

Simple past to imperfective in Ancient Greek via blocking

IAN HOLLENBAUGH
UNIVERSITY OF CALIFORNIA, LOS ANGELES

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“Let me say straightaway that for all the acute and careful attention that has been paid to the use of the aorist and imperfect, we have yet to achieve a full understanding of them.” (Wackernagel, 1926–8 [2009]:221)

1 Introduction

1.1 Two robustly attested grammaticalization pathways for tense–aspect gram types are given in (1) (see especially Bybee et al. 1994, Deo 2015, and Condoravdi and Deo 2014).

- (1) a. STATIVE-RESULTATIVE » PERFECT » PERFECTIVE, SIMPLE PAST
b. PROGRESSIVE » GENERAL IMPERFECTIVE

1.2 These pathways have in common that they are “unidirectional” and “uniformly generalizing,” with the semantics of each gram type weakening over time, not strengthening (ibid.:261–2).

1.3 The development of the Imperfect (Ipf.) within the history of Greek poses a challenge to the generalization in (1b), in that its meaning seems to become more specific over time rather than more general (Johanson 2000:95, 98–9).

1.4 The Greek Imperfect(ive) is thus typologically aberrant and cannot be accounted for in terms of semantic weakening of the typical sort.

1.5 Its development can therefore best be explained by a pragmatic account of the data, with reference to the entire Greek past-tense system, particularly the Ipf.’s interaction with the Aorist (Aor.) and Perfect (Pf.), whose meanings *are* in flux (along the trajectory in (1a)).

2 Proposal

2.1 Following Hollenbaugh (2018), I assume that the Greek Imperfect started off life as what in the typological literature is called a “simple past” (i.e., aspectually neutral), while the Aorist was in Homer a kind of late-stage perfect, which I will call here an “emergent perfective”.

2.2 Though descriptions of the Imperfect at later stages of Greek seem to suggest that its meaning strengthens over time (from simple past to imperfective, cf. Goodwin 1889:7–8, 25), I will argue that, in fact, its denotation remains stable, at least until the end of antiquity.

2.3 Its apparent restriction over time is explained as a blocking phenomenon by the Aorist, which demonstrably becomes more and more grammaticalized as a perfective gram within the history of Greek.

2.4 In addition to accounting for the observed data, this pragmatic account maintains that Ancient Greek is, strictly speaking, not an exception to the typical semantic development in (1b).

3 Typological and theoretical preliminaries

3.1 What is imperfective aspect? What is an imperfective gram type?

3.2 There are basically three things one can mean when referring to “an imperfective,” in Table 1.ⁱ

Types:	1. General imperfective	2. Imperfective allows $t_E = t_A$	3. Imperfective allows $t_E \subset t_A$
Denotations:	$t_E \supset t_A$	$t_E \supseteq t_A$	$t_E \circ t_A$ ¹
Examples:	Central Semitic, Romance ²	Eastern Slavic ³	Sanskrit, Western Slavic ⁴

Table 1: Typology of imperfective grams

3.3 The pseudo-denotations in Table 1 are deliberately crude and intensely simplified, in order to give a “big picture” overview of the types. Far more sophisticated formalisms and analyses are available (e.g.) in Deo 2015, Condoravdi and Deo 2014, Altshuler 2014, Arregui et al. 2014, and Grønn 2008a, 2008b.

3.4 Typologically speaking, types 1 and 2 may be taken to constitute the imperfective gram type (cf. Ö. Dahl 1985:69–79), while type 3 represents the “simple past” gram type (Bybee et al. 1994:84–5, 92–5; Klein 1994:102; Comrie 1976:53, 55, 58).

3.5 The difference between type 3 and the other two types is that type 3 is regularly used in sequential narration—a reading called “concentrative” ($t_E \subset t_A$), of the type *John got tired, then went to bed*.ⁱⁱ

3.6 The difference between types 1 and 2, in my view, hinges fundamentally on a single reading, called the “complexive” ($t_E = t_A$), of the type *John slept for four hours*.

3.7 It is this reading that is captured by the coextension relation ($t_E = t_A$),ⁱⁱⁱ in which the entire span of t_A is saturated by t_E (applied to an atelic eventuality), as exemplified by (2).

(2) COMPLEXIVE READING

καὶ ἐβασίλευσε_[AOR.] ἕτεα δώδεκα (Hdt. I.16.1).

‘And he **reigned**_[AOR.] for twelve years’.

3.8 As shown by Janda and Fábregas (2019) and Ö. Dahl (1985:74–7), examples like (2) are obligatorily encoded by the Imperfective in Russian (and Eastern Slavic generally) but by the Perfective in Spanish (and Romance generally).

3.9 This amounts to a systematic difference across languages, as in Table 2.

	Imperfective	Perfective
1. Spanish	$t_E \supset t_A$	$t_E \subseteq t_A$
2. Russian	$t_E \supseteq t_A$	$t_E \subset t_A$

Table 2: Aspectual systems differing by complexive use

i. “Eventuality” refers to states and events taken together (Bach 1981, 1986). Assertion time (Demirdache and Uribe-Etxebarria 2000) is also called “topic time” (Klein 1994:36–58) or “reference time” (Reichenbach 1947), though precise notions vary (cf. Ramchand 2018:106–7).

ii. Sequential narrative contexts “represent the perfective reading par excellence” (E. Dahl 2010:78).

iii. It is sometimes assumed that the coextension relation ($t_E = t_A$), with an event cardinality greater than 1, represents the habitual reading (e.g., *ibid.*:71–2). However, Klein (1994:108) and Arche (2006:173) treat this as a proper inclusion relation ($t_E \supset t_A$), while others have modal analyses for the habitual (and progressive) (e.g., Boneh and Doron 2010:343, 358–60, 362–3, Arregui et al. 2014:317, 343).

- 3.10 In other words, the Russian Imperfective is slightly “weaker” than the Spanish Imperfective, while the Spanish Perfective is slightly “weaker” than the Russian Perfective.
- 3.11 Accordingly, Spanish encodes complexive readings by means of its Perfective morphology, while Russian does so with its Imperfective.
- 3.12 Whichever form has the stronger denotation blocks the application of the semantically weaker form in just those cases where the stronger form can apply.
- 3.13 This is also true in languages that have a simple past tense standing in contrast to a perfective, where the complexive use falls to the Perfective (Dickey 2015:30), which is the semantically stronger form, as shown in Table 3.

	“Imperfective”	Perfective
Western Slavic	$t_E \circ t_A$	$t_E \subseteq t_A$

Table 3: Western Slavic aspect

- 3.14 As shown by Hollenbaugh (2018), Homeric Greek has an aspectual contrast of the type in Table 4.^{iv}

	“Imperfect” (= simple past)	“Aorist” (= emergent pfv.)
Homeric Greek	$t_E \circ t_A$	$t_E \subset t_A$

Table 4: Homeric aspect

- 3.15 Accordingly, the complexive reading (i.e., coextension of t_E and t_A) seems to be expressed predominantly (or exclusively?) by the Imperfect in Homer, as (3) shows.^v

- (3) *παννύχιοι μὲν ἔπειτα κάρη κομόωντες Ἄχαιοι
δαίνονται, Τρῶες δὲ κατὰ πόλιν ἠδ’ ἐπίκουροι
παννύχιος δέ σφιν κακὰ μῆδετο μητίετα Ζεὺς
σμερδαλέα κτυπέων.* (Hom. *Il.* VII.471–482).

‘Then, all night long the long-haired Achaeans **feasted**, and the Trojans likewise throughout the city, and their allies; and all night long Zeus, the counsellor, **plotted harm** against them, thundering terribly.’

- 3.16 The basic claim of this talk is that, in terms of usage, the “Western Slavic type” Imperfect found in Homeric Greek (type 3 in Table 1) develops into an “Eastern Slavic type” (type 2) at least by the end of the Classical period. This ends up as a “Romance/Semitic type” (type 1) Imperfective in Medieval and Modern Greek, as shown in Table 5.

	Stage I: Homeric	»	Stage II: Classical	»	Stage III: post-Classical	»	Stage IV: Medieval/Modern
Imperfect	$t_E \circ t_A$	»	$t_E \circ t_A$	»	$t_E \supseteq t_A$	»	$t_E \supset t_A$
Aorist	$t_E \subset t_A$ (no complexive Aor.)	»	$t_E \subseteq t_A$ (gain complexive Aor.)	»	$t_E \subseteq t_A$ (lose sequential Ip.)	»	$t_E \circ t_A^5$ (lose complexive Ip.) ⁶

Table 5: Development of Greek aspect

iv. The denotation of the Aor. is more complicated than what is relevant to show in Table 4; see (11) and accompanying discussion below for a more detailed account.

v. So conclude Purdie (1898:70) and Jacobsohn (1933:307–8), with few possible exceptions, discussed in n.27 below.

	Stage I: Homeric	»	Stage II: Classical	»	Stage III: post-Classical	»	Stage IV: Medieval/Modern
Imperfect	simple past	»	simple past	»	imperfective ⁷ (type 2)	»	imperfective ⁸ (type 1)
Aorist	(emergent perfective ⁹	»	perfective (type 1)	»	perfective (type 1)	»	simple past
Perfect ¹⁰	stative-resultative	»	perfect	»	perfective (type 2)	»	☠

Table 6: Typological categories (i.e., “gram types”) in the diachrony of Greek aspect

3.17 The change in usage of the Ipf. does not entail a change in its denotation during the Ancient Greek period, since at Stages I–III the Imperfect is never *incompatible* with concentrative use (i.e., $t_E \subset t_A$).

3.18 Thus, the Koinē Imperfect is semantically identical to the Homeric Imperfect, even if its range of application has been pragmatically restricted in the manner shown in Tables 5–6.

4 Data

4.1 Homeric[/Archaic] Greek (c.700–500 BCE)

4.1.1 In overview, the readings available to the Homeric tense–aspect stems are in Table 7. In curly braces are the situation types compatible with a particular “reading.”

	AORIST	IMPERFECT	PERFECT / PLUPERFECT
1.	stative ¹¹ {states}	continuous {states}	stative ¹² {non-activities}
2.	×	progressive-conative {events}	intensive-frequentative ¹³ {events}
3.	resultative/“hot news” {telic}	? ¹⁴	[resultative/“hot news”?] ¹⁵ {telic}
4.	experiential ¹⁶ {any}	? ¹⁷	experiential ¹⁸ {any}
5.	×	×	[universal?] ²⁰ {any?}
6.	concentrative-sequential ²¹ {events}	concentrative-sequential ²² {events}	[concentrative?] ²³ {events}
7.	counter-sequential {events}	counter-sequential ²⁴ {events}	×
8.	inceptive ²⁵ {states}	inceptive ²⁶ {any}	×
9.	? ²⁷	complexive ²⁸ {non-achievements}	×
10.	iterative-pluractional ³⁰ {telic}	iterative-pluractional ³¹ {telic}	×
11.	distributive-pluractional {any}	distributive-pluractional {any}	×
12.	gnomic {non-activities} ³²	past habitual {events}	empiric-generic {any} ³³
13.	past counterfactual {any}	past counterfactual ³⁴ {any}	×
14.	[performative?(×)] ³⁵	×	×
15.	[for future?] ³⁶ {telic}	×	? ³⁷

Table 7: Attested readings of the past-tense aspect stems in Homeric Greek

(4) STATIVE USE OF THE AOR. IND. IN HOMER

μή ἔρρεθε, σχετλίη, μή χωσαμένη σε μεθείω,
τὼς δέ σ' ἀπεχθήρω ὡς γῶν ἔκπαυλ' ἐφίλησα (Il. III.414–5).^{vi}

vi. Similarly Hom. Il. v.423, XIII.430, Od. VIII.481, among others that could mean ‘have come to love’ (resultative/inceptive (e.g. Il. XXIII.306)) or ‘loved’ (past-state (e.g., Il. IX.477, Od. VIII.63)—a reading also available to the Ipf. (ἐ)φίλειον (e.g., Il. IX.343)).

‘Don’t provoke me, stubborn woman, lest having been angered I cut you loose,
and I come to despise you so terribly as I currently **love**_[Aor.] you’.

[NB: #‘have come to love/been loving’]

(5) SEQUENTIAL IPF. IN HOMER

Ἄτρεϋς δὲ θνήσκων ἔλιπεν_[AOR.] πολύαρνι Θυέστηι,
αὐτὰρ ὁ αὖτε Θυέστ’ Ἀγαμέμνονι λείπε_[IPF.] φορῆναι (II. II.106–7).

‘And Atreus, upon his death, left_[Aor.] [the scepter] to Thyestes rich in flocks, and Thyestes
in turn left_[IPF.] it for Agamemnon to bear’ (ex. from Wackernagel 1926–8 [2009]:235).^{vii}

4.2 Classical Greek (c. 500–300 BCE)

4.2.1 In overview, the readings available to the Classical tense–aspect stems are in Table 8. Innovations are in bold.

	AORIST	IMPERFECT	PERFECT/PLUPERFECT
1.	stative ? ³⁸	continuous	stative
2.	[conative?] ³⁹ {telic}	progressive-conative	[(non-productive)]
3.	resultative/“hot news”	? ⁴⁰	resultative/“hot news” {telic}
4.	experiential ⁴¹	(present) experiential ⁴² {any}	experiential
5.	universal(?) ⁴³ {atelic}	universal ⁴⁴ {any}	universal ⁴⁵ {atelic(?)}
6.	concentrative-sequential ⁴⁶	concentrative-sequential ⁴⁷	concentrative(-sequential) ⁴⁸ {events}
7.	counter-sequential	counter-sequential ⁴⁹	counter-sequential ⁵⁰ {events}
8.	inceptive	inceptive ⁵¹	inceptive ⁵² {any}
9.	complexive ⁵³ {states}	complexive {non-achievements}	×
10.	iterative-pluractional	iterative-pluractional	×
11.	distributive-pluractional	distributive-pluractional	×
12.	gnomic	habitual	empiric-generic ⁵⁴
13.	past counterfactual	present(/past) counterfactual ⁵⁵	×
14.	performative ⁵⁶ {events}	×	×
15.	for future ⁵⁷ {telic}	×	for future ⁵⁸ {events}
16.	egressive ⁵⁹ {accomplishments}	×	×

Table 8: Attested readings of the past-tense aspect stems in Classical Greek

4.2.2 Despite the fact that the Classical Greek IpF. and Aor. share several of the same “uses,” there is partial complementary distribution according to situation type, at least for some of their uses.

4.2.3 In general, the Aorist has inceptive uses only to state predicates (Smyth 1956:430, Rijksbaron 2002:20–1). The same appears to be true of the complexive use (cf. Basset 2009:214).

4.2.4 By contrast, the inceptive use of the IpF. may occur with any situation type (Hollenbaugh 2019). The same is true of its complexive uses, as shown in (6), which has an activity (or accomplishment?) predicate.^{viii}

vii. On this example, cf. Crespo 2014:74: “The conclusion to be drawn is that the imperfect may refer to an action that is either simultaneous *or* *subsequent* to the action denoted by the aorist” (emphasis mine). Despite Chantraine’s (1958 [2015]:224–5) (entirely *ad hoc*) claim that the Imperfect is used for an event that has lasting effects, we might, if anything, rather expect a resultative *Aorist* to refer to Agamemnon in (5), who is still alive and bearing the scepter at time of utterance (cf. Friedrich 1974:10). Note too that the Present participle θνήσκων must be read as concentrative/anterior here: ‘having died’.

viii. Citations from Herodotus of complexive uses of the IpF. according to situation type are as follows: activity (II.175.3, v.68.2), accomplishment (VII.20.1), state (I.18.1–3, I.46.1, I.106.1, I.166.1, II.140.2, IV.95.4, IV.158.1, v.55.1).

(6) COMPLEXIVE IPF. IN CLASSICAL GREEK

οἴκημα μουνόλιθον ἐχόμισε_[AOR.] ἐξ Ἐλεφαντίνης πόλιος, καὶ τοῦτο ἐχόμιζον_[IPF.] μὲν ἐπ’ ἕτεα τρία... (Hdt. II.175.3).

‘He (Amasis) **transported**_[AOR.] from Elephantine a house made of a single stone, and they **transported**_[IPF.] it for three years...’ (ex. and tr. Wackernagel 1926–8 [2009]:234: “i.e. they were occupied with its transport for three years”).

4.2.5 (7) shows a complexive Aor. to a state predicate beside a complexive IpF. to an activity predicate.

(7) COMPLEXIVE AOR. AND IPF. IN CLASSICAL GREEK

Ψαμμήτιχος δὲ ἐβασίλευσε_[AOR.] Αἰγύπτου τέσσερα καὶ πενήκοντα ἕτεα, τῶν τὰ ἐνὸς δέοντα τριήκοντα Ἄζωτον τῆς Συρίας μεγάλην πόλιν προσκατήμενος ἐπολιόρκεσε_[IPF.], ἐς ὃ ἐξείλε. (Hdt. II.157.1).

‘Then Psammetichus **ruled**_[AOR.] Egypt (so they say) **for fifty-four years**. **For twenty-nine** of these (years) he **besieged**_[IPF.] Azotus, a great city in Syria, until he took it’ (ex. and relevant tr. Basset 2009:213–4).^{ix}

4.2.6 The IpF. in concentrative-complexive use remains common until the late Classical period. The use of the IpF. in sequential narration is, in fact, *preferred* to the Aor. in history (Rijksbaron 2019).^x

(8) SEQUENTIAL IPF. IN CLASSICAL GREEK

οὕτω δὴ μουνωθέντες Λακεδαιμόνιοι καὶ Τεγεῆται... ἐσφαγιάζοντο_[IPF.] ὡς συμβαλέοντες Μαρδονίῳ καὶ τῇ στρατιῇ τῇ παρεούσῃ. καὶ οὐ γὰρ σφι ἐγίνετο_[IPF.] τὰ σφάγια χρηστά, ἐπιπτον_[IPF.] δὲ αὐτῶν ἐν τούτῳ τῷ χρόνῳ πολλοὶ καὶ πολλῶ πλεονες ἐτρωματίζοντο· φράζαντες γὰρ τὰ γέροντα οἱ Πέρσαι ἀπίεσαν_[IPF.] τῶν τοξευμάτων πολλὰ ἀφειδέως... (Hdt. IX.61.2–3).

‘In just this way, having been left alone, the Lacedaemonians and the Tegeans... **offered sacrifice**_[IPF.] for the benefit of their joint attack on Mardonius and the army that was with (him). For their sacrifices **did not turn out**_[IPF.] favorable, and in this time many of them **fell(-dead)/died**_[IPF.] and by far more **got/were wounded**_[IPF.]; for the Persians, having barricaded with their shields, **(had) shot out**_[IPF.] an abundance of arrows unsparingly’.

(9) SEQUENTIAL IPF. IN CLASSICAL GREEK

ἐκεῖθεν δὲ τῇ ὑστεραία ἐπλευον_[IPF.] οἱ Ἀθηναῖοι ἐπὶ Κύζικον. οἱ δὲ Κυζικηνοὶ τῶν Πελοποννησίων καὶ Φαρναβάζου ἐκλιπόντων αὐτῆν ἐδέχοντο_[IPF.] τοὺς Ἀθηναίους· Ἀλκιβιάδης δὲ μείνας αὐτοῦ εἴκοσιν ἡμέρας καὶ χρήματα πολλὰ λαβὼν παρὰ τῶν Κυζικηνῶν, οὐδὲν ἄλλο κακὸν ἐργασάμενος ἐν τῇ πόλει ἀπέπλευσεν εἰς Προκόννησον. ἐκεῖθεν δ’ ἐπλευσεν_[AOR.] εἰς Πέρηνθον καὶ Σηλυμβρίαν (Xen. *Hell.* I.1.19–20).

‘From there (*Proconnesus*) the Athenians (*with Alcibiades*) **sailed**_[IPF.] on the next day against Cyzicus. The Cyzicenes, now that the Peloponnesians and Pharnabazus had evacuated the

ix. The fact that the IpF. precedes an ‘until’-clause may be relevant. On the Russian Imperfective being licensed by “time until,” where Spanish has the Perfective, see Janda and Fábregas 2019:705–7.

x. Delbrück (1879:103–6) even asserts that “der Aorist der Griechen nie ein Tempus der Erzählung gewesen” (‘the Aorist of the Greeks has never been a tense of narration’) (cf. also Wackernagel 1926–8 [2009]:235).

city, **admitted**_[IPF.] them. There Alcibiades stayed for twenty days, and obtained a great deal of money from the Cyzicenes, but without doing any further harm in the city, he sailed_[AOR.] back to Proconnesus' (ex. and tr. Emde Boas et al. 2019:429).

4.3 Post-Classical Greek (Hellenistic Koinē and Roman-Greek) (300 BCE–450 CE)

4.3.1 In overview, the readings available to the post-Classical tense–aspect stems are in Table 9. Innovations are in bold.

	AORIST	IMPERFECT	PERFECT/PLUPERFECT
1.	× ⁶⁰	continuous	stative
2.	×	progressive-conative	×
3.	resultative/“hot news”	×	resultative/“hot news”
4.	experiential ⁶¹	× (?)	experiential
5.	universal(?) ⁶²	[past universal?] ⁶³	universal
6.	concentrative-sequential ⁶⁴	concentrative(-sequential?)	concentrative-sequential ⁶⁵
7.	counter-sequential ⁶⁶	counter-sequential ⁶⁷	counter-sequential ⁶⁸
8.	inceptive ⁶⁹	inceptive ⁷⁰	[inceptive?]
9.	complexive ⁷¹	× (?) ⁷²	×
10.	iterative-pluractional	iterative-pluractional ⁷³	×
11.	distributive-pluractional ⁷⁴	distributive-pluractional ⁷⁵	×
12.	gnomic ⁷⁶	habitual	empiric-generic ⁷⁷
13.	past counterfactual	present(/past) counterfactual ⁷⁸	×
14.	performative ⁷⁹	×	×
15.	for future ⁸⁰	×	for future (rarely) ⁸¹
16.	[egressive?]	×	×

Table 9: Attested readings of the past-tense aspect stems in post-Classical Greek

4.3.2 By the post-Classical period (or even in late Classical), the Ipf. in concentrative use is virtually restricted to verbs of communication, above all ἔλεγεν/-ον ‘said’ (*BDF*:169–70, Wallace 1996:541–2, Robertson 1923:882–4), as still in Modern Greek (Hedin 2000:256–8).

4.3.3 However, there are some examples that seem genuinely sequential, as in (10).^{xi}

(10) SEQUENTIAL IPF. IN POST-CLASSICAL GREEK

ἄλλα δὲ ἔπεσεν_[AOR.] ἐπὶ τὴν γῆν τὴν καλὴν καὶ ἐδίδου_[IPF.] καρπὸν.

‘But other seed fell_[AOR.] on good soil and **produced**_[IPF.] a crop’ (Mt. 13:8).

4.3.4 The complexive use of the Ipf. has also essentially disappeared by the end of this period.

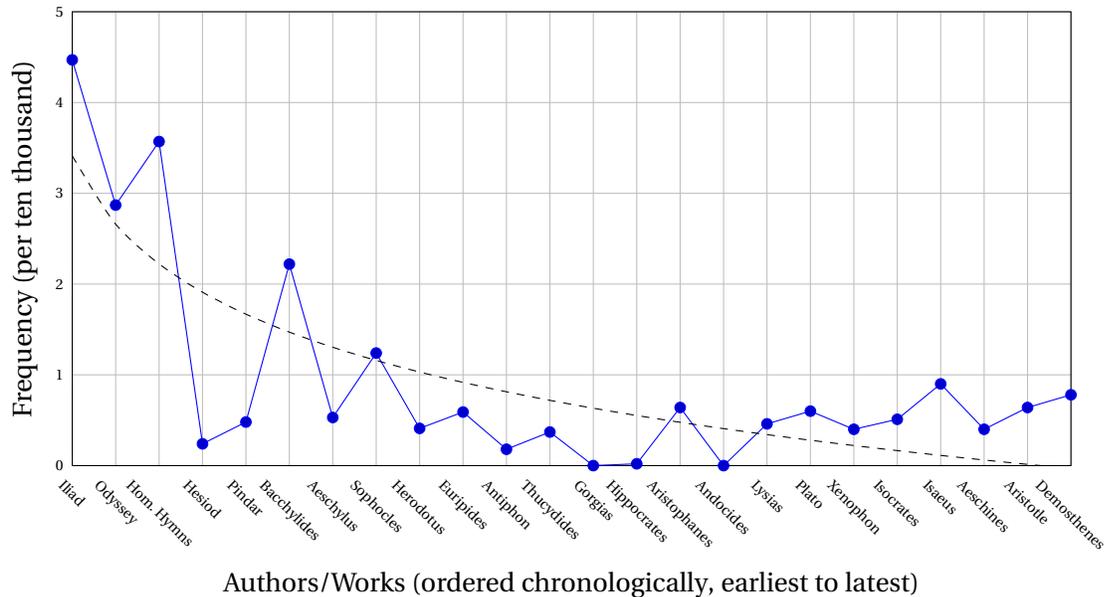
4.4 “Aoristic Drift”

4.4.1 As seen above, the Aorist loses its stative use^{xii} and gains the complexive and future reading in the course of Greek.

xi. This differs from the (syntactically) much more restricted “narrative” use of the Imperfect in Modern Greek and Romance (cf. Hedin 2000:255–6, 262–3).

xii. On the stative reading as a use of the *perfect* aspect, see Kiparsky 2002:113.

- 4.4.2 Hollenbaugh (2018) has claimed that the Aorist in Homer expresses perfect aspect, at least more readily than in later Greek.^{xiii}
- 4.4.3 One way to check this claim and track its validity over the history of Greek is to search for Aorist forms in contexts that are especially conducive to perfect interpretation.
- 4.4.4 The most reliable is the adverb $\nu\upsilon\nu$ ‘now’, since it can only refer to the present moment (unlike other Greek adverbs meaning ‘now’). Its occurrence within 5 words of an Aorist indicative is given below, in rough chronological order by author.^{xiv}

Figure 1: $\nu\upsilon\nu$ ‘now’ within 5 words of Aor. ind.

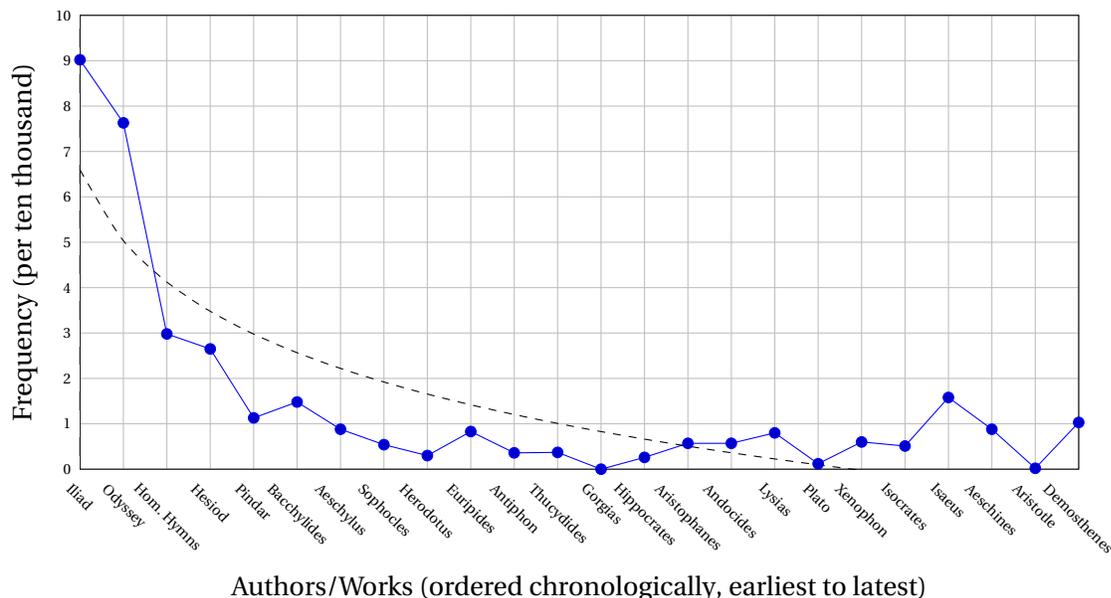
$$r(22) = -0.776395689, p < .001$$

- 4.4.5 As can be seen, there is a general downward trend in the frequency of the Aorist indicative under the scope of $\nu\upsilon\nu$ ‘now’, which has resultative (or experiential) perfect readings ‘have (as of) now done/been X’.
- 4.4.6 Similar trends can be observed for the Aorist in relative past or anterior contexts (type ‘had done X’), in searches within 5 words of the conjunctions $\delta\tau\epsilon$ and $\epsilon\pi\epsilon\iota(\delta\eta)$, both meaning ‘when’.

xiii. That this perfect meaning of the Aorist is inherited is confirmed by comparison to Indo-Iranian and Old Russian, among others (see Schwyzer–Debrunner:277, 281–2). Kiparsky (1998:39, 41–3, 45–6; 2005:227–8) claims that the Vedic Aorist denotes specifically resultative perfect aspect, though universal perfect uses of the Aor. are described by Hoffmann (1967:156–7), E. Dahl (2010:289–90, 299–300), and Delbrück (1897:279). A stative reading of the Aor. may occur at *Rgveda* VIII.47.18d, 48.11b (*ābhāṣmal-uḥ* ‘we/they are afraid’) and, with the injunctive, II.3.10a (*ūpa sthād* ‘is standing by’) (cf. *ibid.*:239). The experiential perfect seems to be expressed in the *Rgveda* almost exclusively by the Perfect, though some clear Aor. examples are attested (cf. E. Dahl 2010:299–300) (e.g., with the injunctive: *sanātā nā dūduṣat* ‘he has never corrupted’ (III.3.1d); with the indicative: *āvidat* ‘has (never) found’ (I.53.1c), *āvidhat* ‘has (ever) done honor’ (II.26.4a, VI.54.4a), *ākārīt* ‘has (ever) paid tribute’ (IV.39.3a)). A similar situation holds for Homeric, where the resultative reading predominates yet one can also find (at least) experiential and stative perfect uses (cf. Table 7 above and Hollenbaugh 2018:33). The resultative usage persists in the Modern Greek Aor., which also has some stative and performative uses (Thumb 1912:123), though it is unclear whether these are inherited or redeveloped (cf. Schwyzer–Debrunner:282).

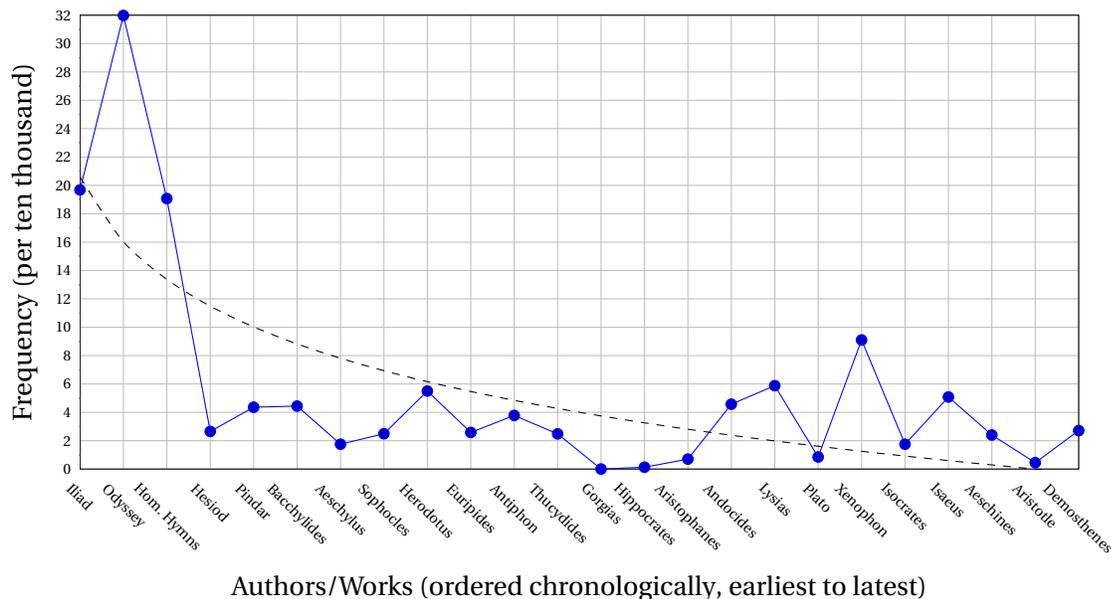
xiv. Data retrieved from *Perseus under PhiloLogic*.

Figure 2: ὄτε ‘when’ within 5 words of Aor. ind.



$r(22) = -0.83137452, p < .001$

Figure 3: ἐπεὶ(ὄῃ) ‘when’ within 5 words of Aor. ind.



$r(22) = -0.721238917, p < .001$

4.4.7 The data suggests that the Aorist is used less and less in characteristically “perfect” contexts over time (though it never becomes *incompatible* with such contexts).

4.4.8 This is in part due to the fact that the morphological Perfect is also moving along the “perfective cline” (as shown by Gerö and Stechow (2003)), partially blocking the application of a number of uses formerly expressed by the Aorist (such as resultative and relative past) and restricting its use largely to sequential narration^{xv} and complexive (see Purdie 1898).

xv. “The perfect was dropped in later Greek...after it had earlier competed in vain with the aorist as a narrative tense”

- 4.4.9 This in turn puts pressure on the Imperfect not to be used in sequential narration.^{xvi}
- 4.4.10 As a result, the Aorist becomes more and more the default tense of narrative sequencing in the past, in preference to the Imperfect.^{xvii}
- 4.4.11 This distribution, beginning already in Homer, is categorical by the time of post-Classical (Koinē) Greek (Browning 1983:29, 34).
- 4.4.12 This diachronic development is stated explicitly by Delbrück (1879:114): “Es ist. . . gezeigt, dass das Imperfectum das altüberlieferte Tempus der Erzählung ist, dass aber im Griechischen der Aorist demselben immer mehr Terrain ab hat” (‘It is shown that the Imperfect is the ancient tense of the narrative, but that in Greek the Aorist gains more and more ground from it’).

4.5 Other trends conspiring to effect the simple past to imperfective shift

- 4.5.1 The inceptive Aor. and Ip. become increasingly common (Hollenbaugh 2019, Friedrich 1974:10, Wallace 2006, Jacobsohn 1933:308–9),^{xviii} as does the complexive Aor. (ibid.:305–10, Schwyzer–Debrunner:281).^{xix}
- 4.5.2 In other words, the Aor. to state predicates is increasingly used in past narratives.
- 4.5.3 Meanwhile, the complexive Imperfect disappears, as (apparently) does its experiential use.^{xx}
- 4.5.4 The Imperfect is not used for present counterfactual conditions until after Homer, when it becomes the *regular* way of marking present counterfactuality.
- This is in line with a cross-linguistic observation of Iatridou’s (2000:239, 244–245) that past-tense imperfectives tend to express counterfactuality only in the present time (type ‘if she were doing X. . .’).
 - That the Homeric Ip. lacks this use is unsurprising if it was not yet an imperfective (semantically or otherwise) (cf. Hollenbaugh 2018:2, 32).
- 4.5.5 The post-Homeric Ip. is thus more in line with a canonical imperfective than its predecessor.
- 4.5.6 The concentrative-sequential Ip. becomes more and more restricted both lexically and in frequency of use.

(BDF:176).

xvi. That the concentrative-sequential Ip. is inherited into Greek is strongly supported by comparison to Indo-Iranian, Anatolian, Slavic, and other IE languages (see, e.g., Wackernagel 1926–8 [2009]:235, Schwyzer–Debrunner:276–7, and Hollenbaugh 2018; cf. Kühner–Gerth:144). Rijksbaron (2019), Basset (2009:218–9), and Delbrück (1897:103–6) view the Ip. as *the* (unmarked) tense of sequential narration in Classical Greek, while the Aor. always contributes some other nuance (cf. n.x, n.xxv, and n.xxviii).

xvii. On the sequential-narrative use of the Aor. as a secondary development of Greek, see Purdie 1898:68.

xviii. For instance, to βασιλεύω ‘reign’ I find only one inceptive in Homer, which is Ip. (*Od.* 19.178–9: ἐννέωρος βασιλεύει ‘he started ruling at nine years old’), despite Jacobsohn’s (1933:309) denial of such an example. The Aor. ἐβασίλευσε becomes common only later in this meaning. Further, of the pair ἴσχυσαν (Aor.) and ἴσχυον (Ip.) (respectively meaning, according to Jacobsohn (1933:308) ‘they gained power’ and ‘they came to power’) the earliest inceptive example is the Aor. at Dem. 9.23 (‘gained some authority’). The Ip. does not occur in clearly inceptive meaning, so far as I can discern, until *Septuagint* (Ex. 1:12, 20) and the *New Testament* (Acts 19:20).

xix. Purdie 1898 concludes that the complexive use is rare in Homer but becomes “the main one pertaining to the Aorist in later Greek” (152–3), beginning already in Classical and categorical by the time of Polybius (post-Classical). She comes to this conclusion despite having a more permissive definition of complexive (which she calls “constative”) than the one I have adopted here, thus leading her to adduce a greater number of possible examples of complexive Aorists in Homer (cf. n.27).

xx. Despite Jacobsohn 1933:305, the Ip. of βασιλεύω ‘reign’ *never* occurs with ἔτη ‘years’ (confirmed by a *TLG* search), though the Present infinitive does (see (18) below and cf. Basset 2009:215, 217).

4.5.7 Nevertheless, at no period, from Homer to the Koinē, is the Imperfect *incompatible* with concentrative-complexive usage or canonical “perfective” contexts, as Wackernagel (1926–8 [2009]:235) is careful to observe.

Often, **particularly in early Greek and later in the most polished prose**, to our way of thinking **imperfect and aorist are used completely interchangeably** in reports about the past. . . Homer has in fact many imperfects which serve as straightforward narrative forms, without depicting the action or the process any more than the corresponding aorist. We simply have to recognize, especially in view of comparison with related languages, above all Sanskrit, that **the imperfect was often the narrative tense**, just as later Herodotus and Thucydides generally use the imperfect in plain narrative. The most that we can say, if we wish to draw a distinction between the two, is that occasionally **the aorist denotes more the culmination** of a series of actions or processes, while their actual performance is expressed in the imperfect. (Emphasis added.)

5 Analysis

5.1 Specifying the stages

The denotations at the various stages outlined above are in need of some refinement in order to adequately account for exactly those readings available to each tense–aspect stem at each stage.

5.1.1 Aorist semantics

5.1.1.1 In Homer, the Aor. must be compatible with perfect readings, including stative, while also being compatible with the concentrative usage BUT NOT the complexive reading.

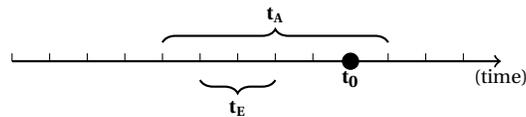
(11) EMERGENT PERFECTIVE DENOTATION OF THE AORIST INDICATIVE FOR HOMERIC GREEK

Aorist indicative: $[\lambda P \lambda t_A. \exists e (t_E(e) \subset t_A \wedge t_E \leq t_0 \wedge P(e) = 1)]$

For some eventuality e , **eventuality time t_E is properly included in assertion time t_A , and the eventuality time at least partially precedes the local evaluation time t_0** (by default = utterance time), and the proposition is true.^{xxi}

5.1.1.2 (11) is compatible with $t_A \supseteq t_0$, which yields the present perfect readings, as shown in fig.4.

Figure 4: PERFECT aspect, experiential and resultative readings



5.1.1.3 (11) also allows t_E to overlap with t_0 , thereby permitting the stative perfect use (as well as the performative) wherein the target state of the eventuality overlaps with speech time (or some past-shifted t_0 , cf. n.11) (see Kiparsky 2002:120–1).

5.1.1.4 Crucially, (11) rules out the complexive reading, such that eventuality time and assertion time must not be coextensive ($t_E \neq t_A$).

xxi. For “local evaluation time,” see Stechow 1995:369 and E. Dahl 2010:56, also called “perspective time” (Kiparsky 1998:38, 2002:115).

- 5.1.1.5 The future use of the Aor. is also ruled out by $t_E \leq t_0$, such that t_E cannot follow utterance time.^{xxii}
- 5.1.1.6 Thus, (11) captures the observed readings of the Aor. while ruling out those not observed at the Homeric stage.
- 5.1.1.7 By Classical Greek, the Aor. has complexive as a use and is also compatible with future interpretation. A maximally permissive perfective denotation is accordingly assigned to the Aor. in (12). This constitutes a weakening of the semantics of the Aor.

(12) PERFECTIVE DENOTATION OF THE AORIST INDICATIVE FOR CLASSICAL GREEK

Aorist indicative: $[\lambda P.\lambda t_A.\exists e(t_E(e) \subseteq t_A \wedge P(e) = 1)]$

For some eventuality e , **eventuality time t_E is included in assertion time t_A** , and the proposition is true.

- 5.1.1.8 Finally, at the post-Classical stage, the stative and performative uses of the Aor. are no longer attested. This may be due to categorical blocking on the part of the Pf., which continues to allow stative as a use, rather than genuine semantic change (i.e., strengthening).^{xxiii} The denotation capturing this is in (13).

(13) PERFECTIVE DENOTATION OF THE AORIST INDICATIVE FOR POST-CLASSICAL GREEK

Aorist indicative: $[\lambda P.\lambda t_A.\exists e(t_E(e) \subseteq t_A \wedge t_E \not\subseteq t_0 \wedge P(e) = 1)]$

For some eventuality e , **eventuality time t_E is included in assertion time t_A , and the eventuality time does not include the local evaluation time t_0** (by default = utterance time), and the proposition is true.

- 5.1.1.9 In Modern Greek, the Aor. has apparently weakened still further to a simple past^{xxiv} (Hedin 2000:227–8)—a typological development hypothesized by Bybee et al. (1994:92–4).

(14) SIMPLE PAST DENOTATION OF THE AORIST INDICATIVE FOR MODERN GREEK

Aorist indicative: $[\lambda P.\lambda t_A.\exists e(t_E(e) \circ t_A \wedge P(e) = 1)]$

For some eventuality e , **eventuality time t_E overlaps with assertion time t_A** , and the proposition is true.

xxii. However, t_0 may perhaps be “future shifted” in an example or two after an ‘if’-clause in the *Iliad* (cf. n.36).

xxiii. Some support for this view (i.e., usage restricted by blocking rather than semantic change) comes from the fact that Modern Greek has at least the stative and performative use of the Aor. for certain predicates (Thumb 1912:123, Schwyzer-Debrunner:282 and cf. n.xiii above). In addition, post-Classical Greek seems to have occasional universal perfect uses (e.g., Jn. 15:9; cf. n.62), which also requires t_E to overlap with t_0 . According to Joseph (2000:324), after the loss of the synthetic Perfect in Medieval Greek until the Early Modern period (early 17th century CE) the Aorist indicative was re-recruited for use as a present perfect. This implies that the denotation of the Aor. was at no stage incompatible with perfect readings, though its actual use in such contexts fluctuated over time, depending on the state of the rest of the verbal system at any given stage. In Modern Greek, where an analytic Perfect is firmly in place, the Aor. nevertheless remains strongly preferred for conveying perfect aspect, with either past or present reference (Thumb 1912:125–6, 162–3).

xxiv. However, the fact that the Aor. indicative in Modern Greek can still be used with future reference (ibid.:123) is problematic for the view that it is a past tense, as (to a lesser extent) are its persistent stative and performative uses (ibid.). Yet all such readings are entirely expected for a perfective gram, which strongly suggests that the Modern Greek Aor. is not a simple past but remains a perfective (type 2: $t_E \subseteq t_A$). Further support for this view is that, as far as I can determine, the Modern Greek Aor. lacks continuous, habitual, and progressive uses (i.e., canonical “imperfective readings”), which would be expected—at least in some environments—for an aspectually neutral simple past tense.

5.1.2 Imperfect semantics

5.1.2.1 As for the Ipf., its denotation remains, for the duration of Ancient Greek, that of a simple past, as defined in (15).

(15) SIMPLE PAST DENOTATION OF THE IMPERFECT FOR ANCIENT GREEK (STAGES I–III)

Imperfect indicative: $[\lambda P.\lambda t_A.\exists e(t_E(e) \circ t_A \wedge P(e) = 1)]$

For some eventuality e , **eventuality time** t_E overlaps with assertion time t_A , and the proposition is true.

5.1.2.2 Such a denotation allows for sequential narration and complexive use, both found abundantly in Homer.

5.1.2.3 Though these uses survive into the Classical period, they become increasingly restricted in the ways described above until by the late/post-Classical period the Ipf. is dispreferred in sequential narration while still having the complexive use ($t_E \supseteq t_A$).

5.1.2.4 In post-Classical Greek, the Ipf. comes to apply almost exclusively in “canonical” imperfective contexts ($t_E \supset t_A$), being regularly neither concentrative-sequential nor complexive.

5.1.2.5 That its denotation has not changed is shown by the exceptions to the above generalizations at every stage, which, while increasingly infrequent, are there nonetheless (e.g., concentrative-complexive uses).

5.1.3 Imperfect pragmatics: Blocking, deblocking, and partial blocking

5.1.3.1 The blocking of the non-imperfective readings of the Ipf. may be captured with “Horn strategies” as applied to Russian by Grønn (2008b).

5.1.3.2 When two morphological forms compete for the same semantic space (due to partial overlap in meaning), the more specific form may block the application of the less specific form wherever it can apply.

5.1.3.3 This is because the more specific form is “weakly optimal” in some specialized meaning (in this case perfective).

5.1.3.4 When the Ipf. is used, the hearer infers that, if the speaker had meant to express perfective aspect, they would have done so with the form that *entails* the expression of that aspect (i.e., the Aor.) rather than implicating it (with the Ipf.).

5.1.3.5 In this way, the Ipf. becomes associated with imperfective aspect, inasmuch as its denotation allows for this meaning while the denotations of the other members of the Greek verbal system do not.

5.1.3.6 The Aor. thus comes to block to the application of the Ipf. in contexts that are not canonically imperfective.

5.1.3.7 Since this reasoning process applies synchronically, the blocking does not become categorical right away. The specific imperfective content associated with the Ipf. does not become conventionalized and associated with the truth-conditional content. Rather, the association builds gradually over a long period of time.

- 5.1.3.8 This lag in grammaticalization is due to various factors that favor or require the use of the Ipf. even in contexts where one might ordinarily expect a perfective.
- 5.1.3.9 This surfacing of the less specific form in a context that ordinarily calls for the more specific form is referred to as “deblocking” and “partial blocking” by Grønn (2008b).
- 5.1.3.10 Aside from lexical factors discussed in the next subsection (§5.2), some factors contributing to “deblocking” and “partial blocking” of the Ipf. are listed in (16).

(16) DEBLOCKING (a–b) AND PARTIAL BLOCKING (c) CONTEXTS

- a. **Avoidance of the Aor. for independent reasons:** The Ipf. is preferred in concentrative contexts where use of the Aor. would infelicitously require a resultative or relative past interpretation^{xxv} (cf. Altshuler 2014:765–70 and n.xxviii below).
- b. **Non-culmination:** The Ipf. surfaces in sequential narration when the event ceases to develop but does not necessarily culminate (preferred under certain QUDs, cf. §5.3 below and §4.5.7 above).
- c. **Distribution by situation type:** In Classical Greek, the use of the Ipf. for complexive and inceptive meaning is partially blocked by the Aor. for state predicates (cf. Hollenbaugh 2019). We *do* find the Ipf. used for some state predicates, but the Aor. is strongly preferred in this usage (and there is little overlap in the set of lexical items that occur to the Aor. in this use vs. those of the Ipf.) (cf. §4.2.3 above).

5.1.4 Semantic change: Medieval and Modern Greek Ipf.

- 5.1.4.1 Eventually, however, the association of the Ipf. with imperfectivity *does* appear to become conventionalized as part of the truth-conditional content of the morphological category.
- 5.1.4.2 At a certain stage, the “neutral aspect” of the Ipf. may not have been recoverable to learners, because the form would have applied almost exclusively in canonical imperfective contexts.
- 5.1.4.3 Hence, learners could understand its denotation to be that of a (type 1) imperfective gram ($t_E \supset t_A$), based on the available input data.
- 5.1.4.4 Thus, the Modern Greek Ipf. seems to express canonical imperfective aspect (Johanson 2000:95, 98–9), comparable in most respects to that of Romance (Hedin 2000:262–3).
- This appears to have taken place by the end of what I have been calling the post-Classical period, since there are said to be no traces of concentrative-complexive use of the Ipf. in Medieval and Modern Greek.

(17) GENERAL IMPERFECTIVE DENOTATION OF THE IMPERFECT FOR MODERN GREEK

Imperfect indicative: $[\lambda P.\lambda t_A.\exists e(t_E(e) \supset t_A \wedge P(e) = 1)]$

For some eventuality e , **eventuality time t_E properly includes assertion time t_A** , and the proposition is true.

xxv. Delbrück (1879:103–6) compares the situation to North German (followed in Hollenbaugh 2018:48–9): “ἐποίησε [Aor.] er hat gethan, aber ἐποίει [Ipf.] er that.” This also resembles the *have*-Perfect and simple Preterite distinction in English (*has done* vs. *did*). The Greek Aor. thus often carries a resultative meaning undesirable in plain narration, whereas the Ipf. lacks this.

5.1.5 Perfect semantics

- 5.1.5.1 By Hellenistic Greek, the Perfect was used “with indicative Aorist meaning” (Schwyzer–Debrunner:287–8).
- 5.1.5.2 Gerö and Stechow (2003) show that the Perfect follows the typical grammaticalization pathway (cf. (1a) above) from stative-resultative in Homer to perfect in Classical Greek to perfective in Hellenistic Greek, discussing its semantics at each stage in detail (which I will not repeat here).

5.2 Variation and paradigmatic limitations

- 5.2.1 As Wackernagel (1926–8 [2009]:222) observes, “we are absolutely not entitled to expect that every Greek verb is, in schoolbook terms, fully conjugated.”
- 5.2.2 Langslow (ibid.) in his footnote points out that “standard, predictable conjugation” is emergent within the history of Greek, arising between Homer and Attic (Classical).
- 5.2.3 Still, there are several verbs that do not conjugate fully (e.g., κείμαι ‘lie’), or for which one form or the other is unexpectedly rare (e.g., rare ἐκέλευσε beside frequent ἐκέλευε, both concentrative ‘ordered’).^{xxvi}
- 5.2.4 Besides paradigmatic and lexical restrictions, there does appear to be some degree of just plain competition, which could be called “free” variation (cf. Wackernagel quote above at §4.5.7).
- 5.2.5 Consider (18), which has two infinitives to the same verb *in the same meaning* (complexive), the first being Aor., the second being Present (Pres.).^{xxvii}

(18) VARIATION OF AOR. AND PRES. INFINITIVES

- a. βασιλευσαι_[AOR.INF.] δὲ τὸν Χέοπα τοῦτον Αἰγύπτιοι ἔλεγον πεντήχοντα ἔτεα (Hdt. II.127.1).

‘And the Egyptians said that Cheops **ruled**_[AOR.INF.] [Egypt] for fifty years’ (ex. from Basset 2009:215).

- b. τὸν δὲ Αἰθίοπα βασιλεύειν_[PRES.INF.] Αἰγύπτου ἐπ’ ἔτεα πεντήχοντα (Hdt. II.137.2).

‘And [they said that] the Ethiopian **ruled**_[PRES.INF.] Egypt for fifty years’ (ex. from ibid.:217).

- 5.2.6 (19) shows Homeric examples of single, momentary events of ‘placing’. The first employs the Ipf., the second the Aor. As (19a) shows, coordination of an Ipf. with an Aor. is possible (indeed common).

xxvi. For examples and discussion, see Wackernagel 1926–8 [2009]:222–4, 235–6

xxvii. Cf. (7) above for a similar example with the Aor. and Ipf. (Jacobsohn’s (1933:305) example of the Ipf. ἐβασίλευε with ἔτη ‘reigned for X years’ is in fact never attested (confirmed by a *TLG* search), though the Aor. indicative is common in this meaning after Homer (cf. (2) above)). For an example with the (present-referring) Aor. and the Present indicative (i.e., Soph. *Aj.* 270), see Wackernagel 1926–8 [2009]:226. In (18) the Aor. inf. marks culmination (the story continues with his death and succession by his brother), while the Pres. inf. may not (the story continues with his deeds as ruler). However, this is not true of all such examples (cf. again (7) above), and Basset (2009:213, 217–9) concludes that the exact opposite is true generally (i.e., the Aor. establishes a frame in which other events fall, while the Ipf./Pres. list individual events; with a similar point, see Wackernagel 1926–8 [2009]:234).

(19) IPF. AND AOR. OF τίθημι ‘PUT, PLACE’

- a. ὧς εἰπὼν ἐν χερσὶ τίθει_[IPF.], ὃ δὲ δέξαστο_[AOR.] χάριων
παῖδα φίλην (Hom. *Il.* 1.446–7).

‘Having thus spoken he (Odysseus) **put**_[IPF.] her (Chryseis) in his (Chryses’) hands, and rejoicing he (Chryses) received_[AOR.] his dear daughter’.

- b. Ἡρῆ δὲ χρύσειον καλὸν δέπας ἐν χερσὶ θήκει_[AOR.]
καὶ ῥ̄ εὖφρον_[AOR.] ἐπέεσσι· (Hom. *Il.* XXIV.101).

‘And Hera **put**_[AOR.] in her hand a fair golden cup, and spoke words of cheer_[AOR.].’^{xxviii}

5.2.7 Given two forms with overlapping semantics, it is entirely reasonable that there should be some degree of “speaker choice” or “interchangeability” of this sort, whereby two different forms are used in identical contexts.

5.3 Partitive operators: Culminating vs. ceasing to develop

5.3.1 Wackernagel (1926–8 [2009]) notes that in archaic (and later archaizing) Greek inscriptions, the creators of a piece of art often write ἐποίει (Ipf.) rather than ἐποίησεν (Aor.) to mean ‘[artist’s name] made (this)’.

5.3.2 Wackernagel claims that the former is used to mean ‘so-and-so worked on/did work on this’ (Ipf., partitive) vs. ‘So-and-so has produced/is the author of this’ (Aor., resultative) (ibid.:233–4).

5.3.3 The Ipf. seems to assert that “at least some X happened.” It could be that all X happened, or it could be that only some X happened, within the relevant assertion time interval.

5.3.4 Just as *some* in English is ambiguous between “only some” and “not none,” the Greek Ipf. is semantically ambiguous between the interpretation that \exists or \forall of a given eventuality takes place within a given assertion time.

5.3.5 By contrast, a canonical general imperfective (of, e.g., the Romance type) entails that $\neg\forall$ of the eventuality falls within the salient assertion time.

5.3.6 When the Ancient Greek Ipf. receives the interpretation (as determined by context and predicate type) that all of $t_E(e)$ falls within t_A (i.e., complexive or concentrative), there is no evidence to suggest that it entails culmination of the eventuality.

5.3.7 Therefore, I regard the Ancient Greek Ipf. as being compatible with interpretations that entail a cessation of development but not culmination.

5.3.8 The difference between “an event that *culminated* and an event that *ceased to develop further*” is discussed by Altshuler (2014:738, 747–50). It is illustrated by an example like (20).

(20) *John ate the cookie #but did not finish it.*

5.3.9 While (20) is illicit in English with the simple past, there are a number of languages whose perfective (or neutral) aspect grams allow such non-culmination of the event, even while allowing or requiring that the event has ceased to develop.

xxviii. Cf. similarly *Il.* XVIII.614–6, XXI.145, XXIII.750. Most often, though, the Aor. to this root is reserved for one of the following uses: resultative (*Il.* VI.357, XXIII.333), relative past (*Il.* 1.55, VIII.324), pluractional (*Il.* 1.2, IX.547), factitive (*Il.* II.482, XII.399, XXIII.263, 269, XXIV.538). By contrast, the Ipf. is typically used in sequential narration/plain concentrative use. On this pervasive distribution of Aor. and Ipf. to the same verb, see Delbrück 1879:103–6.

- 5.3.10 In such languages (e.g., Hindi, Tunisian Arabic), a sentence like (20) with the perfective would mean that John has stopped eating his cookie, he's had enough, but not necessarily that the cookie is all gone.
- 5.3.11 By contrast, languages like Russian (and English), whose perfective (or neutral) aspect grams entail culmination, require that the cookie be fully consumed (or else a different form would be used).
- 5.3.12 It is unclear whether the Aor. indicative *entails* culmination,^{xxix} but there is likewise no evidence to suppose that it represents a partitive operator.
- 5.3.13 The egressive reading, peculiar to the Aorist (Gildersleeve and Miller 1911:94 “Aorist of attainment”), is one strong piece of evidence to suggest that the Aorist designates culmination while the Ipf. does not.

(21) AOR. EGRESSIVE FOR ἀγωνίζομαι ‘CONTEND FOR A PRIZE’ (ACCOMPLISHMENT)

τί οὖν ἠγωνίζου_[IPE.] τι ἡμῖν· καὶ πῶς τι ἠγωνίσω_[AOR.]; (Plat. *Ion* 530a.8).

‘So what (of it)? Pray tell, **did you do some competing**_[IPE.]? And how **did you compete**_[AOR.]?’

[i.e., ‘how did it *turn out* for you, how did you *finish* or place in the competition?’]

- 5.3.14 If this is correct, then the Greek Aor. and Ipf. can be analyzed similarly to how Altshuler (2014) analyzes the Hindi “SV” (simple) Perfective and Russian Imperfective (partitive, non-culminating) vs. the Hindi “CV” (complex) Perfective (non-partitive, culminating).
- 5.3.15 The Classical Greek Aor. could thus be considered a genuine perfective gram, in that it “requires a *maximal stage* of an event[uality]” (ibid.:771), but a perfective of a specific kind, namely one that entails culmination.
- 5.3.16 The Classical Greek Ipf., however, cannot be a perfective (unlike the Hindi SV Perfective), since it does not require a maximal stage of an eventuality but only requires *a stage* and hence must be regarded as “imperfective” of some kind.
- 5.3.17 It is not quite like the Russian Imperfective either, though, in that it is regularly used in sequential narration (at least until post-Classical Greek).^{xxx}
- 5.3.18 Thus, while I find Altshuler’s (2014) claims extremely attractive, I see no way to avoid falling back on Smith’s (1997) and Grønn’s (2004) notion of neutral aspect for the Ancient Greek Ipf. ($t_E \circ t_A$), partitive though it may be (i.e., it is a partitive operator) and “imperfective” in that it does not require a maximal stage.^{xxxi}
- 5.3.19 Neutral and perfective aspect-denoting grams may thus entail culmination or not. Similarly, an imperfective gram may permit interpretations under which an event ceases to develop or not.

xxix. Wackernagel (1926–8 [2009]:235) certainly defines the Aor. in terms of culmination (cf. §4.5.7 above). On the other hand Purdie (1898:67–8) maintains that the Greek Aor. cannot be equated with the Russian Perfective due to the latter’s obligatory culmination effects and lack of complexive use. The inceptive reading would seem to speak against regarding culmination as an entailment of the Greek Aor., but this can be dealt with in ways that are not incompatible with such a semantics (see Bary and Egg 2012 and Hollenbaugh 2019). Various marginal readings (stative, conative, universal, etc.) may require further explanation to understand in what way they (can) fall out from a culmination entailment.

xxx. Basset (2009:218–9) even goes so far as to conclude that, in Herodotus anyway, the Ipf. is the *default* tense of sequential narration (similarly Rijksbaron 2019).

xxxi. The Greek Ipf. would occupy the same spot in Altshuler’s (2014:765) typology as the Russian Imperfective, yet it differs in at least one crucial respect (viz. sequential narrative use). Therefore, the addition of a category to the typology is required (“neutral”).

6 Conclusion

- 6.1 Wackernagel (1926–8 [2009]:243) says that part of the reason “the understanding and proper evaluation of the Greek imperfect have been greatly hindered” is its “usual equation” with the Imperfect of Latin, which “is palpably more constrained” (i.e., something like the general imperfects of modern Romance).
- 6.2 While we abandon this equation, at least until post-Classical Greek, it is important to keep in mind that the Greek Imperfect is a moving target. Any “proper evaluation” of it will accommodate this fact.
- 6.3 I have therefore tried to treat the Ipf. with as little reverence for its name as possible, governed in my analysis of it only by attested usage.
- 6.4 I hope thereby to have shown that:
 - 6.4.1 The Ipf. did not entail imperfective aspect (defined as $t_E \supseteq t_A$) at any stage of Ancient Greek.
 - 6.4.2 There was never entirely free generation of Aor. and Ipf. forms to all lexical verbs. Rather, paradigmatic and lexical restrictions always play a role in stem occurrences.
 - 6.4.3 Some level of “free” variation must have been operative, particularly in Classical prose (especially history).
 - 6.4.4 The trend towards imperfectivity has less to do with semantic change than it does pragmatic restriction by means of various pressures from the rest of the verbal system, eventually resulting in categorical blocking of the concentrative uses of the Ipf. by the Aor. (and to some extent the Pf. before its untimely demise).
 - 6.4.5 The observed changes were by no means abrupt and were never entirely without exception (up to the present day).
 - 6.4.6 “Markedness,” as such, need not play a role in these developments; only the interplay between relatively weaker and stronger denotations of morphological categories at different stages (such that in Homer the Ipf. appears to be “unmarked,” while in Modern Greek the Aor. does).
- 6.5 With this in mind, we may proceed to applying this line of inquiry to other languages that have similar verbal systems, above all Sanskrit, which nevertheless displays a completely different kind of development.
- 6.6 Its (so-called) “Imperfect,” in particular, *never* regularly expresses imperfective aspect, despite competing with a resultative Aorist and a perfective Perfect, which could, according to the very same principles observed for Greek, well have triggered pragmatic restriction of the Ipf. via categorical blocking.
- 6.7 Why two languages with exact formal matches for each of these three verbal categories (Aor., Ipf., Pf.) should be subject to such wildly different kinds of developments over time must, however, be the subject of future research.

Notes

¹Thus E. Dahl (2010:88) and Grønn (2004). Note, however, that Grønn (2008b:127) defines the Russian Imperfective with a disjunction: $t_E \supseteq t_A$ or $t_E \subseteq t_A$, which he notes amounts to essentially the same thing as $t_E \circ t_A$.

²Grønn (2008a:158) claims that the imperfectives in Romance must be of type 2 ($t_E \supseteq t_A$) to allow for the “narrative Imperfect.” This usage, however, occurs mostly with achievement predicates (ibid.:159–61) and requires specific reference “to a definite point in time” (Arregui et al. 2014:335).

³The “general-factual” Imperfective is taken to denote the coextension relation, $t_E = t_A$, which most often corresponds to “complexive” uses, as is clear from examples and discussion in Ö. Dahl 1985:74–7, Altshuler 2014, Arregui et al. 2014:330–4, and Janda and Fábregas 2019:699–708 (though it also has “experiential” perfect uses). Janda’s (2019:498) metaphor that the “Imperfective situation can fill whatever time is available” is thus captured quite nicely by this denotation. Note that, as in Greek, complexive or general-factual uses of the Russian Imperfective “can never move the narration forward” (Grønn 2008a:151).

⁴Dickey (2015; 2000; 1997:90–115) shows that the Eastern Slavic group, including Russian, does not use the Imperfective in sequential narration (similarly Arregui et al. 2014:335), while the Western Slavic group does. However, the Western Slavic Imperfect is, according to Dickey (1997:102), “unsuitable to refer to single achievements in the past” (in contrast to the Sanskrit type), while the Eastern Slavic Imperfective allows this (ibid.:103).

⁵See Hedin 2000:227–8.

⁶See ibid.:229, 232–3.

⁷Browning (1983:29, 34) says that by the time of the Koinē the Greek aspectual system had become a genuine perfective/imperfective system, contrasting “polar opposites.”

⁸Browning (1983:64, 78, 124, 135) says that early (and late) Medieval Greek opposed “continuous and momentary actions,” expressed by the Imperfective and Perfective respectively, which continues into Modern Greek, with some variation according to dialect.

⁹On the category, see Laca 2010:6–7 (“bad perfect”) and Bybee et al. 1994:78–81 (“old anterior”).

¹⁰For the diachronic stages presented here, see Gerō and Stechow 2003. The form is moribund in Hellenistic Greek (Browning 1983:30, 34), vestigial by the early medieval period (ibid.:64), and completely gone in Modern Greek, except *εύρηκα* (as an Aorist) (BDF:176).

¹¹ See (4) below. For further Homeric examples, see Lloyd (1999:44, n.72) and Chantraine (1958 [2015]:214), though the stative usage here described differs from the resultative or inceptive meaning these authors wish to impose on it (cf. Hom. *Il.* xx.306: ἦδη γὰρ Πριάμου γενεὴν ἔχθηρε ‘At length/by now (Zeus) has come to hate/hates the race of Priam’). The use seems to survive at least into lyric (e.g., Theognis 67, though here ἐφίλησαν could mean ‘they have come to love’) and probably into tragedy and comedy (cf. n.38 below). On the stative reading as a use of the *perfect* aspect, see Kiparsky 2002:113, 120–1. This use seems vestigial in Homeric and tragedy, being highly lexically restricted. There may be some examples of this use in Vedic (e.g., *R̥gveda* viii.47.18d, 48.11b (*ābhāṣmal-uḥ* ‘we/they are afraid’) and inj. *ūpa sthād* ‘is standing by’ (ii.3.10a); cf. Delbrück 1897:239). Past states that are *ongoing* at assertion time are also expressed by the Aor. in Homer, e.g.: πόθησαν ‘they missed (him)’ (Hom. *Il.* xv.219) (see Hollenbaugh 2018:44 for other possible examples). Here again, Greek matches an Aor. (inj.) usage found in the *R̥gveda* (e.g., *prāti sthād* ‘stood/was standing firm’ (ii.15.7c)). I take such examples to represent the past-shifted version of the presential stative readings under discussion.

¹²See Wackernagel 1926–8 [2009]:215–8.

¹³See ibid.:215–6.

¹⁴Possibly at Hom. *Od.* iv.585. See Hollenbaugh 2018:36.

¹⁵None so far noticed in Homeric proper (i.e., Homer, Homeric hymns, and Hesiod), but Sappho (c.600 BCE) has a likely example with δέδουκε ‘has set’ (*fr.* 168B).

¹⁶See ibid.:33, 43 (with examples and discussion). On the Vedic Aor. in experiential use, cf. n.xiii.

¹⁷Occurs only under negation, always with (relative) *past* reference, e.g.: οὐ γὰρ πῶ σφιν ἀκούετο λαὸς ἀτύτης ‘For their host had not yet heard the war-cry’ (Hom. *Il.* iv.331). Cf. the Russian past Imperfective in experiential use (Forsyth 1970:15 (cf. 42))

¹⁸Despite Gerö and Stechow 2003, there are multiple clear experiential uses of the Pf. already in Homer (e.g., *Il.* II.272: ἦ δὲ μῦρ' Ὀδυσσεὺς ἐσθλὰ ἔοργεν_[PF] ‘Truly Odysseus **has wrought**_[PF] countless good deeds’.

¹⁹The Aor. in the *Rgveda*, however, shows several reasonably clear examples of universal use (type ‘have been doing X (for/since some time)’), at least with state predicates (see Hoffmann 1967:156–7, E. Dahl 2010:289–90, 299–300 (but cf. pp.21–2!), and Delbrück 1897:279).

²⁰One possible example is *Il.* XXIV.107: ἐννῆμαρ δὴ νεῖκος ἐν ἀθανάτοισιν ὄρωρεν_[PF] ‘For nine whole days strife **has stirred/been roused**_[PF] among the immortals’.

²¹See Hollenbaugh 2018:30–1, 33, 44 and cf. n.x.

²²See Wackernagel 1926–8 [2009]:235, Friedrich 1974:14–6, and Schwyzer–Debrunner:276–7.

²³At least once: Hom. *Il.* I.235 (ἐπεὶ δὴ πρῶτα τομὴν ἐν ὄρεσσι **λέλοιπεν** ‘since first it **left** its stump in the mountains’).

²⁴See Hollenbaugh 2018:37–8.

²⁵Wackernagel (1926–8 [2009]:224) and Jacobsohn 1933:308–9 suggest that the Greek Aor. inceptive may be an innovation, as it is rare in Homer (in competition with the inceptive IpF.) and virtually lacking in Vedic Sanskrit (but cf. E. Dahl (2010:293–6), following Delbrück (1897:239–40) and Hoffmann (1967:157–8), who notes that most examples have a sibilant Aor. (as is true also of the inceptive (Smyth 1956:430, Rijksbaron 2002:20–1) and complexive uses in Greek (Jacobsohn 1933:310 and cf. n.27 and n.53 below))).

²⁶See Hollenbaugh 2019 and Jacobsohn 1933:308–9 (note, however, that there *does* seem to be an example of an inceptive βασιλευε (IpF.) ‘became king’ in Homer (*Od.* XIX.179), despite Jacobsohn’s claim to the contrary; there are none with the Aor. to this verb in Homer). On the scarcity of the inceptive IpF. in Homer, see Friedrich 1974:10.

²⁷No *clear* examples, anyway. One reasonable possibility is *Il.* VI.174: ἐννῆμαρ **ξείνισσε** καὶ ἐννέα βούς **ἱέρευσεν** ‘For nine days he **entertained** him and **slaughtered nine** oxen’. Yet here the meaning *could* be pluractional (‘kept entertaining him (each day for nine days)’). In addition, some manuscripts have here the IpF., ξείνιζε, showing the regular way of designating complexive meaning in Homer, which may well be original, having been later “corrected” by replacing it with the Aor. (Jacobsohn 1933:307–8). All other examples in Homer of ἐννῆμαρ ‘for nine days’ (or any other explicit indication of extent of time) and a verb in the indicative show the IpF. (or rarely Pf., cf. n.29). Past-state uses of the Aor. to state predicates, such as ἐφίλησα ‘loved, used to love’, could be considered complexive; if so, these would provide several examples of the complexive use in Homer (see n.vi below). On the complexive use of the Aor. being an innovation of Greek (and scarce or absent in Homer), see *ibid.*:305–10 and Schwyzer–Debrunner:281. There may be at least one good example of a (non-universal) complexive Aor. in the *Rgveda* (VII.33.5c) (see E. Dahl 2010:289–93 on the possibility of a coextension relation/complexive reading for the Aor. in Vedic).

²⁸See (3) above. For the IpF. as the *regular* way of expressing complexive meaning in Homer, in preference to the Aor., see Jacobsohn 1933:305–10.

²⁹At least one possible example, but nevertheless clearly constative (“perfect”) in its meaning: See n.20 above.

³⁰Despite Smyth (1956:432), the modal particle ἄν/κέν is *not* required for the Aor. to have iterative meaning, at least in Homer (e.g., *Il.* XXI.263) (see Jacobsohn 1933 and Chantraine 1958 [2015]:214).

³¹See Friedrich 1974:10.

³²Wackernagel (1926–8 [2009]:232) says that “the aorist in gnomic utterances always refers to a completed action.” However, as he also points out, this includes state predicates in ingressive meaning. Hence, only activities are excluded. The gnomic usage persists into Modern Greek (Seiler 1952:65). For the possibility of a gnomic-like use of the Aor. indicative in Vedic Sanskrit, cf. Delbrück 1897:285–6 and Schwyzer–Debrunner:283.

³³See Wackernagel 1926–8 [2009]:232–3 for examples with an achievement (λέλυνται ‘are loosened’) as well as with a state (ἴσασι ‘know’) (cf. Chantraine 1958 [2015]:229).

³⁴See Goodwin 1889:96.

³⁵Lloyd’s (1999:41) sole example is probably not performative but stative: (νῦν δέ σευ ὠνοσάμην **πάγχι** φρένας ‘But **now I have scorn** of your wits **completely**’ (Hom. *Il.* XIV.95 (= XVII.173))). Nonetheless, Schwyzer–Debrunner (282) believes the usage is original and that its popular character may explain its scarcity in (or absence from) Homer.

³⁶There are two possible examples in Homer (*Il.* IV.160–1, IX.412–5), which have a meaning somewhat different from those found in later Greek (Wackernagel 1926–8 [2009]:228–9). There is an example of the Aor. *infinitive* with future reference in the

“Brothers” poem of Sappho (6–9): λίσσεσθαι . . . ἐξίκεσθαι . . . κάμμι ἐπεύρην ‘to pray that he will return and find us’. In Vedic Sanskrit, this usage of the Aor. indicative is dubious (cf. Delbrück 1897:285–6 and Schwyzer–Debrunner:283).

³⁷Cf. Chantraine 1958 [2015]:229 and Schwyzer–Debrunner:286–7 (at issue is Hom. *Il.* xv.128: διέφθορας ‘you’ll be destroyed, you’re doomed’ (fut. sense) or ‘you’ve lost your wits, you’re beside yourself’ (pres. stative sense)).

³⁸A possible use of the so-called “tragic Aorist,” though most examples are performative (cf. Bary 2012). For a possible stative use in Euripides, see Lloyd 1999:42. For other possible stative uses (“emotional,” “understanding”), see *ibid.*:43–4. The example from Soph. *Oed. Tyr.* 1023 (ἔστερξεν) is probably not present stative but complexive or inceptive (‘loved’ or ‘came to love’). On the other hand, Soph. *fr.* 770 is very likely stative (μόνην δ’ ἔστερξε τὴν ἀπλῶς δίκην ‘but she **loves** only plain justice’), as is the example at Ar. *Fr.* 229 (ἐμὲ γὰρ ἔστερξαν . . . Μοῦσαι ‘For the Muses . . . **love me**’). We may say, then, that this use is moribund in Classical Greek and apparently absent by the end of the that period.

³⁹See Kühner–Gerth:166–7 on the possibility of a “conative” use of the Aor., but cf. Schwyzer–Debrunner:281 for reasons not to suppose such a reading. A putative example is Eu. *Ion* 1291: ἔκτεινά σ’ ὄντα πολέμιον δόμοις ἐμοῖς ‘I **tried to kill** you because you were an enemy to my house’. Such examples are mostly found in drama but occur also in prose, at least to the end of the Classical period. No example is reported for Homer.

⁴⁰Possibly at Eu. *El.* 1301: μοῖρά τ’ ἀνάγκης ἦγ’ ἦ τὸ χρεῶν ‘The fate of necessity **has led** where it must (lead)’.

⁴¹E.g., οὐδ’ οἶδ’ οὐδεὶς ἦντιν ἐρώσαν πῶποτ’ ἐποίησα γυναικία ‘Nor has anyone known any woman in love that I **have ever yet created**’ (Arist. *Fr.* 1044).

⁴²E.g., ἀλλ’ οὐ μὰ Δι’ οὐ Φαίδρα ἐποίουν πόρνας οὐδὲ Σθενεβοίας ‘But, by Zeus, I **have never created** whores like Phaedra and Sthenoboea’ (Arist. *Fr.* 1043). Cf. the Russian past Imperfective in experiential use, which may have present reference (Forsyth 1970:15 (cf. 42))

⁴³Possibly at Soph. *El.* 1256: μόλις γὰρ ἔσχον νῦν ἐλευθέρων στόμα ‘I **have** now hardly **been restraining** my mouth (from being) free’ (see Kells 1973:203, arguing against the interpretation ‘I have scarcely gotten my mouth liberated’ and citing another possible, though less likely, example: ἦν δὴ νῦν ἔβην ‘(the path) which I have just now **been treading**’ (Soph. *Aj.* 995)). See also Hdt. vii.46.1: ὦ βασιλεῦ, ὡς πολλὸν ἀλλήλων κεχωρισμένα ἐργάσαο νῦν τε καὶ ὀλίγω πρότερον: μακαρίας γὰρ σεωυτὸν δακρύεις ‘O king, what a distance there is between what you **have been (are??) doing** now and a little while ago! After having declared yourself blessed you are weeping’ (this example could be performative ‘you hereby weep’; cf. n.56 below).

⁴⁴With both past reference (e.g., Hdt. 9.63.2: ἀγῶνα ἐποιεύντο ‘they had been conducting the engagement’; Arist. *Fr.* 778 καθῆστο ‘had been sitting’) and, remarkably, *present* reference (e.g., Aesch. *Choe.* 963–4: πολὺν ἄγαν χρόνον / χαμαιπετῆς ἔκεισο δὴ ‘You **have lain/been lying** prostrate for far too much time’; Soph. *El.* 4: οὐπόθεις ‘for which you have been longing’). Note that both of the examples with present reference show verbs that lack an Aorist stem. Still, it is curious that the Present is not used here.

⁴⁵E.g., Eu. *El.* 568: πάλλαι δέδορκα ‘I’ve **been looking for a long time**’.

⁴⁶See Rijksbaron 2002:13 and cf. n.x.

⁴⁷Largely but by no means entirely restricted to verbs of ‘sending, motion, saying, and exhorting’ (Kühner–Gerth:143–4; cf. Emde Boas et al. 2019:429, Rijksbaron 2002:11–4, 18–9, Wackernagel 1926–8 [2009]:233–6, Goodwin 1889:8).

⁴⁸Non-sequential concentrative uses are fairly common (e.g., Ar. *Fr.* 1023, 1471); sequential uses are less so (e.g., Lys. 1.7 (or relative past?)). See Gerö and Stechow 2003 on this development and cf. Smyth 1956:435 (“dated past action”).

⁴⁹See Kühner–Gerth:145.

⁵⁰Pluperfect, e.g.: Hdt. ix.33.1 (ὡς . . . ἐτετάχατο ‘when they had been arrayed’). Cf. Rijksbaron 2002:77, Smyth 1956:435.

⁵¹See, e.g., *ibid.*:426. Schwyzer–Debrunner (277) reject this usage, but see Hollenbaugh 2019 for arguments in favor of its legitimacy as a use of the Ipf.

⁵²Plat. *Ion* 536b.8: εὐθὺς ἐγρήγορας ‘you are at once awakened’.

⁵³Most examples appear to be made with sigmatic Aorists, as is also the case for the inceptive use and is likely matched in Vedic (cf. above n.25 and n.27). The complexive usage persists in Modern Greek (Seiler 1952:75).

⁵⁴On the use, see Smyth 1956:435 and cf. n.33 above.

⁵⁵See Goodwin 1889:94.

⁵⁶Practically restricted to drama (not only tragedy, according to Schwyzer–Debrunner (282)), though it does occur rarely in prose (e.g., Hdt. VII.46.1(?); cf. n.43 above). For examples from both genres see Kühner–Gerth:163–5.

⁵⁷A usage not properly Homeric, on which see Wackernagel 1926–8 [2009]:228–9 (despite Chantraine 1958 [2015]:214–5). For Classical examples, see Kühner–Gerth:166–7, Schwyzer–Debrunner:281–3, and Smyth 1956:432. The usage remains in modern Greek (Seiler 1952:67, Schwyzer–Debrunner:282, Thumb 1912:123).

⁵⁸See Kühner–Gerth:150, Smyth 1956:435, and Rijksbaron 2002:37. The use is absent from Homer.

⁵⁹E.g., Plat. *Ion* 530a.8 (quoted in (21)). The term *egressive* comes from E. Dahl 2010:73–6, but the use is also called “effective” (e.g., Purdie 1898:65). See Gildersleeve and Miller 1911:94 for further citations (“Aorist of attainment”), all to accomplishment predicates. I have found no clear Homeric examples. The putative example cited by Gildersleeve contains simple terminative achievements after a conative IpF. (“Imperfect of endeavor”): ἔπειθεν_[IPF] ‘tried to persuade’... ἤλυθε_[AOR.] ‘came’... ἔτρεψεν_[AOR.] ‘turned, changed, convinced’. In Vedic Sanskrit, I know of no clear example.

⁶⁰On the possibility of an attestation of the stative reading of the Aor. in post-Classical Greek, see n.62 below.

⁶¹E.g., ἤδη ἐμοίχευσεν αὐτήν ‘He **has already committed adultery with her**’ (Mt. 5:28).

⁶²There is a possible example of a past universal reading of the Koine Aor.: καὶ συνετέλεσεν ὁ θεὸς ἐν τῇ ἡμέρᾳ τῇ ἕκτῃ τὰ ἔργα αὐτοῦ ἃ ἐποίησεν ‘And on the seventh day god finished the work which he **had been doing**’ (Gen. 2:2), though it is possible that this is a simple counter-sequential ‘had done’. A present-universal reading to the Aor. is probably attested at Jn. 15:9 (καθὼς ἠγάπησέν με ὁ πατήρ, καθὼς ὑμεῖς ἠγάπησα, μείνατε ἐν τῇ ἀγάπῃ τῇ ἐμῇ ‘as the Father **has loved** me, so **have I loved** you. Remain in my love’). This could, however, plausibly be read as stative (‘As the Father loves you, so I love you’), though the following command makes this less likely.

⁶³A possible example is ἔλεγεν γὰρ αὐτῷ ‘For he had been saying to him’ (Mt. 14:4), though this is more likely a simple counter-sequential: ‘For he had said to him’ (as, e.g., at Mk. 5:8).

⁶⁴See *BDF*:166.

⁶⁵See *ibid.*:177.

⁶⁶See *ibid.*:169. This usage persists in Medieval and Modern Greek (**medgk2019vol4**).

⁶⁷See *ibid.*:170.

⁶⁸See *ibid.*:177.

⁶⁹See *ibid.*:171.

⁷⁰The inceptive is an extremely common use of the Imperfect in this period (see Wallace 2006, with copious examples and references). The use persists into Modern Greek (Hedin 2000:250–52, Robertson 1923:885).

⁷¹See *BDF*:171–2 (e.g., Jn. 2:12: ἐκεῖ ἔμειναν οὐ πολλὰς ἡμέρας ‘They **stayed** there for a few days’).

⁷²The only secure examples of a complexive IpF. so far observed for post-Classical Greek are to the verb ‘be’ (e.g., Mk. 1:13, Acts 9:9, 28:7). A possible exception is Acts 16:18 (τοῦτο δὲ ἐποίησε ἐπὶ πολλὰς ἡμέρας ‘And she **did/kept doing** this [= shouting] for many days’), though this seems better classed as iterative or continuous.

⁷³See *ibid.*:169 (also on the iterative use of the Aorist).

⁷⁴E.g., καὶ ἔλαβον τὸ ἀνά δηνάριον καὶ αὐτοί ‘But they too **received** a denarius apiece’ (Mt. 20:10).

⁷⁵E.g., καὶ πῶς ἡμεῖς ἀκούομεν ἕκαστος τῇ ἰδίᾳ διαλέκτῳ ‘Then how is it that we each **hear** them in our native language?’ (Acts 2:8).

⁷⁶See Wackernagel 1926–8 [2009]:229–30 and *BDF*:171–2.

⁷⁷See *ibid.*:177 and Wackernagel 1926–8 [2009]:230 (ἀπελήλυθεν ‘goes away’).

⁷⁸The Imperfect remains “temporally ambiguous” (*BDF*:182).

⁷⁹The *Present*, of course, is still used performatively, as at all stages of Greek (e.g., Acts 25:11).

⁸⁰See *ibid.*:171–2.

⁸¹See *ibid.*:177.

Abbreviations

<i>BDF</i>	See Blass, Friedrich, Albert Debrunner, and Robert W. Funk. 1961.
Kühner–Gerth	See Kühner, Raphael, and Bernhard Gerth. 1898.
<i>Perseus under PhiloLogic</i>	See Dik, Helma, ed. 2018.
Schwyzler–Debrunner	See Schwyzler, Eduard, and Albert Debrunner. 1950.
<i>TLG</i>	See Pantelia, Maria C., ed. 2001—.

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