

The synchrony and diachrony of the Greek dative of agent

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1 Introduction

The dative participants in the following examples are often characterized as agents:

- (1) *Dative agent with modal predicate*

ἡμῖν γ' ὑπὲρ τῆς ἐλευθερίας ἀγωνιστέον.

'We at least must strive on behalf of freedom.'

Dem. 9.70

- (2) *Dative agent with perfect predicate*

- i. *Dative agent with perfect*

ἡ δὲ ὁδὸς ἡ ἡμερησίη ἀνὰ διηκόσια στάδια συμβέβληται=μοι.

'A day's journey has been calculated **by me** at 200 stades.'

Hdt. 4.101.3

- ii. *Dative agent with pluperfect*

ἐπει=δέ=σφι πάντες κατέστρωντο, τὸ ἱρὸν συλήσαντες ἐνέπρησαν πᾶσαν τὴν ἀκρόπολιν.

'When (the suppliants) had all been slain **by them**, (the Persians) plundered the sacred precinct and set fire to the entire acropolis.'

Hdt. 8.53.2

These two constructions differ in many aspects. In examples such as (1), the predicate is uniformly a modal predicate formed with -τέο- or -τό-.¹ Since the dative participant does not actually carry out the event denoted by the predicate, such datives have long been denied true agentive status (e.g., Petersen 1918a, p. 140). This use of the dative is found in several other archaic Indo-European languages and this construction is at least of Nuclear PIE antiquity (*pace* Luraghi 2016, pp. 21–22, 25–26). I will have nothing more to say about dative agents with modal predicates and will use the label *dative (of) agent* to refer exclusively to the dative agents that we find in examples such as (2).

¹See further on this construction Green 1913, pp. 65–70, Schwyzler 1988, p. 150, Hettrich 1990, pp. 64–67, Luraghi 2016, pp. 17–23, Danesi, Johnson, and Barðdal 2017; outside of Indo-European, see, e.g., Ganenkov, Maisak, and Merdanova 2008, pp. 185–186, Forker 2013, pp. 37–38.

The dative agents in (2) have prompted a number of questions that have yet to be adequately answered:

(3) *Questions*

i. *Distribution*

Under what conditions are passive agents marked with the dative case and not an adposition?

ii. *Semantic role*

Are the dative participants in example (2) true agents?

iii. *Original case*

Do the dative NPs in example (2) continue the PIE dative or instrumental case?

Concerning the distribution question, the standard account maintains that the realization of the agent is conditioned by the aspect of the passive predicate (see, e.g., Kühner and Gerth 1898, p. 422, Schwyzer 1988, p. 150, Smyth 1956, §§1488, 1490, George 2005, pp. 1, 78). The dative of agent is licensed by perfect predicates; elsewhere adpositions mark agents. This generalization accounts for a good portion of the data, but we do find dative agents with non-perfect predicates as well as adpositional agents with perfect predicates. As far as the semantic role of such datives is concerned, a widely held view denies that they are true agents. Wackernagel (2009, p. 190), for example, characterizes the dative of agent as a non-canonical agent (although he does not use this term). According to his analysis, the dative marks benefactives and not true agents. On the basis of this synchronic analysis, the origin of the Greek dative agent is then traced back to the PIE dative (whether benefactive or some type of dative of interest) and not the PIE instrumental.

I argue against all three of these claims. First, the dative of agent is not conditioned solely by aspect. The semantic role of the subject of the passive predicate and the prosodic status of the agent also play crucial roles in determining the choice between dative and adposition. Second, when we adopt an explicit set of criteria for determining agenthood, it becomes clear that there is no reason to think that the dative participants in example (2) fall short of the benchmark for true agentivity. Once we acknowledge that dative agents are in fact true agents, we have to revisit the question of their diachronic origin, since the analysis of the dative of agent as a reflex of the PIE dative in many analyses relies crucially on its synchronic status as an attenuated agent.² On my analysis, the Greek dative of agent is a real agent. Nothing therefore prevents us from identifying it as the reflex of the PIE instrumental case, which is believed to have been used to mark passive agents in PIE (e.g., Jamison 1979a, Jamison 1979b, Watkins 1995, p. 389, Melchert 2016). Although the distribution of dative agents in Herodotus is an innovation of post-Homeric Greek, this use of the dative can ultimately be traced back to the PIE instrumental.

The remainder of the paper is structured as follows. Section 2 presents an overview of the semantics of the Greek dative and argues that the Greek dative of agent is more agentive than previous scholars have acknowledged. Section 3 argues that the Greek dative in examples such as (2) continues the PIE instrumental case. Section 4 concludes with a brief recapitulation of the main claims.

²An exception to this trend is the analysis of Luraghi (2016, p. 31), who analyzes the dative of agents found with perfect passives as true agents. Despite this view, she locates the origin of dative agent in a PIE dative, specifically a dative experiencer. This view of the diachrony of the dative of agent suffers from the same problems as that of George (2005), in particular those mentioned at the end of section 3.2 below.

2 The Greek dative

As is well known, the Greek dative differs from the dative in other archaic Indo-European languages in that it is the product of a diachronic syncretism of three earlier cases: the dative, the locative, and the instrumental (Kühner and Gerth 1898, pp. 404–405, Green 1913, pp. 18–19, 21–23, Petersen 1918a, Petersen 1918b, Luraghi 1987, pp. 362, 365, Calabrese 2008, p. 165). As a result, the Greek dative is used in a wide array of semantic roles:

(4) *Semantic roles of the Greek dative*

i. *Recipient* (Smyth 1956, §§1469–1470)

Κύρος δίδωσιν αὐτῷ ἕξ μηνῶν μισθόν.

‘Cyrus gives **him** six months’ pay.’

Xen. *Anab.* 1.1.10

ii. *Possessor* (Smyth 1956, §§1476–1480)

ἄλλοις μὲν χρήματά ἐστι, ἡμῖν δὲ ξύμμαχοι ἀγαθοί.

‘**Others** have money, we have good allies.’

Thuc. 1.86

iii. *Locative* (Smyth 1956, §§1530–1538)

γῆ ἔκειτο.

‘(She) was lying **on the ground**.’

Soph. *OT* 1266

iv. *Experiencer* (Smyth 1956, §§1495–1496, Krüger 2003, §2.48.4.2D, 2.48.12.2, 2.48.15.2)³

φεύγειν αὐτοῖς ἀσφαλέστερόν ἐστιν ἢ ἡμῖν.

‘It is less risky **for them** to flee than **for us**.’

Xen. *An.* 3.2.19

v. *Instrumental* (Smyth 1956, §§1507–1511)

ὁ μὲν δὴ βληθεὶς τῇ αἰχμῇ ἐξέπλησε τοῦ ὀνείρου τὴν φήμην.

‘He (= Atys), having been struck **by the spear**, fulfilled the prediction of the dream.’

Hdt. 1.43.3

vi. *Benefactive* (Smyth 1956, §§1481–1486)

Φιλιστίδης ἔπραττε Φιλίππῳ.

‘Philistides was working **on behalf of Philip**.’

Dem. 9.59

Although this dossier is not exhaustive, it testifies to the unusual semantic breadth of the Greek dative. Given this breadth, scholars have routinely characterized the dative of agent as an attentuated or non-canonical agent. Wackernagel (2009, p. 190), for instance, writes that “It [= the dative case, DMG] is not however a form which serves straightforwardly to denote the agent as such, but

³For an analysis of experiencer arguments more generally, see Bosse and Bruening 2011.

rather it indicates that the action of the verb is performed in someone's interests."⁴ He illustrates his claim with the following passage:

- (5) ἐπειδὴ ἀπό τε τῶν ἔργων καὶ τῶν λόγων παρεσκευάστο ἀμφοτέροις...
'After arrangements had been made **by both sides** as to words and actions...'

Thuc. 4.67.1

Wackernagel (2009, p. 190) goes on to say that although we translate the sentence as 'when preparations had been made by them/by both sides', the meaning is really 'when preparations had been made for them'. What Wackernagel appears to have in mind is what would nowadays be called a benefactive agent, that is, an agent who benefits from an event or its outcome (see further on benefactive agents Yamashita Smith 2005, Yamashita Smith 2010, Zúñiga and Kittilä 2010). Another approach, which is similar in spirit, analyzes dative agents as a type of dative of interest (e.g., Kühner and Gerth 1898, p. 422, Green 1913, §90, Smyth 1956, §1488, George 2005, p. 78).

There are two difficulties with the view that the dative in examples such as (5) is really a benefactive dative or dative of interest (cf. Green 1913, §73). The first is that it is far from clear that dative agents imply any benefactive (or malefactive, for that matter) sense. Wackernagel's claim entails that we add a phrase such as 'to his/her/their benefit' to each case of a dative agent, a move for which I see little motivation. More importantly, even if the dative in examples such as (5) could be shown to be benefactive agents, they would still be agents. The addition of a benefactive component to the meaning of the clause would not nullify the agentivity of the dative.

2.1 Canonical and non-canonical agents

The debate over the semantic role of the datives in examples such (2) has been conducted without an explicit set of criteria about what exactly constitutes an agent. One widely used set of criteria for agenthood and patienthood is that of Dowty (1991, p. 572), who uses the lexical entailments that verbs impose on their arguments as semantic determinants of argument realization (cf. Cruse 1973, Ackerman and Moore 2001). He identifies two proto-roles, proto-agent and proto-patient, which are characterized by the following properties (the entailments in parentheses below are identified by Dowty himself as marginal):

- (6) *Proto-agent entailments*
- i. Volitional involvement in the event or state.
 - ii. Sentience (and/or perception)
 - iii. Causing an event or change of state in another participant
 - iv. Movement (relative to the position of another participant)
 - v. (Exists independently of the event named by the verb)
- (7) *Proto-patient entailments*
- i. Undergoes change of state

⁴Similar attempts have been made to deny dative agents in Latin (Suárez Martínez 2001; Luraghi 2010, p. 46) and Sanskrit (Delbrück 1888, p. 145), as well. The situation in these languages of course differs since they did not undergo a syncretism of the dative and instrumental.

- ii. Incremental theme
- iii. Causally affected by another participant
- iv. Stationary relative to movement of another participant
- v. (Does not exist independently of the event, or not at all)

Dowty decomposes the concepts of agent and patient into more basic components, which determine which arguments of an event will be realized as the subject and the object. The more criteria that an agent or patient satisfies, the more canonical the agent or patient, respectively. Participants that have all the relevant properties in example (6) are canonical agents. Participants of an event that lack one or more of the proto-agent properties exhibit a lower degree of agentivity and are known as non-canonical agents (e.g., Yamashita Smith 2005, Kittilä 2005, Ganenkov, Maisak, and Merdanova 2008, Forker 2013).

2.2 The Greek dative as canonical agent

A closer look at the factors that condition the distribution of agency expression in classical Greek reveals that dative agents are in no way attenuated agents. Figure 1, which is based on a sample of 438 tokens of passive predicates with overt agent phrases from Herodotus' *Histories*,⁵ reveals that the standard, aspectually based account of the dative of agent accounts for a respectable swath of the data, but is certainly not the whole story.⁶



Figure 1: Aspect and agency expression in Herodotus

⁵All the passive verbs were retrieved from the PROIEL corpus (Haug and Jøhndal 2008) of the *Histories*, which contains books 1, 4, 5, 6, and 7. In addition, all of the passive predicates with overt agents from books 8 and 9.1–9.90 were collected. I gratefully acknowledge the assistance of Anahita Hoose and Silvio Curtis in coding the Herodotean data.

⁶A chi-square test of independence reveals a statistically significant relationship between perfect aspect and agent realization ($\chi^2(1) = 222.6, p < 0.001$). There is in addition a strong positive correlation between these two variables ($\phi = 0.72$).

This graph reveals the extent of the exceptions and also makes clear that the counterexamples exist in both directions:

(8) i. *Dative of agent with non-perfect (present)*

λέγεται δὲ τοῦδ' ἔνεκα ταῦθ' ἡμῖν, ὡς...

'These things are said **by us** for the following (reason), that...'

Pl. *Leg.* 715b7

ii. *PP-agent with perfect*

ἐξεληλαμένος τε ὑπὸ τοῦ πατρὸς...

'And having been banished **by my father**...'

Hdt. 1.35.3

Under the standard analysis, one expects a prepositional phrase agent in example (8i), since the predicate is a present imperfective. In example (8ii), one expects a dative agent, since the predicate is a perfect participle. One can account for counterexamples such as these by enriching the model of agent realization. In particular, two further factors have to be taken into account: the semantic role of the subject and the prosodic status of the agent.

2.3 Subject affectedness

When the subject bears the theme semantic role, dative agents are preferred. I define theme subjects here as exhibiting one of the following two properties: they are either brought into or out of existence by the event or they undergo involuntary movement. (In the interest of space, I will focus exclusively on the former property.) This type of existential discontinuity preponderates among passive predicates with dative agents:

(9) *Existential discontinuity*

i. τῆς δὲ γῆς τῆς Σκυθικῆς αἰνώως ἀξύλου εἰσῆσις ὧδε=σφι ἐς τὴν ἔψησιν τῶν κρεῶν ἐξεύρηται.

'Since the Scythian land has very little wood, **they** have devised their own way to boil their meat.'

Hdt. 4.61.1

ii. ἐπεὶ=δέ=σφι πάντες κατέστρωντο, τὸ ἱρὸν συλήσαντες ἐνέπρησαν πᾶσαν τὴν ἀκρόπολιν.

'When (the suppliants) had all been slain **by them**, (the Persians) plundered the sacred precinct and set fire to the entire acropolis.'

Hdt. 8.53.2

Both examples illustrate existential discontinuity. In example (9i), the cure of the Scythians comes into existence as a result of their discovery. In example (9ii), the suppliants cease to exist at the conclusion of the event. The subjects in both cases are thus highly affected by the event denoted by the predicate.

Partially affected subjects undergo a change in some quality, but their existential status is constant. Adpositional agents are typical with such subjects:

(10) *Qualitative discontinuity*

Ἴστιαῖος μεμετιμένος ὑπὸ Δαρείου ἐκομίζετο ἐπὶ θάλασσαν.

‘Histiaeus having been released **by Dareios** was traveling to the sea.’

Hdt. 5.108.1

Although Histaeus undergoes a change of state in becoming free, he exists before and after the event. In this regard, he is less affected by the event described by the predicate than the subjects in example (9).

Figure 2 reveals the impact that the semantic role of the subject (specifically, whether or not it is a theme) has on the distribution of agency expression.

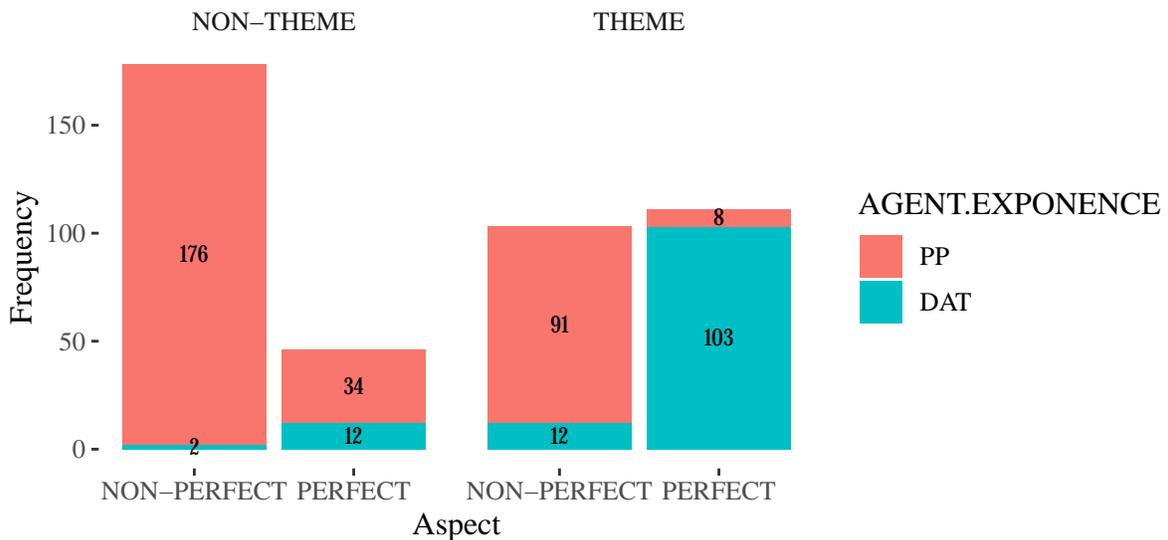


Figure 2: Subject semantic role, aspect, and agency expression in Herodotus

The vast majority of dative agents co-occur with subject themes. By taking into account the semantic role of the subject, we are thus able to account for a greater percentage of the data, in as much as most of the prepositional phrase agents that co-occur with an aspectually perfect predicate have non-theme subjects.

Given this robust association with theme subjects, dative agents are unquestionably true agents. The following examples fulfill most of the proto-agent criteria established in example (6):

- (11) i. πρὸς δὲ τοὺς Ἑλληνας=σφι σκήψις ἐπεποίητο.

‘A pretext had been prepared **by them** for the Greeks.’

Hdt. 7.168.4

- ii. ἐπεὶ=δέ=σφι πάντες κατέστρωντο, τὸ ἱρὸν συλήσαντες ἐνέπρησαν πᾶσαν τὴν ἀκρόπολιν.

‘When (the suppliants) had all been slain **by them**, (the Persians) plundered the sacred precinct and set fire to the entire acropolis.’

Hdt. 8.53.2

In example (11i), the agents are sentient, act on their own volition, are high on the animacy hierarchy, and caused a change of state to take place, namely the creation of the pretext. In example (11ii), the dative agent again has the properties of sentience and volition. This time, however, the change that the agent effects in the world is far more forceful than in the preceding example. Nothing in the act of murdering suppliants that suggests attenuated agency.

Further evidence for the status of dative agents as true agents comes from the following contrast. Dative agents never, to the best of my knowledge, co-occur with unaccusative predicates, whereas adpositional agents do (cf. Schwyzer 1943, p. 30, Smyth 1956, §1493, Schwyzer 1988, pp. 528–529, Mariani 2002, p. 126, George 2005, 7 n. 16, 17, Anagnostopoulou and Sevdali 2015, pp. 449–450):

2.4 Prosodic realization

The prosodic status of the agent also has a crucial effect on whether the agent is marked with the dative or with an adposition. Figure 3 reveals that adpositional agents are nearly always prosodic words:⁷

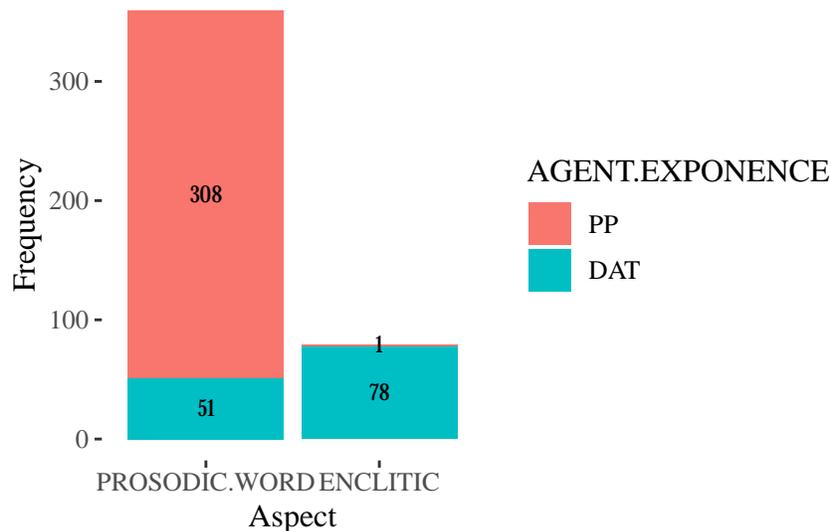


Figure 3: Prosody and agency expression in Herodotus

This skew is due to prosodic phonology. Enclitic pronominal agents are realized as dative agents because monosyllabic enclitic pronouns are not licit complements of prepositions (Powell 1938, p. 340, Goldstein 2016, 82 n. 2). The complement of a preposition has to be a prosodic word:

(12) *Stressed pronominal complement of preposition*

γνώμηι μέντοι ἔσσοῦται ὑπὸ σεῦ.

‘In counsel, however, he is bested **by you**.’

Hdt. 7.237.1

⁷A chi-square test of independence reveals a statistically significant relationship between the prosodic status of the agent and its morphological realization ($\chi^2(1) = 218.6, p < 0.001, \phi = 0.71$).

Although Greek has both a stressed ($\sigma\epsilon\upsilon$) and enclitic ($-\sigma\upsilon$) form of the second person singular genitive pronoun, here the adposition requires the former.

In sum, three factors are crucial in determining the realization of passive agents in Herodotus: the aspect of the passive predicate; the semantic role of the subject; and the prosodic status of the agent. How we should best model these three factors and why they are significant are topics that cannot be treated here on account of space constraints. I am currently preparing an article for publication that pursues these issues.

If a clause has a perfect passive predicate, an enclitic pronominal agent, and a theme subject, it is highly likely that the agent will be in the dative. Even if a clause only contains two of the three properties, the agent is still highly likely to be in the dative. (What lies behind the slight drop off among perfect passives with theme subjects and prosodic word agents is not yet clear.) The probability of a dative agent then plummets if a clause has only one of these three properties.

3 Diachrony

As mentioned in section 1, scholars have long preferred to locate the origin of the Greek dative of agent in an earlier dative construction on the belief that it is not truly an agent and therefore should not continue the instrumental case. The preceding section has revealed this synchronic analysis to be groundless when it comes to Herodotus. The rejection of this synchronic analysis in turn has consequences for the diachrony of the dative of agent. Before tackling the question of the origin of the classical Greek dative agent, it is necessary to provide a brief sketch of passive agents in Homer.

3.1 The dative of agent in Homer

The distribution of agent phrases in Homer differs strikingly from what we find in Herodotus. First and foremost, passive predicates with agent phrases are extremely rare in Homer. In the first twelve books of the *Iliad*, there are but 24 tokens of passive predicates with overt animate agents.⁸ Second, dative agents in Homer do not preponderate with perfect passive predicates the way they do in the classical period, as Figure 4 reveals.⁹

⁸I gratefully acknowledge the assistance of Chengzhi Zhang in helping me collect and code the Homeric data.

⁹A two-tailed Fisher's exact test failed to yield a statistically significant result for the relationship between perfect aspect, morphological expression, or prosodic realization and the realization of the agent in Homer.

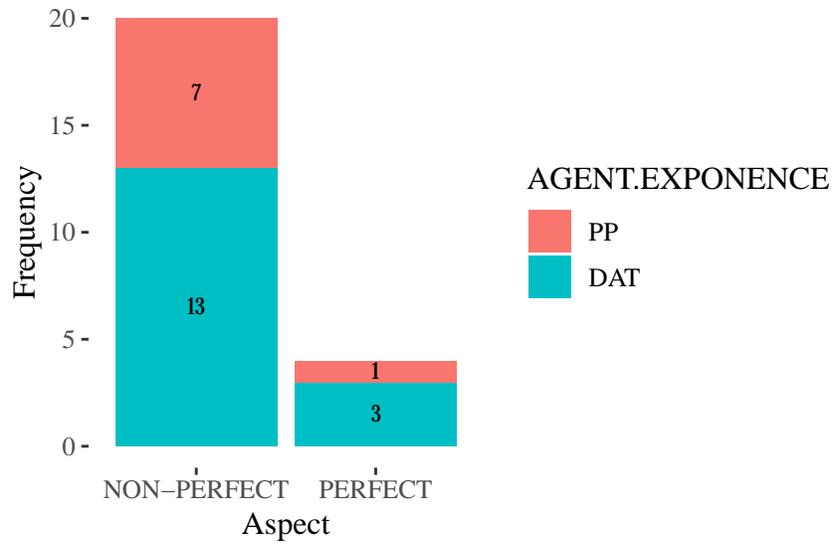


Figure 4: Aspect and agent realization in *Il.* 1–12

Equally remarkable is the frequency of dative agents in Homer. Figure 3 shows that they outnumber adpositional agents.

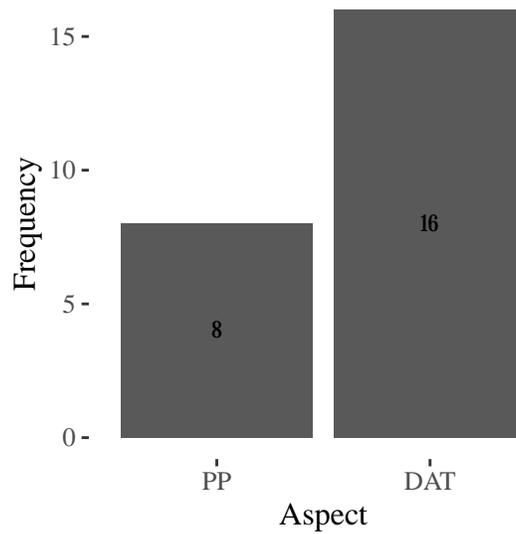


Figure 5: Frequency of dative and adpositional agents in *Il.* 1–12

Interestingly, the robust correlation between dative agents and enclitic pronouns that we observed above in Herodotus (Figure 3) is nowhere to be found in Homer:

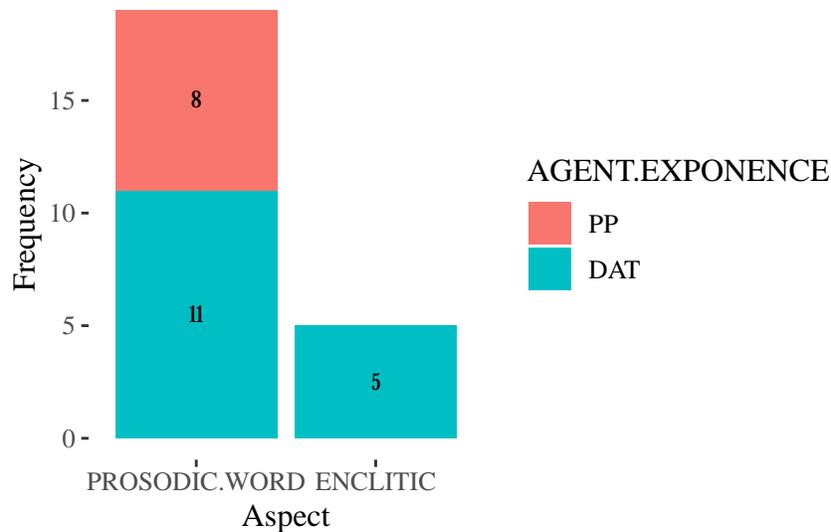


Figure 6: The prosodic realization of agents in *Il.* 1–12

To be sure, enclitic pronominal agents are more common among dative agents than among adpositional agents, but the Herodotean distributional patterns have yet to set in.

Dative agents in Homer are most common among verbs in two lexical fields, subjugation and accomplishment (see also Green 1913, pp. 75–76 and Luraghi 2016, pp. 26–29). The best-represented predicate among the former class is δάμνημι (George 2005, pp. 52–55), but other predicates also co-occur with dative agents:

- (13) i. ἦν μὴ καὶ σὺ θάνῃς Ἀχιλλῆϊ δαμασθεῖς.
 ‘Unless you too die, having been killed by Achilles.’
 Hom. *Il.* 22.55
- ii. ἐς τί ἔτι κτείνεσθαι ἐάσετε λαὸν Ἀχαιοῖς;
 ‘Up until what point will you allow (your) host to be killed by (the) Achaeans?’
 Hom. *Il.* 5.465

Less frequently, the dative agent is also found with accomplishment predicates (George 2005, p. 55):

- (14) i. ὦ πόποι, ἦ μέγα ἔργον ὑπερφιάλως ἐτελέσθη
 Τηλεμάχῳ ὁδὸς ἦδε. φάμεν=δέ=οἱ οὐ τελέεσθαι.
 ‘Oh my, a big deal indeed. This journey has boldly been completed by Telemachus. It had been said that it would not be completed by him.’
 Hom. *Od.* 4.663–664
- ii. τέτρατον ἦμαρ ἔην καὶ τῷ τετέλεστο ἅπαντα.
 ‘It was the fourth day and everything had been completed by him.’
 Hom. *Od.* 5.262
- iii. θοῶς=δέ=οἱ ἦνυτο ἔργον.
 ‘(The) deed was completed by him quickly.’

Examples such as these make it clear that some dative agents in Homer are true agents and cannot be viewed as attenuated or non-canonical.

3.2 The standard history of the Greek dative of agent

In his diachronic analysis of the Greek dative, George (2005, pp. 79–81, 102) begins with the assertion that the PIE perfect of most verbs was originally an intransitive stative, which could not be passivized. This is a position shared by a number of other scholars, including Luraghi (2016, pp. 29–30):¹⁰

[T]he perfect did not have a passive at its earliest stage, as it was basically intransitive and subject oriented, that is, it indicated a state of the subject. For this reason, it did not have a real active/passive distinction. Only later did it acquire a transitive character, and started being patient oriented, that is, it could indicate a state of the object.

To cite a well-known data point, the transitive verb τίθημι ‘place, put’ is attested 382 times in the *Iliad* and *Odyssey*—and not once in the perfect (*LHD*, s.v.). It is only in the post-Homeric period that transitive perfects, which typically denote the resultant state of the object with a change-of-state of predicate, come into full bloom (Wackernagel 1904, pp. 1006–1010). Consequently, passive perfects become much more frequent in the post-Homeric period.

Although the perfect was rarely passivized in Homer, it could, according to George, co-occur with dative participants. This dative was a dative of “interest” (George 2005, p. 81), which George uses as an umbrella term to refer to the datives with modal predicates (such as we have in example 1 above); possessor datives; and lexical datives selected by particular adjectives (cf. Seržant 2012, pp. 358, 362, 374, 382 for a similar and more explicit analysis). As already noted, the perfect came to be used transitively in the post-Homeric period, as a result of which it could also be passivized. Once this change took place, the erstwhile datives of interest were coerced into agent phrases. Adpositional agents were also licensed. Thus the dative of interest and prepositional phrase agent both ended up as markers of passive agents. The account of both George (2005, pp. 80–81) and Schwyzer (1988, pp. 149–150, 165) entails a change from a dative of interest to a dative of agent. In a similar vein, Luraghi (2016, pp. 35, 41–42) locates the diachronic origin of the dative of agent in the experiencer dative.

George’s account faces insurmountable empirical problems. Its central claim is that the dative of agent arose as a consequence of the change in valency of the Greek perfect. It therefore predicts that where we find passivized transitive perfects, we should find dative agents. Outside of the perfect, however, dative agents should not appear. As established in Figure 1 above, the distribution of dative agents in Herodotus is not so neat. When we look to Homer, the analysis fares even worse. As George (2005, p. 51) himself observes, dative agents are more frequent in Homer than adpositional agents and do not show the correlation with perfect passives that will become so prominent in the

¹⁰For my purposes, this diachronic account will suffice. The development of the perfect in Greek may, however, be better characterized as a change first from an S-oriented to a P-oriented resultative (Nedjalkov 2001) and from here into a perfect proper (see Seržant 2012 for such a trajectory).

classical period. If the dative of agent is only supposed to arise after the transitivity of the perfect sets in, why is the dative of agent already prevalent in Homer? One way to solve this issue is to of course acknowledge that some dative agents in Homer continue the instrumental. Such a move opens the door to the possibility that some datives in Herodotus also continue the instrumental.¹¹ Otherwise, George has to say that the dative agents in Homer continue an earlier instrumental whereas those in Herodotus continue an earlier dative. I am aware of no evidence to motivate such an analysis.

3.3 A new account

Given these problems, a new diachronic account is in order. In the post-Homeric period, it is crucial to recognize two diachronic trajectories in the domain of passive agents. The first is that the dative agent is consistently used with the new perfect passives that follow in the wake of the widespread development of transitive perfects. The second is that the use of adpositional agents is considerably extended, to the point that by the time of Herodotus it is the default realization of passive agents. So this period is one of both expansion and contraction for the dative of agent. The spread of adpositional agents will continue into the classical and Hellenistic periods, with the result that the dative of agent is much rarer by the time of the New Testament (George 2005, p. 94).

Within this diachronic context, the central question is how the dative agent acquires the distributional profile that it has in Herodotus. It is well known that the perfect relates a past eventuality to a current state. Comrie (1976, p. 86) observed that with transitive predicates it is typically the object that undergoes the change in state and not the subject:

(15) The enemy has destroyed the city.

In this example, the city undergoes a change of state but the subject does not (or at least, the sentence says nothing about this possibility). When the perfect is in the passive, it is the subject that is profiled. As Comrie (1976, p. 86) puts it, “The perfect passive is precisely that form which predicates a change of state to the object of an action.” This description accurately characterizes the post-Homeric perfect passive in Greek. As established in section 2.3, the subjects of perfect passives with dative agents in Herodotus are highly affected, in as much as they frequently undergo an existential change-of-state.

Given that the perfect passive serves to highlight the change of state of the subject, dative agents predominate in this context because they are usually established in the discourse compared to adpositional agents and therefore require less morphological marking (cf. Haspelmath 2018, pp. 4, 7). As illustrated above in Figure 3, the majority of dative agents are enclitic pronouns. So in none of these cases can the agent be the focus of the utterance. Even in cases where the dative agent is not an enclitic pronoun, there are cases in which it is not focused:¹²

¹¹George (2005, pp. 59–60) does entertain the possibility that some of the dative agents in Homer continue the PIE instrumental. He ultimately rejects it, however, on the grounds that the evidence is ambiguous.

¹²Given the difficulty of establishing the focus constituent of an utterance on the basis of corpus data alone, I do not offer here a quantitative assessment of how often non-enclitic dative agents are focused.

- (16) ἀλλὰ γὰρ [ἐς τοὺς πολεμίους]_{Foc} τῷ θεῷ εἰρήσθαι τὸ χρηστήριον συλλαμβάνοντι κατὰ τὸ ὀρθόν, ἀλλ' οὐκ ἐς Ἀθηναίους.

'For one interpreting it correctly, the oracle has been spoken by god not in regard to the Athenians, but [in regard to their enemies]_{Foc}.'

Hdt. 7.143.2

From Herodotus' rejection of ἐς Ἀθηναίους, we infer that ἐς τοὺς πολεμίους is the focus of utterance. Crucially, the focus is not the dative agent τῷ θεῷ 'the god'. As described above by Comrie, the perfect passive typically highlights the resultant state of the subject and not that of the agent. In such a scenario, the agent phrase is therefore marked with case alone as opposed to both a preposition and a case.

The correlation between dative agents and perfect predicates in classical Greek thus has nothing to do with the nature of the dative case itself (whether synchronically or diachronically). This line of reasoning offers a reason for why the dative agent exhibits the distributional pattern that it does in Greek and nowhere else in archaic Indo-European.¹³ In other languages, the instrumental case was preserved and continues to mark passive agents (e.g., Hittite, Vedic, Old Avestan, Old Church Slavic) or case-marked agents were lost entirely (e.g., Gothic, Old Irish, Armenian). There are exceptions to this makeshift typology,¹⁴ but the crucial point is that in Homeric and classical Greek we have both a dative-instrumental syncretism and the preservation of case-marked passive agents. This, I claim, is why the dative of agent as we have it in Greek exists there and nowhere else. On George's analysis, however, we are left to wonder why the dative of interest did not develop into a dative agent in Indo-Iranian, where we would have had the same input context (i.e., a dative of interest with an intransitive perfect followed by the subsequent rise of transitive and therefore passivizable perfects).

George (2005, 80 n. 5) argues against the view of the Greek dative of agent as an original instrumental on the grounds that its special relationship with the perfect is entirely unexpected. (See further on this debate Green 1913, pp. 63–65, 70–77.) He invokes the Latin construction *mihi facta sunt* to demonstrate the special connection between the dative and the perfect. In addition, he notes that dative agents are found chiefly with personal pronouns. If this use of the dative had descended from the instrumental, we should have expected the dative to be used with participants across the animacy hierarchy from personal pronouns to inanimates.

Both of these objections can be answered. To begin with the proclivity of pronominal agents for the dative, this pattern only arises in the post-Homeric period. So the scenario that George expects from Herodotus was presumably there at earlier stages of Greek. Concerning the *mihi facta sunt* pattern of Latin, it is a false comparison. This dative agent presumably arose from a possessor dative. Had the possessor dative really been the origin of the Greek dative of agent, we would

¹³Dative agents with non-modal predicates are of course found elsewhere in archaic Indo-European, including Latin and Indo-Iranian (Green 1913, pp. 37–39, 52, 58, 73), but in these languages their distribution bears no resemblance to what we find in Greek, not least because the dative agents in these languages are prevalent among non-finite forms. (And in the case of Latin, language contact with Greek may also have played a role.) Some stage of pre-Greek presumably resembled what we find in these languages. My point here, however, is that the distributional pattern of the dative agent in classical Greek is unique and due in part to the syncretism of the dative and the instrumental.

¹⁴Lithuanian, for instance, preserves the instrumental but marks passive agents with the genitive. See Schmalstieg 2002.

expect to find data of the type that we have in Indo-Iranian (for which see Benveniste 1966), where possessors did develop into agents. As established above in section 3.1, the correlation between perfect aspect and dative agents comes into being only in the post-Homeric period. This association has nothing to do with a privileged relationship between the Greek dative per se and the perfect. It has to do instead with the contrast between a case-marked agent and a prepositional phrase agent. Case-marked (i.e., dative) agent phrases are typically canonical agents: they are high on the animacy scale, pronominal, established in the discourse, and trigger a change of state of the subject of the passive predicate. Prepositional phrase agents by contrast appear to mark less canonical agent phrases.

4 Conclusion

Despite perennial claims to the contrary, the dative of agent that preponderates among perfect predicates is a true agent, which ultimately continues the PIE instrumental case. The distributional pattern of the dative of agent in Herodotus is a post-Homeric phenomenon that arose in the face of the spread of adpositional agents during this phase of Greek. In sum, Greek, like Hittite (Hoffner and Melchert 2008, §21.14, Melchert 2016), Vedic (Gonda 1951, Jamison 1979a), and Old Church Slavic (Bräuer 1952), provides evidence that passive agents in PIE were realized with the instrumental case (for an alternative view of passive agents in PIE, see Luraghi 1986, Strunk 2005).

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