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Differential Object Marking in Ancient Greek

Abstract: At least three DOM-related constructions can be observed in Ancient Greek, but only one of them has received due consideration in the DOM bibliography (Bossong 1998). In this paper I will deal with the other two: the partitive genitive and a borderline instance of alternation in case marking of objects due to aspectual and affectedness variations in the interpretation of the predicate. I will also deal with the relation of the neuter accusative of unspecific objects with DOM, a relatively neglected construction. Central to the relation of Ancient Greek with DOM is the fact that its case marking is both universal and obligatory (or “symmetrical” in two different uses of the term). This explains why in Ancient Greek the functions differentiated by DOM are not Subject and Object, but Object and Extensions to core. Following other authors, I present here some examples of Spanish that show how the “differentiating” function (Comrie 1989) is not enough to explain DOM, even in the classical example of a DOM system, thus making clear the necessity to include constructions as the two mentioned above in a comprehensive definition of DOM.

Keywords: Differential Object Marking, Ancient Greek, transitivity, case systems, agentivity, partitive genitive, accusative, affectedness, morphosyntax, Spanish, Indo-European

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1 Presentation

Differential Object Marking (DOM) is a special instance of differential case marking, itself a phenomenon distinct from *different* case marking mechanisms well known in the literature about alternation (Levin 1993). The vast majority of research on DOM has been focused on languages with *asymmetric* case alternation (i.e., alternation between a zero-case form and a marked case form). However, my aim in this article is to present some examples of differential object case marking and closely related phenomena in Ancient Greek, a language with *symmetric* case

alternation seldom mentioned in the recent literature about DOM.¹ I will frame my explanation of case alternations within a functional-cognitive theory of transitivity, and compare the data in Ancient Greek with similar phenomena in languages with different case marking strategies, especially Spanish. During the rest of the paper I will use “Greek” to denote Ancient Greek from the 8th to the 2nd century BCE.

In Section 2 I will try to have the concept of DOM clearly separated from other forms of case alternation before presenting my arguments. In Section 3, I will differentiate the various meanings of “symmetry” that are useful for the description of the Greek case system. For the benefit of the readers not familiar with this particular case system, I will summarize its main characteristics in Section 4. The central part of the paper is Section 5, where I present the main phenomena related to DOM in Greek. I hope that the data and interpretations I am offering here will prompt a reconsideration of some central issues of DOM.

2 Definitions of DOM

There is not a clearly agreed-upon definition of DOM (for a detailed analysis of most of the problems in this section, see Malchukov and de Swart 2009). For instance, in her now classic study of DOM, Aissen (2003: 435) gives the following working description of DOM: “It is common for languages with overt case marking of direct objects to mark some objects, but not others, depending on semantic and pragmatic features of the object. Following Bossong (1985), I call this phenomenon Differential Object Marking (DOM)”. Although Aissen’s is a fair characterization of DOM in Bossong’s book (and in many other works as well), in fact Bossong did not provide a formal definition of DOM at the time. He did provide slightly different definitions in several parts of his writings. In an earlier paper (1983/1984: 8) the following definition is proposed: “I have termed *Differential Object Marking* (DOM) the subcategorization of direct objects, or, more precisely, of transitive patients [. . .] depending on the semantic properties of the object noun phrase.” Here the necessity of “overt” case marking is not included in the definition, but his wording seems to imply that the motivation for the differential coding is only semantic (as opposed to semantic-pragmatic). In a later (1998) paper, Bossong attempts a more general definition that still presents some problems. He labels as DOM only those cases where

¹ Here I am following de Hoop and Malchukov’s (2007) terminology for “asymmetry”, but see below for other uses of the term.

[...] the marking is done only over the objects “deserving” to be marked, because they are further away from the semantics of the prototypical object. If the object does not have any agent-like tract, in as much as it is not a human and is not animated, it does not belong to the potential subjects. Therefore, it is not functionally necessary to mark it as an object. On the other hand, if on grounds of its inherent semantics, the object is a potential subject, it is now necessary to confer on it a specific marking allowing to unambiguously differentiate the object from the subject. In this second case, the outcome is a system where not every object is marked, but only those objects that, because of their inherent agentivity, are potential subjects. This is the phenomenon called in my terminology differential object marking (Bossong 1998: 202 [my translation]).

In this second definition, DOM seems to be limited to the opposition of unanimated zero-marked objects vs. animated (or human) marked ones; at least apparently, it only considers animacy to the exclusion of other intervening factors, does not contemplate symmetrical case systems, and the only motivation for DOM that recognizes is the differentiating one. As virtually any circulating definition of DOM, Bossong’s characterization is teleological (an exception to this tendency in Malchukov and de Swart 2009: 350–351). More often than not, authors work with informal definitions, work definitions or assumed common knowledge. We may generalize the main points of disagreement among current definitions of DOM in at least three aspects:

- a) The implied morphosyntactic phenomena.
- b) The dimensions that determine DOM and the relevant transitivity parameters.
- c) The syntactic functions and semantic roles implied in the phenomenon.

I will touch briefly upon these three points before moving on to the core of the problem.

2.1 Morphosyntactic extension of DOM

For some authors (Aissen 2003; Comrie 2008), only case marking seem to be relevant for DOM but it is increasingly common to see the term DOM used when another morphosyntactic device like agreement is used by a language for the identification of the functions Subject and Object.² Another important part of the definition of DOM is what kind of marking opposition is envisaged. According to some authors (Aissen 2003; Nichols and Bickel 2008: 4; Guntsetseg 2009: 115)

² Some definitions of DOM include the requisite of “overt case marking” as a prerequisite (Kemper 2006) but the reader is always supposed to understand that “overt case marking” case is to include non-morphological case marking strategies as well.

- (2) *golpeó* *(a) *la/una* *pediatra*
hit-PRF.PAST.3SG DOM ART.DEF/INDF.FEM pediatrician
'he/she hit the/a pediatrician'
- (3) *vió* *(a) *la* *pediatra*
see-PRF.PAST.3SG DOM ART.DEF.FEM pediatrician
'he/she saw the pediatrician'
- (4) *vió* ?* (a) *una* *pediatra*
see-PRF.PAST.3SG DOM ART.INDF.FEM pediatrician
'he/she saw a pediatrician'
- (5) *buscó/necesitó* ?* (a) *la* *pediatra*
see/need-PRF.PAST.3SG DOM ART.DEF.FEM pediatrician
'he/she looked for/needed the pediatrician'
- (6) *buscó/necesitó* (?*a) *una* *pediatra*
see/need-PRF.PAST.3SG DOM ART.INDF.FEM pediatrician
'he/she looked for/needed a pediatrician'
- (7) *la* *vió/buscó/necesitó* *(a) *la*
PRON.3SG.AC.FEM see/look for/need-PRF.PAST.3SG DOM ART.DEF.FEM
pediatra
pediatrician
'he/she saw/looked for/needed the pediatrician'
- (8) *busca/necesita* (*a) *pediatras*
looks for/needs-3SG DOM pediatrician.PL
'he/she looks for/needs (some) pediatricians'

The semantics of the verbs are the same throughout most of the examples (1) to (8), although in (4) the preferred reading of the form with object marking is specific, while such interpretation is incompatible with the unmarked construction. In (1) we see that when the object is inanimate (definite or indefinite) the “a” marker renders the sentence ungrammatical with any of the four verbs. The “a” marker is obligatory when the referent is human definite or indefinite with the verb for ‘hit’ (2). With the verb for ‘see’ the “a” marker is necessary if the referent is human specific (3), but if it is human unspecific, it is only preferred (4). With the verbs for ‘to look for’ or ‘need’ the “a” marker is preferred with a human definite object (5), but if the object is indefinite, the preferred construction is the one without case marking (6). The case marker is always obligatory in the double

clitic construction of (7); it is ungrammatical with an indefinite undetermined plural (8).⁴

Examples (1)–(8) illustrate the interaction of animacy and definiteness in the manifestation of DOM in Spanish. However, they do not give a full picture of its real complexity. Interestingly, at least in spoken Spanish we can notice two important deviations from the general pattern: (a) The “a” marker is used with specific inanimate objects of some highly transitive verbs like *golpear* ‘to beat’ (9);⁵ (b) the “a” marker is used with animate nonhuman objects of verbs somewhat lower in the transitivity scale (10). That implies extending the use of DOM along the parameters of the scale of animacy from *human* to *animate*.

(9) *golpeó* (a) *la* *pelota*
 see-PRF.PAST.3SG DOM ART.DEF.FEM ball
 ‘he/she hit the ball’

(10) *vió* (a) *un/el* *gato*
 see-PRF.PAST.3SG DOM ART.INDF.FEM cat
 ‘he/she saw one/a cat’

What we can detect in (9)–(10) is a partial extension of the “a” marker with some verbs, currently happening in Spanish, from a pure “distinctive” function in strict DOM terms to a marker of verbal object for more prototypical objects. We will return to this later.

2.3 Arguments implied in DOM

In his seminal work, Thomson (1912: 65) concerned himself only with examples where “an urgent necessity for an accusative form differentiated from the nominative was felt . . . when the hearer was disposed to perceive a word as nominative in phrases where an accusative identification was in order” [my translation]. Following him and Bossong (1985) among others, DOM is usually considered a phenomenon limited to the opposition of S (or Agent) and O (or Patient), that is, the first and second verbal arguments, leaving aside the apparently second-

⁴ Pensado (1992) offers a thoughtful, in-depth treatment of the “prepositional object” in Spanish.
⁵ A search for the exact strings *golpear la pelota*, *golpear a la pelota* using Google and the CREA corpus of contemporary Spanish (both accessed August 2010) returned respectively 573,000 and 8 results for the unmarked phrase; 92,000 and 1 for the marked phrase; that is a proportion of 6:1 and 8:1 for each corpus. (The search of the infinitive form is designed to avoid ambiguities that may appear with some personal forms.)

ary need for speakers to differentiate direct objects from extensions to core (third arguments of some transitive constructions; see Dixon 1994: 122–124; 2005: 12). The intuition is that given that speakers have a knowledge of the morphological form and semantic value of the shared vocabulary, there is a reduced value in the differentiation of the progressively less central participants. The two main verbal arguments are foremost, and there is a tendency to reserve the most economical marking (usually zero marking) for the Agent, and the next most simple mark for the Patient, using as a rule more complex markings (larger case morphemes or adpositions, or prepositions, etc.) for extensions to core and peripherals. While such an argument must be at least partially right, it is not so clear that the only relevant contrast for DOM is S/O, especially in languages where case marking is universal and obligatory, like Greek (see below).

If we should consider as an essential part of DOM's definition that DOM is strictly a device to differentiate S from O, then by necessity there will be no other parts to look at, and the extent of the phenomena studied under the name "DOM" will be narrower. While there is obviously some methodological gain in constraining the definitions, I think we may lose sight of equally important phenomena by trying to impose the *main* motivation of DOM as its *only* motivation.

Following Haspelmath (2005: 1) and others, in the rest of the paper I use the label "Differential Object Marking" to designate any alternation of case marking between two contexts of the same verb where the verbal meaning remains basically the same and only the nature or the pragmatic interpretation of the referent is different. I will use the term "different" object marking whenever the alternation of case marking is linked to changes either in the conceptualization of the events, *or* in the role or the number of the participants.

3 Asymmetry in case marking

Before presenting the data corresponding to the examples of DOM in Greek, it is necessary to outline some of the properties of its case system vis-à-vis other languages with canonical examples of DOM, like Turkish, Hindi or Spanish. In this section we will deal with the notable symmetry of its case system, and in (4) we will deal with other properties of the case system. Let us start by presenting a number of ways in which the morphology and morphosyntax of case systems are said to be symmetrical or asymmetrical by different authors.⁶

⁶ The term "asymmetry" is used yet in a different way, not dealt with here, in Jakob (2002).

- (12) *1ηΛ=tse 4ηι-ηθα mlênkya nòkor(=ri) ten 2sen 1τarkya*
 1.SG=ERG two-CLASS black cat(=LOC) CONJ three white
nyùkyu=ri 1mraj 1mo
 dog=LOC see COP
 ‘I see two black cats and three white dogs’
 (Hildebrandt 2003: 105)

- (13) *ho nómos tōi*
 ART.NOM.MASC.SG law-NOM.MASC.SG ART.DAT.MASC.SG
bouloménoi didōsi tèn
 want-PART.PRES.DAT.MASC.SG give-PRES.3SG ART.AC.FEM.SG
exousían
 power-AC.FEM.SG
 ‘The law gives this power to whoever wants it’
 (Isaews 11.25)

In Greek (13) every nominal element must be case marked in every phrase (as well as number and gender). This is a feature shared with most ancient Indo-European languages (Tocharian is one of the exceptions with *Gruppenflexion*), but not with the majority of their present day’s descendants. In other non-Indo-European languages, like Finnish, most adjectives agree with their head in case and number, but this universality of case marking is not such a common feature typologically. From the economy vs. markedness opposition, this makes Greek a language with maximal differentiation while the economy in functional differentiation is minimal.

3.3 Zero-marked cases vs. universal full marking

Many languages with overt case marking tend to leave one case unmarked. De Hoop and Malchukov (2007: 1640) label as “symmetrical” the differential case marking system where “the alternation is between two types of overt morphological case rather than between the presence and the absence of morphological case.” This reflects yet another kind of morphological asymmetry (Malchukov and de Swart 2009: 345–347).

Again the unmarked case will typically code the most frequent function, and at least since De Saussure, it has been assumed that zero marking is just a special case of marking, as long as it can be shown that zero marked forms contrast with the overtly marked forms. While there is every reason to abide by the structural soundness of such reasoning, from the neurological point of view, one must point

out that the mechanisms implied in the coding and decoding of nominals must be different (and simpler) in the case of bare, zero marked nominals, as opposed to the declined forms, and the linguistic explanation in both types of language may rest upon different motivations (linguistic economy will play a different role when the competition is not between two overt marks, but between an overt one and zero). Therefore for the completeness of linguistic description and typological comparison, it is sometimes convenient to signal what kind of opposition system is used. Following de Hoop and Malchukov I will call “symmetrical” the case systems where all cases are paradigmatically marked with an overt mark. Greek is symmetrical in this sense (which we can call paradigmatic symmetry), while Turkish and Hungarian are not. An important feature of Greek is the fact that there is no zero case, although there are zero marked forms in some declensions, like the nominative-accusative singular neuter of the third declension or the nominative-vocative feminine singular of the first declension (see Sihler 1995: 248–341). Compare this situation with that of Turkish, with a case- \emptyset nominative, and also with Finnish, where the most common “talo” inflection has a zero marked nominative, while other inflections have all the cases marked in some way.

Table 1 illustrates the differences in case marking in Turkish (following the tradition, I use “nominative” for the “absolute case”) and Greek, exemplifying with just the singular of one declension (for Greek, the most common of the three). This table is presented only for illustrative purposes and is far from showing all the complexity of the nominal morphology in both languages.

Table 1: Turkish and Ancient Greek case marking

Turkish		Ancient Greek	
Nominative	kitap	Nominative	lóg-os
Accusative	kitab-ı	Vocative	lóg-e
Genitive	kitab-in	Accusative	lóg-on
Dative	kitab-a	Genitive	lóg-ou
Locative	kitab-ta	Dative	lóg-ōi
Ablative	kitab-tan		
Instrumental	kitab-la		

3.4 Partial syncretisms

Case syncretism in some parts of the paradigm (for instance, in some gender, or declension) is another frequent source of morphological case asymmetry in another sense (see Baerman and Brown 2011). Here Greek provides a clear example

of that asymmetry, which was mentioned by Bossong (1998) as a special case of DOM:⁷

In ancient Indo-European, and especially in Classical Greek and Latin, the Differential Object Marking comes forth as a fossilized category. As is well known the Indo-European neuter does not have a special form for the accusative, which is identical with the nominative. Conversely, in the masculine and feminine, the accusative is differentiated from the nominative by means of a specific form. Therefore, the accusative is only partially marked; we can describe this phenomenon as a case of Differential Object Marking. But clearly it is not a fluid category, but a fixed one. (Bossong 1998: 207 [my translation])

3.5 Core of DOM

Finally, the differential marking of objects depending on the semantic, pragmatic or discursive nature of the object's referents (the core of DOM) is yet another type of asymmetrical marking. We saw the examples in Spanish (1)–(2) where DOM marks the objects potentially identifiable with subjects. Turkish (14), a language lacking a definite article, is another well-known example of this asymmetry: inanimate, unspecific objects in immediate preverbal position are not marked for case, while specific objects are.⁸ Thus, at least in this position accusative objects are formally identical to (zero marked) nominatives when referentially they are the opposite of the prototypical subject.

- (14) a. *Ali bir kitab-ı aldı*
 Ali one book-AC buy-PAST
 'Ali bought a certain book'
 (Enç 1991: 5)
- b. *Ali bir kitap aldı*
 Ali one book buy-PAST
 'Ali bought some book or other'
 (Enç 1991: 5)

⁷ In the rest of the article, though, I will not be dealing in detail with this well-known feature of Ancient Greek morphosyntax.

⁸ Von Heusinger and Kornfilt summarize the distribution of the accusative mark of objects and the genitive of factive nominals as subjects of embedded clauses in the following terms: "The case suffix is obligatory if the NP is not to the immediate left of the verb, while in a position left-adjacent to the verb the case suffix signals specificity, and its absence non-specificity." (2005: 16). It is interesting to note the differential marking of the nominal form of subordinated subjects in both languages (the infinitive, in the case of Ancient Greek).

For the description of case systems, I propose to call “total symmetry” the (theoretical) property of being symmetrical in all the senses described in (3.1)–(3.4). Few languages (none that I am aware of) may be totally symmetrical, but Greek is much above average (we propose the term “hypersymmetrical”) in as much as morphological case marking has been generalized to all nominal word classes (“symmetrical” as in Section 3.1), is universal (as in Section 3.2) and obligatory across the board (as in Section 3.3) that is, three out of the four described instances of case-related symmetry. It is also symmetrical according to the restricted interpretation of DOM explained in (3.5) but, as we will argue in Section 5, core DOM does not cover all the possible cases of DOM. In the rest of this article, and unless a different meaning is explicitly indicated, by “asymmetry” I mean the use of different case markers (or case-encoding strategies) to encode the same syntactic function.

4 The Ancient Greek case system

Greek was a highly inflectional language with a 5-case system (nominative, accusative, genitive, dative and vocative.) Nominative is of course the case of the subject. Accusative is the typical (though not the only possible) case of the object, but it can also denote Direction, Trajectory and Extension. Nouns in genitive (the case of the Possessor) are usually in nominal dependency; they can also denote Source and other roles. Most datives have human referents and are third verbal arguments (indirect objects); other datives can denote Instrument and Location. There is not a regular alternation of cases in the subject or object position for the same verb according to the referent of the argument. (The genitive subject in Greek is extremely rare [see below], very unlike, for instance, the ordinary Finnish partitive subject; see Karlsson [1999: 82–84].)

Number and gender are fused with case in the same morpheme. There are several declensions, conventionally classified into: first (a-stems), second (thematic o-stems) and third declension (consonantal or athematic stems). Different morphemes can be used for the same case according to the declension. All nominals (nouns, adjectives, articles, pronouns) and participles exhibit the same inventory of cases, with the same syncretisms according to the declension, and all of them with a morpheme repertory from some of the three mentioned declensions.⁹ This means that Greek is, to a very large extent, a symmetric language in the sense used by Iggesen 2005.

⁹ Allowing for some specificities in the pronominal system, which lack a morphological form for the vocative different from the nominative, and some pronominal forms like *autós*, *ekeĩnos* that

There are three grammatical genders (masculine, feminine and neuter), and three grammatical numbers: singular, dual and plural (the dual was already in decline in the 5th century BC and disappeared by the end of the 1st century AD.) All the neuters belong to the second (mainly) or third declension.

Although there are some notable syncretisms of two (sometimes three) case morphemes, there is always at least one gender and/or one declension where each case appears differentiated. Almost every case has a particular morpheme: the most notable syncretism is the nominative-accusative form of the neuter, identical for both cases in the singular and plural forms. The plural vocative is always identical with the nominative, as is the singular in some declensions. Dual number is highly syncretic: a nominative-vocative-accusative contrasts with a genitive dative. Nominative and accusative plural syncretize in some varieties of the third declension in masculine and feminine as well, and the masculine accusative singular of the -o declension is identical with the nominative-accusative neuter.

Most direct objects are accusative marked, but this is not necessarily so, since passivizable objects can be marked with the genitive and the dative.¹⁰ As I have argued elsewhere (Riaño 2004, 2006a: 527–539) the main motivation for the case marking of verbal objects in Greek is determined to a very large extent by the affectedness of the object: the more affected objects are more likely to be coded with the accusative case and behave as full-fledged direct objects (typically, admitting the passive transformation). Less affected objects are more likely to be coded with a different oblique case, even when they admit of the passive transformation. I consider “most affected” objects to be the effected objects, i.e., objects that do not pre-exist the verbal activity and are created by it, as in ‘to build a building’; next come the objects whose referent is modified by the verbal action, as in ‘kill the pest’ or ‘move the table’. Lowest in the scale are objects that remain indifferent to the verbal action (‘heard of you’. See Riaño [2006a: 375–443, in prep.]).¹¹ We

have \emptyset case marker in the neuter nominative-accusative singular: *autó*, *ekeĩno* and not **autón*, **ekeĩnon* as you would expect from regular -o stems.

10 See also Lavidas (2009: 76–88).

11 Riaño (in prep.) refines and partially corrects my earlier approach to the issue (Riaño 2006a) and offers a methodology to establish an “affectedness scale”. In brief, it decomposes the affectedness-related elements (participants, events and relations) explicit or implicit in Langacker’s “billiard model” and specifies a limited number of parameters for each of them. Then it uses this list of parameters to classify verbal actions according to its object affectedness. The list of parameters is presented in the following way: “Affectedness is greater if . . . (a) the object experiments a change as a result of it; (b) it happens in the physical world; (c) the state of affairs is different after the effects of the action have ceased; (d) it alters the relation of the object with other entities in the scene,” etc. For instance, the first item of the list identifies the element

can say that the case marker of the object in Greek is semantically motivated in as much as to some extent it conveys information about a particular semantic relation of its bearer with the verb.

There are other morphosyntactic phenomena linked to the degree of affectedness of the object: objective predicative arguments are only possible with objects not completely affected, and subjective predicative arguments are only compatible with the less affected arguments (Riaño [2006a: 156–157, 165, 210, 376]). Alternations of case marking (“different case marking”) are linked to the affectedness of the object in the same way: the accusative construction will be the “more affected” one.

Some parts of the verb lexicon are thus the domain of non-accusatively marked objects. Examples are the verbs for ‘remember’ (*mimnēskō*), ‘forget’ (*lanthānomai*), ‘prevail over’ (*perigígnomai*), ‘lead’ (*hēgēomai*), ‘accuse’ (*katēgoréō* usually constructed with an object in the genitive, and occasionally in the accusative); ‘fight’ (*epérchomai*), ‘resist’ (*amúnō*), ‘make company’ (*akolouthéō*), etc. (object in dative). Of course the selection of one case instead of the others is not arbitrary, and my hypothesis is that this selection crucially depends on the mental schemes that underlie verbal semantics.¹² For instance, the primitive morphosyntax of verbs of ‘lead’, ‘rule’ (*árkhō Athēnaiōn*.GEN.PL ‘I lead the Athenians’ and ‘I rule the Athenians’) depends on a *separative* two-participant mental scheme actualized in grammar by the genitive (Riaño 2006a: 380–397). This basic separative value of the genitive is on the root of the basic, adnominal use of the genitive (*Persēs*.NOM *tōn dēmotōn*.GEN.PL ‘a Persian from the common people’ Xenophon *Cyropaedia* 2.3.7.)

The case marking of objects in Greek is to a large extent linked to the lexical semantics of the verb, thus making it largely independent of the pragmatic interpretation of the events (Riaño 2004, 2006a). The arguments presented here rely on the interpretation of affectedness as introduced in Riaño (2004, 2006a). In Riaño (in prep.) I am offering a scale of affectedness that improves such scale at various points and its theoretical foundations.

“change in the object” and specifies the following set of identifiable parameters: *creation of the object* > *destruction of the object* > *change in the object itself* > *objet cent red change* > *no change in the object*. Since there are 5 parameters in this scale, we assign a value to each of them from 4 to 0 (the last value is for “no change in the object”). A tentative “scale of affectedness”, apparently valid at least for Greek and Latin, is presented by selecting a reduced number of verbal classes that share basically the same number of “points” according to such scale. A typological comparison will no doubt allow a refinement of this list (e.g., by simplifying the above mentioned parametric list by merging “creation” and “destruction of the object” and applying the same value to them).

¹² See Riaño (2006a: 374–513). About mental schemes underlying specific constructions see e.g., Langacker (1987–1991), Nikiforidou (1991) and Fauconnier (1997).

Finally, I will mention briefly a few morphosyntactic notabilia of Greek, most of them shared with at least another member of the Indo-European family, and at least tangentially connected with our inquiry, mentioned here just to help the reader not fluent in Greek to understand some of the examples.

(a) Infinitives (there is a wealth of them, for there is almost one for every tense and voice) behave, in their nominal side, as neutral singular substantives (they can be subjects, objects, etc.) but they cannot receive any nominal morpheme; they can be determined with the article, as regular substantives do: as a rule, they do not need the article when they function as a nominative or accusative noun does, but they need it when they function as a genitive or dative.

(b) Almost any adjective can be substantivized in the neuter case, being interpreted as an abstract noun (*kalós*-MASC.SING ‘beautiful’; *tò*-ART.NEUT.SG *kalón*-ADJ.NEUT.SG ‘beauty’).

(c) Nominatives and (especially) accusatives have a range of uses well beyond the subject/object opposition. Accusatives appear in adjective dependence, as verbal and adjectival temporal adjuncts, etc. Most notably, the regular case marking of the infinitive’s subject (whenever it is not coreferential with a noun in another syntactic role) is the accusative, except with copulative infinitives (where the case is again the nominative).

5 DOM in Ancient Greek¹³

In Greek there are a good number of alternations of case that can be explained as examples of *different* object marking. As I said above, case assignment of the verbal arguments is, to a very large extent, independent of the pragmatic interpretation of the utterance. After the existence of more than one participant, the main parameter of the transitivity scale that is relevant for this assignment is object affectedness, itself a gradable property closely related to verbal aspect (Hopper and Thompson 1980). Objects high in this property, in a non-contextual consideration of verbal semantics, are always marked with the accusative. Objects low in this property can be marked with the accusative or any of the other two oblique cases.¹⁴ *Basileúō* ‘reign’ ‘be king’ and similar verbs of *rule* will govern

¹³ Data for this section are drawn from a subset of 60,000 words of a larger, manually-tagged electronic corpus of c. 100,000 words of literary prose texts of Greek authors spanning from the 5th century BCE to the 2nd century CE, supplemented by examples quoted from other scholars. For full details I refer to Riaño (2006a: xxviii–xxxii). Whenever it is possible I choose among prose texts, to avoid taking “poetic constructions” as representative of ordinary prose.

¹⁴ This point is elaborated with some detail in Lavidas (2009: 76–92). The choice of case depends on the mental schemes that underlie the organization of the basic predicate (see Note 12).

a genitive that can be passivized; *pisteúō* ‘trust’ and semantically related verbs may govern a dative (even inanimate) that can be passivized. Thus Greek presents, to a large extent, a “split type” of case variation, actualized through a very symmetrical but uneconomical case system. *Prima facie*, such a system should not need to show effects of DOM, since objects and subjects are almost always distinguished (except neuters) and overtly marked: Hypersymmetrical languages are not expected to provide good examples of core DOM, at least as long as there is no syncretism of the cases for S and O. But (and this is one of the main claims of this paper) core DOM does not cover all the possible examples of DOM. Now let us consider the apparent deviations from the general rules for case assignment of the object in Greek.¹⁵

5.1 The partitive genitive

In Finnish, the partitive case alternates with the nominative and the accusative in the subject and object position (Examples (15)–(16)). The alternation of the partitive and accusative is often quoted as an example of DOM (cf. de Hoop and Malchukov 2007).

- (15) a. *Anne tapaa viera-at*
 Anne meets guest-ACC.PL
 ‘Anne meets the guests’
 (de Hoop and Zwarts 2009: 172–173)
- b. *Anne tapaa viera-ita*
 Anne meets guest-PART.PL
 ‘Anne meets some guests’
 (de Hoop and Zwarts 2009: 172–173)
- (16) a. *Anne rakensi talo-n*
 Anne built house-ACC
 ‘Anne built a/the house’
 (de Hoop and Zwarts 2009: 172–173)
- b. *Anne rakensi talo-a*
 Anne built house-PART
 ‘Anne was building a/the house’
 (de Hoop and Zwarts 2009: 172–173)

¹⁵ I am not going to deal here with a construction that involves differences of case marking of non-direct objects, which was the main theme of Riaño (2006b).

In (15b) the use of the partitive “triggers a nonspecific (indefinite) reading” of the object, and in (16b) the “accusative case marking of the object correlates with a resultative (perfective) interpretation, while the use of unmarked partitive case usually combines with an irresultative (imperfective) interpretation” (de Hoop and Zwarts 2009: 173).¹⁶

Greek lacks a partitive case, but it does have a partitive object and, to a more limited extent, a partitive subject (20).¹⁷ When the object of a verb is marked with the (partitive) genitive, instead of the accusative, the differential case marker triggers an indefinite or unspecific reading (17b)–(18).¹⁸ This is the only interpretation that licenses the genitive case for the coding of an object that is transformed by the verbal action.

- (17) a. *tēn* *gēn* *temeîn*
 ART.FEM.AC.SG land-AC.FEM.SG ravage-AOR.INF.ACT
 ‘to ravage the land’
 (Thucydides 2.20.4)
- b. *tēs* *gēs* *temeîn*
 ART.FEM.GEN.SG land-GEN.FEM.SG ravage-AOR.INF.ACT
 ‘to ravage some of the land’
 (Thucydides 1.30.2)
- (18) *Adrēstoio* *égēme* *thugatrōn*
 Adrastus.GEN.SG marry.3SG.PAST daughter-GEN.PL
 ‘he married one of the daughters of Adrastus’
 (Homer, *Iliad* 14.121)

The differential marking of the object in (17b)–(18) reflects a change in the specificity of the affected object. It is important to understand that if there is a reduction in the affectedness of the object it is because the unspecificity of the affected part of the object implies a partitive reading (“the land” is a concrete one, but the specific affected part is either unknown to the writer or the writer is not interested in specifying it), and not because there is another kind of partial affectedness.

¹⁶ On the interaction in Finnish (a language without verbal aspect) of aspectual distinctions and object case (an issue which is more complex than what the present examples suggest) see Kiparsky (1998), Malchukov (2006b).

¹⁷ I will use the term “partitive” in a strict, restrictive meaning as in Schwyzer and Debrunner (1950: 101–104), non-inclusive of all the allegedly derived uses dealt with in Schwyzer and Debrunner (1950: 104–117).

¹⁸ In Greek, the indefinite or unspecific reading is compatible with the presence of the definite article.

This is not always understood in Greek grammars.¹⁹ Example (19) shows a somewhat exceptional case of coordination of the two cases in object position, while (20) is an example of the genitive partitive assuming the subject role (a much rarer case than the partitive object).

(19) *tōn poulopódōn esthiéthō kai tēn linózōstin*
 ART.GEN poulp-GEN.PL eat-IMP and ART.ACC.SG mercury-ACC.SG
 ‘let him/her eat some octopus and annual mercury [a herb]’
 (Hippocrates, *De natura muliebri* 45)

(20) *epimignúnai sphōn pròs ekeinous*
 associate-INF.ACT PRON.GEN.PL for-PRON PRON.AC.PL
 ‘some of their number associated with them’
 (Xenophon, *Anabasis* 3.5.16)

Unlike the situation in Finnish, where the partitive is the unmarked case for objects (Heinämäki 1984: 154), in Greek (as in Russian, Latin and other Indo-European languages) the accusative is the unmarked case for objects. The genitive, however, is the regular case in Greek for objects of many verbs that imply a *less affected* object (like verbs of “remembering”), often atelic (like *árkhō* ‘to rule’, mentioned before). It is also the only valid case for most verbs with the meaning of ‘share’ or ‘partake’, with an obvious partitive meaning.

When this partitive construction is used (at least in Classical times, and as late as the first century CE) with ingestive verbs like eating, or drinking, the two most common contexts are the following: (a) medical contexts where the genitive has as its referent the whole from which the doses are taken; (b) the eaten thing is not regular food but a poison, or a non-edible thing, or things subjected to some kind of taboo (Riaño [2005, 2006a: 247–253]). In this second case the possibility of the alternation may be linked to reduced agentivity of the subject: we may suppose that in such situations the agent is presented as acting in a less voluntary way, since the consequences are fatal, or there is ignorance on the subject’s side, etc. This is clearly not the case with other classes of verbs (17)–(18), where the

¹⁹ For instance, in Humbert (1960: 270) we find the following translation of *hēdēōs*-sweet.ADV *àn*-PARTICL *kai*-and *ōmōn*-raw.GEN.PL *esthiēin*-eat.INF.ACT *autōn*-they.GEN.PL Xenophon *Hellenica* 3.3.6 “(ils disaient) qu’ils auraient plaisir à leur arracher un morceau de chair et à la manger crue” “(they told them that) they would happily eat a piece of their meat, even raw” but this is a gross misinterpretation of the matter discussed there, the genitive partitive (also wrong is the holistic translation by Brownson [1918: 221] or Strassler and Marincola [2009: 98]). The partitive interpretation must be rendered by something along the lines of “they would happily eat some of them raw.”

action is definitely volitional, and the construction simply conveys the speaker's ignorance or indifference about the specificity of the referent.

Whilst the genitive partitive construction is not in Greek as common as it is in other languages, almost every type of direct object admits this construction, with one exception: effected objects (that is, objects whose referent is *created* by the verbal action) do not have this kind of alternation. The frequency and scope of this phenomenon in Greek cannot compare with the all-common partitive constructions in Finnish (with a partitive case) or Russian (with an opposition of accusative and genitive marking definite/indefinite objects [Wierzbicka 1981]). In Greek it is more frequent to find a lexical strategy to convey the same message, that is, the use of words such as 'a part of', 'some of' etc. in the expected case, modified by a noun usually in the genitive.

In this construction, the semantic value of the genitive takes precedence over the syntactic one, so the case marking is opaque as to the syntactic function of the nominal phrase. This is clearly not a case of "distinguishing" use of DOM, made unnecessary by the hypersymmetrical nature of the Greek case system. Rather the genitive is indexing the semantic value of the nominal phrase, this time opposing the general rule in Greek that ignores the pragmatics of the clause for case marking (see, with another explanation of the facts, Meillet and Vendryes [1968: 559–561]; Luraghi [2003: 60–62]). It must be pointed out that even in this construction the case marking strategy is coherent with the general model: the less affected interpretation (partitive) is the one with the genitive case, as opposed to the accusative, which marks a (cancellable) total affectedness. Thus the indexing strategy still follows the general rules for case marking.

5.2 DOM due to changes in animacy?

Luraghi (2003: 54–55) presents a very interesting example of case alternation with the verb *orégō* (21):

- (21) a. *oreksámenos* *prumnòn* *skélos*
 reach-PART.AOR.MID.NOM extreme-AC leg-AC
 'hitting him upon the base of the leg'
 (Homer, *Iliad* 16.314, quoted in Luraghi [2003: 54])
- b. *paidòs* *oréksato* *phaídimos* *Héktōr*
 child-GEN reach-AOR.MID.3SG glorious-NOM Héctor-NOM
 'glorious Hector reached out to his boy'
 (Homer, *Iliad* 6.466, quoted in Luraghi [2003: 54])

Luraghi explains the case variation of the object primarily as a consequence of the change on the animacy of its referent (non-accusative objects would correspond to the animate referent). She does not call it an example of DOM, but if we were to accept her analysis, this is necessarily how it should be considered. Before presenting our alternative explanation of examples like (21) and similar ones, let us first take a look at another pattern of case alternation that has been considered an instance of DOM. This time the examples come from Warlpiri (22) and Djaru (23), two ergative Australian languages closely related to each other.

(22) a. *Njuntulu-l npa-tju pantu-nu _atju*
 2SG.ERG 2SG.1SG spear-PAST 1SG.ABS
 ‘You speared me’

(Malchukov and de Swart 2009 : 346, from Hale 1973)

b. *Njuntulu-l npa-tju-la pantu-nu _atju-ku*
 2SG.ERG 2SG-1SG.DAT spear-PAST 1SG.DAT
 ‘You tried to spear me’

(Malchukov and de Swart 2009: 346, from Hale 1973)

(23) a. *Mawun-du (nga) njang-an djadji.*
 man-ERG CAT see-PRES kangaroo-ABS
 ‘A man sees a kangaroo.’

(Onishi 2001: 39, from Tsunoda 1981: 149)

b. *Mawun-du nga-la njang-an djadji-wu.*
 man-ERG CAT.3SG.DAT see-PRES kangaroo.DAT
 ‘A man looks for a kangaroo.’

(Onishi 2001: 39, from Tsunoda 1981: 149)

In (22)–(23) we see an alternation, not common in Australian ergative languages, between the ergative-absolutive construction and the ergative-dative construction. The second construction implies a less affected “attemptive” reading, and it is possible only with a reduced set of verbs that varies from one language to the other. Each construction represents a different state of events.

Returning to the Greek example in (21) I propose that this kind of change in the lexical semantics of the verb depends on the *affectedness* of the object, not on the role of animacy: ‘hitting’ is an accomplishment that implies a flux of energy, and therefore is higher on the scale of affectedness than the activity of ‘reaching out’. (There may be a reduction of the *subject’s* agentivity aligned with the reduction of affectedness). We find the same genitive case marker, irrespective of the animacy of the referent, for the object of similar verbs expressing a process that aims toward some goal, like *tokseúō* ‘shoot with the bow’ (with genitive object)

‘hit with an arrow’ (with an accusative).²⁰ Should we conclude from this that there is no other instance of DOM in Greek?

In Greek, the normal alternations in the case marking of an object (according to the change of the semantic roles or the verbal semantics) respond to the principles of case marking mentioned in Section 4 above: First, some verbs may present a semantic variation linked to a different case marking of the object, always following the rule that the less affected object construction may be marked with the genitive or the dative. Second, changes in the verbal semantics may affect verbal aspect or voice, aligned with the affectedness variation (atelic meanings correspond with less affected objects).²¹ Some examples of all this are the following: (the first translation responds to the accusative construction, the second one to the genitive or dative) *háptō* ‘to tie’, with genitive ‘to touch’; *peithō* ‘to convince somebody’ with dative (normally implying the use of the middle voice) ‘to obey somebody’; *diakonéō* ‘to provide (something)’, with dative ‘to serve (somebody)’. Since in most of the attested cases there is a sensible semantic distance between both meanings of the same form, dictionaries register the different meanings separately. The case of objects in the low end of the affectedness scale, like the object of verbs of perception, may sometimes vary according to their semantic role, without a semantic variation in the verb. For instance, the role of Source for the object marking of *akoúō* ‘hear’ and similar verbs of auditory perception is usually marked iconically with the genitive, while the perceived entity receives the default case for the object, the accusative.

Such are examples of verbal alternations (in the sense of e.g., Levin (1993)), not DOM. But semantic change is quite often a *gradual* transformation of verbal semantics, and the initial stages of this shift, at least in some cases, consist in speakers coding in the syntax of the sentence some semantic interpretations of the predicate not yet lexicalized. For instance, since there is a close relation between object affectedness and verbal aspect,²² and genitive and dative typically code less affected objects than the accusatively marked ones, speakers may code

20 Luraghi offers an additional explanation for the case variation of (21) related with an opposition of total affectedness of the object in (21a) vs. a partial affectedness in (21b) which is compatible with my general explanation, but Luraghi’s view of affectedness seems to be very different from mine. The matter is briefly touched upon in Luraghi (2003: 53–54) where we find the view that the “main semantic feature [of the semantic role Patient] is total affectedness.” My own, repeated view (see Riaño [2004, 2006a]) is that affectedness is a scalable property even within the same semantic role.

21 For an overview of voice in Greek see Duhoux (2000: 103–127). About the interaction of voice and transitivity alternations see Lavidas (2009: 79–92).

22 See Tenny (1987) for the seminal investigation on the interplay between aspect and affectedness, and Kiparsky (1998), Malchukov (2006a) for more recent contributions to the issue.

via case marking some pragmatic interpretation of the predicate that depend on affectedness or aspect variations.

In fact, we can find in Greek that the object of some verbs low in the affectedness scale is involved in a verbal alternation very similar to the one we saw in (22)–(23), which we may consider in the borderline between DOM and verbal alternations.²³ In a fairly large group of non-telic verbs of emotion (including verbs of affection and disaffection, like *agapáō* ‘love’, *stérgō* ‘feel affection’, and others like *lūmaínomai* ‘to hurt, maltreat’ (24), *enokhléō* ‘to trouble’ (25), *mémphomai* ‘to blame’, etc.), the semantic differences between the construction with the accusative and the dative is difficult to describe (at least partially) if it is not in terms of a reduction of the object’s affectedness, aligned with a variation in lexical aspect that can oppose a telic/atelic or an activity/state interpretation.

- (24) a. *tèn híppon eluménanto anēkéstōs*
 ART.FEM.AC.SG cavalry-FEM.AC hurt-PRF.PAST.MID.3PL fatal-ADV
 ‘they caused fatal harm to the cavalry’
 (Herodotus 8.28.1)
- b. *nekrōi lumáínesthai*
 corpse-MASC.DAT.SG insult-INF.PRES.MID
 ‘insulting the corpse’
 (Herodotus 9.79.1)
- (25) a. *eán ti enokhlēi hēmās*
 COND PRON.INDEF disturb-PRES.ACT.3SG PRON.AC.1PL
 ‘if they cause us some trouble’
 (Xenophon, *Memorabilia* 3.8.2)
- b. *hōste mē enokhleîn toîs kériasi*
 CONJ not disturb-INF.PRES.ACT ART.DAT.NEUT.PL
 army wing-DAT.NEUT.PL
 ‘so as not to interfere with the wings [of an army]’
 (Xenophon, *Anabasis* 3.4.21)

Example (21) also belongs to this class of *borderline* DOM. As it is clear from (24) the accusative is consistently used for the most affected object, independently

²³ The similarity lies in that the mentioned examples from both languages there are changes in case marking due to the degree of affectedness of the object (often linked with aspect changes), and at least some of such examples are not to be considered as mere case alternations, but instances of real DOM.

from the opposition animate/inanimate and regardless of the clear preference of the dative in Greek for the case marking of functions typically fulfilled by humans.

5.3 Neuter accusative of unspecific objects

The construction we are to consider next is most probably not an example of DOM, but of *different* object marking due to alternation. I bring it into the present discussion because it presents an interesting contrast with DOM.

The indefinite unspecific object in Greek is usually marked with the neuter accusative (26; see Kühner and Gerth 1898: 313; Havers 1924; Riaño 2006a: 181–184), even with verbs that mark their specific objects in the dative or genitive case (27). This indefinite accusative object is very common and there is a great variety of nominals that can appear in the neuter with such an interpretation, especially: the indefinite pronoun *ti*, several adjectives that function as indefinite pronouns (*oudén* ‘none’, *pān* ‘all, every’, etc.), the relative pronoun, many adjectives (*tá kalá* ‘good things’, *kállista* ‘the most beautiful things’) some participles and even neuter personal pronouns with an unspecific referent *taúta* ‘such things’. This can happen even with objects that cannot be passivized, as in (27) with the verb *khráomai* ‘use’.

- (26) a. *filon* *ōphelēsai*
 friend-MASC.AC.SG help-INF
 ‘to help a friend’ Xenophon *Anabasis* 1.3.6
- b. *megála* *ōphelēsai*
 big-NEUTR.AC.PL help-INF
 ‘you will help big’ viz. ‘in many ways’
 (Xenophon, *Cyropaedia* 6.1.38)
- (27) a. *akribēĩ* *sēmēĩoi* *khrō̃menos*
 exact-MASC.DAT sign-MASC.DAT use-PART.MID
 ‘using an exact sign’
 (Thucydides 1.10.1)
- b. *éite ti* *álla* *khrēsō̃ntai*
 if PRON.INDEF.NEUT.AC.SG other-NEUT.AC use-AOR.SUBJ.MID.3PL
 ‘if they would use something different’
 (Thucydides 2.4.6)

This construction is similar to the cognate construction (in Plato *Laws* 868b a cognate object and a personal dative object co-occur with the verb of [27]). The obvious differences between the two are: (a) the internal accusative is not related to

a specific gender; and (b) the unspecific accusative is not semantically related to the verb. Yet both are in complementary distribution and share several common properties, among them the proximity to adverbial constructions. From a semantic and functional point of view, at least a part of the unspecific neuters must be counted among the “result” (or “affected”) objects. As with internal objects, the referent of the argument is not completely separated from the verbal process. With neuter participles, it is sometimes difficult to decide which construction they belong to, as with *praksántōn-do tō-ART.AC.NEUT suntakhthén.order-PART.PASS.AC.NEUT* ‘doing what was ordered’ (Polybius 1.19.3).

This somehow neglected Greek construction defies a unified explanation. Diachronically this accusative is the origin of several adverbs in Modern Greek (like *téleia*, *aplá*) and in Greek it is clear that in some places it behaves like a true adverbial (the superlative form of a common type of adverbials in *-ōs* is built with the plural neuter.) However, examples like (27b) show a real object, and like the internal object, with a semantic that defies role definition. What is most interesting here, from the point of view of DOM, is the linking of unspecificity with the accusative, the default case for the object.

Internal objects result from the externalization of the verbal process. When they are used as objects, then the process itself is being profiled against the external participants. The modifications of the head noun of the internal construction result in the same kind of semantic transformations of the predicate as in the adverbial modification of the intransitive construction. Therefore, internal constructions are not always equivalent to manner adverbials (as in *to live a good life*) but to other kind of adverbials as well (the adverbial for the internal object in *he shot two shots* would be *twice*, and not a manner adverbial.) On the other hand, when the identity of the referent of the object is unknown, or is ignored, then the importance of the object is reduced, and the focus shifts from the external object to the internal process of the verb. For instance, when the referent is unknown in a context where we know that somebody (nonreferential) has been shot, an expression like *she shot two shots* can be preferable to *she shot twice at somebody*. We then have a clear motivation for the internal construction to substitute some instances of indefinite external objects. What makes this construction so close to DOM constructions is precisely the fact that referentiality is the parameter behind the difference in argument selection and coding of the object.

6 Conclusions

The “distinctive” function (Comrie [1989: 128]) may explain the main motivation for DOM in at least some languages that present zero marking of A or P, but this is

not the whole story. First, as we saw in the Spanish examples (9)–(10), what may have started as a device to distinguish between subject and object in potentially confusing contexts along the parameters of animacy and individuation can be extended to other contexts. Following a well-known linguistic pattern of generalization, the Spanish “a” marker, used to characterize some objects, may in time enter in a different kind of opposition with unmarked forms. Thus, even in clear examples of DOM, the differential marking can be used beyond the necessity to differentiate objects from subjects. The process we can observe in contemporary Spanish still proceeds according to the parameters of the scales of animacy and definiteness. As for Greek, we see that DOM may appear to mark the unspecificity of the affected part in the genitive-partitive construction; in the hypersymmetrical system of Greek, there was no need to introduce a differential mark to differentiate between the two main arguments. Instead, it was possible to use DOM as a morphosyntactic device to denote the unspecificity of the object. Further (Section 5.2), I have shown how it was possible in Greek to code a pragmatic interpretation of the aspectual configuration of some events via DOM. Diachronically, this process could be followed by a further change of the role of the arguments, and the resultant possibilities of verb determination would constitute an example of case alternation. The neuter accusative of unspecific objects in Greek is another example of a construction that defies the borders of any definition of DOM.

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