# Beyond affectedness – partitive objects and degrees of agenthood in Ancient Greek

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In several ancient and modern Indo-European languages, the partitivegenitive may be used in place of the accusative to encode the second argument of two-place verbs. In Ancient Greek the two types of object encoding can alternate with change-of-state verbs, alternation being viewed as connected with degrees of patient affectedness: the partitive-genitive encodes partially affected objects. Alternation also extends to experiential verbs, which are typically characterized by a low degree of transitivity and do not imply any change of state of the object-stimulus. Rather than concentrating on the implications of case alternation on the construal of the object, I consider the effects of variation on the whole construction, and argue that genitive vs. accusative marking of the object (NomGen vs. NomAcc constructions) reflects the construal of the subject-experiencer. While the different construal of the experiencer in terms of degrees of control crosslinguistically often results in non-nominative encoding of the experiencer, in Ancient Greek it is object encoding that affects the construal of the experiencer and reflects a scale based on possible control. The distribution of constructions with experiential verbs shows that NomAcc is typical of verbs of sight, thought, intellectual knowledge and emotions connected to sight and awareness, such as wonder and fear. NomGen is connected with touch, smell, taste, memory, forgetfulness, care and desire. In the in-between area, verbs of hearing, learning and verbs of affection may feature both accusative and genitive encoding, thus constituting a fuzzy transition area. The connection between sight and other experiential verbs that feature accusative encoding reflects an embodied conceptualization of experiential situations.

Keywords: decreasing patienthood, decreasing agency, affectedness, NomAcc/NomGen construction alternation, experiential verbs, embodiment

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# 1. Introduction

In recent years, alternation between an accusative case and a partitive-genitive or a partitive case as typical of several ancient and modern Indo-European languages<sup>1</sup> or of Balto-Finnic languages has been described as an instance of symmetric differential object marking, or DOM (see De Hoop and Malchukov 2008; Iemmolo 2013; Iemmolo and Klumpp 2014).<sup>2</sup> Iemmolo and Klumpp (2014: 271) define optional DOM as "the phenomenon whereby only a subset of direct objects are case-marked depending on the semantic and/or pragmatic properties of the object referent." Concerning symmetric DOM, De Hoop and Malchukov (2008: 575) write: "in Finnish, weak objects receive partitive case and strong objects, accusative case." These, as well as virtually all available definitions, focus on properties of the object as triggers of DOM. It then appears to be important for the understanding of language-specific DOM to pinpoint the properties that the object must exhibit to trigger it.

A frequent trigger of DOM is considered to be patient affectedness. In alternations involving an accusative and a partitive or partitive-genitive, the latter is viewed as indicating low or partial affectedness (Luraghi and Kittilä 2014: 40–44; Tamm 2014: 128; Hettrich 2014). Notably, this can result in two types of constructions. In the first place, low affectedness of the second argument can be a consequence of a verb's low transitivity. In such cases, partitive coding is obligatory with

(i) Estoy esperando un tren / a un camarero.
 be.prs.1sG waiting a train/ DOM a waiter
 "I'm waiting for a train/ for a waiter."

<sup>1.</sup> On the partitive genitive in other Indo-European languages see e.g. Daniel (2014) and Ter-Avanesova & Daniel (this vol.) on Russian, and Dahl (2014) on ancient Indo-Iranian.

**<sup>2.</sup>** A distinction is often made in the literature between asymmetric and symmetric DOM. The former involves optional marking of direct objects. A typical example is Spanish, as in (i).

In (i), the inanimate object *un tren* 'a train' is unmarked, while the animate object *a un camarero* 'a waiter' receives extra marking, in this case the preposition *a*. Symmetric DOM, on the other hand, involves different case marking of objects as in Finnish (see examples (1)–(3) discussed further on), which typically take different cases. A slightly different terminology is used by Chappell and Verstraete (2019), who distinguish between DOM (limited to symmetric DOM) and optional case marking (elsewhere called asymmetric DOM, see Iemmolo 2013). They define the two types of marking as follows: "optional case marking refers to the situation where a case marker can be present or absent in a particular environment without affecting role interpretation ... Differential case marking ... is defined here as referring to the situation where two overt case markers alternate in the same environment without affecting role interpretation." (2019: 1). In this paper, I will be concerned only with symmetric DOM.

specific verbs. In Finnish, this is the case of a part of experiential verbs, as shown in (1).

(1) Lapsi ajattele-e kesä-ä
 child think-3sG.PRS summer-PAR
 'The child is thinking about the summer.'

In (1) the verb *ajattele* 'think' is a low-transitivity verb which does not indicate change of state, and obligatorily takes the partitive case.

In the second place, verbs that denote change of state may allow construction alternation, depending on whether the patient undergoes the change of state in its totality or only in part. In this latter case, DOM may indeed indicate partial affectedness (Iemmolo and Klumpp 2014: 272). Compare the Finnish examples (2) and (3).

- (2) *Lapsi* sö-i keito-n child.NOM eat-3SG.PST soup-ACC 'The child ate (up) the soup.'
- (3) *Lapsi* sö-i keito-a child.NOM eat-3SG.PST soup-PAR 'The child ate (some) soup.'

In (2) and (3), the verb *sö* 'eat' indicates change of state, and can take either the (genitive)accusative or the partitive, depending on whether the object is fully affected or not. As remarked in Giusti and Sleeman (2021: 4), in occurrences such as (3), "the nominals marked with partitive case ... have the interpretation of weak indefinites."

Hence, gradients of transitivity appear to be crucially connected with this type of DOM, either because a special type of case marking is connected with low transitivity verbs, or because it indicates that an action denoted by a transitive verbs is not fully accomplished, hence the overall transitivity of the sentence is reduced. Remarkably, depending on the verb's meaning, different transitivity parameters may show higher or lower relevance. This has been highlighted by Tsunoda (1985: 395), who remarks: "not all the parameters involved are equally relevant to a given morphosyntactic phenomenon. ... in manifesting a transitive case frame, ... Affectedness is crucial, but ... [v]olitionality and ... [a]gency appear to be irrelevant." On the opposite edge of the scale, with verbs that do not indicate change of state, it is the degree of agency that gains relevance: indeed, even when not causing a change of state, the first participant may be construed as exerting a higher degree of control and volitionality over the situation.

In order to capture this difference, Malchukov (2005) proposed two different sub-hierarchies departing from the transitive prototype, one measuring decreased patienthood (decreasing degrees of affectedness in Tsunoda's terms) and the other measuring decreased agenthood, as shown in Figure 1.



Figure 1. Two-dimensional verb type hierarchy

The sub-hierarchy of decreased agency mostly includes experiential verbs, concerning which Malchukov points out that "the difference in argument structure between canonical transitives and mental [i.e. experiential, S.L.] verbs such as 'see' and 'like' ... relate[s] ... importantly to properties of A." (2005: 80).

Notably, Malchukov (2005, 2006) claims that the two sub-hierarchies should predict the constituent on which transitivity parameters are marked. In (2006: 335), he states the Relevance Principle as follows: "Mark the Transitivity Parameter on the relevant constituent (i.e. on the constituent to which the feature pertains)." Following this principle, the sub-hierarchies of decreasing patienthood is predicted to have reflexes such as DOM on the object encoding, while the sub-hierarchies of decreasing agenthood should reflect differential subject marking, or DSM (2006: 337–339).

In a detailed study conducted on the ValPaL valency patterns (http://valpal.info/about/project),<sup>3</sup> Aldai and Wichmann (2018) show that a connection between DSM and classes of experiential verbs does not emerge clearly from the data. In particular, they argue that "not all the verbs in the sub-hierarchy along agentivity of proto-agents (experiential verbs) take the inverted pattern [i.e. non-nominative experiencers, S.L.]. Some languages may use an oblique-object frame here too, even if the latter may seem more suited for the sub-hierarchy along

**<sup>3.</sup>** The "Valency classes in the languages of the world" project was carried out at the Leibniz *Max Planck Institute for Evolutionary Anthropology* (www.eva.mpg.de) (2009–2013), resulting in two collective volumes (Malchukov and Comrie 2015) and the online *ValPaL* database (Hartmann, Haspelmath and Taylor 2013). The aim of the project was to investigate the range of possible variation across verb classes, from languages of different genetic and areal affiliation, trying to extract/detect general coding tendencies. The data base includes data for 80 verb meanings from 36 languages and additional ones for specific languages, up to a total of 162 verb meanings.

affectedness of proto-patients." (2018: 278). Indeed, Malchukov acknowledges that the use of partitive objects with low transitivity verbs in Estonian may be viewed as reflecting low agentivity. He writes that in "the case of Estonian… where nonagentive verbs of perception and cognition combine with the O in Partitive …it can be argued that case marking of O depends on a feature (volitionality or control) of the A argument." (2006: 339)

While descriptions of DOM typically only focus on the construal of the patient, the above considerations show that the construal of the agent should also be taken into the picture, as constructions implying low affectedness in the patient also imply lower agentivity for the agent. Construction alternation, then, may point to different degrees of overall transitivity, indicating degrees of involvement of both the agent and the patient in the event, with different, partly language-specific, reflexes on the construal of the event. Hence, it seems more appropriate to consider whole constructions and their holistic properties, rather than focus on participant-specific properties in isolation to reach a better understanding of the type of construction alternation instantiated by specific types of DOM.

In this paper I describe accusative/partitive-genitive alternations with twoplace verbs in Ancient Greek, which are traditionally viewed as connected with degrees of patient affectedness (Conti and Luraghi 2014).<sup>4</sup> I follow the approach outlined above, and consider the Nom(inative)Acc(usative) and the Nom(inative)Gen(itive) constructions as holistic units. I show how construction alternation contributes to the construal of the situation in different ways in connection with the verbal meaning, and profiles to various extents the involvement of the subject's or of the object's referent. In particular, I argue that with experiential verbs the NomAcc/NomGen alternation reflects on the construal of the subjectexperiencer as characterized by decreasing agentivity (Luraghi 2020), hence providing evidence for possible marking of features of the A argument on the O in terms of Malchukov (2006). On the other hand, preferred referential features of objects in either construction also point to different construal of the objectstimulus as being more or less easily apprehended mentally or through the senses, although this latter distinction is not systematic.

Although the function of construction alternation outlined above accounts especially well for the H(omeric) G(reek) data, as argued in Luraghi (2020), in this paper I show that the same alternation holds in Classical Greek and the early Koine. However, cognitive verbs show a tendency to reduce its role, and partly discard the NomGen construction in Classical Greek. On the other hand, with

<sup>4.</sup> With 'Ancient Greek' (AG) I refer to the time span covered from the Homeric poems (before 8th century BCE) to the early Koine (4th century BCE). Within this time span, I further distinguish between Homeric Greek (HG) and post-Homeric Greek (post-HG).

perception verbs construction alternation patterns in the same way as in HG, even with verbs that are not attested in Homer.

The structure of the paper is as follows. In Section 2, I survey the possible alternation of the NomAcc and the NomGen constructions with verbs belonging to the sub-hierarchy of decreasing patienthood. Construction alternation with experiential verbs constitutes the topic of Section 3. In Section 4, I argue that some verbs point to contacts between the two the sub-hierarchies, partly highlighted by semantic extensions in post-HG. Section 5 contains the conclusions.

# 2. NomACC/NomGen alternation along the sub-hierarchy of patient affectedness

In A(ncient) G(reek), the vast majority of two-place verbs take the NomAcc construction, regardless of their degree of transitivity (Sausa 2015; Luraghi 2020). This is in accordance with Haspelmath's (2015: 139) claim that "the prominence of transitivity does seem to be a robust language universal", based on cross-linguistic data from the ValPaL verbs. The NomGen construction is typical of certain verb classes, including motion verbs with ablative prefixes and other verbs whose meaning profiles the source, which will not be discussed here, and part of experiential verbs discussed in Section 3 (Humbert 1960: 278–283; Luraghi 2020: 63; 75–79).

Change-of-state verbs (verbs of effective action; Malchukov 2005) admit construction alternation involving NomAcc and NomGen. Handbooks describe genitive objects as partially affected (Schwyzer 1950:103; Chantraine 1953:51; Humbert 1960:269). This alternation is typically exemplified with verbs of consumption (Napoli 2010), as in (4) and (5).<sup>5</sup>

(4) Mế pốs tis lōtoîo phagốn nóstoio
 NEG how INDF.NOM lotus.GEN eat.PTCP.AOR.NOM return.GEN
 láthētai
 forget.SBJV.AOR.MID.3SG
 'So that nobody, having eaten some lotus, may forget the return.'
 (Hom. Od. 9. 102)

<sup>5.</sup> The glosses conform to the *Leipzig Glossing Rules*. For the sake of simplification, gender is never indicated; number is indicated only if it is non-singular; mood and voice are indicated only if they are non-indicative and non-active respectively.

(Hom. Od. 14.135)

(5) *è* tón g' en póntōi phágon ikhthúes
or DEM.ACC PTC in sea.DAT eat.AOR.3PL fish.NOM.PL
'Or in the sea, the fish have eaten him up.'

While in (4) the partitive-genitive indicates an indefinite quantity, in (5) the accusative refers to a fully accomplished action that refers to the whole direct object-patient, in a similar fashion as the Finnish accusative/partitive alternation in (2) and (3). The verb *phágon* 'eat' is highly transitive and indicates a change of state of the patient. Notably, consumption verbs are sometimes regarded as not typically transitive, as they involve what Næss (2009: 27) defines as 'an affected agent'. However, in AG other transitive verbs pattern similarly, as *témnō* 'cut, chop up, devastate' with NomGen *tês gês* '(part of) the country' in (6) and with NomAcc *tền gên* 'the country' in (7).

- (6) pleúsantes es Leukáda tèn Korinthíōn apoikían sail.ptcp.aor.nom.pl to Leucas.acc Art.acc Corinthian.gen.pl colony.acc tês gês étemon Art.gen land.gen ravage.aor.3pl 'Sailing to Leucas, the colony of the Corinthians, they ravaged part of the country.' (Thuc. 1.30.2)
- (7)hoiĒleîoi...LepreatōntềngênétemonART.NOM.PLElean.NOM.PLLepreate.GEN.PLART.ACCland.ACCravage.AOR.3PL'The Eleans ravaged the land of the Lepreates.'(Thuc. 5.31.3.)

Similarly, with contact verbs (non-resultative; Tsunoda 1985, 2015) the two cases can alternate in HG and indicate whether contact is actually achieved or not, as in the case of the verb *orégomai* 'reach, hit' with the accusative, as in (8) (*khróa* 'the flesh'), but 'aim at' with the genitive, as in (9) (*Héktoros* 'Hector') (Luraghi 2011, 2020: 49–52).

(8) hoppóterós ke phthêisin orexámenos khróa which.NOM PTC precede.SBJV.AOR.3SG reach.PTCP.AOR.MID.NOM flesh.ACC kalón psaúsēi d' endinōn fair.ACC touch.SBJV.PRS.3SG PTC interior.GEN.PL 'Which of the two will first reach the other's fair flesh and touch the inward parts.' (Hom. Il. 23.805–806) (9) Aías d' hormēthéntos oréxato dourì
Aias.NOM PTC rush.PTCP.AOR.PASS.GEN reach.AOR.MID.3SG spear.DAT phaienôi Héktoros all' oú pēi khroòs eísato
bright.DAT Hector.GEN but NEG PTC flesh.GEN reach.AOR.MID.3SG
'But Aias aimed with his bright spear at Hector as he rushed, yet in no wise did he reach (his) flesh.' (Hom. Il. 13.190–191)

This verb shows an interesting meaning shift in post-HG, which has effects on its constructions, see Section 4.

As a reflex of their lower degree of transitivity, some contact verbs do not allow variation but only take either construction (e.g.  $b\acute{allo}$  'hit' always with NomAcc as opposed to  $h\acute{apto}$  'touch',  $tugg\acute{ano}$  'hit' always with NomGen). Remarkably, this does not happen with change-of-state verbs that all allow the NomAcc construction.

Pursuit verbs are partly not relevant to this type of construction alternation, as several of them, such as hépomai 'follow', take a third construction, NomDat which is typical of non-change-of-state verbs with human second arguments (Luraghi 2020:69-75). The verb zētéō 'seek, look for' takes the NomAcc construction, while the meaning 'look at' is often instantiated by a sight verb with a prepositional second argument, mostly containing eis 'to', such as horáō eis, blépō eis 'look at', but it can also be expressed by more specific verbs such as skopéō 'look at, consider' or theáomai 'observe' and NomAcc (on the construction of sight verbs see the discussion of Examples (10) and (48) in Sections 3 and 4). The verb hamartánō 'miss', which is arguably located on the least transitive edge of the group of pursuit verbs, takes the NomGen construction. While a discussion of constructions other than NomAcc and NomGen falls outside the scope of this paper, it is remarkable that the middle portion of the hierarchy contains the widest range of construction variation (this is in line with Aldai and Wickman's 2018: 278 observation that "the middle part of the hierarchy... is the most interesting to examine").

# 3. NomACC/NomGen alternation along the sub-hierarchy of agentivity

The sub-hierarchy characterized by decreasing agentivity includes different groups of experiential verbs. Cross-linguistically, the different construal of the experiencer in terms of degrees of control often results in non-nominative encoding of the experiencer (Malchukov 2006; Aldai and Wichmann 2018), and in fact so-called non-canonical subjects feature prominently with experiential verbs. Remarkably, however, non-canonical subject encoding is very limited in AG

(Conti 2010a, b). In this section I will show how object encoding affects the construal of the experiencer and reflects a scale based on possible control, understood in the case of experiential verbs as corresponding to degrees of attention.

This last point needs further elaboration. According to Malchukov (2005: 80) "the A [experiencer S.L.] of emotional predicates is not a controlling but rather an affected participant." Kemmer (1993) points to a scale of experiencer's affectedness, whereby experiencers of perception verbs are less affected than those of other experiential situations. Luraghi (2020) has shown that construction alternation with experiential verbs in HG reflects an embodied construal of experience, in which perception verbs function as source domain for other domains of experience. Following this view, sight as the means to rise the experiencer's attention provides a parallel to control and agency. As I argue below, construction alternation in AG is better understood by applying a parameter of decreasing control than one of increasing affectedness to the experiencer's construal. Furthermore, metaphorical extensions of verbs belonging to either sub-hierarchy in Figure 1 attested in post-HG pinpoint the existence of motivated connections between the two sub-hierarchies (Section 4).

According to Malchukov (2005), the sub-hierarchy of decreasing agentivity represented in Figure 1 shows perception and cognition verbs ranking highest in terms of similarity to the transitive prototype and sensation verbs ranking lowest, while emotion verbs take an in-between position. If one further inquires into specific groups of experiential verbs, the situation in AG appears to be more diverse, as none of the verb groups singled out by Malchukov shows a homogenous constructional pattern.

The distribution of case marking with experiential verbs shows that accusative marking is typical of verbs of sight, thought, intellectual knowledge, and emotions connected with sight and attention, such as wonder and fear. In the next sections I discuss groups of experiential verbs and the connection between them starting with perception, sensation and volition (Section 3.1). I then proceed to cognition verbs, the only group that shows a significant change in the constructional pattern of part of its members in post-HG (Section 3.2). I conclude with verbs of emotion (Section 3.3).

# 3.1 Perception, sensation and volition

Among perception verbs, one can detect a split in the constructional patterns along the modality hierarchy proposed in Viberg (1984: 136–137) and reproduced in Figure 2 (see Luraghi 2020: 115–149), which separates sight from other modalities.

Sight > hearing > touch >  $\begin{cases} smell \\ taste \end{cases}$ 

Figure 2. The modality hierarchy

Let us first consider sight verbs. From Homer onward, these verbs pattern with transitive verbs in that they only take the NomAcc construction (on occasional occurrences of NomGen see the discussion of example (48) in Section 4). In (10) the verb *eidon* 'see' is coordinated with *theáomai* 'behold, look with wonder'; both verbs take NomAcc.

(10) ei gignoménēn pólin theasaímetha lógōi, kaì if be.PTCP.PRS.M/P.ACC city.ACC behold.AOR.MID.1PL discourse.DAT and ídoimen tền dikaiosúnēn autês àn gignoménēn kai ART.ACC justice.ACC DEM.GEN see.OPT.AOR.1PL PTC be.PTCP.PRS.M/P.ACC and adikían? tền ART.ACC injustice.ACC "If our argument should observe the origin of a state, should we see also the origin of justice and injustice in it?" (Pl. *Rep.* 369a)

When we turn to other perception verbs, we find construction variation reflecting the modality hierarchy as shown in Figure 3.





Figure 3 shows that while sight is connected with the NomAcc construction, lower perception modalities, including touch, smell and taste take the NomGen construction, as *geúomai* 'taste' in (11) and *osphraínomai* 'smell' in (12).

(11) toîsi án mề katergasménon êi toûto, DEM.DAT.PL PTC NEG accomplish.PTCP.PRF.M/P.ACC be.SBJV.PRS.3SG DEM.ACC ou geúontai toû oínou toútou NEG taste.PRS.M/P.3PL ART.GEN wine.GEN DEM.GEN
' Those who have not achieved this do not taste this wine.' (Hdt. 4.66) (12) hōs ốsphronto tákhista tôn kamélōn hoi
as smell.AOR.MID.3PL quickly ART.GEN.PL camel.GEN.PL ART.NOM.PL
híppoi kai eîdon autás...
horse.NOM.PL and see.AOR.3PL 3PL.ACC
'As soon as the horses smelled the camels and saw them...' (Hdt. 1.80.5)

In the middle of the hierarchy, verbs of hearing show construction alternation, partly triggered by referential features of the stimulus: while animate stimuli occur in the NomGen construction (with the exception of some occurrences accompanied by a participle), inanimate stimuli can occur with either NomAcc or Nom-Gen (Luraghi 2020: 127–139). An example is  $ako u \bar{o}$  'hear', as in (13)–(15).

(13) tòn dè perì aoutoû ékouson lógon en Prokonnésōi ART.ACC PTC about DEM.GEN hear.AOR.1SG discourse.ACC in Proconnesus.DAT kaì Kuzíkōi léxō and Cyzicus.DAT tell.FUT.1SG
'I will tell the story I heard about him in Proconnesus and Cyzicus.' (Hdt. 4.14.1)

(14) prókate phōnês akoúein immediately cry.GEN hear.INF.PRS
'(They) immediately heard a cry.' (Hdt. 8.65.1)

(15) akoúsesthai toû arístou anthrốpōn aoidoû hear.INF.FUT.MID ART.GEN best.GEN man.GEN.PL singer.GEN
'To hear the best of all singers.' (Hdt. 1.24.5)

Examples (13) and (14) contain inanimate stimuli, with NomAcc (*tòn lógon* 'the story') in (13) and NomGen (*phōnês* 'a cry') in (14). They show that with inanimate stimuli constructions are in free variation: indeed, cases of coordination of genitive and accusative inanimate stimuli are also attested with this verb (see Luraghi 2020:130). In (15) NomGen occurs with an animate stimulus (*aoidoû* 'singer').

An interesting case is constituted by the verb *aisthánomai* 'perceive', which does not occur in HG. In post-HG, this verb shows construction alternation, similar to verbs of hearing, but not conditioned by animacy. Examples are (16)-(19).

- (16)kaí hōs éisthontotônlógōnand asperceive.AOR.MID.3PL ART.GEN.PL discourse.GEN.PL'As they heard the speeches...'(Thuc. 1.72.1)
- (17) oudéteron éistheto tês mákhēs
  neither.NOM perceive.AOR.MID.3SG ART.GEN battle.GEN
  'Neither realized that there was fighting [owing to the distance].' (Thuc. 2.81.7)

- (18)hōs éisthontotềnboếtheianasperceive.AOR.MID.3PL ART.ACC rescue.ACC'As they learned about the (coming) relief.'(Thuc. 2.94.3)
- (19) hōs éisthonto tèn stratián eselēluthuîan
  as perceive.AOR.MID.3PL ART.ACC army.ACC enter.PTCP.AOR.ACC
  'As they heard that the army had entered.' (Thuc. 3.102.5)

Etymologically, *aisthánomai* is connected with the HG verb  $ai\bar{o}$ , 'hear', and it preserves the constructional patterns of verbs of hearing, even though it clearly refers to all perception modalities, including sight, as is shown by the discussion on senses in Plato's *Theaethetus*, see e.g. example (20).

(20) hà tôi horân aisthanómetha è tôi akoúein
 REL.ACC.PL ART.DAT see.INF.PRS perceive.PRS.M/P.1PL OF ART.DAT hear.INF.PRS
 'The things that we perceive by sight or by hearing.' (Pl. Theaet. 163b)

The NomGen construction is the only one occurring with the few transitive sensation verbs, such as *peináō* 'feel hunger (of)'. This verb developed a metaphorical meaning 'crave after' in post-HG, as in (21).

(21) hóti peinésas khrēmátōn eploútēsas
that be\_hungry.AOR.2PL good.GEN.PL become\_rich.AOR.2PL
'That you became rich after becoming hungry for goods.' (Xen. Cyr. 8.3.39)

Construction alternation pinpoints the distinction between will and desire within the domain of volition and need. Verhoeven includes verbs of (bodily) needs among verbs of volition, and argues that "a bodily need can be understood as a will (concerning the realization of a situation) based on person-immanent physical necessities" (2007: 48; see further Reh and Simon 1998: 42). In fact, evidence from the types of construction in which predicates of bodily need occur in AG suggests that such situations are construed as similar to bodily sensations, as shown by the verb *khráomai* 'be in want of, lack' as in (22), which, similar to verbs of sensation, takes the NomGen construction (*pónōn* 'trouble').

(22) ponoûmen hēmeîs kou pónōn kekhrémetha suffer.PRS.1PL 1PL.NOM and\_not trouble.GEN.PL need.PRF.M/P.1PL
'I am troubled and I don't need more trouble.' (Eur. Med. 334)

The pattern emerging from the data shows that uncontrolled desire patterns after bodily sensations. In general, verbs of craving, desiring and yearning, including the verb *éramai*, which indicates love as sexual desire and craving as in (23) and (24), take the NomGen construction. Hence, desire also marks the transition between volition and emotion, two partially overlapping fields according to Verhoeven (2007: 47).

- (23)hoKandaúlēsērásthētêsheōutoûgunaikósART.NOM Candaules.NOM love.AOR.MID.3SG ART.GEN REFL.GEN wife.GEN'Candaules fell in love with his own wife.'(Hdt. 1.8.1)
- (24) hoûtos ho Dēiókēs erastheis turannídos DEM.NOM ART.NOM Deioces.NOM love.PTCP.AOR.PASS.NOM power.GEN epoíee toiáde do.IMPF.3SG DEM.ACC.PL
  'Being infatuated with power, Deioces did such things.' (Hdt 1.96.2)

Examples (23) and (24) show that the verb *éramai* 'love, desire', which mostly takes human stimuli (as *tês heōutoû gunaikós* 'his own wife in (23)), also features the same constructional pattern, NomGen, with inanimate stimuli (as *turannídos* 'power' in (24)).

On the other hand, verbs that indicate volition viewed as controlled intentionality take the NomAcc construction, as *boúlomai* 'want' in (25) with the stimulus *tà mésa* 'moderate things'.

(25) toùs dè tà mésa bouloménous
ART.ACC.PL PTC ART.ACC.PL moderate.ACC.PL want.PTCP.PRS.M/P.ACC.PL
tền dè poluteleiēn pheúgontas
ART.ACC PTC costly.ACC flee.PTCP.PRS.ACC.PL
'Those who want moderate things and shun the costly.' (Hdt. 2.87.1)

Matching verbs of volition and desire against perception verbs points to a constructional correspondence that connects verbs of effective action with sight and controlled volition. On the other hand, bodily sensations and uncontrolled desire show the construction of verbs that rank lower on the agency hierarchy.

# 3.2 Cognition

Cognitive verbs show a split similar to perception verbs. This group of verbs is also the one that features more differences between HG and post-HG. While verbs that indicate knowledge, thought and awareness take the NomAcc construction throughout the time span covered by the written sources, verbs of learning show construction alternation in Homer, have different developments in later prose. In HG, in addition, the verb *oîda* 'know' also shows alternation depending on whether it indicates intellectual knowledge or acquaintance, or whether it indicates a practical skill, as shown in (26) and (27).

- *éidē* (26) Kálkhas... hòs eónta tá ť Calchas.NOM REL.NOM know.PPF.3SG DEM.ACC.PL PTC be.PTCP.PRS.ACC.PL tá ť essómena pró ť eónta DEM.ACC.PL PTC be.PTCP.FUT.MID.ACC.PL before PTC be.PTCP.PRS.ACC.PL 'Calchas ... who knew the things that were, and that were to be, and that had been before' (Hom. *Il*. 1.69–70)
- (27) kaí hoi Teûkros háma spésthō tóxōn eù and 3sg.dat Teucros.NOM together follow.IMP.AOR.MID.3sg bow.gen.pl well eidốs know.ptcp.prf.NOM.sg
  'Let Teucros, who is an expert archer, follow him.' (Hom. Il. 12.350)

Another verb that exhibits construction alternation in Homer is *epístamai* 'be skilled, be experienced of'. With this verb, alternation is triggered by the type of stimulus: while genitive stimuli include different types of referents, the NomAcc construction only allows the noun *érga* 'work' as filler. In post-HG, only the NomAcc construction remains, with the meaning 'know, be expert of', as in (28) (hence similar to the meaning of *oîda* with NomGen in HG shown in (27)).

(28) *kaì* epistámenos autà axiô iatrikòs eînai and know.PTCP.M/P.NOM DEM.ACC.PL deem.PRS.1SG physician.NOM be.INF.PRS 'And knowing these things I deem myself a physician.' (Pl. Phaedr. 268b)

Alternation is best exemplified by verbs of learning in HG. These verbs, too, show a wider range of variation in HG than in post-HG: for example,  $gign \delta sk \bar{o}$  'learn', 'understand', 'recognize' always takes NomAcc, but in Homer it occurs twice with NomGen and the stimulus  $all \acute{e} l \bar{o} n$  'each other' (62 occurrences of NomAcc do not show any preferences as to the type of stimulus; Luraghi 2020: 175–178). Another verb,  $\acute{e} daon$  'learn', no longer occurs after Homer (the root of this verb remains in the causative verb  $did \acute{a} sk \bar{o}$  'teach', with the double accusative; Luraghi and Zanchi 2018). In HG it shows construction alternation (Luraghi 2020: 179–181).

The verb *punthánomai* shows more frequent alternation and partly patterns after verbs of hearing in Homer. Out of 33 occurrences of NomAcc with *punthánomai* and its metrical variant *peúthomai* in Homer, only four feature animate stimuli. Conversely, 19 occurrences of NomGen show four inanimate and 15 animate stimuli. An example is (29).

apáneuthen (29) híppoi d' Aiakídao mákhēs horse.NOM.PL PTC offspring of Aeacus.gen battle.gen off eóntes klaîon epei dè prôta puthésthēn PTC first learn.AOR.MID.3DU be.PTCP.PRS.NOM.PL weep.IMPF.3PL as en koníēisi hēniókhoio pesóntos charioteer.gen in dust.dat.pl fall.ptcp.aor.gen 'But the horses of Achilles, being apart from the battle, were weeping, since first they sensed that their charioteer had fallen in the dust.'

(Hom. *Il*. 17.426–428)

Notably, this verb underwent a semantic shift to the meaning 'inquire', thus indicating an intentional activity and moving away from the domain of experience to the group of pursuit verbs (see Section 4). This semantic extension was at its onset in HG and was accomplished in post-HG. Originally, *punthánomai* indicated perception through the senses, as shown in (29), in which the experiencers, Achilles' horses, not being human cannot have acquired information through an intentional inquiry (see the discussion in Luraghi 2020: 184–185). Hence, this verb provides a direct connection between perception and cognition understood as the process of learning. The semantic change observed from HG to post-HG is accompanied by the rise of a new construction, NomAccGen, as shown in (30), in which the accusative argument refers to what is learned (*tòn pánta lógon* 'the whole story'), and the genitive argument refers to the source of information (*therápontos* 'the servant').

(30) kaì prókate dề kať hodòn punthánomai tòn pánta and soon PTC along road.ACC learn.PRS.M/P.1SG ART.ACC all.ACC lógon therápontos discourse.ACC servant.GEN
'Very soon on the way I learned the whole story from the servant.' (Hdt. 1.111.5)

Among verbs of memory, the verb *mimnéskomai* 'remember' allows construction alternation to a limited extent, both in Homer and in later prose. In Homer, in particular, the ratio between the NomGen and the NomAcc construction is 84:7, but the latter, though infrequent, occurs with both animate and inanimate stimuli. In Herodotus, the ratio is 18:4, and NomAcc is limited to inanimates. The verb *lanthánomai* 'forget' always takes NomGen in AG.

As I pointed out in Section 3, verbs that indicate thought invariably take the NomAcc construction in AG. In this case, too, one can single out a direct connection between thought and perception provided by the verb *noéo* 'realize, be/ become aware, have in mind'. Examples are (31) and (32).

- (31) hóti próteron ephaíneto mounē noéousa because earlier appear.IMPF.M/P.3SG alone.ACC occur.PTCP.PRS.NOM tà poiētéa ên art.ACC.PL do.GRDV.ACC.PL be.IMPF.3SG
  'Because earlier she appeared to be the only one who had discerned what was to do.' (Hdt. 8.101.1)
- (32) légousa gàr epetúgkhane tá per autos tell.PTCP.PRS.NOM PTC happen.IMPF.3SG DEM.ACC.PL PTC self.NOM enóee occur.IMPF.3SG
  'For she happened to say what he himself had in mind.' (Hdt. 8.103)

In HG, the connection is explicit in a few passages, as in (33) (see Bertolín Cebrián 1996 and the discussion in Luraghi 2020: 154–158).

(33) *óphrá min* autòs en ophthalmoîsi noésas tôi that 3sg.acc self.nom in eye.dat.pl realize.ptcp.aor.nom dem.dat epí nêas íēis Danaôn písunos trusting.NOM on ship.ACC.PL go.SBJV.PRS.2SG Danaan.GEN.PL takhupốlōn fast\_fleeted.GEN.PL 'Because, perceiving it (sc. the bird) with your eyes, you will trust the sign and go to the ships of the fast-mounted Danaans. (Hom. Il.24.294-295=Il.24.312)

In (33), the prepositional phrase *en ophthalmoîsi* 'in (your) eyes' specifies sight as perception modality.

So far, I have shown that knowledge and thought are connected with sight while learning is connected with hearing. I suggest that this connection matches degrees of attention and awareness: sight is a more reliable source of information than hearing, hence it immediately captures the attention of the experiencer rising a state of full awareness. This is also reflected in the different patterns exhibited by verbs of volition and verbs of yearning and desiring, the latter referring to states that are commonly construed by humans as causing a partial loss of normal intellectual faculties. On the plane of perception, uncontrolled desire is often said to obfuscate one's sight: hence the embodied conception of emotions provides the link between groups of verbs and their constructional patterns. Construction alternation with *oîda* 'know' in HG is also motivated by embodiment. Intellectual knowledge and acquaintance are connected with NomAcc, hence with sight, while practical skills, typically performed with body parts, are connected with NomGen, hence with bodily sensations.

In this framework, the constructional pattern of the verb *mimnéskomai* 'remember' deserves attention. This verb takes the NomGen construction in the majority of occurrences, but the NomAcc construction is also attested throughout the course of AG attestations, with all sorts of stimuli. Examples are (34)–(37).

- (34) mâllon hoi Kólkhoi ememnéato tôn more ART.NOM.PL Colchian.NOM.PL remember.PPF.M/P.3PL ART.GEN.PL hoi Aiguptíōn è Aigúptioi tôn Egyptian.gen.pl than ART.NOM.PL Egyptian.NOM.PL ART.GEN.PL Kólkhōn Colchian.GEN.PL 'The Colchians remembered the Egyptians better than the Egyptians remembered the Colchians.' (Hdt. 2.104.1)
- (35) tòn Euphraîon hoî' épathen
  ART.ACC Euphraus.ACC such.ACC.PL endure.AOR.3SG
  memnēménoi
  remember.PTCP.PRF.M/P.NOM.PL
  'Remembering of Euphraeus, what sort of things he suffered.' (Dem. 9.61)
- (36)têsepistolêsmemnēménēnautềnpoiêsaiART.GEN letter.GEN remember.PTCP.PRF.M/P.ACC DEM.ACC dO.INF.AORtáentetalménaART.ACC.PL order.PTCP.PRF.M/P.ACC.PL'Remembering the instructions, she did as she was told.'(Hdt. 4.10.1)
- (37) ei goûn memnémethatoùsémprosthen lógousif PTCremember.PRF.M/P.1PL ART.ACC.PL beforediscourse.ACC.PL'If we now keep in mind our previous reasonings.'(Pl. Laws 633d)

In (34) and (35) the stimulus is human, once with NomGen (*tôn Aiguptión* 'the Egyptians') and once with NomAcc (*tòn Euphraîon* 'Euphraeus'). Similarly, the two constructions occur with inanimate stimuli in (36) with NomGen (*tês epis-tolês* 'the letter') and in (37) with NomAcc (*toùs lógous* 'the reasonings').

As argued in Luraghi (2020: 190–191) in HG this verb often simply means 'think of, have in mind, occur', as in (38).

(38) hoì dè phóhoio duskeládou mnésanto, DEM.NOM.PL PTC flight.GEN ill\_sounding.GEN remember.AOR.MID.3PL
láthonto dè thoúridos alkês forget.AOR.MID.3PL PTC fighting.GEN valor.GEN
'(The Greeks fell upon the Trojans), and they thought of ill-sounding flight, and forgot their fighting valor.' (Hom. Il. 16.356-357) Example (38) describes a fight. The Trojans, overcome by the Greeks, can only think of fleeing: clearly, the verb form *mnésanto* does not indicate memory, but rather the occurring of a sudden thought, as is also highlighted by the use of the aorist tense, which indicates perfective aspect with a verb that normally has a stative character. This occurrence is matched by *láthonto*, the aorist of the verb *lanthánomai* 'forget' which, in much the same way, does not indicate forgetfulness in the proper sense, but simply that the Trojans no longer minded to resort to their well-known valor and resist.

In this and other similar occurrences, *minnéskomai* provides a counterpart to other verbs of thought that indicate the elaboration of some new mental content and always take the NomAcc construction. In turn, *minnéskomai* points to the activation of an already existing mental content, which is in the experiencer's mind but needs to be retrieved. The fact that it allows construction alternation similar to verbs of learning and hearing points to the construal of memory as a special type of mental activity, based on pre-existing knowledge that is, so to speak, 'learned' again as it is retrieved from the backgrounded existing knowledge of the experiencer. The peculiarity of such mental activity is reflected in construction variation. On the other hand, the verb *lanthánomai* 'forget', which indicates the deactivation of a mental content, always only takes the NomGen construction.

### 3.3 Emotion

As has been pointed out in previous research (e.g. Verhoeven 2007: 44), emotions constitute the most complex field of experience, partly on account of their wide variety, partly because their construal is dependent on cultural factors, such as social evaluation (Wierzbicka 1999). Indeed, in AG this is the only group of experiential verbs that also features the NomDat construction and some three-place constructions, mostly NomDatGen (Luraghi 2020: 201–215; 238–241; 271279). Limiting the observations to alternations involving NomAcc and NomGen, three groups of verbs can be singled out based on different constructional patterns:

- a. verbs of desiring;
- b. verbs of care and affection;
- c. verbs that indicate negative emotions such as fear, shame and hate.

Verbs of desiring take the NomGen construction and have already been discussed (see examples (23) and (24)); in Homer, the verb *éldomai* 'desire eagerly' occurs three times with NomAcc and inanimate stimuli. Similar to verbs of hearing, NomGen occurs with all types of stimuli, regardless of animacy.

Verbs of care and affection are the most interesting group, as they show different patterns. As examples, let us consider *kédomai* 'care for' and *philéō* 'love, like'.

(Hdt. 1.209.4)

While the former takes the NomGen construction as in (39) (*emeû* 'me'), the latter always takes the NomAcc construction, as in (40) (*hoùs* 'those who').

- (39) *emeû theoì kédontai* 1SG.GEN god.NOM.PL care.PRS.M/P.3PL 'The gods take care of me.'
- (40) hoùs án tis hēgêtai khrēstoùs phileîn
  REL.ACC.PL PTC INDF.NOM deem.SBJV.PRS.M/P.3SG good.ACC.PL love.INF.PRS
  hoùs d' àn ponēroùs miseîn
  REL.ACC.PL PTC PTC bad.ACC.PL hate.INF.PRS
  "(Men) will love those whom they suppose to be good and hate those whom they deem bad." (Pl. Rep. 334c)

Some other verbs with similar meaning allow for alternation between the two constructions (see Luraghi 2020: 221). A link between these verbs and cognition is provided by memory: remembering someone may imply taking care of them, as in (41).

(41) *memnêsthai* patròs kai mētéros en megároisin hōs nûn remember.INF.PRF.M/P father.GEN and mother.GEN in palace.DAT.PL as now 'Be mindful of my father and my mother in the halls as you are now.'

(Hom. Od. 18.267268)

Fear verbs, as well as verbs indicating other negative emotions such as shame and part of hate verbs, take the NomAcc construction. In Section 3.3 I have argued that the NomGen construction is typical of verbs that indicate partial loss of normal intallectual faculties, or loss of obfuscation of perception. Hence, the occurrence of the NomAcc construction with verbs of fear might seem at odds with the common conception of fear as an uncontrollable feeling. However, a connection with sight can be found in the bodily correlates of emotions. Since Darwin (1872) it is commonly recognized that facial expressions of basic emotions (including at least surprise, fear, disgust, anger, happiness and sadness; see Fridlund 1994) show significant similarities across cultures. The role of the eyebrows is especially important in the expression of emotions, and points to their possible association with sight. A rise of the eyebrows is typically associated with surprise, with the eyes wide open, across different cultures (Ekman and Friesen 2003: 37-40). According to Wierzbicka (1999) the "action [of] increasing a person's visual field can serve as a semiotic basis for the message 'I want to know more (about this)'" (1999: 203). In HG, the connection of sight with marvel and surprise has been pointed out by Mette (1961), who argues that marvel arises from sight, and that the verb *thaumázō* 'wonder, marvel', indicates sight and surprise at the same time. In fact, this verb is also etymologically related to theáomai 'behold', a sight verb

introduced in example (10); possibly, two other surprise verbs also share the same etymology, *thambéō* 'wonder' and *téthēpa* 'be astonished' (Luraghi 2020: 227).

Turning to facial expressions of fear, Fridlund (1994: 223) and Ekman and Friesen (2003: 36) point to frequent confusion with expressions of surprise. Indeed, as argued in Ekman and Friesen (2003: 50) facial expressions of fear also involve lifting the eyebrows, even though in fear they are drawn together, contrary to surprise. It can sometimes be hard to keep the two emotions distinct: surprise is brought about by the unexpected sight of an entity, which can possibly be threatening for the experiencer. As Ekman and Friesen (2003: 36) write "fear is the most common sequel to surprise, perhaps because unexpected events are often dangerous, and many people come to associate anything unexpected with danger."

AG fear verbs which, as mentioned above, always take the NomAcc construction are, *phobéomai*, as in (42) and (43), and *deídō*, as in (44)

(42)	prôton mê	èn toùs	ánō	theoùs	phobeísthōn	
	first pt	C ART.ACC.PI	over	god.acc.pl	fear.IMP.PRS.M/P.3PL	
	'(They sh	all), first, fear	the go	ods above.'		(Pl. <i>Laws</i> 927b)
(12)	kámālon	hippos	nhahá	otai		

(43) kámēlon híppos phobéetai camel.ACC horse.NOM fear.PRS.M/P.3SG 'Horses fear camels.'

(44) hèn egố málista pasôn hēmerôn dédoika kaì REL.ACC 1SG.NOM most all.GEN.PL day.GEN.PL fear.PRF.1SG and péphrika kaì bdelúttomai shiver.PRF.1SG and detest.PRS.M/P.1SG
'Of all the days the one I most fear, and dread, and abominate.'

(Ar. Cl. 1132-1133)

(Hdt. 1.80.4)

The passage in (44) also contains another fear verb, *phríssō* 'shiver in terror'. Other fear verbs that take the NomAcc construction are *tarbéō* 'be afraid', 'be torn apart by fear', *atúzomai* 'be terrified', and *stugéō* 'fear', 'be terrified' in HG and 'hate, detest', in post-HG as in (45).

(45)	tò	krésson	stugéousi		
	ART.ACC power.ACC hate.PRS.3PL				
	'They h	ate power.'			(Hdt. 7.236.1)

The semantic evolution of *stugéō* is especially interesting because it shows a connection of hate with fear. The verb's etymology connects it with coldness (Chantraine 1977: 1066) but this meaning is not attested in AG. One can hypothesize that, similar to *phríssō* 'shiver', it metonymically got to indicate fear as the cause of a bodily reaction. The extension to hate is based on a feeling of repul-

sion raised by something fearful. A similar connection is also shown by the verb *ekhthaírō* 'hate'. This verb is a derivate of *ekhthrós* 'enemy' and is related to the root of Latin *extrā* 'outside'. According to Chantraine (1977: 391), *ekhthrós* is 'the man from outside, an alien that remains outside any social relation'.<sup>6</sup> As in the case of the link between surprise and fear, hate and hostility are caused by something unknown and potentially threatening (see Luraghi 2020: 232–233). Example (40) contains the verb *miséo*, another hate verb with the NomAcc construction.

Summing up, embodiment largely explains constructional patterns of emotion verbs. While the NomGen construction is associated to feelings of yearning and desiring, matching verbs of uncontrolled desire, need and bodily sensations, fear and hate, appearing in the NomAcc construction, are associated to sight, as emotions often raised by surprise before the unknown. In the in-between area, verbs of care and affection show construction alternation, hence pairing with memory and, among perception verbs, with hearing. This suggests a construal of such emotions as involving an intermediate level of attention between desire, which obfuscates the experiencer's attention, and feelings connected with surprise and threat arising a high level of attention in the experiencer.

# 4. Connections between the two sub-hierachies

Some of the experiential verbs discussed in Section 3 provide a direct link between the two sub-hierarchies in Figure 1. In the first place, the verb  $h \dot{a} p t \bar{o}$  'touch' indicates both the intentional action of touching or grasping, and belongs to the group of contact verbs, and the perception achieved through the sense of touch. The verb  $g e u \bar{o}$  'taste' does not only refer to the sense of taste but also means 'make try', as in (46), a meaning already frequent in HG (Luraghi 2020: 139–140).

(46) tòn dè dè eukherôs ethélonta pantòs mathématos
ART.ACC PTC PTC recklessly want.PTCP.PRS.ACC all.GEN knowledge.GEN geúsesthai
taste.INF.AOR.M/P.PRS
'The one who recklessly wants to try every study.' (Pl. Rep. 475c)

In addition, sight verbs often also instantiate the meaning 'look at' in AG, even though this meaning can be indicated by alternations involving prepositional phrases, as pointed out in Section 2. The meaning 'listen to', on the other hand, is systematically expressed by hearing verbs, hence with NomAcc/NomGen alternation. Notably, 'look at' and 'listen to' belong to the group of pursuit verbs, which

<sup>6. &</sup>quot;L'homme du dehors, l'étranger extérieur à toutes relations sociales."

show the widest range of construction alternation (Section 2). The same development concerns *punthánomai*, a verb that means 'learn (through the senses)' in HG, and whose meaning changes to 'inquire' in post-HG, bringing it into the group of pursuit verbs.

However, connections between groups of verbs on the two sub-hierarchies are not limited to cases of polysemy as instantiated by perception verbs. Semantic extension provides further evidence. In HG the verb *orégō* discussed in Section 2, Examples (8) and (9), shows construction alternation, and means 'hit' with NomAcc or 'aim at' with NomGen, thus oscillating between the groups of contact and pursuit verbs. In later prose, only the second construction remains, as the verbal meaning undergoes a shift to the experiential domain. From the meaning 'strive', when taking the NomGen construction *orégomai* increasingly acquires the meaning 'desire to reach' and then 'crave for', 'desire', as in Example (47), in which it occurs parallel to *boulómai* 'want'.

(47) ouk állo ti boúletai è pieîn, kaí toútou NEG other.ACC INDF.ACC want.PRS.M/P.3SG PTC drink.INF.PRS and DEM.ACC orégetai strive.PRS.M/P.3SG
'Doesn't want to drink any other (wine), and yearns for this.' (Pl. Rep. 439a-b)

The NomAcc construction on the other hand remains in the original meaning 'hit' mostly limited to poetry, and can be considered an archaizing reflex of the Homeric language. Hence, the verb patterns after other verbs of desire, which consistently take the NomGen construction in AG (see Section 3.1).

Moreover, one can also detect some aspects in the behavior of sight verbs that point to a much more transitive nature as compared to other experiential verbs. Indeed, occasional occurrences of the NomGen construction show that the contribution of the construction to the resulting meaning imports on the construal of the object. Let us consider example (48).

 (48) è oúpō eîdes en toíaútēi politeíai anthrópōn or never seen.AOR.2SG in DEM.DAT state.DAT man.GEN.PL katpsēphisthéntōn thanátou è phugês oudèn hêtton autoû condemn.PTCP.AOR.PASS.GEN.PL death.GEN or exile.GEN nothing less there menóntōn abide.PTCP.GEN.PL
 'Or you have never seen in such a state men who have been condemned to

death or exile but nevertheless remain there?' (Pl. Rep. 558a)

According to Humbert (1960: 273), the occurrence of NomGen here is due to attraction from other perception verbs. However, this does not seem to be the

case: indeed, other perception verbs either do not allow construction alternation (touch, smell, taste plus hearing verbs with animate stimuli) or, in the case of hearing verbs, do not indicate any meaningful differences affecting the object, as shown in (13)–(14). On the other hand, in (48) the NomGen construction gives a partial reading to the object, in the same way as it does with change-of-state verbs discussed in Section 2. As the object *anthrópōn* 'men' is a count plural, the resulting reading is reference to an indefinite quantity of a non-preestablished whole, a frequent shift of partitives that cross-linguistically show a tendency to mark indefiniteness (see Luraghi and Kittilä 2014: 28–32; 56–58). An indefinite reading with count plurals is also possible for genitive subjects in AG, as in (49) (Conti and Luraghi 2014: 455–459).

(49) tôn dè polemiōn ên hoùs hupospóndous DET.GEN.PL PTC enemy.GEN.PL be.IMPF.3SG REL.ACC.PL under truce.ACC.PL apédosan return.AOR.3PL
'There were some of the enemy (casualties) that they returned under a truce.' (Xen. Hell. 7.5.17)

Correspondences between the two sub-hierarchies and constructions are represented in Table 1.

	HIERARCHY	OF DECREASING AGEN	THOOD	
VOLITION	will / intention		desire	
PERCEPTION	sight	hearing	touch / taste / smell	
COGNITION	knowledge	learning	skill	
	thought	memory	forgetfulness	
EMOTION	fear / wonder	care / affection	sexual desire / yearning	
	HIERARCHY	OF DECREASING PATIE	NTHOOD	
effec	tive action	contact/pursuit		
		CONSTRUCTIONS		
NomAcc		NomAcc/NomGen	NomGen	

Table 1. Correspondences between sub-hierarchies

More in general, one can also observe that features that are foregrounded in either sub-hierarchy are also present in the other, though backgrounded. On the sub-hierarchy of patient affectedness, agenthood also decreases parallel to patienthood: an agent who does or cannot affect a patient completely is less effective than an agent who does. On the sub-hierarchy of agenthood, with experiential verbs, a stimulus that can be apprehended more easily by the experiencer can be construed as a totally affected patient (Luraghi 2020: 285). This latter fact has a grammatical reflex in AG, although not systematically occurring with all experiential verbs. I have pointed out that with hearing verbs, only inanimate stimuli can occur in the NomAcc construction. Accusative encoding of inanimate stimuli is sporadically also attested for some verbs of desiring, while the verb *punthánomai* 'learn' admits both animate and inanimate stimuli in both constructions in HG, but shows a strong preference for NomAcc with inanimates. The verb *édaon* 'learn' in HG takes both constructions, but NomAcc is limited to the generic object *érga* 'work'.

The tendency for neuters to occur in the accusative even with verbs that normally require other constructions has long been known (Havers 1924). Experiential verbs show that this is not only true of neuters, but that it is a general tendency of inanimate nouns. Thus, construction alternation with experiential verbs appears to have a systematic link with decreasing agency, understood as decresing attention from the experiencer to the stimulus, hence it codifies a property of A. It also reflects degrees of possible apprehension of the stimulus by the experiencer, hence codifying a property of O: as this latter connection is systematically encoded only with hearing verbs but remains sporadic with verbs of learning and desiring, it seems safe to conclude that the general function of construction alternation on the sub-hierarchy of agenthood is to encode properties of the subject's referent. Notably, such properties would remain uncoded in AG, a language that only marginally resorts to dative experiencers (inverted patterns).

# 5. Conclusion

In this paper I have discussed the alternation involving accusative and genitive objects with two-place verbs in AG. Contrary to a well-established tradition, I have not focused on the semantics of cases in isolation, but as parts of constructions, labelled NomAcc and NomGen. I have surveyed the distribution of both constructions with two-place verbs along the two sub-hierarchies of transitivity proposed in Malchukov (2005), the former reflecting decreasing patienthood, and the latter reflecting decreasing agenthood. I have argued that construction alternation, though only involving differential marking of the second argument, indicates transitivity features pertinent to the O on the patienthood scale and transitivity features pertinent to the A on the agency scale, thus constituting an exception to Malchukov's (2006) Relevance Principle.

Concerning verbs on the agenthood scale, I have show that, as commonly highlighted in the literature, sight verbs are the closest ones to the transitive prototype. Other perception verbs cover a wide range of construction variation, pointing to a construal of the experiencer as characterized by a decreasing degree of agency that ranges from hearing to lower perception modalities. The latter show the same constructional pattern as verbs of sensation. Verbs of hearing constitute a fuzzy in-between area, and admit construction variation. The constructional patterns of perception verbs remain stable over time, but it is remarkable that the verb *aisthánomai* 'perceive', which is not attested in HG, follows the pattern of hearing verbs, and can take both the NomAcc and the NomGen construction though covering all perception modalities including sight.

Based on the evidence from perception verbs, I have suggested that agency with experiential verbs is construed as a gradient of attention and awareness. I have then shown that cognition verbs denoting cognitive states and thought pattern after sight, while verbs of learning and memory feature construction variation, similar to verbs of hearing. In different ways, all these verbs indicate indirect acquisition of knowledge: either through senses other than sight or by retrieving some piece of information already present in the experiencer's knowledge but temporarily inactive. Notably, however, the parallel between perception and cognition is reflected in construction variation with cognitive verbs mainly in HG. In post-HG, variation remains limited to the verb *mimnḗskomai* 'remember', whereas it is dropped by other verbs, that mostly only feature the NomAcc construction in post-HG. This holds for *oîda* 'know', *epístamai* 'be able to', *gignṓskō* 'learn, recognize', while *punthánomai* underwent a semantic shift from 'learn' to 'inquire', reflected in the rise of the new NomAccGen construction.

Among emotion verbs, part of which take different constructions and have not been discussed here, verbs that indicate negative feelings such as fear and hate pattern after sight and take the NomAcc construction. I have explained this fact as a consequence of embodiment, and linked such feelings with sight through the intermediary of surprise. On the opposite side, verbs of yearning and desiring take the NomGen construction, pointing to a low degree of attention, hence of control. Verbs of care and affection, which admit construction variation, constitute an intermediate area.

The distribution of constructions in Ancient Greek is summarized in Table 2, which also highlights the change in the constructional pattern of a part of cognitive verbs.

	NomAcc	NomAcc/NomGen	NomGen
PERCEPTION	see	hear	touch, smell, taste
SENSATION			be hungry
COGNITION	think, know	remember	forget
	post-HG	be able to, learn	
VOLITION	will		need
EMOTION	desire	love, care	fear, hate

Table 2. Distribution of constructions across experiential verbs

# List of Abbreviations

# Greek authors and works

Ar.	Aristophanes	Med.	Medea
Cl.	Clouds	Od.	Odyssey
Cyr.	Cyropaedia	Pl.	Plato
Eur.	Euripides	Rep.	Republic
Hdt.	Herodotus, Histories	Thaetet.	Thaetetus
Hell.	Hellenica	Thuc.	Thicydides, The Peloponnesian wars
Hom.	Homer	Xen.	Xenophon
Il.	Iliad		

#### Glosses

1	1st person
2	2nd person
3	3rd person
ACC	accusative
AOR	aorist
ART	article
DAT	dative
DEM	demonstrative
DU	dual
FUT	future
GEN	genitive
GRDV	verbal adjective (gerundive)
IMP	imperative
IMPF	imperfect
INDF	indefinite
INF	infinitive
M/P	medio-passive

Med.	Medea
Od.	Odyssey
Pl.	Plato
Rep.	Republic
Thaetet.	Thaetetus
Thuc.	Thicydides, The Peloponnesian wars
Yon	Venophon

MID	middle
NEG	negation
NOM	nominative
OPT	optative
PAR	partitive
PASS	passive
PL	plural
PPF	pluperfect
PRF	perfect
PRS	present
PST	past
PTC	particle
PTCP	participle
REFL	reflexive
REL	relative
SBJV	subjunctive
SG	singular

# Other abbreviations

А	proto-agent
AG	Ancient Greek
DOM	differential object marking

DSM	differenti al subject marking
HG	Homeric Greek
NomAcc	NominativeAccusative construction
NomDat	NominativeDative construction
NomDatGen	$Nominative Dative Genitive\ construction$
NomGen	NominativeGenitive construction
0	proto-patient

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