέω ‘love’ as equally durative/continuative as ναίω/ναιετάω are, which would make φιλέεσκε as non-iterative as ναίεσκε is; or else, we can conceptualize φιλέεσκε more concretely as ‘she would (regularly) be kind to him [i.e., perform acts of kindness]’, thereby restoring an iterative value.

In order to account for the peculiar situation of ναίεσκε/ναιετάασκε and the like, it has been argued that whenever a past iterative is built to a *state* verb (such as ‘dwell, live’, or also ‘love’), the product is “intensive” (or better: “durative/continuative”), whereas with *activity*, *achievement*, and *accomplishment* verbs the outcome is “iterative”.<sup>8</sup> Descriptively this works reasonably well, although it is notoriously difficult to pin down the boundary between states and

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<sup>8</sup> See Zerdin 2002:116–26.

activities; for the feature of “dynamicity” that is supposed to differentiate between them according to Vendler’s classic typology is equally elusive when we are dealing with volitionally maintained and/or temporary, but internally homogeneous, events such as ‘holding’ (or indeed ‘dwelling (in a place)’).<sup>9</sup>

However, we must resist the temptation to operate with too mechanical a framework. Effectively the extension of “iterative” -σκε/o- suffixation to verbs like ναίω/ναιετάω might be no more than a natural side-effect of the fact that ναίω/ναιετάω refer to a human habit *par excellence*—the (usually freely chosen) occupation of a particular dwelling place. This being so, ναίω/ναιετάω are closely comparable with other verbs referring to habits constituted by event iteration (as in example (4)). Or similarly, in the case of a form like φιλέσκει, the transition from an iterative ‘used to perform acts of kindness’ to continuous ‘loved/was kind’ could be triggered by the verb’s semantic core because performing acts of kindness more or less equates to loving. In that sense, the existence of ναίεσκε/ναιετάασκε/φιλέσκει etc. need not undermine the diagnosis that the entire formation type is quintessentially iterative. What it minimally does is suggest that

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<sup>9</sup> If, for example, we maintain (with Comrie 1976:49) that non-states require energy input to maintain the situation, where does that place a verb such as ‘dwell’? Note also, e.g., Homeric εὔδεσκε ‘would sleep’ (*Il.* 22.503), ποθέεσκε ‘would long for’ (*Il.* 1.492) as examples of “iteratives” (in this case, “habituals”) from state verbs.

the durativity/continuativity observed with ναίεσκε/ναιετάασκε/φιλέεσκε represents a secondary extension of the iterativity that is observed with typical activity verbs.<sup>10</sup> Even so, it is true that from a synchronic perspective we may actually fare better if we do not regard our suffixed type as *intrinsically* iterative. Since iterativity, just like durativity/continuativity or progressivity, is one frequent manifestation of imperfectivity, we can also treat the past iteratives quite simply as “past (marked) imperfectives”.<sup>11</sup>

Whichever take we prefer, there are two main points to retain from the above discussion. Firstly, when we seek to understand the prehistory and history of the past iteratives, we must keep in mind that the expression of iterativity does

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<sup>10</sup> Cf. Bybee, Perkins and Pagliuca 1994:165 (“The difference between iterative and continuative is largely a matter of the type of verbs with which they occur, since iteration applies better to punctual or telic predicates and continuativity to both telic and atelic. It is therefore conceivable that an iterative might generalize to a continuative”), Zerdin 2002:125–6. With regard to ναιετάασκε (but not ναίεσκε/φιλέεσκε), it should also be noted that without the adoption of the -σκε/o- suffix, a 3sg. impf. of ναιετάω could have been used in a hexameter only very restrictively (since (ἐ)ναιέτᾱ has the metrical structure – □ –; cf. *Lfgre* 3.294, s.v. ναιετάω).

<sup>11</sup> Cf. Bianconi 2019:172–82, with reference to the similar views of Ruipérez 1954:132–4, Willi 2018:365–6.

represent *a*, if not *the*, core function of the class.<sup>12</sup> And secondly, within the binary aspectual system of Ancient Greek, with its fundamental imperfective vs. perfective divide of imperfects vs. aorists,<sup>13</sup> our past iteratives are a somewhat redundant “nice-to-have” rather than a “must-have”. All they express could not just in theory also be expressed by simple imperfects: *it is* in fact often expressed by simple imperfects.

#### **4. Morphological vs. syntactic past iteratives in ancient Greek**

This latter observation goes some way towards explaining why the past iteratives seem to be on the path to extinction as we move from Homeric and more generally epic Greek towards the classical period. Leaving aside the prose of

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<sup>12</sup> Cf. similarly Zerdin 2002:125–6, Pagniello 2007:113.

<sup>13</sup> *Pace* Hollenbaugh 2018 and 2021, this divide is also pervasive and clearly observable in any stretch of Homeric Greek, nor is it problematized by the occasional occurrence of narrative imperfects or the ability of—especially augmented—aorists to express perfect-like (resultative) nuances; cf. in general Willi 2018:357–416. Note that, even *if* the Indo-European aorist had originated as a perfectoid functional type (which I doubt), it would have had to acquire its core perfective value already in the proto-language since that value is widely reflected well beyond the Graeco-Aryan area and it would be most uneconomical to invoke multiple independent operations of an “aoristic drift” instead.

Herodotus (and subsequent imitations thereof<sup>14</sup>), we very rarely find pertinent forms also in non-hexametrical poetry, for instance in Pindar (*Nem.* 3.52 κράτεσκε ‘he would defeat’, *Pyth.* 4.209 κυλινδέσκοντο ‘they would roll’, 4.226 ἀράσσεσκον ‘they would pound’) and Attic tragedy. It is tempting to explain these stray occurrences as epic echoes—just as when Aristophanes uses such forms parodically (*Ar. Eq.* 1242 βινεσκόμην ‘I would fuck’, *Pax* 1070 ἐξαπάτασκον ‘they would deceive’)—, even if there is nothing ostensibly “epic” about the use of e.g. ταμιεύεσκε ‘she was the keeper’ and πάυεσκε ‘he would check’ in a choral song of Sophocles’ *Antigone* (950, 962; cf. also Aesch. *Pers.* 656 ἔσκεν ‘was’, fr. 312.3 κλαίεσκον ‘they would weep’, Soph. fr. 546.3 βλάστεσκε ‘he was shooting forth’ (?)).

More importantly, meanwhile, we do not find anything of the sort in non-Herodotean prose. Instead, classical Greek regularly uses a simple preterite, with the optional addition of the particle ἄν to highlight the iterational nuance;<sup>15</sup> and in subordinate clauses the iterational optative continues to be used, as it already was

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<sup>14</sup> Jiménez Delgado and García Zamora (2022:39) list as such ἄρδεσκον ‘they used to water’ in Abydenus *FGrH* 685F6 and κλαίεσκον ‘she would wept’ in Luc. *Syr. D.* 22. In hexameter poetry, the type of course also remains alive in the classical and later periods (cf. e.g. Emp. fr. 84.6 D.-K. λάμπεσκεν ‘[the light] would shine’, fr. 129.5 D.-K. λεύσσεσκεν ‘he would perceive’, Apoll. Rhod. *passim*, etc.).

in Homer (cf. passages (3), (5), (6) above). But the very fact that the preterite (both aorist and imperfect) with ἄν did provide speakers with a functionally similar means of expression is suggestive in its own right; for it intimates that the “nice-to-have” was too nice to have to be given up without any substitute. And if that is the case, the historical linguist should also ask why it was given up at all—a question which, to my knowledge, has been neglected in the literature.

Importantly, the matter does not appear to be one of mere dialectal divergence. In Herodotus, too, we find instances of the iterational preterites with ἄν instead of, or indeed beside,<sup>16</sup> the forms in -σκε/ο-. Passage (12), with a description of Assyrian marriage customs, neatly illustrates the constructional competition, with some simple imperfects also thrown into the mix; these simple imperfects are marked with dotted underlining, alongside the past iteratives with single underlining and the iterational preterites with ἄν with double underlining:

(12) νόμοι δὲ αὐτοῖσι ᾧδε κατεστᾶσι, ὁ μὲν σοφώτατος ᾧδε κατὰ γνώμην τὴν ἡμετέραν, τῷ καὶ Ἰλλυριῶν Ἐνετοῦς πυνθάνομαι χρᾶσθαι. κατὰ κώμας

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<sup>15</sup> Cf. Kühner and Gerth 1898-1904:1.211 (“Während also beim Imperfekt (ohne ἄν) die wiederholten Handlungen als *ein* zusammenhängendes Ganzes erscheinen: ‘es war Sitte, Gewohnheit’ [...], hebt das Präteritum mit ἄν die *einzelnen* Fälle, in denen die Handlung sich wiederholte, hervor”).

<sup>16</sup> Cf. Jiménez Delgado and García Zamora 2022:38, 40.

ἐκάστας ἄπαξ τοῦ ἔτεος ἐκάστου ἐποιέετο τάδε· ὡς ἂν αἱ παρθένοι  
γενοῖατο γάμων ὠραῖαι, ταύτας ὄκως συναγάγοιεν πάσας, ἐς ἓν χωρίον  
ἐσάγεσκον ἀλέας, περίξ δὲ αὐτάς ἴστατο ὄμιλος ἀνδρῶν, ἀνιστάς δὲ κατὰ  
μίαν ἐκάστην κῆρυξ πωλέεσκε, πρῶτα μὲν τὴν εὐειδεστάτην ἐκ πασέων·  
μετὰ δέ, ὄκως αὕτη εὐροῦσα πολλὸν χρυσίον πρηθείη, ἄλλην ἂν ἐκήρυσσε  
ἢ μετ' ἐκείνην ἔσκε εὐειδεστάτη· ἐπωλέοντο δὲ ἐπὶ συνοικίῃσι. ὅσοι μὲν  
δὴ ἔσκον εὐδαίμονες τῶν Βαβυλωνίων ἐπίγαμοι, ὑπερβάλλοντες ἀλλήλους  
ἐξωνέοντο τὰς καλλιστευούσας· ὅσοι δὲ τοῦ δήμου ἔσκον ἐπίγαμοι, οὗτοι  
δὲ εἶδος μὲν οὐδὲν ἐδέοντο χρηστοῦ, οἱ δ' ἂν χρήματά τε καὶ αἰσχίονας  
παρθένοὺς ἐλάμβανον. ὡς γὰρ δὴ διεξέλθοι ὁ κῆρυξ πωλέων τὰς  
εὐειδεστάτας τῶν παρθένων, ἀνίστη ἂν τὴν ἀμορφεστάτην, ἢ εἴ τις αὐτέων  
ἔμπηρος εἴη, καὶ ταύτην ἂν ἐκήρυσσε, ὅστις θέλοι ἐλάχιστον χρυσίον  
λαβὼν συνοικέειν αὐτῇ, ἐς ὃ τῷ τὸ ἐλάχιστον ὑπισταμένῳ προσέκειτο. τὸ  
δὲ ἂν χρυσίον ἐγίνετο ἀπὸ τῶν εὐειδέων παρθένων καὶ οὕτω αἱ εὐμορφοὶ  
τὰς ἀμόρφους καὶ ἐμπήρους ἐξεδίδοσαν. (Hdt. 1.196)

As for their laws, they are as follows, and in my opinion the cleverest is  
this one, which I understand is also in use among the Illyrian Eneti. In  
each village the following was done every year. As the girls became old  
enough to marry, in order to match them all, they would bring them  
together into one place, and a crowd of men stood around them. Getting  
up, an auctioneer would sell each and every one of them, starting with the

prettiest of all. Then, after this one had been sold, bringing in a lot of gold, he would announce another one, who was the next prettiest after the first; and they were sold to become wives. Now, all those who were the wealthiest bachelors among the Babylonians bought the beautiful women, outbidding each other; whereas those who were bachelors among the common people, these were not interested in good looks, and they would take money and the uglier girls. For once the auctioneer had gone down the list selling the prettiest girls, he would put up for sale the least attractive one, or if one of them was crippled he would announce this one for whoever might be willing to take her as a wife in return for the smallest amount of gold—until she was allocated to the one who made the lowest asking bid. The gold would come in from the pretty girls; in this way the attractive ones gave out for marriage the unattractive and crippled ones!

So, whatever the situation may have been in other dialects, including Attic where the evidence for -σκε/o- forms is so much scarcer, in the Ionic dialect of Herodotus at least we seem to witness a replacement process that may be nearing

its end, with the more recent syntactic construction eventually ousting its morphological predecessor.<sup>17</sup>

## 5. Indo-European connections

At the upper end of the timeline, meanwhile, historical and comparative linguists have been much busier trying to elucidate things. But here too, it is just one big question which has occupied scholars' minds—so much so that another big question has been more or less forgotten.

The question which *has* often been asked is whether the past iteratives in -σκε/o- are inherited from Proto-Indo-European, i.e. connected *directly* to the Proto-Indo-European present stems in \*-skē/o-; or else, assuming that they are instead a Greek innovation, whether they are an innovation that has arisen strictly internally or one that is due to, or was at least promoted by, linguistic contact. By

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<sup>17</sup> The replacement process also explains why there are occasionally hybrid combinations of ἄν + past iterative. Cf. e.g. Hdt. 4.130 (ὄκως τῶν προβάτων τῶν σφετέρων αὐτῶν καταλίποιεν μετὰ τῶν νομέων, αὐτοὶ ἄν ὑπεξήλαυνον ἐς ἄλλον χῶρον· οἱ δὲ ἄν Πέρσαι ἐπελθόντες λάβεσκον τὰ πρόβατα καὶ λαβόντες ἐπήροντο ἄν τῷ πεποιημένῳ “While they [the Scythians] left behind some of their own sheep with the shepherds, they would move on to a different place; but the Persians, following them, would take the sheep and, in doing so, would gain confidence by their action”).

contrast, the question which has *not* been asked so regularly is how these formations fit into the verbal system, qua *system*, of early Greek, especially given their apparent redundancy and later (re)disappearance. As already indicated in Section 1, on the following pages an attempt will be made to find an answer to this latter question, more than anything else; but precisely because of the structural connectedness of everything, at least some brief remarks on the former question, too, are in order.

There is more than one reason why it is problematic to think of the Greek past iteratives as a category inherited from Proto-Indo-European.<sup>18</sup> First and foremost, there is no really close parallel to the type in any other language, nor even traces of its erstwhile existence. To postulate a solitary survival in Greek is therefore uneconomical. Second, if we did want to regard (some of) our forms as inherited, the most plausible option would be to treat them as past tenses of verbs belonging to the Proto-Indo-European present stems in *\*-skē/o-*; but we would then need a watertight explanation of why only the past tenses should have

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<sup>18</sup> As is assumed, in one way or another, by Wathelet 1973:403–5, Clackson 1994:78–80, and Szemerényi 1996:273–4; for objections see already Brugmann 1902:267–8 (but Brugmann’s own derivation of the type from an analytic construction involving (ἔ)σκειν has found few followers, despite the endorsement in the survey of Fantini 1950:333–8; thus e.g. δόσκειν ‘they would give’ < “δοῦς [δούς] σκειν”).

managed to survive while the corresponding presents did not. After all, there is no *a priori* reason why present iteratives should be any less useful than past iteratives. Third, the variety of semantic values we observe for the *\*-skē/o-* suffix across Indo-European does not specifically point to an iterative suffix;<sup>19</sup> it is much easier to account for the Indo-European present stems in *\*-skē/o-* by assuming that *\*-skē/o-* was already in (at least later) Proto-Indo-European what it demonstrably is in the historical languages, namely an all-purpose *imperfective* suffix that could secondarily undergo specializations in various directions (for instance by turning into an incrementally progressive suffix in Latin verbs such as *nigrēscō*, which does not mean ‘become black repeatedly’, but ‘gradually turn black’<sup>20</sup>). Even in Hittite, which—alongside our Homeric past iteratives—has

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<sup>19</sup> Pace e.g. Porzig 1927:159 (“Handlungen oder Vorgänge als sich ruckweise in einzelnen Absätzen vollziehende”), Benveniste 1936:231 (“itératif-intensif”), Lehmann 1974:147–9 (“plurality”), Sihler 1995:507 (“iterative/durative”), Szemerényi 1996:273 (“iterative-durative”); cf. also Inglese and Mattioli 2020:286–91. The functional variety of present stems in *\*-skē/o-* in Greek and elsewhere is stressed by Giacalone Ramat 1967:107–15 and Di Giovine 1999:39–40. On the causative presents with *\*-skē/o-* in Tocharian, see especially Malzahn 2010:433–59, but also Willi 2018:489 (with further literature).

<sup>20</sup> See Mignot 1969:213–8, Berrettoni 1971:120, Keller 1992:432–5; cf. the “présent inchoatif” of Younger Avestan (Kellens 1984:156–60).

traditionally been the mainstay of theories defending an iterative *core* value of the \*-skē/o- suffix, it is nowadays clear that iterativity is just one surface manifestation (alongside progressivity, durativity/continuativity, etc.) of what may also be classified as a *generally* imperfective, or imperfectivizing, suffix.<sup>21</sup>

Moving on to the innovation theory, the assumption of any kind of outside influence or borrowing<sup>22</sup> leads to rather unnecessary complications. Of course, we

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<sup>21</sup> See Melchert 1998:414–6, Bertinetto and Cambi 2006, Cambi 2007, Hoffner and Melchert 2008:317–22, against more functionally restricted *Aktionsart* interpretations (esp. “iterative”: e.g. Pedersen 1938:131–4, Friedrich 1960:140–1); the more recent view is foreshadowed by Bechtel’s (1936) “durative” interpretation (as also adopted by Sturtevant 1951:130–2 and Puhvel 1991:17–20. On the *Aktionsart* side cf. further Dressler 1968:159–234 and now Inglese and Mattioli 2020, arguing for “pluractionality” as the common denominator of the various usages. The “backgrounding” function stressed by Daues 2009 is an epiphenomenon that may be expected for an imperfective formation of this sort, as Daues (2009:89–90) herself observes.

<sup>22</sup> See especially Puhvel 1991:13–20 (“of Anatolian inspiration”, but “less due to conscious copying than to a kind of ‘Sprachbund’ effect”) and the literature cited in fn. 25, after Pisani 1959:176–7 and Negri 1976. Contrast e.g. Giacalone Ramat 1967:123 (epic innovation based on Proto-Greek, but not Proto-Indo-European, non-past iteratives in \*-skē/o-) and the literature cited in fn. 44 (focusing on ἔσκε

have to acknowledge the superficial similarity of the Greek past iteratives with the Hittite imperfectives in *-ške-* when these mark iterativity or habituality. But it has rightly been pointed out that the contact hypothesis also encounters serious obstacles. One of the reasons why it has attracted some is because the available data seem compatible with the idea that the Homeric type was a dialectally restricted phenomenon of (East) Ionic only; and that then takes us to the coast of Asia Minor where contact with speakers of Anatolian would be easiest to accept. However, in the absence of any positive pointers in this direction, this is a rather weak foundation.

Firstly, the belief that the past iteratives are a *specifically* East Ionic innovation is actually based on very little evidence. Within the Homeric text, there is nothing to point to a particularly young category,<sup>23</sup> as it would have to be \_\_\_\_\_  
'was', φάσκει 'spoke').

<sup>23</sup> *Pace* Chantraine 1958:325 (“surtout dans des développements de l'épopée que l'on peut considérer comme relativement récents (en particulier le début du chant Ω et la description du supplice de Tantale dans la *Nekyia* (λ 585-600)”) and Wathelet 1973:393–403; the latter stresses their non-formulaic character, but has to accept important exceptions, including ὧδε δέ τις εἴπεσκε and ὧς ἄρα τις εἴπεσκε 'thus someone would speak' with metrically observed digamma. Contrast Bianconi 2019:152 (“the relative distribution of these verbs shows that the I[onic]P[reterites] are not necessarily a late feature of the epic language. There are

if it was somehow due to contact with speakers of Anatolian after the establishment of the Greek bardic tradition in Asia Minor, say around 1000 BC. Even the fact that in post-Homeric times the past iteratives survive longest or best in the Ionic prose of Herodotus<sup>24</sup> is far from conclusive. In the absence of pre-Herodotean non-Ionic prose, nothing can tell us whether, say, a sixth-century writer hypothetically writing prose in Doric or Attic instead, but showing just as much occasional indebtedness to epic stylemes as the first writers of Ionic prose do, would not have used the past iteratives to a similar extent.<sup>25</sup>

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in fact a fair number (10) in the second book of the *Iliad*—generally considered quite ‘archaic’—and only one in the tenth (the so-called *Doloneia*, which is generally considered to be a later addition”). Wathelet (1973:387) also observes that “la formation de πεδάσσκον remonte sans doute à une date antérieure à la contraction de -αε-, sinon on lirait πέδασσκον”, and Clackson (1994:78) notes that “iterative formations are marginally more frequent in the *Iliad* than in the *Odyssey*”.

<sup>24</sup> To which two examples in the Ionic of Hipponax can be added: Hipponax fr. 78.11 W. (φοίτε[σκε ‘would go’) and fr. 104.48 W. (θύεσκε ‘would sacrifice’); cf. Bettarini 2017:44–8. At the same time, there is no real reason to regard πατάγασκ(ε) ‘would ring’ in Alcaeus fr. 72.10 L.-P. and ἀπέσκομεν ‘we were absent’ in Sappho fr. 94.26 L.-P. as influenced by epic style.

Secondly, even if we follow the ancients in labelling our forms as “Ionic”, rather than “epic” or “Homeric” (cf. Hdn. pp. 1.535, 2.38, 2.792 Lentz, Ἰακῶς), we face the difficulty that the Anatolian languages the Eastern Ionians would most naturally have come into contact with in the early first millennium BC would *not* have included Hittite. Luwian or Lycian would be far better candidates, but in these languages there is *no* arguably “iterative” suffix *-ške-* that could have been borrowed: there are likely cognates, such as Luw. *-za-* and Lycian *-s-*,<sup>26</sup> but these *look* very different. In order to get around this obvious issue, it has recently been argued that we could perhaps think of a strictly literary borrowing, making Hittite relevant again. Bilingual Greek bards would have known “iterative” *-ške-*

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<sup>25</sup> The use of non-past φάσκω ‘say’ in post-Homeric non-Ionic texts—including Attic oratory and comedy where Homeric influence is most unlikely—does in fact suggest the former existence of the past iteratives also outside East Ionic. The only post-Homeric emergence of φασκε/ο- as a “normal” present speaks against its antiquity (cf. the Appendix), and given the fact that “ἔ-φασκον has sometimes a distinctly Iterative meaning in Homer” (Monro 1891:47) it would make sense for presentic φασκε/ο- to be a secondary development built upon past iterative φασκε/ο- to φημί ‘say’ once the iterative nuance of the latter was (partly) lost; but the non-Ionic character of presentic φασκε/ο- then presupposes past iterative φασκε/ο- also (at least) in early Attic.

<sup>26</sup> See Melchert 1989:27–9.

from Hittite literary texts, thought of it as an attractive feature of style, and hence repurposed the existing Greek suffix *-σκε/o-* in a similar manner. But how much living Hittite literature could they have come into contact with, where, and in what cultural context(s)? If hard pressed, we could perhaps take it all back to the Mycenaean period, making the forms a feature of “Aḫḫiyawan” epic; but it hardly needs stressing how treacherous the ground then becomes.<sup>27</sup>

Moreover, thirdly, even this *ultima ratio* is undermined by the substantial dissimilarities we also have to diagnose when we compare the Homeric past iteratives with their alleged Hittite source of inspiration, the marked imperfectives of Hittite. Quite unlike the Homeric forms, the Hittite imperfectives in *-ške-* are by no means confined to the past tense. They freely occur in the present tense, in

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<sup>27</sup> For the idea of such a transmission in a “literary” context, see especially Bianconi 2019:185–94; already Puhvel (1991:20) speaks of “some familiarity with Hittite language and literature on the part of an incipient aeolic tradition”, and Watkins (2001:58) may have had something similar in mind when he wrote that “either [Hittite *-ške-* or Luvian *-za-*] could have been diffused into Eastern Ionic Greek, which responded by extending the use of its cognate and phonologically similar native morpheme *-ske-*”. As Bianconi (2021:11–3) outlines, the idea of a substantial “Aegean-Micrasiatic *Sprachbund*” in Mycenaean times was particularly popular in Italian scholarship between the 1950s and 1980s.

gnomic statements and otherwise, and even as imperatives. It is of course true that they can *also* be used to set the scene, or act as “background”, for some other action; but the fact that the same is sometimes the case with the -σκε/o- formations in Homer is without further relevance since this is only to be expected of *any* marked imperfective—quite apart from scene-setting (background) iteration in subordinate clauses being most commonly expressed in Homer not by means of -σκε/o-, but through the iterational optative: see again passages (3), (5), (6).<sup>28</sup>

## 6. Missing augments

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<sup>28</sup> In other words, although past iteratives can of course occasionally “express repetitive actions that provide background information for the story” (Pagniello 2007:109, cf. 112–3; similarly Daues 2009:93–6), they have no *deeper* connection with background presentation than “normal” imperfects do. Giacalone Ramat (1967:116) even observes that “se si leggono i passi in cui si fa ricorso agli ‘iterativi ionici’ si vedrà che spesso si tratta, non di meccanica e indifferente ripetizione di azioni, ma di situazioni drammatiche, in cui si richiede al soggetto una totale applicazione”. For a typology of the most characteristic iterative usages of the past iteratives, see Zerdin 2002:117–20, in the wake of Stolpe 1849 and Týn 1859 (“Whenever X happened, then Y would happen”; “At one time X would happen, at another time Y would happen”; “One would do X”).

Be that as it may, in the present context it is not even hugely relevant whether there was Hittite interference of any sort. Nothing of what will be suggested below fundamentally depends on pure endogenesis of the past iteratives. Apart from their apparent systemic redundancy, which has already been highlighted, the following two points therefore deserve more attention:

(i) As just noted, the Homeric past iteratives really are *past* iteratives: they never occur in the present tense, nor in moods other than the indicative. This not only sets them apart from their Hittite *Doppelgänger*; it is also something that has never really been explained, with scholars simply accepting it as a given.<sup>29</sup>

(ii) Despite being confined to the indicative, the Homeric past iteratives do not take the Classical Greek past-tense marker *par excellence*, the augment. With at most one or two exceptions in Homer,<sup>30</sup> this second rule is hardly less strict

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<sup>29</sup> As pointed out by Schwyzer (1939:711–2), who adds that “Erst spät und künstlich werden iterative Präsentien zugebildet: τρωπασκέσθω· μεταβαλλέσθω H[esychius], τιεσκόμενοι CIG 3538 (metr.)”.

<sup>30</sup> Kühner and Blass (1890–2:2.81) cite *Od.* 20.7 ἐμισγέσκοντο ‘they used to sleep with’ and *Od.* 14.521 παρεκέσκει(ο) ‘was lying next to’ as well as some instances of the imperfect of φάσκω; however, the latter is best kept apart because this formation in -σκε/ο- was clearly more lexicalized (see Wathelet 1973:402, fn. 23 above, and the Appendix). Cf. also Risch 1974:277, as well as Shipp 1972:88 and Nussbaum 1998:70–2 on εἰασκε/ο- ‘would let’, which is not to be taken as

than the first; and it becomes even more remarkable when we see that it is still valid in Herodotus, in whose prose past-tense augmentation is no longer as “optional” as it used to be in epic language.

More so than the restriction to the past tense, the non-augmentation has generated scholarly interest. There have been two main ways to try and account for it by reference to other principles of augmentation or non-augmentation in Homer.<sup>31</sup> The first, advocated by Bottin, relates the matter to the long-established augmented either. In *Od.* 14.521 παρακέσκει(ο) is marginally attested as well (but the *varia lectio* παρεχέσκει(ο) mentioned in schol. Hom. *Od.* 14.521 deserves rejection), and *Od.* 20.7 ἐμισγέσκοντο may be owed to an underinformed later editor (Wackernagel 1916:118–9). In the *Homeric Hymns*, all the 19 attested forms are unaugmented (Jiménez Delgado and García Zamora 2022:34). In Herodotus, the manuscript transmission unanimously offers ἐλάβεσκον ‘they would take’ in Hdt. 4.130, while κατελίπεσκε ‘would leave behind’ in Hdt. 4.78 competes with καταλειπέεσκε (cf. Rosén 1962:126, Jiménez Delgado and García Zamora 2022:34–5).

<sup>31</sup> Wathelet (1973:403–4) remains vague when he says that “la répétition s’inscrit plus naturellement dans le cadre du passé, [m]ais la valeur de ce passé n’est pas soulignée, précisée, d’où l’absence d’augment”. Giacalone Ramat (1967:122) and Lazzeroni (1977:25) invoke the length of the forms in -σκ- to explain their non-augmentation (cf. already Curtius 1876:379–80 and Wackernagel 1906:173 n. 1,

fact that augmentation is much less common in narrative parts of Homeric epic than elsewhere. Since past iteratives predominantly occur in narration, or else in speech environments where at least *some* (para-)narrative purpose can be detected, they would more or less automatically have failed to take the augment.<sup>32</sup> The problem with this theory is that the same argument could be made about the normal imperfect; yet, the imperfect shows nothing like a similarly strict aversion to augmentation.

The second approach, meanwhile, indirectly builds on the same recognition of narrative non-augmentation; but it specifically takes up Bakker's

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with earlier literature), but forms like δόσκει, ἔσκει, ἔχεσκει are no longer than many other past-tense forms of Greek. Not unlike Ruipérez (1954:134) before him, Itzés (2008:27–31) has more recently argued that, since iterational -σκει/o- was confined to the past tense, an additional past marker would have been “überflüssig, sogar ungrammatisch”. However, not only is there no theoretical reason for the proscription of such “superfluosity”, but by the same argument for example Greek κ-aorists such as ἔδωκε should also be unaugmented.

<sup>32</sup> See Bottin (1969:117–8). In order to find a narrative “nuance”, the evidence sometimes needs to be stretched quite a lot; see e.g. *Il.* 5.472 Ἕκτορ, πῆ δὴ τοι μένος οἴχεται ὃ πρὶν ἔχεσκες; “Hector, what has happened to the fighting spirit you used to have before?”. As acknowledged by Bottin, the prominence of third-person forms is a natural consequence of the narrative bias.

idea that the augment originally served to mark “immediacy in time and space”.<sup>33</sup> Such speaker-oriented “immediacy”, it is assumed, would never have obtained when past iteratives were used. Like the preceding one, this theory is impossible to falsify, though to an even greater degree because defining (and measuring) “immediacy” is even less straightforward than defining “narrativity”. However, since Bakker’s theory is meant to capture only a *tendency* anyway, we still need to understand in any case what it was that allowed this tendency to develop into a hard and fast rule in the case of the past iteratives, but nowhere else.<sup>34</sup> It is not too difficult, after all, to find passages like (13) where an unaugmented past iterative seems endowed with a similar degree of immediacy (or lack thereof) as a parallel augmented imperfect:

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<sup>33</sup> Bakker 2001:14–8; cf. Bakker 1999:57–60. For the application of this idea to the past iteratives, see—after Bakker 2001:15—especially Pagniello 2007:116–21, with the claim that “a deictic marker, which is focal, would signify information that stands contrary to the inherent signification of the non-focal past-iterative”. Cf. also De Decker 2015:64–5, Hajnal 2018:2047.

<sup>34</sup> Pagniello (2007:121) tellingly only claims that “‘distributiveness,’ which falls within the functional compass ‘diffuse,’ is *relatively* incompatible with the focal quality of the augment as a deictic particle” (emphasis added).

(13) [Penelope is telling Odysseus about the trick she used to keep the suitors waiting]

ὥς ἐφάμην, τοῖσιν δ' ἐπεπείθετο θυμὸς ἀγήνωρ.

ἔνθα καὶ ἡματίη μὲν ὕφαινεσκον μέγαν ἰστόν,

νύκτας δ' ἄλλυεσκον, ἐπὴν δαΐδας παραθείμην.

ὥς τρίετες μὲν ἔληθον ἐγὼ καὶ ἔπειθον Ἀχαιοῦς·

ἀλλ' ὅτε τέτρατον ἦλθεν ἔτος... (*Od.* 19.148–52)

This is what I said to them, and their boldness was kept in check. And so I used to weave by day a large web, and at night I used to undo it again, while placing torches beside me. For three years I was not found out and managed to convince the Achaeans; but when the fourth year came...

In other words, any theory that wants to justify the non-augmentation of the past iteratives by reference to textual pragmatics or the like remains incomplete if it cannot also offer a plausible explanation of why such soft-factor conditioning should have turned into actual morphological blocking.

## 7. An alternative approach

Many of the problems and questions relating to the history and prehistory of the Greek (and Indo-European) augment have also been discussed at some length in my 2018 monograph on the *Origins of the Greek Verb*. Apart from setting out a

new theory on the formal origins of the augment, which is of no to in the present context, I argued there that there are good reasons to see in the augment the descendant of an aspectual perfectivity marker.<sup>35</sup> Such a theory enables us to explain in an economical and coherent manner a range of at least four in principle independent distributional observations on the use of the augment in Homer:

1. For all the differences in *augmentation frequency* in narrative passages vs. direct speeches, in both of these categories the augmentation of imperfects, i.e. past imperfectives, is significantly less common than the augmentation of aorists, i.e. past perfectives.

2. What may be called “*resultative*” aorists, i.e. aorists that show a particular interest in the completion of an action and in its result, display a particularly strong tendency to take the augment (a fact incidentally paralleled by the Vedic augmented aorist). This makes sense if we remember that (marked) perfectives have a similar completeness focus.

3. *Gnomic aorists*, i.e. aorists used in timeless statements (and also aorists in similes), regularly take the augment. This not only excludes the view whereby the augment *originated* as a past-tense marker, but it positively aligns with the

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<sup>35</sup> As acknowledged in Willi 2018:381 n. 67, the same idea was already mooted in Hirt 1928:171. Note that the claim is of course not that the augment *synchronically* still serves as a perfectivity marker in either Homeric Greek or Vedic Sanskrit.

fact that in aspectual languages non-past perfectives are often used in timeless utterances.

4. As mentioned above, our *past iteratives*, which to all intents and purposes act like marked imperfectives, are unaugmented. Since this is more than just a broad tendency, there is much to be said for an actual incompatibility between augmentation and the *\*-skê-* suffix as such. But if the latter effectively constitutes an marked imperfectivizer, the one thing which *should* be incompatible with it is indeed a marked perfectivizer being coupled with it.

Against this background, an attempt will now be made to show how all of this *additionally* helps us to explain the various open issues regarding the past iteratives that have been highlighted so far, namely

(i) why such an apparently redundant category came into being in the first place;

(ii) what its structural *raison d'être* was within the verbal system of early Greek (of which we find an intermediate reflex in Homer and a late one in Herodotus); and

(iii) why the category disappeared again, with its function being taken over by a syntactic replacement construction.

## **8. Perfectivized imperfects in Bulgarian and early Greek**

If we accept, as a working hypothesis, that the augment at some point served as a signal of marked perfectivity, one question which immediately arises is why there can be augmented imperfects at all. It is probably not sufficient to say that this is because the augment was already on its way to becoming a simple past-tense marker; for in that case we would not expect a significant difference in augment frequency between imperfects in Homeric speech and imperfects in Homeric narrative—but that is what we do find. Also, it has been noticed that Homeric speech introductions, which frequently take the imperfect, show a particular tendency to be augmented;<sup>36</sup> this, too, implies that there is *some* internal differentiation within the imperfect category.

In order to account for this situation, I suggested that the augmentation of imperfects must have started where perfectivity was to be superimposed on an imperfective stem. To begin with, augmented imperfects would thus have been “perfectivized imperfects”. To understand better what this means, we can take a look at the aspectual system of South Slavic Bulgarian. As in the other Slavic languages, Bulgarian differentiates in most verbs an imperfective from a perfective stem; the perfective stem is often recognizable as such by the presence of preverbation. For example, imperfective (unpreverbated) *piša* ‘I write’ stands beside perfective (preverbated) *na-piša* ‘I write’. Additionally, however—and this

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<sup>36</sup> For statistics see now De Decker 2015:60–1; note that Bakker (1999:64, 2001:9–10) only looks at the aorist.

is where Bulgarian parts company with East or West Slavic languages such as Russian, Polish, or Czech—Bulgarian has two synthetic past tenses, the imperfect and the aorist. As one would expect, the imperfect to an imperfective stem is unremarkable: *pišex* simply means ‘I was writing’. Similarly, the aorist to a perfective stem is straightforward: *napisax* means ‘I wrote (down)’. But there is also the aorist of an imperfective stem, i.e. a perfectivized imperfective. This so-called imperfective aorist is “[used] to indicate an action which is presented as a single whole (whence the Aorist as marker of perfectivity), but with internal complexity (whence the Imperfective as marker of imperfectivity)”; it “takes a situation which is described by an imperfective form (Imperfective), to give explicit reference to its internal complexity, and circumscribes the situation by giving it a perfective form (Aorist)”.<sup>37</sup>

Homeric speech introductions with the imperfect do exactly that; and so, according to the theory proposed here, they “deserve” to be augmented. In e.g.

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<sup>37</sup> Comrie 1976:23, 32; cf. Nicolova 2017:411–2 on both (a) “summative” imperfective aorists (alongside perfective ones: in either case there is a “*definite number of repetitions* of the activities”) and (b) imperfective aorists which “denote specific *longer duration* of the activity” (e.g. “*Kogàto Zvezda izlèze ot krãčmata, vsìcki nasjàdacha i málčacha*:IMPF:AOR:3PL *polovìn čas* ‘When Zvezda left the pub everybody sat down and **kept silent** for half an hour’ (El.-Pelin)”).

(14) τὸν δ' ἠμείβετ' ἔπειτα ἄναξ ἀνδρῶν Ἀγαμέμνων (*Il.* 1.172, etc.)

to him then replied the lord of men Agamemenon

the augmented imperfect ἠμείβετ(ο) makes the listener expect the following speech to be “internally complex”, despite being presented as a complete whole in the introductory formula. Along similar lines, the surprisingly common, though of course not universal, use of the augmented imperfect in artists’ signatures on ancient Greek objects finds a neat explanation. If, for example, a late-fifth-century red-figure cup from Vulci reads Ἐργίνος ἐποίησ<ε>ν on the interior, then that aorist ἐποίησεν is the default way of saying that ‘Erginos produced [the cup]’; but on the exterior of the same cup, we read Ἀριστοφάνες ἔγραφε with the imperfect (Berlin, *Antikensammlung*, F 2531 = AVI 2387). This certainly does not mean that Aristophanes thought of his painting as ongoing or incomplete—although that is how Pliny the Elder tried to make sense of these signature imperfects, in an almost postmodern manner; nor can it easily mean, statively, that Aristophanes ‘was the painter’<sup>38</sup> because if we were to think of a state without time limits, it

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<sup>38</sup> Thus Minon 2002 (“était le peintre, le créateur”); the comparison with formulae like ὁ δεῖνα ἐγραμμάτευε ‘X was secretary’ is not quite pertinent, not only because γραμματεύω as a “stative verb [...] is a doubtful parallel for strongly transitive verbs such as ποιέω ‘make’” (Colvin 2017:92), but also because

would make much better sense to say that Aristophanes ‘is the painter’. More promisingly, Wackernagel held that “wenn der Künstler das Imperfectum ἐποίει setzt, so erzählt er von seiner Arbeit; wenn den Aorist ἐποίησεν, so konstatiert er sie als Faktum. Also ἐποίει bedeutet ‘Arbeit tat an diesem Werk der und der’, während der Aorist ἐποίησεν heisst ‘der und der ist der Verfertiger’”.<sup>39</sup> Yet, even this only partly makes sense: the painter Aristophanes would then still risk underplaying his overall achievement—which is unlikely because adding the signature does after all mean to mark the completion, not leave open the possibility that others also did some work on it. What is really happening here is that the imperfective stem draws attention to the complex artistic process while the augment nevertheless marks its completeness. The only reason why we no longer recognize this instantly—and why for example Pliny failed to grasp it—is that by the time we come across these standardized signatures augments have become compulsory on *all* imperfects, including truly “open-ended” or “backgrounding” imperfects which are a very different kind of thing.

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ἐγράμματαε circumscribes a specific moment in time when (e.g.) a decree was passed. Colvin (2017) himself argues that the imperfect in artists’ signatures might indicate “a slight backgrounding of agency”; but the artistic “modesty” this would entail is not evident.

<sup>39</sup> Wackernagel 1926:181.

## 9. Imperfectivized perfectives in Bulgarian and early Greek

Once we reconceptualize the early Greek past-tense system in such a way, we notice that its resemblance with that of a language like Bulgarian has an important corollary. Given the two binary dichotomies between imperfective and perfective stems on the one hand, and imperfects and aorists on the other, we are logically to expect not just a tripartite system, but a system with four slots. More concretely, Bulgarian should—and does—not only have what amounts to a “perfectivized imperfect” (i.e., an imperfective stem with superimposed perfectivity), in the form of the Bulgarian imperfective aorist just discussed, but also its logical counterpart, an “imperfectivized perfective”. As is intuitive, in Bulgarian this takes the form of the imperfect of a perfective (i.e., typically preverbated) stem, for instance *na-pišex* (cf. Table 1).

	IMPERFECTIVE STEM	PERFECTIVE STEM
	(e.g., <i>piša</i> ‘I write’)	(e.g., <i>na-piša</i> ‘I write’)
IMPERFECT	<i>pišex</i> ‘I was writing’	<i>napišex</i> ‘I wrote/would write’
AORIST	<i>pisax</i> ( <i>dva časa</i> ) ‘I wrote (for two hours)’	<i>napisax</i> ‘I wrote (down)’

*Table 1: Aspectual distinctions in the synthetic past-tense system of Bulgarian*

In early (or Proto-)Greek, meanwhile, exactly the same kind of four-slot system should have arisen as soon as the perfectivizing augment began to be transferred from “proper” perfectives (i.e., aorists) to newly built “improper” perfectives as well, namely our perfectivized (= augmented) imperfects. At that point, an empty fourth slot automatically came into existence as well, and invited the creation of imperfectivized aorists in order to get back to a balanced system. And once again it is Bulgarian which tells us what the concrete function of such imperfectivized aorists would have been: for the Bulgarian “perfective imperfect” is “[used] to describe a situation that is iterative, and each of whose individual occurrences would itself be referred to by the Perfective (in fact, the Perfective Aorist)”; it “takes a situation which would in itself be described by a perfective form (Perfective), and then superimposes upon this imperfectivity, or rather one of the possible subtypes of imperfectivity, namely habituality”.<sup>40</sup>

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<sup>40</sup> Comrie 1976:31–2; cf. Nicolova 2017:401 (“The iterative imperfect, like the iterative present, occurs with verbs of both aspects. With perfective verbs the chain of events, each presented in its completion, is represented through the example of the separate instances”; thus e.g. “*Slòžeše*:PFV:IMPF:3SG *drùg pàt*

The way in which Comrie here outlines what the Bulgarian perfective imperfect does can be transferred, without any modification, to the core of the Homeric past iteratives. And so, we may conclude, the creation of the so-called “past iteratives” very much looks like the early (or Proto-)Greek response to the emergence of the structural imbalance described above. In order to adjust things, all that was required was to take an aorist stem, of any kind, and superimpose imperfectivity on it. The most straightforward method of doing that was to repurpose an existing, easily recognizable imperfectivity marker, i.e. present-stem suffix. And of all the present-stem suffixes found in Greek, the *\*-skē/o-* suffix is indeed one of the most conspicuous items, which made it eminently suited for the task—with or without Anatolian inspirational input, and whether or not any particular imperfective lexeme in *\*-skē/o-* acted as a direct model (cf. the Appendix).

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*Ivāna da jadāt. Napālnēše:PFV:IMPF:3SG nòvata šàrena panìca s tòpla pìleška čorbà i tigànjata s kàša, zamirišēše:PFV:IMPF:3SG kàštata na čùbrica i prepārženo – sljùnkite izpālnjacha:PFV:IMPF:3PL ustàta mu.* ‘On another occasion Ivana **would lay** the table. She **would fill** the new bright-coloured bowl with hot chicken soup and the frying pan with gruel, the house **smelled** of savoury and fried meal, and his mouth **watered.**’ (O. Vasilev”).

	PRESENT (= IPFV.) STEM	AORIST (= PFV.) STEM
IMPERFECTIVE (-IZED)	imperfect (unaugmented)	“past iterative”
PERFECTIVE (-IZED)	imperfect (augmented)	aorist

*Table 2: Aspectual distinctions in the synthetic past-tense system of prehistoric Greek*

Controversial though it may be, the augment theory outlined in Section 7 thus not only accounts for the chronic non-augmentation of the past iteratives. It also, though less directly, explains why they were created in the first place. At the same time, we now understand why these Homeric “iteratives” are always and only *past* iteratives. While there is nothing to exclude the existence of present iteratives *per se*, the four-slot system that prompted the creation of the actual iterative type Greek possesses only ever existed in the past tense (and, one may add, in the indicative mood).

## **10. Sketching the history of the past iteratives from rise to fall**

One implication of the model proposed here is that the *oldest* past iteratives must have been those that are based on an aorist stem. It was here that the iterational value naturally arose and could become associated with the otherwise more broadly imperfective suffix \*-skē/o-. To then transfer the new past-iterative suffix also to imperfective stems was unproblematic: to have an iterative suffix added to an imperfective stem might be redundant, at worst, but it is certainly not “illogical”. On the contrary, in the imperfective domain such a suffix could be a welcome addition as well, for it allowed speakers to differentiate, where desirable, one particular imperfective function—iterativity—from others, such as progressivity or durativity/continuativity.

It goes without saying that we do not have any data for the period when the history of the past iteratives started. But the statistics for the periods we do know about are compatible with the above account. In Homer, it is true, imperfect-based past iteratives are already in the majority,<sup>41</sup> but aorist-based ones

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<sup>41</sup> Risch (1974:277–8) lists *c.* 98 imperfect-based past iterative” stems vs. *c.* 30 aorist-based ones in Homer; Zerdin (2002:110–1) counts 95 “different iteratives formed from present stems in Homer, giving a total of 173 instances”, and 31 “aorist stem forms [...] totalling 77 different instances”. The divergence seems mainly related to the uncertain classification of ῥίπτασκε, κρύπτασκε, ἰσάσκετο (cf. Kimball 2014), whereas the total number of occurrences given by Bianconi 2019:379–80 is considerably larger because ἔσκει/o- and φασκει/o- are not

are also still quite common. When we reach Herodotus,<sup>42</sup> the aorist-based ones have all but disappeared.<sup>43</sup> This makes sense if we believe that those forms which were inherently “contradictory”—since they combined a perfective stem with an

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excluded (313 in *Iliad* and *Odyssey* combined; but cf. Bianconi 2019:152). Most of the forms are attested just once or twice, the main exceptions being, on the imperfect side, ἔσκει/o- (45×), (ἐ)φασκει/o- (17×), φιλεσκει/o- (8×), and ἔχεσκει/o- (7×), and on the aorist side εἶπεσκει/o- (28×), δοσκει/o- (5×). Not much can be read out of these latter figures because they broadly correlate with the frequency of the respective base verbs.

<sup>42</sup> Or, in fact, already Hesiod and the *Corpus Hesiodicum*: the aorist-based λάβεσκειν ‘would take’ and φάνεσκειν ‘would appear’ in Hes. fr. 67b M.-W. (with the hybrid type of modal particle κε + past iterative) and Hes. fr. 33a.14 M.-W., both from the *Catalogue of Women*, are quite isolated in a total of some three dozen forms. Note that this also speaks in favour of a linguistically real decline and shift from aorist-based to imperfect-based items, and against the aorist-based ones just being an artificial “experiment” of epic poetry. If they had been the latter, we should expect them to be better represented in Hesiod.

<sup>43</sup> See only λάβεσκει/λάβεσκον ‘would take’ (Hdt. 4.78, 4.130), uncertain κατελίπεσκει ‘would leave behind’ (Hdt. 4.78; conjectural καταλείπεσκει may be

imperfective stem marker—were bound to be abandoned first, more quickly than their semantically less problematic congeners.<sup>44</sup>

But that is still not all. With our model we can now also explain why the type as such had to disappear in the long run. As we move from the state of the language reflected by the Homeric epics to the Greek of the classical period, we  

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preferable, cf. fn. 28), and ambiguously transmitted βαλ(λ)έσκετο ‘would cast’ (Hdt. 9.74), again—as in Hesiod—out of a total of some three dozen forms (Bianconi 2019:388); cf. Rosén 1962:125–6, Jiménez Delgado and García Zamora 2022:36 (where a single aorist-based example in *h.Ap.* 403 is also pointed out). According to Jiménez Delgado and García Zamora (2022:34), “de los 26 imperfectos jónicos que se documentan en Heródoto [counting types, not tokens, A.W.], 10 formas (38,46%) aparecen ya en Homero, Hesíodo y/o en los *Himnos homéricos*”; the remaining 16 are either first or only attested in Herodotus. They plausibly infer from this distribution that Herodotus is not just imitating Homer (as was assumed for instance by Bottin 1969:117).

<sup>44</sup> As Jiménez Delgado and García Zamora (2022:37–8) underline, the non-iterative (“durative/continuative”) type discussed in Section 3 is also not, or at best marginally, attested in Herodotus; cf. Zerdin 2002:123–5. This, too, makes sense since such forms would not have been useful for disambiguation purposes. It need not mean that for Herodotus all the forms in -σκε/o- were only theoretically acquired relics (Brugmann 1902:270), but it is conceivable that

see how the augment turned from an “optional” into an obligatory marker of past tense. As mentioned in Section 6, by the time of Herodotus *all* past-tense indicatives have a compulsory augment, save for the relic category of our past iteratives. But if we now think back to the aspectual four-slot grid sketched in Section 9, this evolution meant that the foundation of the system was being eroded already in the epic language as the tendency towards universal past-tense augmentation is clearly under way there. By the fifth century, the four-slot system had effectively ceased to exist: there was no longer any means of differentiating “perfectivized” and “normal” imperfects. In other words, the morphologically characterized four-slot system had given way to a new imbalanced three-slot system.

In principle, there were now two pathways to restabilize things: one could either (a) retain the “imperfectivized aorists” (our “past iteratives”) and create a *new* type of “perfectivized imperfects”; or (b) *also* get rid of the “imperfectivized aorists”. Pathway (b) is the one the Greek language chose, as the marked iterative was demorphologized and replaced by a syntactic construction. Here, too, then, we are able to make out impeccable language-systemic logic behind what the philological data tell us.

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“non-serial use of -σκον is a poetic innovation on the part of Homer” (Zerдин 2002:125).

## 11. Conclusion

On the most general level, the preceding pages are meant to be read as a plea not to forget the systemic dimension when we seek to make sense of the rise and decline of a language's morphological material. To establish formal relationships is only the first half of our task as historical-comparative linguists. The much-discussed "past iteratives" of early Greek can serve here as a perfect illustration. This formation type, I have argued, represents a category that was born out of systemic necessity as two types of morphological perfectivity marking began to intersect with each other.

The first step in this process would have been the creation of new "perfectivized imperfects" to express the internal complexity of past-tense events without at the same time leaving them open-ended. Because this step was the first move towards a transformation of the augment into a general past-tense marker, we should attribute it already to the later stages of a "Central Indo-European" group (consisting of the ancestors of all the later augment branches, i.e. Indo-Iranian, Armenian, and Phrygian as well as Greek). After all, Greek is not the only language where the augment eventually ends up as a universal signal of pastness. The subsequent rebalancing of the system through the creation of "imperfectivized perfectives", on the other hand, could well be something only

Proto-Greek did.<sup>45</sup> Be that as it may, the linguistic situation reflected in early epic is in any case best taken to be already close to the final stages of the past iteratives' lives, which we see in Herodotus.

As so often, therefore, a single label “archaism”, “innovation”, or “artificial feature” is not appropriate for the type as a whole. Where aorist-based δόσκει or ἴδεσκει stand a good chance of being truly “archaic”, imperfect-based ναίεσκει, let alone ναιετάασκει, are likely more recent, if not altogether experimental creations. To the linguist it is precisely the complexity of this

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<sup>45</sup> I leave open the *vexata quaestio* of a possible link between the past iteratives of Greek and the weak aorist in -c' (< \*-skē/o-?) of Armenian; see e.g. Pedersen 1905:207, Meillet 1936:115–6, Schmitt 1981:145, and Klingenschmitt 1982:284–7 (but Klingenschmitt prefers a derivation of the Armenian suffix from secondarily dissimilated \*-ss-). Clackson (1994:75–83) casts doubt on this connection because of several formal differences (notably the fact that “the productive morph for the Armenian aorist is -ac'-, which can derive from \*-āsk'- or \*-ask'-, and [...] the productive morph of the Ionic iteratives is \*-esk'-”), but to account for these by assuming divergent developments in the two languages is not out of the question. In principle, one could therefore speculate about an already Graeco-Armenian four-slot system having been simplified differently in Armenian, by a functional merger of “normal” and imperfectivized aorists, just as the usage of the augment also became regulated differently in that language.

layering which makes Homeric language both attractive and challenging—so challenging, in fact, that we sometimes even have to enlist the help of modern Bulgarian if we want to *really* understand what is going on.

### **Appendix: Possible model forms (φασκε/ο-, έσκε/ο-, βασκε/ο-)**

In the literature, two verbs in particular are often invoked as likely direct models for the creation of the past iteratives in -σκε/ο-: φάσκω next to φημί (with 3sg. impf. (έ)φασκε : (έ)φᾶ, Att.-Ion. έφη) and \*έσκω next to εἰμί (with 3sg. impf. έσκε : ἦς).<sup>46</sup> Of these two, φάσκω seems the less promising candidate if the idea is that the imperfect of a fully-fledged paradigm must have inspired the other past iteratives. While impf. (έ)φασκε is well-attested in Homer, non-past φασκε/ο- is found only in post-Homeric times, suggesting that it may be a recent creation; and if that is the case, it is most likely backformed precisely from (έ)φασκε, which could have lost an earlier iterational value and become a general imperfective. In fact, although “έ-φασκον has sometimes a distinctly Iterative meaning in Homer”,

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<sup>46</sup> See e.g. Chantraine 1958:319–21, Risch 1974:277, Rix 1992:229, Ittzés 2008:27–30. According to Negri 1976, έσκε/ο- and φασκε/ο- do not contain the normal PIE present-stem suffix \*-skē/o-, but a separate “modal” suffix PIE \*-skē/o-<sub>2</sub>.

as in (15),<sup>47</sup> in a case like (16) the iterative nuance is less prominent, if at all present.<sup>48</sup>

(15) ἀλλὰ τόδ' ὥς ποτε πατρός ἐγὼν εἰπόντος ἄκουσα  
Ναυσιθόου, ὃς ἔφασκε Ποσειδάων' ἀγάσασθαι  
ἡμῖν, οὐνεκα πομποὶ ἀπήμονές εἰμεν ἀπάντων. (*Od.* 8.564–6; cf. *Od.*  
13.173)

[Alcinoos is speaking:] But I once heard my father say this, who used to maintain that Poseidon got angry with us because we are kindly guides for anyone.

(16) ἄνδρα ποτ' ἐξείνισσα φίλη ἐν πατρίδι γαίῃ  
ἡμέτερόνδ' ἐλθόντα, καὶ οὐ πῶ τις βροτὸς ἄλλος  
ξείνων τηλεδαπῶν φιλίων ἐμὸν ἵκετο δῶμα·  
εὔχετο δ' ἐξ Ἰθάκης γένος ἔμμεναι, αὐτὰρ ἔφασκε  
Λαέρτην Ἄρκεσιάδην πατέρ' ἔμμεναι αὐτῷ. (*Od.* 24.266–70)

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<sup>47</sup> Monro 1891:47, citing the example given above; for further passages in which φασκε/o- is readily understood as iterative, see e.g. *Od.* 4.191, 5.135, 7.256, 10.331, 12.275, etc.

<sup>48</sup> Cf. also *Il.* 13.100, *Od.* 11.306, 14.321, 17.114, 19.191, 24.75.

[Odysseus is speaking to his father Laertes, concealing his true identity:]

In my own home country I once entertained a foreigner who came to our place, and no other person, among the guests from afar, was more welcome to my house: he claimed to be from Ithaca by birth and maintained that Laertes the son of Arceisius was his father.

That this lexicalization of φασκε/o- was already underway in Homeric Greek, although it had not yet led to the establishment of non-past usages as such, is also suggested by the frequent augmentation, which is out of line with the non-augmentation of other past iteratives (cf. Section 6 above). At the same time, the much stronger representation of preterital φασκε/o- in the *Odyssey* (15×) as opposed to the *Iliad* (2×) reinforces the impression that the formation is not particularly old.

The situation with ἐσκε/o- looks more promising. What makes the early existence of this potential model stem appear plausible is the occurrence of similar formations in other Indo-European languages, namely Hittite and perhaps Palaic, Tocharian B, and Old Latin.<sup>49</sup> In Anatolian, there is a late Hittite hapax 3pl. active *ēškanzi*, whereas Palaic *iška*, if taken as an ipv. ‘be!’, might continue

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<sup>49</sup> See *LIV*<sup>2</sup> 241–2, s.v. *\*h<sub>1</sub>es-*, with reference to the full discussion in Hackstein 1995:272–82. Keller 1985:27–33 discusses, and rejects, further suspected comparanda in Thracian, Middle Indic, and Armenian.

an archaic medial *\*h<sub>1</sub>s-skō*, and hence allow a comparison with the 3sg. *ste* and 3pl. *skente* (alongside *stare*) of the copula in Tocharian B: *skente* directly suggests the reconstruction of medial *\*h<sub>1</sub>s-skō-nto*, and *ste* may reflect a parallel *\*h<sub>1</sub>s-skē-to*.<sup>50</sup> In Old Latin, meanwhile, a 3sg. *escit* and a corresponding 3pl. *escunt* are attested—the former fairly well, the latter more marginally<sup>51</sup>—in the legal language of the XII Tables, as substitutes of mainly existential (i.e., non-

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<sup>50</sup> On the Anatolian forms see Melchert 1984:30–1 (with an *active* interpretation of Palaic *iška*), on the above comparison of the Palaic and Tocharian material Watkins 1993:477–8, Hackstein 1995:273–5, and Malzahn 2010:691–2, also on alternative views connecting *ste* with *\*steh<sub>2</sub>-* ‘stand’ (i.e., *\*sth<sub>2</sub>-o* next to 3pl. *stare* < *\*sth<sub>2</sub>ro*) and on the use of secondary endings (Toch. B *ste* ‘is’, *skente* ‘are’ < *\*‘has/have become, became’* according to Hackstein 1995:274). Note, however, that, as Anthony Yates points out to me, Yakubovich 2006:113–114 takes the Palaic form to be derived from an entirely different verb (‘anoint!’); cf. further Yates 2023 (in favor of PIE full-graded *\*h<sub>1</sub>es-skē/o-*).

<sup>51</sup> For *escit* see above all *XII Tab.* I.3, V.4, V.5, V.7 (2×) (though sometimes changed to *est* or *existet* in the indirect transmission), as well as Festus p. 68 L. (*escit erit*) and p. 394 L. (*superescit significat supererit* ‘*superescit* means *supererit* [“will survive”]’), who adduces Enn. *ann.* 494 and Acc. *tr.* 266 (and cf. Lucr. 1.619), for *escunt* Cic. *leg.* 3.9 and *leg.* 2.60 with reference to *XII Tab.* X.9 (transmitted *essent*); Keller 1985:38–40.

copular<sup>52</sup>) *est* and *sunt*, respectively.<sup>53</sup> Although a reconstruction with a zero-grade root will not do as an immediate ancestor for these, it is conceivable that *escit/escunt* took the place of expected *\*scit/\*scunt* < *\*(h<sub>1</sub>)s-sk-et(i)/-ont(i)*. To assume this probably represents a safer hypothesis than to doubt the existence of *escit, escunt* in real early Latin and account for them as mere antiquarian figments created in the days of Ennius, Accius, or Cicero in lieu of actual *\*essit* or *\*erit*, *\*esunt* (> fut. *erit, erunt*).<sup>54</sup> Even then, however, we must acknowledge the

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<sup>52</sup> Definitely copular is *escunt* (transmitted *essent*: cf. fn. 49) in Cic. *leg.* 2.60, but this need not suggest that Cicero, in citing from the XII Tables, inadvertently overlooked a restriction (cf. Pascucci 1968:25–6 n. 2). On *XII Tab.* I.3, see Fraenkel 1925: 440–3; *XII Tab.* V.7 is ambiguous.

<sup>53</sup> The identification of *escit* with fut. *erit*, which is made explicit in ancient scholarship (Fest. p. 68 and 394 L.) and reflected in Enn. *ann.* 494, Acc. *tr.* 266, Lucr. 1.619, and Cic. *leg.* 3.9, must be quite old, but does not fully align with the use in the XII Tables (cf. Fraenkel 1925:443 n. 2, Pascucci 1968:24–6 n. 2, Keller 1985:39–42). It may have arisen when people tried to make sense of the obsolete archaism by equating it with a formally similar item in the same irregular verb’s paradigm.

<sup>54</sup> For the latter idea, see Pariente 1978:423–35, Coleman 1996:417–8, Powell 2005:144. In view of *adessint* in *Lex repetundarum* 63 (cf. Crawford 1996:1.71, 2.571) one cannot object that *\*essit* itself would be a morphological oddity

mismatch in both usage (copular vs. existential) and verbal voice (middle vs. active) between Tocharian on the one hand and Latin on the other; and we should also remember that *\*-skē/o-* certainly remained productive in the prehistory of Latin (just as in the prehistory of Anatolian and Tocharian), so that nothing *excludes* an independent internal creation. Since *escit*, *escunt* are exclusively attested at the end of cola, it has indeed been argued that their formation could be due to the simple wish to obtain a variant for *est*, *sunt* with fuller word body.<sup>55</sup>

As long as such doubts surround the Latin forms, which would in principle be the closest comparanda—alongside Hitt. *ēškanzi*—to an actively inflected Proto-Greek stem *έσκει/o-*, we cannot take it for granted that such a stem was inherited from Proto-Indo-European. Instead, a closer look at the attestations of *έσκει/o-* itself is called for.

Firstly, it may be noted that, in contrast with Lat. *escit* (cf. above), Homeric *έσκει/o-* much more frequently acts as a copula (42×) than as an existential verb (3×: *Od.* 9.508, 15.417, 22.126).<sup>56</sup> This divergence should not

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alongside regular *siēt* > → *sit* (perhaps created in analogy with forms like *faxit* next to *facere*), but one still has to ask why anyone who was unfamiliar with *\*essit* or *\*esit* should have made up an even more unfamiliar—since invented—form.

<sup>55</sup> See Fraenkel 1925:443 n. 2 and Pascucci 1968:25 n. 2.

however be overvalued as it might simply reflect the greater overall frequency of copular *vis-à-vis* existential εἰμί.

Secondly, like the other past iteratives, but again unlike Lat. *escit* (or indeed the Tocharian and Anatolian forms), ἔσκε/o- is confined to the past tense. Thus, if the stem were inherited from Proto-Indo-European, we would need an explanation as to why presentic forms such as \*ἔσκει were given up in Greek. It has been claimed that this may have happened because in Ionic the regular imperfect of \**h<sub>1</sub>es-* (i.e., Proto-Gr. \*ἦς, later ἦν) had become “quasi-perfective”, thereby making the survival of ἔσκε necessary, whereas in the present or in modal forms no such aspectual shift had occurred, so that an alternative present was no longer required.<sup>57</sup> Yet, not only is there no firm evidence for a (partial) perfectivization of ἦς/ἦν, but even if an argument of this sort could be made (cf. below), there is no intrinsic reason why a hypothetical “iterative”

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<sup>56</sup> While not considering *Od.* 15.417 and 22.126, where an existential reading is needed despite the presence of a local adverbial phrase, Watkins 1993:477 also points to *Alcm. fr.* 74 P. (ἦσκέ τις Καφειὺς φανάσσων ‘There was one Capheus ruling’); add *Hes. Op.* 151, *Pind. Nem.* 5.31, *Emp. fr.* 16.1 D.-K., and possibly *Mimnermus fr.* 14.10 W. (ambiguous). The nine Herodotean examples are all copular, as are *Hes. fr.* 199.9 and 372.9 M.-W., *h.Ven.* 157, 237, *Aesch. Pers.* 656, *Emp. fr.* 128.9. ἔσκε in *Archilochus fr.* 15 W. is very uncertain.

<sup>57</sup> Thus Ittzés 2008: 28–9; Keller 1985:44 is unspecific on the matter.

(“frequentative”/“habitual”) or markedly “durative/continuative” \*ἔσκει should have been given up outside the past tense, presumably already in Proto-Greek times since a parallel loss without trace in the various dialectal areas of Greek would be even less likely.

Thirdly, any confidence about the existence of a fully lexical stem ἔσκει/o- in early Greek is shaken by the observation that the Homeric use of ἔσκει is (a) broadly in line with that of other past iteratives as far as the iterative/durative semantics are concerned, i.e. more specific than what we find in Latin or Tocharian,<sup>58</sup> and (b) strongly determined by metrical factors. Even according to Chantraine, who finds that in some environments “ἔσκει exprime fortement la durée”, in many passages “l’emploi de ἔσκει a été favorisé par le fait que la forme constituait métriquement un équivalent rigoureux à ἐστί. Z 153 ου λ 393 [...] l’aède aurait pu employer ἦεν pour ἔσκειν, mais ce n’est pas toujours le cas. Σ 118,

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<sup>58</sup> Everything that has been said in Section 3 about non-prototypical past iteratives is valid for ἔσκει/o- as well (see e.g. *Il.* 8.223 = 11.6, 13.695 = 15.334, 16.225, *Od.* 11.394, etc. with clearly durative/continuative ἔσκει/o-), but an iterative/habitual shade is often also detectable (cf. *Il.* 5.536, 16.147, 16.550, 24.739, *Od.* 14.222, 14.227, 15.362, etc.; also *Hdt.* 1.196, 4.200, 6.133, etc.). That the use of ἔσκει/o- was never compulsory in such environments can be seen in e.g. *Il.* 14.123–4 with parallel ἔσαν ~ ἔσκει or *Od.* 14.224 where ἦσαν matches ἔσκει(ν) in *Od.* 14.222 and 14.227.

par exemple, ὄς περ φίλτατος ἔσκε Δί, l'itératif équivaut métriquement à ἔστι".<sup>59</sup>

In fact, the large majority of the attestations of ἔσκε(v) in Homer is located just before the caesura κατὰ τρίχον τροχᾶϊον<sup>60</sup> and may therefore be due to the need to activate that caesura instead of the alternative penthemimeral one that was served by monosyllabic ἦν (\*ἦς).<sup>61</sup> Moreover, it is striking that despite the frequency with which 3sg. ἔσκε(v) occurs, there is not a single example of 3pl. ἔσκειον—but this, too, becomes readily understandable once we realize that 3pl. ἔσκειον would have been metrically identical with 3pl. ἦσαν.<sup>62</sup> All of this gives rise to the suspicion that whatever iterative or markedly durative/continuative nuance ἔσκε/

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<sup>59</sup> Chantraine 1958:321; the metrical conditioning is stressed even more by Shipp 1972:88.

<sup>60</sup> 31 out of 43 occurrences (= 72%), with a fairly even spread across the *Iliad* (14/21 = 67%) and *Odyssey* (17/22 = 77%); cf. *LfgrE* 2.438, s.v. εἰμί.

<sup>61</sup> That not only ἔσκε is so used, but also ἔσκειν (metrically ~ ἦεν), suggests that the usage is older than the replacement of 3sg. ἦς (< \*ēś(t)) by (originally 3pl.) ἦν/ἦεν (< \*ēsen(t)). Interestingly, though, ἔσκε(v) does not occur at line-end, where ἦεν is extremely common (63× in Homer: *LfgrE* 2.439, s.v. εἰμί). Should we assume that ἔσκε(v) was consistently superseded here by ἦεν, whereas the survival of ἔσκειν before the trochaic caesura (where ἦεν is rare: 4× in Homer, cf. *LfgrE* 2.438, s.v. εἰμί) was protected because of the frequency of parallel ἔσκε in the same slot (with no metrical alternative)?

o- did have (and later still has in Herodotus), this was not the only driver for its use by the epic poets; and if that is so, we may ask whether it being a firmly rooted archaism is the most economic scenario, or whether oral poets who needed a trochaic equivalent of \*ῥ̃ς did not artificially create ἔσκει alongside other innovative forms in -σκει/o- and preferentially use it where the suffixal semantics seemed appropriate.

Having said that, even if we hesitate to regard ἔσκει/o- as *inherited*, we should accept that both it and φασκει/o- may have formed part of a very early instalment of marked past-tense imperfectives in -σκει/o-. As mentioned above, it is possible that the formal imperfect of \**h<sub>1</sub>es-* was felt to be aspectually indeterminate—though probably not so much because of an “aspectual shift” towards perfectivity as because the stative nature of the verb rendered the perfective/imperfective distinction less relevant: states by definition have no internal structure. Consequently, while permanent past states could be referred to with the simple imperfect, both the unambiguous expression of iterated transient states (cf. e.g. Engl. *Mary was being happy* as opposed to *Mary was happy*) and any focus on the duration of a state were precluded; nor could the context always be counted upon to highlight or clarify this (cf. e.g. *Last year Mary was singing/sang in a choir*, where our real-world knowledge tells us that the idea is

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<sup>62</sup> Or earlier 3pl. \*ῥ̃εν (< \**ēsen(t)*). By contrast, the rare 1sg. ἔσκειν is again metrically distinct from 1sg. ῥ̃α (or ἔᾱ) (*Il.* 7.153).

not that Mary uninterruptedly sang, vs. *Last year Mary was happy*, where nothing indicates whether we are dealing with repeated periods of happiness or one uninterrupted state). In the case of φημί, meanwhile, the aspectual indeterminacy of the formal imperfect ἔφην is due to the telic or even punctual semantics of any verb meaning ‘to say’, which prompts a quasi-aoristic reading of ἔφην; so here too—though for rather different reasons—the creation of an unambiguous imperfective past next to it will have been welcome.<sup>63</sup>

However, the *ultimate* source of inspiration for the application of -σκε/o- as a new imperfectivizer should then still be sought elsewhere. In this connection one might perhaps think of the lexeme βασκε/o-, the inherited status of which is intimated by the formal parallelism with Skt. *gácchati* ‘goes, comes’ and Av. *jasaiti* ‘do.’ (all pointing to *\*g<sup>w</sup>m̥-ské/ó-*).<sup>64</sup> Although this stem βασκε/o- technically belonged to a different root than aor. ἔβη (ἔβᾱ) ‘went’ (< *\*(h<sub>1</sub>)e-g<sup>w</sup>eh<sub>2</sub>-t*), the apparent correspondence of 3sg. aor. *\*g<sup>w</sup>ā(-t)* : 3sg. impf. *\*g<sup>w</sup>a-ske(-t)* might have given rise to parallel 3sg. “aor./impf.” *\*p<sup>h</sup>ā(-t)* :

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<sup>63</sup> Cf. Wackernagel 1926:173, Jacquiod 1978:50–3, with n. 33 on ἔσκε/o-. Keller (1985:37–8) suggests that the subsequent greater paradigmatic integration of (ἐ)γενόμεν as a suppletive aorist of εἰμί facilitated the eventual demise of ἔσκε/o- (unlike that of lexicalized φασκε/o-).

<sup>64</sup> Cf. *LIV*<sup>2</sup> 209–10, s.v. *\*g<sup>u</sup>em-*, with further reference to Alb. *n-gah* ‘starts, hurries’ (< *\*en-g<sup>u</sup>m̥-skē-*).

\**p<sup>h</sup>a-ske(-t)* in the first place, with \*-*ske/o-* subsequently spreading further in Proto-Greek, notably—to begin with—(a) to similar root aorists (e.g., 3sg. aor. \**stā(-t)*, \**dō(-t)* → imperfectivized aor. \**sta-ske(-t)* > στάσκε, \**do-ske(-t)* > δόσκε), and (b) to the paradigm of εἰμί with its equally ambiguous 3sg. “aor./impf.” \**ēs* (→ disambiguated impf. \**eske(t)* > ἔσκε).

Unfortunately, the peculiar attestation pattern of βασκε/o- in Greek means that this hypothesis, too, is not quite as robust as one would like. This is because βασκε/o-, though attested in Homer, is virtually<sup>65</sup> restricted to the imperative (βάσκε), so that early poetry or indeed later Greek literature provide little positive evidence for the imperfect \*(*ē*)βασκε/-ον which such a theory would require to have played a pivotal role (see only *Il.* 11.104 παρέβασκε).

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## References

AVI = *Attic Vase Inscriptions* online (ed. Rudolf Wachter). <https://avi.unibas.ch>

(last accessed 5 February 2023).

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<sup>65</sup> The inf. ἐπιβασκέμεν ‘lead into’ in *Il.* 2.234 is arguably haplological (Wackernagel 1916:18–9 n. 2) and the causative value of the verb in that line makes it different in any case; intransitive reduplicated βιβάσκω occurs in *h.Ap.* 133 (cf. also Shipp 1972:86–7).

- Bakker, Egbert J. 1999. Pointing to the Past: Verbal Augment and Temporal Deixis in Homer. In John N. Kazazis and Antonios Rengakos (eds.), *Euphrosyne: Studies in Ancient Epic and its Legacy in Honour of Dimitris N. Maronitis*, 50–65. Stuttgart: Steiner.
- . 2001. Similes, Augment, and the Language of Immediacy. In Janet Watson (ed.), *Speaking Volumes: Orality and Literacy in the Greek and Roman World*, 1–23. Leiden, Boston, Cologne: Brill.
- Bechtel, George. 1936. *Hittite Verbs in -sk-: A Study of Verbal Aspect*. Ann Arbor, Mich.: Edwards Brothers.
- Benveniste, Émile. 1936. Tokharien et indo-européen. In Helmut Arntz (ed.), *Germanen und Indogermanen: Volkstum, Sprache, Heimat, Kultur. Festschrift für Hermann Hirt*, vol. 2: *Ergebnisse der Sprachwissenschaft*, 227–40. Heidelberg: Winter.
- Berrettoni, Pierangiolo. 1971. Considerazioni sui verbi latini in *-scō*. *Studi e Saggi Linguistici* 11.89–169.
- Bertinetto, Pier Marco, and Valentina Cambi. 2006. Hittite Temporal Adverbials and the Aspectual Interpretation of the *-ške/a-* Suffix. In Raffaella Bombi, Guido Cifoletti, Fabiana Fusco, Lucia Innocente, and Vincenzo Orioles (eds.), *Studi linguistici in onore di Roberto Gusmani*, vol. 3, 193–233. Alessandria: Edizioni dell’Orso.
- Bettarini, Luca. 2017. *Lingua e testo di Ipponatte*. Pisa and Rome: Serra.

- Bianconi, Michele. 2019. The Linguistic Relationships between Greek and the Anatolian Languages. D.Phil. thesis. University of Oxford.
- . 2021. “There and Back Again”: A Hundred Years of Graeco-Anatolian Comparative Studies. In Michele Bianconi (ed.), *Linguistic and Cultural Interactions between Greece and Anatolia: In Search of the Golden Fleece*, 8–39. Leiden and Boston: Brill.
- Bottin, Luigi. 1969. Studio dell’aumento in Omero. *Studi Micenei ed Egeo-Anatolici* 10.69–145.
- Brugmann, Karl. 1902. Die ionischen Iterativpräterita auf -σkov. *Indogermanische Forschungen* 13.267–77.
- Bybee, Joan L., Revere Perkins, and William Pagliuca. 1994. *The Evolution of Grammar: Tense, Aspect and Modality in the Languages of the World*. Chicago and London: University of Chicago Press.
- Cambi, Valentina. 2007. *Tempo e aspetto in ittito*. Alessandria: Edizioni dell’Orso.
- Chantraine, Pierre. 1958. *Grammaire homérique*, vol. 1: *Phonétique et morphologie* (2nd edn.). Paris: Klincksieck.
- Clackson, James. 1994. *The Linguistic Relationship between Armenian and Greek*. Oxford and Cambridge, Mass.: Blackwell.
- Coleman, Robert. 1996. Conditional Clauses in the Twelve Tables. In Hannah Rosén (ed.), *Aspects of Latin: Papers from the Seventh International*

- Colloquium on Latin Linguistics*, 403–21. Innsbruck, Institut für Sprachwissenschaft.
- Colvin, Stephen. 2017. Aspect and Agency in Epigraphic Signatures. In Andreas Willi (ed.), *Sprachgeschichte und Epigraphik: Festgaben für Rudolf Wachter zum 60. Geburtstag*, 83–103. Innsbruck: Institut für Sprachwissenschaft.
- Comrie, Bernard. 1976. *Aspect: An Introduction to the Study of Verbal Aspect and Related Problems*. Cambridge: Cambridge University Press.
- Crawford, Michael H. 1996. *Roman Statutes* (2 vols.) London: Institute of Classical Studies.
- Curtius, Georg. 1876. *Das Verbum der griechischen Sprache seinem Baue nach dargestellt*, vol. 2. Leipzig: Hirzel.
- Daues, Alexandra. 2009. Zum Funktionsbereich des Suffixes \*-skē/o- im Junghethitischen und Homerischen. In Rosemarie Lühr and Sabine Ziegler (eds.), *Protolanguage and Prehistory*, 82–99. Wiesbaden: Reichert.
- De Decker, Filip. 2015. The Augment in Homer, with Special Attention to Speech Introductions and Conclusions. *JournaLIPP* 4.53–71.
- Di Giovine, Paolo. 1999. Funzione e forma nei morfemi e nelle categorie flessionali del sistema verbale indoeuropeo ricostruito. In Jürgen Habisreitinger, Robert Plath, and Sabine Ziegler (eds.), *Gering und doch von Herzen: 25 indogermanistische Beiträge Bernhard Forssman zum 65. Geburtstag*, 33–46. Wiesbaden: Reichert.

- Dressler, Wolfgang. 1968. *Studien zur verbalen Pluralität: Iterativum, Distributivum, Durativum, Intensivum in der allgemeinen Grammatik, im Lateinischen und Hethitischen*. Wien: Böhlau.
- Fantini, Julio. 1950. Vista de conjunto sobre los pretéritos iterativos jónicos en -σkov. *Helmantica* 1.319–38.
- Fraenkel, Eduard. 1925. Zum Texte römischer Juristen. *Hermes* 60.415–43.
- Friedrich, Johannes. 1960. *Hethitisches Elementarbuch*, vol. 1: *Kurzgefaßte Grammatik* (2nd edn.). Heidelberg: Winter.
- Giacalone Ramat, Anna. 1967. La funzione del suffisso -σκ- nel sistema verbale greco. *Archivio Glottologico Italiano* 52.105–23.
- Hackstein, Olav. 1995. *Untersuchungen zu den sigmatischen Präsensstambildungen des Tocharischen*. Göttingen: Vandenhoeck & Ruprecht.
- Hajnal, Ivo. 2004. Die Tmesis bei Homer und auf den mykenischen Linear B-Tafeln: ein chronologisches Paradox? In John H. W. Penney (ed.), *Indo-European Perspectives: Studies in Honour of Anna Morpurgo Davies*, 146–178. Oxford: Oxford University Press.
- Hajnal, Ivo. 2018. Graeco-Anatolian Contacts in the Mycenaean Period. In Jared Klein, Brian Joseph, and Matthias Fritz (eds.), *Handbook of Comparative and Historical Indo-European Linguistics*, vol. 3, 2037–55. Berlin and Boston: de Gruyter.

- Hirt, Hermann. 1928. *Indogermanische Grammatik*, vol. 4: *Doppelung, Zusammensetzung, Verbum*. Heidelberg: Winter.
- Hoffner, Harry A., and H. Craig Melchert. 2008. *A Grammar of the Hittite Language*, vol. 1: *Reference Grammar*. Winona Lake, Ind.: Eisenbrauns.
- Hollenbaugh, Ian. 2018. Aspects of the Indo-European Aorist and Imperfect: Re-evaluating the Evidence of the Rgveda and Homer and its Implications for PIE. *Indo-European Linguistics* 6.1–68.
- Hollenbaugh, Ian. 2021. The Development of the Imperfect in Ancient Greek from Simple Past to Imperfective as a Blocking Phenomenon. *Journal of Greek Linguistics* 21.58–150.
- Inglese, Guglielmo, and Simone Mattioli. 2020. Pluractionality in Hittite: A New Look at the Suffix *-ške/a-*. *STUF – Language Typology and Universals* 73.261–303.
- Ittzés, Máté. 2008. Morphologie und Ursprung der ionischen Iterativpräterita. *Acta Classica Universitatis Scientiarum Debreceniensis* 44.13–34.
- Jacquinod, Bernard. 1978. L'évolution de φημί en grec ancien. In Gilbert Argoud etc., *Mémoires I*, 45–57. Saint-Étienne: Publications de l'Université de Saint-Étienne.
- Jiménez Delgado, José Miguel, and Patricia García Zamora. 2022. El imperfecto jónico en Heródoto: ¿elemento épico o elemento jónico?. *Cuadernos de Filología Clásica: Estudios griegos e indoeuropeos* 32.29–42.

- Kellens, Jean. 1984. *Le Verbe avestique*. Wiesbaden: Reichert.
- Keller, Madeleine. 1985. Latin *escit, escunt* a-t-il des correspondants?. *Revue de Philologie, de Littérature et d'Histoire Anciennes* 59.27–44.
- . 1992. *Les Verbes latins à infectum en -sc-, étude morphologique à partir des formations attestées dès l'époque préclassique*. Bruxelles: Peeters.
- Kimball, Sara E. 1980. A Homeric Note. *Glotta* 58.44–6.
- . 2014. Homeric κρύπτασκε, ῥίπτασκε and ισάσκετο. *Glotta* 90.163–73.
- Klingenschmitt, Gert. 1982. *Das altarmenische Verbum*. Wiesbaden: Reichert.
- Kühner, Raphael, and Friedrich Blass. 1890–2. *Ausführliche Grammatik der griechischen Sprache. Erster Teil: Elementar- und Formenlehre* (2 vols., 3rd edn.). Hannover: Hahnsche Buchhandlung.
- Kühner, Raphael, and Bernhard Gerth. 1898–1904. *Ausführliche Grammatik der griechischen Sprache. Zweiter Teil: Satzlehre* (2 vols., 3rd edn.). Hannover: Hahnsche Buchhandlung.
- Lazzeroni, Romano. 1977. Fra glottogonia e storia: ingiuntivo, aumento e lingua poetica indoeropea. *Studi e Saggi Linguistici* 17.1–30.
- Lehmann, Winfred P. 1974. *Proto-Indo-European Syntax*. Austin and London: University of Texas Press.
- LfgrE = Lexikon des frühgriechischen Epos* (4 vols.). Göttingen: Vandenhoeck & Ruprecht, 1979–2010.

- LIV<sup>2</sup> = Rix, Helmut (ed.). 2001. *Lexikon der indogermanischen Verben. Die Wurzeln und ihre Primärstambildungen* (2nd edn. by Martin Kümmel and Helmut Rix). Wiesbaden: Reichert.
- Malzahn, Melanie. 2010. *The Tocharian Verbal System*. Leiden and Boston: Brill.
- Meillet, Antoine. 1936. *Esquisse d'une grammaire comparée de l'arménien classique* (2nd edn.). Vienna: Imprimerie des PP. Mékhitharistes.
- Melchert, H. Craig. 1984. Notes on Palaic. *Zeitschrift für Vergleichende Sprachforschung* 97.22–43.
- Melchert, H. Craig. 1989. New Luvo-Lycian isoglosses. *Historische Sprachforschung* 102.23–45.
- . 1998. Aspects of Verbal Aspect in Hittite. In Sedat Alp and Aygül Süel (eds.), *III. Uluslararası Hititoloji Kongresi Bildirileri – Acts of the IIIrd International Congress of Hittitology*, 413–8. Ankara: Uyum Ajans.
- Mignot, Xavier. 1969. *Les Verbes dénommatifs latins*. Paris: Klincksieck.
- Minon, Sophie. 2002. L'Aspect dans les signatures de sculpteurs et de peintres. Les paires minimales ἐποίη/ἐποίησε(ν) et ἔγραφε(ν)/ἔγραψε(ν). *Syntaktika* 24.1–13.
- Monro, David B. 1891. *A Grammar of the Homeric Dialect* (2nd edn.). Oxford: Clarendon Press.
- Negri, Mario. 1976. Studi sul verbo greco II. *Acme* 29.233–50.

- Nicolova, Ruselina. 2017. *Bulgarian Grammar* (trans. Christo Stamenov). Berlin: Frank & Timme.
- Nussbaum, Alan J. 1998. *Two Studies in Greek and Homeric Linguistics*. Göttingen: Vandenhoeck & Ruprecht.
- Pagniello, Frederick James. 2007. The Past-Iterative and the Augment in Homer. *Indogermanische Forschungen* 112.105–23.
- Pariente, Ángel. 1978. Notas al lexico juridico latino. Sobre *escit = erit y sarpta = putata*. *Emerita* 46.423–43.
- Pascucci, Giovanni. 1968. Aspetti del latino giuridico. *Studi Italiani di Filologia Classica* n.s. 40.3–43.
- Pedersen, Holger. 1905. Zur armenischen sprachgeschichte. *Zeitschrift für Vergleichende Sprachforschung* 38.194–240.
- . 1938. *Hittitisch und die anderen indoeuropäischen Sprachen*. København: Levin & Munksgaard.
- Pisani, Vittore. 1959. Obiter scripta. *Paideia* 14.168–81.
- Porzig, Walter. 1927. Zur Aktionsart indogermanischer Präsensbildungen. *Indogermanische Forschungen* 45.152–67.
- Powell, J. G. F. 2005. Cicero's Adaptation of Legal Latin in the *De legibus*. In Tobias Reinhardt, Michael Lapidge, and James N. Adams (eds.), *Aspects of the Language of Latin Prose*, 117–50. Oxford: Oxford University Press.

- Puhvel, Jaan. 1991. *Homer and Hittite*. Innsbruck: Institut für Sprachwissenschaft.
- Risch, Ernst. 1974. *Wortbildung der homerischen Sprache* (2nd edn.). Berlin and New York: de Gruyter.
- Rix, Helmut. 1992. *Historische Grammatik des Griechischen: Laut- und Formenlehre* (2nd edn.). Darmstadt: Wissenschaftliche Buchgesellschaft.
- Rosén, Haiim B. 1962. *Eine Laut- und Formenlehre der herodotischen Sprachform*. Heidelberg: Winter.
- Ruipérez, Martín S. 1954. *Estructura del sistema de aspectos y tiempos del verbo griego antiguo. Análisis funcional sincrónico*. Madrid: Consejo Superior de Investigaciones Científicas.
- Schmitt, Rüdiger. 1981. *Grammatik des Klassisch-Armenischen mit sprachvergleichenden Erläuterungen*. Innsbruck: Institut für Sprachwissenschaft.
- Schwyzler, Eduard. 1939. *Griechische Grammatik*, vol. 1: *Allgemeiner Teil, Lautlehre, Wortbildung, Flexion*. Munich: Beck.
- Shipp, G. P. 1972. *Studies in the Language of Homer* (2nd edn.). Cambridge: Cambridge University Press.
- Sihler, Andrew. 1995. *New Comparative Grammar of Greek and Latin*. New York and Oxford: Oxford University Press.

- Stolpe, August. 1849. *Iterativorum Graecorum vis ac natura ex usu Homeri atque Herodoti demonstrata*. Diss. Breslau.
- Sturtevant, Edgar H. 1951. *A Comparative Grammar of the Hittite Language* (2nd edn., rev. Edgar H. Sturtevant and E. Adelaide Hahn). New Haven, Conn.: Yale University Press.
- Szemerényi, Oswald J. L. 1996. *Introduction to Indo-European Linguistics*. Oxford: Oxford University Press.
- Týn, Emanuel. 1859. Über den Gebrauch und die Bedeutung der iterativen Imperfecta und Aoriste im Griechischen. *Zeitschrift für die österreichischen Gymnasien* 10.677–95.
- Wackernagel, Jacob. 1906. Wortumfang und Wortform. *Nachrichten von der Gesellschaft der Wissenschaften zu Göttingen*, 147–84.
- . 1916. *Sprachliche Untersuchungen zu Homer* (2nd edn.). Göttingen: Vandenhoeck & Ruprecht.
- . 1926. *Vorlesungen über Syntax mit besonderer Berücksichtigung von Griechisch, Lateinisch und Deutsch: Erste Reihe* (2nd edn.). Basel: Birkhäuser.
- Wathelet, Paul. 1973. Études de linguistique homérique. *L'Antiquité Classique* 42.379–405.
- Watkins, Calvert. 1993. Some Anatolian Words and Forms. In Gerhard Meiser (ed.), *Indogermanica et Italica: Festschrift für Helmut Rix zum 65. Geburtstag*, 469–78. Innsbruck: Institut für Sprachwissenschaft.

- . 2001. An Indo-European Linguistic Area and its Characteristics: Ancient Anatolia. Areal Diffusion as a Challenge to the Comparative Method?. In Alexandra J. Aikhenvald and R. M. W. Dixon (eds.), *Areal Diffusion and Genetic Inheritance: Problems in Comparative Linguistics*, 44–63. Oxford: Oxford University Press.
- Willi, Andreas. 2018. *Origins of the Greek Verb*. Cambridge: Cambridge University Press.
- Yakubovich, Ilya. 2006. Were Hittite Kings Divinely Anointed? A Palaic Invocation to the Sun-God and its Significance for Hittite Religion. *Journal of Ancient Near Eastern Religions* 5.107–137.
- Yates, Anthony. 2023. The Diachrony of “Voice Reversal” in Hittite. Paper given at the 12th International Congress of Hittitology, Istanbul, 5 September 2023 (slides available at [www.adyates.com/research](http://www.adyates.com/research), accessed 14 July 2024).
- Zerdin, Jason. 2002. The “Iterative-Intensives” in -σkov. In Ina J. Hartmann and Andreas Willi (eds.), *Oxford University Working Papers in Linguistics, Philology & Phonetics*, vol. 7, 103–30. Oxford: Centre for Linguistics and Philology.