

Starting over: Inceptives in Ancient Greek

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1 Introduction

- (1) “inchoative Ipf.”: εἰς τὸν ἀγρὸν εἰσελθόντες **ἐπόνου**ν
‘having entered the field, they **began to work**’
- (2) “ingressive Aor.” ἡ Μυρρῖνη **ἐδάκρυσε**
‘Myrrhine **burst into tears**’.
(Balme and Lawall 2003:216)

1.1 Terms met with in:

Schwyzler and Debrunner 1950:277, “Ipf. inchoative”.

Kühner and Gerth 1898:155–7, “Aor. ingressive”.

Smyth 1956:§1900 and §1924 respectively.

1.2 “Ingressive”/“inchoative” = *inceptive* (Aor./Ipf. verb interpreted as ‘began to be/do *x*’).

- (3) AORIST INCEPTIVE
ἀνεῖλέ τε δὴ τὸ χρηστήριον καὶ **ἐβασίλευσε** οὕτω Γύγης (Herodotus I.13.2).
‘The oracle did so ordain; and Gyges thus **became king**’ (ex. and tr. Rijksbaron 2002:20).
- (4) IPF. INCEPTIVE
οἱ δὲ ὥς οὐκ εἰδότες, ἐπειρώτων τὸ λεγόμενον, ἐπειρόμενοι δὲ ἐξέμαθον πᾶν τὸ ἔόν, ὥστε ἐν θώματι γενόμενοι **ἐπορεύοντο** τὴν ταχίστην διώκοντες· (Herodotus IX.11.3).
‘And as they had not been aware of [the Spartan expedition], [the Athenian envoys] questioned them further, and by their questioning they found out the whole truth, such that, having fallen into amazement, they **got going**, pursuing the swiftest (route)’.

2 Claims

- 2.1 The Aor. (Aor.) and Ipf./Present (Ipf./Pres.) both have real and valid inceptive uses.
- 2.2 The traditional denotation assigned to the “imperfective” aspect in the semantic literature is insufficient to account for the inceptive Ipf./Pres. (i.e., it predicts that such an interpretation should not be possible!).

- 2.3 Likewise, the basic semantics of the Aor. cannot readily handle the inceptive reading.
- 2.4 The two inceptive constructions are in near-complementary distribution at both the lexical and the syntactic level.
- 2.5 This distribution can best be accounted for by a revised understanding of “imperfective” aspect for the inceptive Ipf./Pres. and adopting a coercion analysis along the lines of Bary and Egg 2012 for the inceptive Aor..
- This ensures that the Aor. is sensitive to predicate type (i.e., “actionality” or “Aktionsart”), while the Ipf./Pres. is not.

3 Inceptives in the Greek grammatical literature

3.1 Inceptive Ipf.

- 3.1.1 Schwyzer and Debrunner (1950:277): “Ein inchoatives (inzeptives, ingressives) Imperfekt anzusetzen sehe ich keinen Grund.”
- 3.1.2 Can be translated as ‘was already in the process of doing X’ rather than ‘began to do X’.
- Similarly Rijksbaron 2002:18: “(No sooner had he [done X] than) he was [doing Y].”
- 3.1.3 Claims this is just a “stilistisch prägnanten Gebrauch des gewöhnlichen Imperfekts.”
- Similarly *ibid.*:18: “We are placed, as it were, right in the middle of the state of affairs.”
- 3.1.4 Rijksbaron (2002:17–8) calls this usage “immediative,” viewing the inceptive sense as an implicature (and see now Emde Boas et al. 2019:429–30).
- 3.1.5 But consider again (4).

(4) IPE. INCEPTIVE

οἱ δὲ ὡς οὐκ εἰδότες, ἐπειρώτων τὸ λεγόμενον, ἐπειρόμενοι δὲ ἐξέμαθον πᾶν τὸ ἐόν, ὥστε ἐν θύματι γενόμενοι ἐπορεύοντο τὴν ταχίστην διώκοντες· (Herodotus IX.11.3).

‘And as they had not been aware of [the Spartan expedition], [the Athenian envoys] questioned them further, and by their questioning they found out the whole truth, such that, having fallen into amazement, they **got going**, pursuing the swiftest (route)’.

- 3.1.6 Since the Athenians’ amazement causes their movement, it must logically precede in time.
- 3.1.7 Cannot mean ‘They were already underway #when they fell into amazement’.
- 3.1.8 The implicature of the initial stage is not independently cancellable: #*In fact, they had already gotten underway* or #*but they didn’t start moving*.
- 3.1.9 Not simply “distributive” or “pluractional,” given the singular in (5).

(5) IPE. INCEPTIVE, SINGULAR VERB

τοσόδε εἰπὼν ἐπορεύετο ὅτι ἦδε ἡ ἡμέρα τοῖς Ἑλλησι μεγάλων κακῶν ἄρξει (Thucydides II.12.3).

‘Having said the following, (namely) that this day would be the beginning of great misfortunes for the Greeks, he **set out**’.

- 3.1.10 “Stylistic” usage is still usage, deserving of explanation, in semantic or pragmatic terms.
- 3.1.11 A “reading” of an aspectual category is some interpretation within the semantic range of a particular morphological form that is available in certain contexts and/or with certain kinds of predicates.
- 3.1.12 The semantics of a form must at least *allow* for a particular pragmatic (“stylistic”) interpretation.
- 3.1.13 Therefore, the inceptive use of the Ipf. is no less “legitimate” than any other use of the Pres. stem (despite Rijksbaron (2002:18)).
- 3.1.14 Rijksbaron’s (2002:21) claim that the inceptive Ipf. is “predominantly found with stative predicates” is falsified by his own examples which are all verbs of motion (i.e., activities) (id.:17).

3.2 Inceptive Aor.

- 3.2.1 Smyth (1956:§1924–5) and Rijksbaron (2002:20–1): Inceptive Aor. is restricted to state/condition predicates, mostly denominative, sigmatic Aorists (similarly Goodwin 1889:§19, n.1).

(6) FIRST AOR. (list is non-exhaustive):

• ἀποδημέω	‘be abroad’	→	ἀπεδήμησα	‘went abroad’ ¹
• ἄρχω	‘rule’	→	ἤρξα	‘became ruler’
• βασιλεύω	‘be king, reign’	→	ἐβασίλευσα	‘became king’
• βλέπω	‘see’	→	ἔβλεψα	‘cast a glance’
• δακρύω	‘weep (for)’	→	ἐδάκρυσα	‘burst into tears’
• δεῖδω	‘fear’	→	ἔδεισα	‘got scared’
• δουλεύω	‘be a slave’	→	ἐδούλευσα	‘became a slave’
• ἐρῶ	‘love’	→	ἠράσθη	‘fell in love’
• θάρρῶ	‘be courageous’	→	ἐθάρρησα	‘worked up courage’
• νοσῶ	‘be ill’	→	ἐνόσησα	‘got/fell ill’
• πλουτῶ	‘be rich’	→	ἐπλούτησα	‘got rich’
• πολεμῶ	‘be at war’	→	ἐπολέμησα	‘began the war’
• σιγῶ	‘be silent’	→	ἐσίγησα	‘became silent’

- 3.2.2 There is, however, a handful of (non-denominative) asigmatic Aorists as well.

(7) SECOND AOR.:

• αἰσθάνομαι	‘perceive’	→	ἤσθόμην	‘became aware’
• ἔχω	‘have, hold, keep’	→	ἔσχον	‘took hold/possession of, got’
• ἵσταμαι	‘stand’	→	ἔστην	‘took position, halted’

- 3.2.3 Rijksbaron (2002:20–1): The inceptive Aor. “explicitly denotes the initial stage” of a state, while “the state itself is referred to only implicitly.”

- But the “implied” state of affairs cannot be cancelled independent of the inceptive meaning: *He became king #but wasn’t king after that* (contrast *He was king/reigned but wasn’t king/reigning anymore*).

- 3.2.4 By contrast, Kühner and Gerth (1898:155–7):

1. On this example see Basset 2009:214.

- Inceptive is in line with the general meaning of the Aorist:
“Doch darf dieser Ausdruck nicht in dem Sinne verstanden werden, als ob es sich hier um eine von der allgemeinen Bedeutung des Aorists gesonderte Gebrauchsweise handelte.”
 - Inceptive interpretation arises via implicature in special contexts:
“Der Begriff des Eintretens ergibt sich von selbst aus dem der momentanen, in einen Punkt zusammengedrängten Handlung im Gegensatz zu dem Durativbegriffe, der dem Präsens und Imperfekt anhaftet.”
- 3.2.5 But there is no explanation as to *how* this ‘compression’ (“zusammengedrängten”) of the eventuality comes about and why it is virtually restricted to state predicates.
- 3.2.6 His description strongly resembles a coercion analysis.
- 3.2.7 The Pres. and IpF. are not limited to ‘durative conception’ (“Durativbegriffe”), so the inceptive cannot be attributed to the non-durative nature of the Aor. stem.
- 3.2.8 Rather, the two constructions differ only in that the Aor. is more restricted in terms of predicate selection. This near-complementary distribution is completely accidental under Kühner’s analysis.
- 3.2.9 Further, the same Aor. form can be either inceptive or “complexive” (e.g., ἐβασίλευσα ‘was king, reigned’).
- 3.2.10 Therefore, the Aor. stem applied to a state predicate does NOT guarantee an inceptive interpretation. Context matters, as well as situation type.
- 3.2.11 The evidence thus demands an explanation that:
- a. treats the inceptive Aor. as sensitive to situation type, able to arise only when a state or state-like predicate is applied to Aor. morphology (type ἐβασίλευσα ‘became king (10 years ago)’);
 - b. still allows for a more basic interpretation (“complexive”) in which the predicate is simply bounded in its entirety (type ἐβασίλευσα ‘reigned (for 10 years)’).
 - Following Bary and Egg (2012), the choice between complexive and inceptive interpretation to state predicates in the Aor. will be attributed to the “Duration Principle” (see next section), such that inceptive coercion is triggered only by the proper contexts.
- 3.2.12 The inceptive Aor. is thus sensitive to both situation type *and* context, whereas the inceptive IpF./Pres. emerges from context alone.

4 Inceptives in the formal semantic and typological literature

4.1 Defining aspect

- 4.1.1 Denotations of aspectual markers typically rely on notions of “assertion time” (t_A) and “eventuality time” (t_E).²
- 4.1.2 Assertion time (t_A) is the interval about which some claim is made, with respect to which the run-time of the eventuality (t_E) is said to hold and may be assessed as either true or false.

(8) COMMON DENOTATIONS OF PERFECTIVE AND IMPERFECTIVE ASPECT (e.g., Klein 1994:108).

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

- a. perfective aspect: $t_A \supseteq t_E$
The assertion time interval **includes** the span of eventuality time.
- b. imperfective aspect: $t_A \subset t_E$
The assertion time interval **is fully included in** the span of eventuality time.

4.1.3 In Greek, the Aor. is traditionally identified with the perfective aspect, while the IpF./Pres. is said to express imperfective aspect (e.g., Ö. Dahl 1985:81–4, Bary and Egg 2012).

4.2 Inceptive Aor.

4.2.1 Comrie (1976:19–20) describes inceptive as a reading of the perfective aspect but not the imperfective.

4.2.2 This view is more-or-less standard (followed, e.g., by E. Dahl (2010:75–6) and Bary and Egg (2012)).

4.2.2.1 Moens and Steedman (1988:24) provide the following example for English, which I give in (9) (slightly modified):

(9) *When Pete came in, John knew that something was wrong.* (\approx ‘realized’)

4.2.3 Bary and Egg (2012:123–4) seek to explain the inceptive interpretation of the Aor. in Greek as emerging from the avoidance of an impending mismatch between the selection restriction of the Aor. (for bounded predicates) and the unboundedness of certain arguments that it may take, particularly states.

- They capture this with a “coercion operator” called INGR, which forces an inceptive reading for state predicates in the Aor. tense that occur with a sufficiently brief assertion-time interval.
- I will ultimately adopt their analysis and will explain it in more detail below.

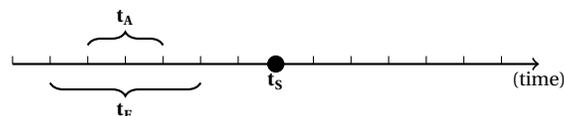
4.3 Inceptive IpF.

4.3.1 Little is said in the semantic literature about the inceptive interpretation of imperfective aspect (a notable exception is Hedin 2000:250–2, with reference to Russian and Classical and Modern Greek).

4.3.2 Nevertheless, its existence is assured by robust occurrence across languages, being found not only in Greek but also in Latin (Ernout and Thomas 1964:221–2), Slavic (Dickey 1999), and Hittite (Hoffner and Melchert 2008:§24.18).

4.3.3 Problematically, the traditional denotation of the imperfective aspect ($t_A \subset t_E$) cannot account for the inceptive interpretation at all, since t_E is obliged to fully include t_A , as shown in fig.1.

Figure 1: IMPERFECTIVE aspect, past tense



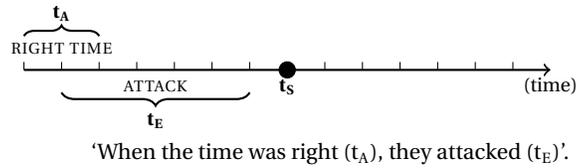
4.3.4 But the inceptive IpF., as in (10), requires a structure something like that in fig.2.

(10) ἐπειδὴ δὲ καιρὸς ἦν, τῇ μὲν προτέρῃ πρὸς τὰ τείχη τῶν Ἀθηναίων προσέβαλλον (Thuc.VII.51.2)³

3. Example from Smyth 1956:§1900.

'And when the time was right, they **began attacking/proceeded to attack** the (battle-)lines of the Athenians on the first day'. [The details of the attack follow.]

Figure 2: IMPERFECTIVE aspect, past tense, inceptive interpretation



4.3.5 To solve this problem, I will propose a revised version of the imperfective aspect (see §6 below).

5 Data

5.1 Text samples: Homer (*Iliad* 1), Aeschylus (*Libation Bearers*), Sophocles (*Electra*), Euripides (*Electra*), Herodotus (VII, IX), Thucydides (II), Gorgias (*Encomium of Helen*), Aristophanes (*Frogs*), Lysias (I), Isocrates (*Helen*), Plato (*Ion*).

5.1.1 The inceptive Aor. is reasonably common in Homer (~5% of Aors., cf. n.8 below).

(11) HOMERIC INCEPTIVE AORISTS: STATE PREDICATES

a. ὧς ἔφατ', ἔδδεισεν δὲ βοῶπις πότνια Ἥρη (Hom. *Il.* I.568).

‘Thus he spoke, and ox-eyed queen Hera **was seized with fear**’.

b. ὧς φάτο, μείδησεν δὲ θεὰ λευκώλενος Ἥρη,
μειδήσασα δὲ παιδὸς ἐδέξατο χειρὶ κύπελλον· (Hom. *Il.* I.595–6).

‘Thus he spoke, and the white-armed goddess Hera **smiled [i.e., ‘cracked a smile’]**, and **smiling [i.e., ‘having become smiley’]** she received in her hand the cup from her son’ (on this reading, cf. (16) below).

5.1.2 The inceptive IpF., on the other hand, is somewhat harder to come by in Homer (~2% of IpFs., cf. Friedrich 1974:10).

(12) HOMERIC INCEPTIVE IMPERFECTS: ACTIVITY AND STATE PREDICATES

a. τοῖσιν δὲ Χρύσης μεγάλ' εὔχετο χεῖρας ἀνασχών· (Hom. *Il.* I.450).

‘Then Chryses, having lifted up his hands, **started praying** aloud for them’.

b. αὐτὰρ ἐπεὶ παύσαντο πόνου τετύχοντό τε δαῖτα,
δαίνυντ', οὐδέ τι θυμὸς ἐδέετο δαιτὸς ἕψης. (Hom. *Il.* I.467–8).

‘Then, when they had ceased from their labor and had the meal ready, they **feasted/started feasting**, and their heart(s) did not lack anything of the equal feast’.

c. ἀλλ' αὐτως ἀποβάντες ἐκείμεθα νηὸς ἅπαντες (Hom. *Od.* XIII.281).

‘But having disembarked from the ship in such a state, we all **lay down**’ (ex. Chantraine 1958 [2015]:222).

- 5.1.3 The relative scarcity of Homeric inceptives accords with the proposal of Hollenbaugh (2018) that the Homeric verbal system does not yet make a categorical contrast between perfective and imperfective aspect.
- 5.1.4 The Homeric data is in line with the general observation that the inceptive Aor. is restricted to states/conditions while the inceptive Ipf. is not.
- By the time of Koinē, by contrast, the inceptive is an extremely common use of the Imperfect (see Wallace 2006, with copious examples and references). The use persists into Modern Greek (Hedin 2000:250–52, Robertson 1923:885).
- 5.2 All verbs that attest an inceptive Ipf./Pres. in my data are given in the Appendix (§8, Tables 1–4), showing every situation type (activity, state/condition, accomplishment, and achievement).
- 5.3 There are no secure examples of an inceptive Aor. to an event predicate (activity, accomplishment, achievement). All examples of the inceptive Aor. are built to state or condition predicates.
- 5.3.1 Most examples are genuine states (13)–(14) (also (3) and (11) above and (22) below).

(13) AOR. INCEPTIVE: STATE PREDICATE

εἰ γάρ νιν ἔσχευ ἀξίωμ' ἔχων ἀνήρ,
εὐδοντ' ἄν ἐξήγειρε τὸν Ἀγαμέμνονος
φόνον δίκη τ' ἄν ἦλθεν Αἰγίσθω τότε (Eur. *El.* 40).

'For if a man of status **had taken possession of her**,
he would have awakened the sleeping murder of Agamemnon
and judgment would have come at that time to Aegisthus.'

(14) AOR. INCEPTIVE: STATE PREDICATE

τοὺς ἑπτ' ἐπὶ Θήβας.
ὁ θεασάμενος πᾶς ἄν τις ἀνὴρ **ἠράσθη** δάιος εἶναι (Arist. *Fr.* 1021–2).

'*The Seven against Thebes*:
having seen which every single man **fell in love** with being fierce'

- 5.3.2 A handful of examples involve conditions. Conditions are non-agentive processes that pattern in many respects with states, as with *δακρῦω* 'weep (for)' in (15)–(16).

(15) AOR. INCEPTIVE: CONDITION AND STATE PREDICATES

τὸν μὲν ἐγὼ δάκρυσα ἰδὼν ἐλέησά τε θυμῷ (Hom. *Od.* XI.55, .87, .395).

'Having seen him I **wept [i.e., started weeping]** and I **took pity** in my heart'.

(16) AOR. INCEPTIVE: CONDITION PREDICATE

ὡς δὲ ὦρα πάντα μὲν τὸν Ἑλλήσποντον ὑπὸ τῶν νεῶν ἀποκεκρυμμένον, πάσας δὲ τὰς ἀκτὰς καὶ τὰ Ἀβυδηνῶν πεδία ἐπίπλεα ἀνθρώπων, ἐνθαῦτα ὁ Ξέρξης ἐωυτὸν ἐμακάρισε, μετὰ δὲ τοῦτο **ἐδάκρυσε**. μαθὼν δὲ μιν Ἀρτάβανος ὁ πάτρως... οὗτος ὠνήρ φρασθεὶς Ξέρξην **δακρῦσαντα** εἶρετο τάδε... (Hdt. VII.45.1–2).

'And when he saw the whole Hellespont covered with ships, and all the shores and plains of Abydos full of men, then Xerxes congratulated himself, and after this he **started weeping**. Then his uncle Artabanus, having become aware of him (weeping)...

This man, having noticed Xerxes **weeping [i.e., having become teary]**, questioned (him) as follows...’ (cf. (11b) above).

5.3.3 Conditions have in common with states an experiencer subject and are unaccusative.

5.3.4 By contrast, *unergative* processes (viz. activities) have agentive subjects and invariably employ the Ipf. for inceptive meaning in Greek.

5.3.5 Unaccusativity is a necessary condition for use of the Aor. inceptive, ruling out activities, though it is not a sufficient one. The predicate must also be “unbounded,” to rule out accomplishments and achievements (leaving only states/conditions).

5.4 Ipf. inceptive occurs with every situation type, though most often activities (17)–(20) (see also (4) and (5) above).

- Less often accomplishments ((21) and (23)) and states/conditions ((24) and (28)), rarely achievements (25)–(26) (also (10) above).

5.4.1 Explicit indication that the activity begins to take place only after some other event in (17).

(17) IPF. INCEPTIVE: ACTIVITY PREDICATES

μετὰ δὲ τὸ δεῖπνον τὸ παιδίον **ἔβόα** καὶ **ἔδυσκόλαιεν**... καὶ ἐγὼ τὴν γυναῖκα ἀπιέναι ἐκέλευον καὶ δοῦναι τῷ παιδίῳ τὸν τιτθόν, ἵνα παύσηται κλαῖον (Lysias 1.11–12).

‘And after dinner the baby **started crying** and **being fussy**... and [so] I bade my wife go away and give her breast to the baby, to stop it from crying’.

5.4.2 Inceptive Ipf. often found in conjunction with Aor.

(18) IPF. INCEPTIVE: ACTIVITY PREDICATE

Πέρσας δὲ ὄρωντες ὀρμημένους διώκειν τοὺς Ἕλληνας οἱ λοιποὶ τῶν βαρβαρικῶν τελέων ἄρχοντες αὐτίκα πάντες ἤειραν τὰ σημήια, καὶ **ἔδίωκον** ὡς ποδῶν ἕκαστος εἶχον, οὔτε κόσμῳ οὔδενι κοσμηθέντες οὔτε τάξι (Herod. IX.59.2).

‘And seeing the Persians setting out to pursue the Greeks, the rest of the commanders of the barbarian divisions at once all raised_[Aor.] their standards, and they **gave chase**_[Ipf.], to the utmost that each had power over his own feet, having been arranged by neither rank nor post’.

- The inceptive Ipf. is often preceded by an Aor. temporal clause, as in (19)–(20), or Aor. participle, as in (21)–(22) (also (4) and (5) above), whereas the inceptive Aor. is most often in a dependent clause or takes the form of a participle itself (as seen in (29) below).

(19) IPF. INCEPTIVE: ACTIVITY PREDICATES

ἔπειδῃ δὲ τὸ παιδίον ἐγένετο ἡμῖν, ἡ μήτηρ αὐτὸ **ἐθήλαζεν**. ἵνα δὲ μή, ὁπότε λοῦσθαι δέοι, κινδυνεύη κατὰ τῆς κλίμακος καταβαίνουσα, ἐγὼ μὲν **ἄνω διητώμην**, αἱ δὲ γυναῖκες κάτω... (Lysias 1.9).

‘And when the baby was born to us, its mother **took to breast-feeding**; and so as to avoid taking a risk by walking down the staircase whenever (the baby) needed

to be bathed, I **moved/started living upstairs**, while the women (stayed) downstairs.’

(20) IPF. INCEPTIVE: ACTIVITY PREDICATE

ὅτε δὴ κατῆλθ' Εὐριπίδης, **ἐπεδείκνυτο**... (Arist. *Fr.* 771).

‘As soon as Euripides came down, he **started showing off**...’

(21) IPF. INCEPTIVE: ACCOMPLISHMENT PREDICATE

καὶ λαβὼν μόσχου πόδα, λευκάς **ἐγύμνου** σάρκας ἐκτείνων χέρα. θᾶσσον δὲ βύρσαν ἐξέδειρεν ἢ δρομεὺς δισσοὺς διαύλους ἵππιος διήγνυσε... (Eur. *El.* 822–5).

‘And having grabbed the calf’s hoof, he **started stripping (bare)** the white flesh, stretching out his hand, and flayed the hide more swiftly than a horse racer finishes a two-lap course...’

- In (22), we find an inceptive Aor. coordinated with an inceptive IpF., which is preceded by an Aor. participle.

(22) AOR. INCEPTIVE (STATE PREDICATE) AND IPF. INCEPTIVE (ACTIVITY PREDICATE)

ἔπειτα πολλῶ θορύβῳ... **ἐφοβήθησαν**_[Aor.] καὶ τραπόμενοι **ἔφρουγον**_[IpF.] διὰ τῆς πόλεως... (Thuc. II.4.1–2).

‘Thereupon, with much alarm... they **got scared**_[Aor.] and, having turned tail, they **took to flight**_[IpF.] through the city...’

- 5.4.3 For verbs that inherently have an endpoint, the IpF. may focus on the activity necessary to achieve the culmination of the entire event, as in (23).

(23) IPF. INCEPTIVE: ACCOMPLISHMENT PREDICATE

οἱ δὲ Ἀθηναῖοι ἀκούσαντες ἀνεπίθοντό τε καὶ **ἐσεκομίζοντο** ἐκ τῶν ἀγρῶν παῖδας καὶ γυναῖκας καὶ τὴν ἄλλην κατασκευὴν ἢ κατ’ οἶκον ἐχρῶντο... (Thuc. II.14.1).

‘And the Athenians having heeded (him) both were convinced and **began to carry/were carrying in** from the countryside their children and wives and (any) other belonging that they made use of at home...’

- 5.4.4 The inceptive IpF. may sometimes occur in a temporal clause, like the Aor., especially when it is a state predicate, as in (24).

(24) IPF. INCEPTIVE: STATE PREDICATE

ἢ δ’ ἐν δόμοις ἔμεινεν Ἡλέκτρα πατρός,
ταύτην ἐπειδὴ θαλερὸς **εἶχ’** ἥβης χρόνος,
μνηστῆρες ἦτουν Ἑλλάδος πρῶτοι χθονός (Eur. *El.* 20–1).

‘Electra, meanwhile, had been staying in the house of her father, [and,] when the blooming time of youth **came upon [lit. ‘took hold of’]** her, the foremost suitors of the Greek country were/started asking for (her)’.

5.4.5 Achievement predicates do not often admit of inceptive interpretation (25) (perhaps also (10) above) without being either pluractional (26) or conative (27).

(25) IPF. INCEPTIVE(?): ACHIEVEMENT PREDICATE

ἄμα δὲ τὸ τεῖχος σφι, τὸ ἐν τῷ Ἴσθμῳ ἐτείχεον, καὶ ἤδη ἐπάλλξιν ἐλάμβανε (Hdt. IX.7.9).

‘And at the same time the wall which they were building in the Isthmus **was** even then **getting/starting to get** its battlements’.

(26) PLURACTIONAL IPF. INCEPTIVE: ACHIEVEMENT PREDICATE

λόγχα δὲ θέντες δεσπότη φρουρήματα
δμῶεσ πρὸσ ἔργον πάντεσ ἴεσαν χέρασ· (Eur. *El.* 798–9).

‘The slaves who formed the master’s bodyguard, having laid aside their spears, all **started applying** their hands to the work’.

(27) CONATIVE IPF.: ACHIEVEMENT PREDICATE

καὶ γὰρ δὴ καὶ Μελάμπουσ τῶν ἐν Ἄργεῖ γυναικῶν μανεισέων, ὡσ μιν οἱ Ἄργεῖοι **ἐμισθοῦντο** ἐκ Πύλου παῦσαι τὰσ σφετέρασ γυναίκασ τῆσ νόσουσ, μισθὸν προετέλινατο τῆσ βασιληίησ τὸ ἥμισυ (Hdt. IX.34.1)

‘For it was also the case that Melampus, when the women in Argos had gone mad, such that the Argives **sought to hire** him from Pylos to relieve their women of their disease, demanded [lit. ‘proposed’] as payment half of their kingship’.

5.5 The Present indicative is also found with inceptive meaning, especially when used in a narrative (in place of the IpF. or Aor.) or in a generic-habitual sense, as in (28).

(28) PRESENT INCEPTIVE: STATE PREDICATE

τῷ δὲ ὑπερβάλλοντι αὐτῶν φθονοῦντεσ ἤδη καὶ **ἀπιστοῦσιν** (Thuc. II.35.2).

‘And being envious at their embellishment, at this point they even **grow incredulous**’.

5.6 Inceptives are not limited to the indicative, being common in the Aor. participle (29) and infinitive (30) (cf. Rijksbaron 2002:21).⁴

(29) PARTICIPLE: INCEPTIVE AOR. (STATE PREDICATE)

ὁ δὲ τούτῳ τῷ λόγῳ **καταρρωδήσασ** τοὺσ Πέρσασ ἔλεγε τάδε· (Hdt. IX.46.1)

‘And at this message he, **having gotten scared of** the Persians, said as follows’.

(30) PARTICIPLE: INCEPTIVE AOR. (STATE PREDICATE)

4. Many directives may be understood as inceptive in some sense (type ‘let’s go!’, ‘be afraid!’), though I omit data of this sort here because it is difficult in such cases to know how much is to be attributed to the modality and how much to the tense-aspect stem.

οἱ δὲ Αἰγύπτιοι, πρὶν μὲν ἢ Ψαμμήτιχον σφέων βασιλεῦσαι, ἐνόμιζον ἑαυτοὺς πρῶτους γενέσθαι πάντων ἀνθρώπων. (Hdt. II.2.1)

‘Now before Psammetichus **became king** of Egypt, the Egyptians deemed themselves to be the oldest nation on earth.’ (ex. and tr. Rijksbaron 2002:21).

5.7 There is a near-complementary distribution for the two constructions, on both the lexical and the syntactic level.

- The Aor. inceptive is restricted to states/conditions; the Ipf. is not. The Aor. inceptive tends to occur in a restrictive clause or as a restrictive participle; the Ipf. is not so limited.

6 Theory and formal semantics

6.1 Traditional “neo-Reichenbachian” denotations of the imperfective and perfective aspect (31).

(31) TRADITIONAL IMPERFECTIVE AND PERFECTIVE DENOTATIONS

a. IMPERFECTIVE (traditional): $[\lambda P \lambda t_A. \exists e(t_A \subset t_E(e) \wedge P(e) = 1)]$

For some eventuality e , assertion time **is fully included in** eventuality time, and the proposition $P(e)$ is true.

b. PERFECTIVE (traditional): $[\lambda P \lambda t_A. \exists e(t_A \supseteq t_E(e) \wedge P(e) = 1)]$

For some eventuality e , assertion time **includes** eventuality time, and the proposition $P(e)$ is true.

6.2 These fail to account for all observed interpretations for the Ipf./Pres. and Aor.

6.3 Neither one can readily account for inceptive readings. I propose revised denotations, in (32).

(32) REVISED IMPERFECTIVE AND PERFECTIVE DENOTATIONS

a. IMPERFECTIVE (revised): $[\lambda P \lambda t_A. \exists e(t_A < t_E^{\downarrow}(e) \wedge t_A \cap t_E(e) \neq \emptyset \wedge P(e) = 1)]$

For some eventuality e , assertion time **fully precedes** the right edge of eventuality time (t_E^{\downarrow}), and the intersection of assertion time and eventuality time is non-empty, and the proposition $P(e)$ is true.

b. PERFECTIVE (revised): $[\lambda P \lambda t_A. \exists e(t_A \not< t_E^{\downarrow}(e) \wedge t_A \cap t_E(e) \neq \emptyset \wedge P(e) = 1)]$

For some eventuality e , assertion time **does not fully precede** the right edge of eventuality time (t_E^{\downarrow}), and the intersection of assertion time and eventuality time is non-empty, and the proposition $P(e)$ is true.

Figure 3: IMPERFECTIVE aspect, past tense, progressive or habitual interpretations

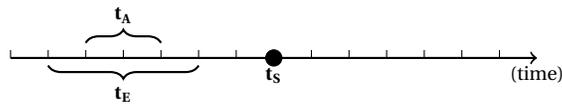
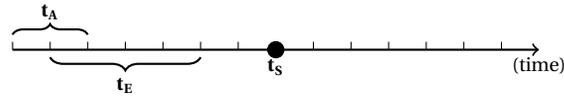


Figure 4: IMPERFECTIVE aspect, past tense, inceptive interpretation



6.4 As for the perfective, under the denotation in (32b) the configurations represented in figs.5–7 are readily available.

Figure 5: PERFECTIVE aspect, past tense, “concentrative-terminative”

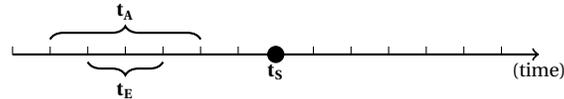


Figure 6: PERFECTIVE aspect, past tense, “complexive-terminative”

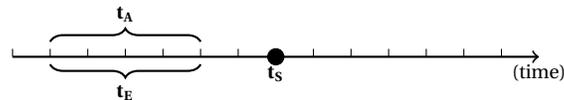
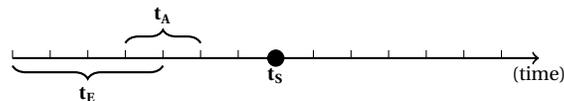


Figure 7: PERFECTIVE aspect, past tense, “egressive”



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

τί οὖν ἠγώνιζου τι ἡμῖν· καὶ πῶς τι ἠγώνισω· (Plat. *Ion* 530a8)

‘So what (of it)? Pray tell, **were you doing some competing?** And how **did** you **do**/how **did** it **turn out** for you?’

[lit. ‘did/could you compete and (if so) how did you compete (i.e., finish or place in the competition)?’]

6.4.1 The egressive is impossible to translate literally into English but is familiar from Russian (34).

(34) RUSSIAN PERFECTIVE, EGRESSIVE USE (ACCOMPLISHMENT PREDICATES)

a. *On mnogo delal*_[Ipfv.], *no malo sdela*_[Pfv.].

‘He did (i.e., undertook) a lot, but did (i.e., accomplished) little’ (ex. from Comrie 1976:113).

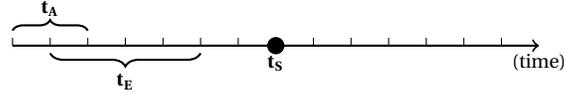
b. *On dolgo ugovarival*_[Ipfv.] *menja*, *no ne ugovoril*_[Pfv.].

‘He persuaded me for a long time (i.e., he spent a long time trying to persuade me), but didn’t (successfully) persuade me’ (ex. from *ibid.*:19).

6.4.2 The egressive use may be restricted to accomplishment predicates, arising pragmatically via coercion. However, since this is beyond my scope, I will simply assume that the egressive reading is directly compatible with the denotation of the perfective given in (32b).

6.5 The only reading *not* directly compatible with the denotation in (32b) is the inceptive (fig.8).

Figure 8: PERFECTIVE aspect, past tense, inceptive



6.6 This is desirable, so that the Aor. inceptive is impossible unless the Aor. takes an unbounded (state/condition) predicate as its argument.

6.7 I therefore adopt the coercion analysis of Bary and Egg (2012). This will output an inceptive reading for the perfective/Aor. *only* for non-event predicates, provided the context is suitable (*vis-à-vis* the “Duration Principle” (38)).

6.7.1 Bary and Egg (2012:123–4) posit a “coercion” operator that maps unbounded predicates (states/conditions) onto bounded ones (the perfective aspect/Aor.), yielding the inceptive reading.

6.7.2 They call this coercion operator “INGR” and define it as in (35).

$$(35) \text{ INGR}(P)(e) \text{ iff } e \text{ is the smallest eventuality such that } \neg\exists e'.e' \succ e \wedge P(e') \text{ and } \exists e''.e \succ e'' \wedge P(e'')$$

“INGR(P) holds for smallest eventualities e that do not abut on a preceding eventuality (relation ‘ \succ ’) of type P but abut on a following eventuality in the extension of P .”

6.7.3 So, the semantics of (9), cited above, applies as follows, in (36).

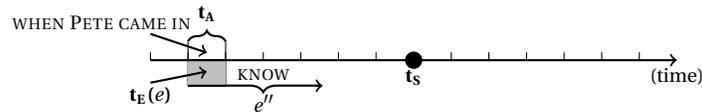
(36) *When Pete came in, John knew that something was wrong.*

$$\exists x\exists e.\text{John}'(x) \wedge \text{INGR}(\text{know}'(x, \text{that-something-is-wrong}'))(e) \wedge t_A \supseteq t_E(e) \wedge t_A < t_s$$

t_A (when Pete came in) precedes the moment of utterance (t_s) and includes the runtime of the beginning of the state $t_E(e)$, viz. that John knew that something was wrong (e'').

6.7.4 This is illustrated in fig.9.

Figure 9: PERFECTIVE aspect, past tense, inceptive via coercion



When Pete came in (t_A), John knew (t_E) that something was wrong.

6.7.5 Simply put, there is a smallest possible eventuality (e) which no other eventuality of its kind immediately precedes (e'), but which an eventuality of its kind does immediately follow (e'').

- For KNOW, this means that there was no knowledge of type P before the realization at issue ($P(e)$), but there is some more knowledge of type P after it.

6.7.6 Crucially, the e at issue is treated as a discrete and bounded whole separate from the e' that comes after it.⁵ In this way, the semantics of the perfective aspect is satisfied such that $t_A \supseteq t_E(e)$.

6.7.7 Without an appropriately brief run-time of t_A , we get the “complexive” reading (37) by default.

(37) *He reigned (t_E) for 20 years (t_A), then he died.* (where t_A is coextensive with t_E)

6.7.8 Bary and Egg (2012:128–31) (38) define a “Duration Principle” for the contextual adjudication between alternatives that, from the point of view of aspect alone, are equally possible.

(38) Duration Principle: “Properties of eventualities must be compatible with respect to the duration they attribute to an eventuality” (ibid.:129).⁶

6.8 In effect, the Ip f . accomplishes by its nature what the Aor. does by “coercion.”

6.9 This accounts for the near-complementary distribution of the two inceptive constructions—the Aor. to state/condition predicates, the Ip f ./Pres. elsewhere.

6.10 I identify the denotations of the perfective and imperfective aspect with the Greek Aor. and Pres. stems respectively.

6.11 That is, the Aor. assigns the semantics of the perfective aspect (at least after Homer, cf. Hollenbaugh 2018), while the Ip f ./Pres. assigns the semantics of the imperfective aspect, as defined in (32), repeated here (simplified).

(32) REVISED IMPERFECTIVE AND PERFECTIVE DENOTATIONS (simplified)

a. IMPERFECTIVE (revised): $[\lambda P \lambda t_A. \exists e(t_A < t_E^{-1}(e) \wedge t_A \cap t_E(e) \neq \emptyset \wedge P(e) = 1)]$

b. PERFECTIVE (revised): $[\lambda P \lambda t_A. \exists e(t_A \not< t_E^{-1}(e) \wedge t_A \cap t_E(e) \neq \emptyset \wedge P(e) = 1)]$

7 Conclusion

7.1 The distinction between the Aor. and Ip f . is subtle at all stages of Greek (Wackernagel 1926–8 [2009]:235).

7.2 This presentation provides at least one reliable distinction between the two. In summary:

7.2.1 The inceptive use is common to the Aor. and the Ip f ./Pres. stems.

7.2.2 A revised denotation of the perfective and the imperfective aspect can account for inceptive readings.

7.2.3 The coercion operator INGR accounts for the near-complementary distribution observed in the data, whereby the Aor. only has inceptive meaning with a state/condition predicate.

7.2.4 I identify the Greek Ip f ./Pres. as denoting imperfective aspect, and the Aor. as denoting perfective aspect (as defined here), at least by the end of the Classical period.⁷

5. For the inceptive Ip f ./Pres., this is not the case, as only one eventuality is needed.

6. “This information may be exact (as in *for five minutes*) or take the form of a ‘typical duration’ (e.g., we know that the duration of playing a sonata usually is measured in minutes, but not seconds, or days)” (Bary and Egg 2012:129).

7. This is a simplification of the facts, particularly the use of the Ip f . in sequential narration, which is not uncommon at any stage of Greek before the end of the Classical period. However, this is beyond the scope of the present line of inquiry.

7.3 Compare to similar behavior of past tenses in other IE languages:⁸

- Hittite “inceptive” *-ške*-forms.
- Latin “inchoative” Imperfect and “inceptive” Perfect.
- Slavic “ingressive” Imperfectives.

8 Appendix: List of inceptive Ipf./Pres. verbs

8.1 Forms of the Ipf. are cited in the first person (though most attestations are in the third person); the Pres. is cited as attested.

8. Wackernagel (1926–8 [2009]:224) and Jacobsohn 1933:308–9 suggest that the Greek Aor. ingressive may be an innovation, as it is relatively rare in Homer and lacking in Vedic Sanskrit (but cf. E. Dahl 2010:293–6).

Table 1: VOLITIONAL/AGENTIVE ACTIVITIES

• ἄγω	‘lead’	→ ἤγον	‘started leading’ (e.g., <i>Od.</i> 24.5, <i>Hdt.</i> IX.14.1)
• ἀθρέω	‘inspect’	→ ἤθρουν	‘started inspecting’
• αἰτέω	‘ask’	→ ἤτουν	‘started asking’
• (ἀνα)βοάω	‘cry, shout (out)’	→ (ἀν)ἔβόων	‘started crying/screaming (out)’
• ἀνατιμάω	‘raise in price’	→ ἀνετίμων	‘began raising the price’
• βαδίζω	‘go, walk’	→ ἐβάδιζον	‘proceeded, went forth’
• βουλεύομαι	‘deliberate’	→ ἐβουλεύομην	‘began deliberating’ (e.g., <i>Hdt.</i> IX.14.1)
• δαίνυμαι	‘feast’	→ (ἐ)δαινύμην	‘started feasting’
• δειπνέω	‘dine’	→ ἐδειπνοῦν	‘started dining’
• δηρόω	‘cut down, slay, ravage’	→ ἐδήρουν	‘set to ravaging’
• διδάσκω	‘teach’	→ ἐδίδασκον	‘began to teach’ (NT <i>Mk.</i> 1:21, with εὐθύς)
• διώκω	‘pursue’	→ ἐδίωκον	‘gave chase’
• ἐλαύνω	‘drive’	→ ἤλαυνον	‘took to driving’
• ἐπιβουλεύω	‘plan, plot against’	→ ἐπεβούλευον	‘began plotting against’
• ἐπιδείκνυμαι	‘exhibit’	→ ἐπεδεικνύμην	‘started showing off’
• ἐρωτάω	‘ask’	→ ἠρώτων	‘started questioning’
• εὔχομαι	‘pray’	→ (ἡ/)εὐχόμην	‘started praying’
• θέω	‘run’	→ ἔθειον	‘started running’
• θηλάζω	‘suckle’	→ ἐθήλαζον	‘took to breast-feeding’
• ἴημι	‘send, apply’	→ ἴην	‘started applying’
• μάχομαι	‘fight’	→ ἐμαχόμην	‘started fighting’
• πειρητίζω	‘try’	→ (ἐ)πειρήτιζον	‘began to try’
• πορεύομαι	‘move’	→ ἐπορεύομην	‘got moving’
• προσβάλλω	‘strike against, attack’	→ προσέβαλλον	‘proceeded to attack’
• πρόσκειμαι	‘lie upon, press upon’	→ προσεκέαμην	‘started attacking’
• στείχω	‘walk, march, go’	→ ἔστειχον	‘got moving’
• στρατηλατέω	‘lead into battle’	→ ἐστρατηλάτεον	‘began the march (into battle)’
• φεύγω	‘flee’	→ ἔφευγον	‘took to flight’
• χωρέω	‘withdraw, advance’	→ ἐχώρεον	‘charged’
• [?]ἀντιβολέω	‘entreat, supplicate’	→ ἤντεβόλουν	‘started entreating’
• [?]ἱκετεύω	‘beseech, implore’	→ ἰκέτευον	‘started imploring’
• [?]οἴχομαι	‘go, have gone’	→ ὤχόμην	‘left, had gone’ (e.g., <i>Lys.</i> 1.14)
• [?]συμπολεμέω	‘fight beside, join in war’	→ ζυνεπολέμουν	‘joined the war’

Table 2: STATES AND CONDITIONS (AND MEDIO-PASSIVE EXPERIENCER PROCESSES)

• ἀπιστέω	‘distrust, disbelieve’	→ ἀπιστοῦσιν	‘grow incredulous’ (NB: Pres.)
• βάλλομαι	‘get struck’	→ (οὐκ) ἐβαλλόμην	‘(didn’t) start getting pelted’
• γελάω	‘laugh’	→ ἐγέλων	‘started laughing’
• διαιτάομαι	‘live a lifestyle, inhabit’	→ διητώμην	‘started residing, occupied’
• διαφαίνω	‘show through’	→ διέφαινον	‘started shining through’
• δυσκολαίνω	‘be peevish’	→ ἐδυσκόλαινον	‘started being fussy’
• ἔχω	‘hold’	→ εἶχον	‘took hold of’
• κείμην	‘lie, be lying down’	→ ἐκείμην	‘lay down’
• ταρασσομαι	‘be troubled’	→ ἐταραττόμην	‘got upset’

Table 3: ACCOMPLISHMENTS

• γυμνός	‘strip bare’	→	ἐγύμνονον	‘started stripping bare’
• εἰσκομίζομαι	‘carry in’	→	ἐσεκομιζόμεην	‘began to carry in’
• ἐπιδιαβαίνω	‘cross over after’	→	ἐπιδιέβαινον	‘proceeded to cross’ (Xen. <i>Hell.</i> 5.3.4) ⁹
• καθίσταμαι	‘set in order’	→	καθιστάμην	‘began arranging’
• (παρ)άγω	‘lead aside’	→	(παρ)ῆγον	‘started leading (aside)’
• παρασκευάζομαι	‘prepare’	→	παρεσκευαζόμεην	‘began making preparations’
• [?](ἐκ)πέμπω, -ομαι	‘send (out) [?and deliver]’	→	(ἐξ)έπεμπον	‘sent (out) [but not delivered]’

Table 4: ACHIEVEMENTS(?) (OR LEXICAL INCEPTIVES?)

• [?]λαμβάνω	‘take, get’	→	ἐλάμβανον	‘started getting’
• [??]καθεύδω	‘go to sleep, sleep’	→	ἐκάθευδον	‘went to sleep’
• [??]ὀργίζομαι	‘grow/be angry’	→	ὠργιζόμεην	‘got angry’
• [??]ὀρμάομαι	‘start moving’	→	ὠρμήμην	‘got going’

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9. See on this example Emde Boas et al. 2019:406–7.

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