



# Ditransitive 'teach' and the status of the Theme "argument"(?)

Greek διδάσχειν as a case study

Marina Benedetti Università per Stranieri di Siena, Siena, Italy benedetti@unistrasi.it

# Abstract

This paper offers new insights into the much-debated topic of double accusatives, taking  $\delta i \delta d\sigma x \epsilon i v$  as a case study. By focussing on the different syntactic and semantic properties of the two accusatives in expressions such as  $\delta i \delta d\sigma x \omega \sigma \epsilon \sigma \omega \varphi \rho \sigma \sigma \upsilon v \eta v$  'I teach you moderation', it is shown that the mere reference to distinct semantic roles (Recipient vs Theme) does not provide a satisfactory account of some crucial properties of these constructions. As emerges from textual evidence, the so-called "Theme" may alternate with an infinitival complement (e.g.  $\delta i \delta d\sigma x \omega \sigma \epsilon \sigma \omega \varphi \rho \sigma \upsilon \epsilon v' I teach you (how) to exert moderation'). Both the infinitival and the nominal complements are bound to the object of <math>\delta i \delta d\sigma x \omega$  through a relationship which may be defined by the notion of *control*. This finding reveals the predicative function performed here by the "Theme", thus supporting a multi-predicative approach to the double accusative construction of  $\delta i \delta d\sigma x \epsilon v$ . This hypothesis has relevance to the analysis of other double accusatives of Ancient Greek, and opens a new path for the analysis of comparable data offered by modern languages.

## Keywords

double accusative - verbs for 'teaching' - infinitive - control - noun predicates

## 1 Introduction: double accusatives in Ancient Greek

Ancient Greek displays a wide array of double accusative constructions, whose extent and variety is stressed by Jacquinod (1989: 5) in his rich monograph:

De plusieurs points de vue, le double accusatif est une construction importante et intéressante en grec ancien. Elle est importante d'abord par sa fréquence. De toutes les langues indo-européennes anciennes, c'est le grec, semble-t-il, qui produit le plus grand nombre d'exemples. [...] Cette construction est importante parce qu'elle concerne un très grand nombre de verbes et elle est intéressante parce qu'elle recouvre des types assez varies.

Among the different types of double accusative constructions, we have those related to the so-called "double accusative verbs". These include a wide range of verbs which essentially express some sort of "transfer" of an entity between two participants: verbs of demanding, exacting, interrogating, teaching, reminding, remembering, robbing, depriving, hiding, concealing, putting on and taking off, girding and cloaking; for a recent account, cf. Lavidas (2013: 15 ff.):

A number of verbs (especially verbs of teaching, reminding, asking, demanding, persuading, hiding, depriving, (un)clothing) can take two accusatives (the so-called 'Double Accusative'), one denoting the affected person and the other the Theme.

An example of this construction is provided in (1), with the verb form  $\epsilon \delta(\delta \alpha \xi \alpha v)$  (they) taught' taking two accusatives,  $\sigma \epsilon$  'you' and  $i \pi \pi \sigma \sigma \delta \nu \alpha \varsigma$  'horsemanship':

(1) σε Ζεύς τε Ποσειδάων ἰπποσύνας
 you:ACC Zeus:NOM and Poseidon:NOM horsemanship:ACC.PL ἐδίδαξαν teach:AOR.3PL
 'Zeus and Poseidon taught you horsemanship' (Hom. Il. 23, 306 ff.)<sup>1</sup>

This paper deals with issues related to the different behaviour of the two accusatives. After a brief overview of the state-of-the-art (including both traditional accounts and more recent literature) a new approach will be developed based on a closer inspection of textual data, taking the verb διδάσκειν 'teach' as a case study. Although our approach is essentially empirical (in that it does not aim at a formalised description within a specific theoretical framework), our

<sup>1</sup> The translations of the Greek passages are based on the digital Loeb edition, with minor changes. In the glosses, singular number on nominals is unmarked, as well as present tense and indicative mood in the verb forms.

data will be presented in a theoretically informed way, since several descriptive models share the assumptions we will need to adopt.

### 2 The state of the art

Double accusative verbs have been the object of an extensive literature, which includes all handbooks and grammars of Ancient Greek as well as dedicated studies such as the classic monograph by Jacquinod (1989; see also more recently Jacquinod 2016). Moreover, a renewed interest in the topic has arisen over the last decades, in the light of the increased attention on ditransitive constructions, which have been extensively discussed within theoretical and functional-typological research. In this section, we shall briefly review some of the main aspects traditionally highlighted in the literature.

In a historical-comparative perspective, the presence of parallels in other Indo-European languages—hence the presumably Indo-European origin of this construction—is repeatedly highlighted both in traditional accounts and in more recent works; see e.g. Delbrück (1893: 383 s.); Jacquinod (1989); Hettrich (1994); Krisch (1994); Kurzová (2001); Pinkster (2015: 164); Napoli (2016); Keydana (2018).

In a descriptive synchronic perspective, on the other hand, special attention has been devoted to the asymmetric behaviour of the two accusatives, both at the semantic and at the syntactic level. At the semantic level, the contrast is usually captured in terms such as *animate* ~ *inanimate* or *person* ~ *thing* etc.; see Kühner & Gerth (1898: 318 ss.); Schwyzer & Debrunner (1950: 81); Humbert (1960: 257); Cooper (1988: 150); Kurzová (2001); Lavidas (2013: 15). At the syntactic level, passivization offers an important clue for assessing the asymmetry between the two accusatives: only one of the two accusatives (namely, the one denoting the person) may surface as the passive subject; or, in a more careful formulation, one of the two accusatives is strongly preferred as the passive subject (on this see below); see Kühner & Gerth (1898: 318 ss.); Schwyzer & Debrunner (1950: 81); Hettrich (1994); Lavidas (2013: 15); Luraghi & Zanchi (2018: 26). This phenomenon has been the object of renewed attention in connection with the theoretical distinction between structural and inherent case: the status of structural case is attributed only to that accusative which alternates with the passive subject (Anagnostopoulou & Sevdali 2015: 457 ff.; Keydana 2018: 2209; on Modern Greek: Anagnostopoulou 2001; Bowers & Georgala 2007; Efstathopoulou 2007).

Moreover, a renewed interest in the topic has arisen over the last decades in light of the increased attention on ditransitive constructions and on the different alignment patterns that these constructions display cross-linguistically. According to a common definition in typological literature, a "ditransitive construction is defined [...] as a construction consisting of a (ditransitive) verb, an agent argument (A), a recipient-like argument (R), and a theme argument (T)" (Malchukov, Haspelmath & Comrie 2010: 2). The way in which these semantic arguments are encoded across languages is usually described in terms of variable alignment patterns, defined by comparing the encoding of R[ecipient] and T[heme] with the encoding of the monotransitive Patient (P). In brief, we have indirective alignment when T is treated like P, and differently from R; secunda*tive alignment* when R is treated like P, and differently from T, and *neutral align*ment when both T and R are treated like P (Malchukov, Haspelmath & Comrie 2010: 2; Haspelmath 2008, 2015; Malchukov 2017). In the double accusative construction, where both arguments take the accusative case, i.e. the same case as the monotransitive P, we have thus an instance of *neutral alignment*.<sup>2</sup> According to Malchukov (2017: 183), identical case marking for R and T is favoured by their semantic asymmetry (in terms of animacy / referentiality), which rules out ambiguity in the interpretation.

It is also worth mentioning that the double accusative construction has been repeatedly claimed to be somehow related to semantic causativity (Humbert 1960: 259; Jacquinod 1989: 185; Luraghi & Zanchi 2018); this idea recalls some recent models of lexical decomposition (cf. Dowty 1979; Van Valin 2001, who identify an abstract operator CAUSE in the semantic of verbs such as 'teach' = CAUSE [BECOME know]).

The achievements of typological and theoretical linguistics have undoubtedly had a valuable impact on the analysis of such a traditional topic as double accusative verbs in Ancient Greek. However, as we believe, traditional (mainly text-oriented) analyses may also provide a stimulus to further inquiry, which would in turn produce interesting theoretical implications.

#### 3 Διδάσκειν as a case study: some data

Verbs denoting *cognitive transfer* typically occur in ditransitive constructions in a variety of languages, as repeatedly observed in the literature. Among them,

<sup>2</sup> The double accusative construction of διδάσχειν—and of Ancient Greek double accusative verbs in general—does not admit alternative alignment patterns. In other words, it does not present anything comparable to the so-called dative shift which is very common, e.g., in English. For a survey, see Haspelmath (2015); against the assumption of dative shift in Modern Greek, see Efstathopoulou (2007).

one should mention verbs for 'teaching': within the Indo-European domain, the double accusative construction occurs not only in Greek ( $\delta_i \delta \dot{\alpha} \sigma \kappa \epsilon_i \nu$ ) but also in Latin (*docere*) and German (*lehren*); for recent accounts, see Napoli (2016) and Lee-Schoenfeld & Diewald (2017) respectively, with further references.<sup>3</sup>

In our analysis, we selected Ancient Greek διδάσχειν 'teach' as a case study in order to reflect on some issues related to the asymmetry between the two accusatives. A more focused approach is expected to yield interesting results.

The double accusative construction of  $\delta\imath\delta\acute{\alpha}\sigma\varkappa\epsilon\imath\nu$  is widely attested in all sorts of Greek texts, at different epochs:4

- (2) τὸν ἡ μήτηρ αὑτὴ γλῶσσάν τε DEM:ACC ART:NOM mother:NOM herself:NOM tongue:ACC and Eλλάδα καὶ γράμματα ἐδίδαξε
  Greek:ACC and letter:ACCPL teach:AOR.3SG
  'his mother [...] taught him to speak and read Greek (lit.: the Greek tongue and letters)' (Hdt. 4.78.1 ss.)
- (3) Διδάσκουσι δέ τούς παίδας καὶ σωφροσύνην
   teach:3PL PTC ART:ACC.PL boy:ACC.PL also moderation:ACC
   'They teach the boys moderation also' (X. Cyr. 1.2.8.1)
- (4) και διδάξω σε σοφίαν
   and teach:FUT.1SG you:ACC wisdom:ACC
   'and I shall teach you wisdom' (Sept. Job. 33.33.2)

The double accusative construction of  $\delta_1\delta_4\sigma_{xeiv}$  survives into Modern Greek, where it coexists with other types of constructions, with the Recipient surfacing either as a genitive or as a  $\sigma_{\epsilon}$ -prepositional phrase; cf. Anagnostopoulou (2001); Alexiadou (2007: 2 ffs.); Bowers & Georgala (2007: 19 ss.); Efstathopoulou (2007).

<sup>3</sup> Etymologically, all these verbs are causatives (cf. *LIV* s.vv. \**dek*-, \**dens*-, and \**leis*-), although this was no longer transparent in historical times. On Latin *docere*, see also García-Hernández (1994); Hoffmann (2016).

<sup>4</sup> For the present investigation, all occurrences of διδάσχειν have been collected (through the electronic resources of *Thesaurus Linguae Graecae*) in the following corpus: Homer and Homeric Hymns, Hesiod, Aesopus, Pindarus, Solon, Theognis, Attic tragedy, Herodotus, Thucydides, Xenophon (*Cyr., An., Symp.*), Aristophanes, Isocrates, Isaeus, Plato (only *Crito, Phaedo, Cratylus, Theaetetus, Respublica*), Septuagint (occasionally others).

The data collected in our corpus are consistent with the traditional assumptions concerning passivization,<sup>5</sup> even though it must be stressed that evidence is scanty.<sup>6</sup> The examples of passives with both T and R expressed (which provide contrastive evidence for the expected passivization of R over T) are very few. The Homeric passage frequently quoted in the literature is inconclusive: it is an *accusative and infinitive* clause, with both T and R in the accusative case and verb in the infinitive (not carrying subject agreement feature): this does not allow us to determine with certainty which of the two is the clause subject; for which, see (5):

(5) φάρμαχα [...] τά σε προτί φασιν Ἀχιλλήος medicine:ACC.PL REL:ACC.PL you:ACC from say:3PL Achilles:GEN δεδιδάχθαι teach: PF.INF.MEDIOPASS 'medicines [...] which they say you were taught by Achilles' (or: 'were taught you by A.') (Hom. *Il* 11.830 ff.)

More reliable evidence comes from passages like (6) and (7), in which the passive subject is undoubtedly R:

- (6) ἄγε δή, τί βούλει πρῶτα νυνὶ μανθάνειν ὧν οὐκ
  well PTC what will:2SG first now learn:INF REL:GEN.PL not
  ἐδιδάχθης πώποτ' οὐδέν;
  teach:AOR.PASS.2SG ever nothing
  'Very well then, what would you begin learning now, of the subjects you were never taught anything about?' (Ar. Nub. 636 ff.)
- (7) ἄλλος 'Ολυμπιάδων Μουσέων πάρα δώρα other:NOM.SG Olympian:GEN.PL Muse:GEN.PL from gift:ACC.PL διδαχθείς teach:AOR.PASS.PTCP.NOM 'another one, [having been] taught the gifts that come from the Olympian Muses [...]' (Solon, Fr. 13.51)

<sup>5</sup> Kühner & Gerth (1898: 318 ff.); Humbert (1960: 259: "Au passif, la *chose* reste en accusatif, tandis que la *personne* devient le sujet de la nouvelle tournure"); Anagnostopoulou & Sevdali (2015: 457 ff.: "only the 10 can be passivized"); Luraghi & Zanchi (2018: 26: "only the causee can be passivized"). On Modern Greek, see Anagnostopoulou (2001).

<sup>6</sup> Passivization can be intended as the modification of a basic transitive pattern, involving two syntactic phenomena: (i) the promotion of the initial Direct Object to Subject and (ii) the demotion of the initial Subject (Kulikov & Lavidas 2013: 100).

The active ~ passive contrast is well represented by the following passage of Euripides, in which  $\gamma \alpha \mu \beta \rho o \dot{\upsilon} \varsigma \delta i \delta \dot{\alpha} \xi \omega$  'I shall teach my son-in-law' is in contrast with  $\delta i \delta \dot{\alpha} \xi \circ \mu \alpha i$  'I shall be taught' and the acc.  $\lambda \dot{\sigma} \gamma \circ \upsilon \varsigma$  (T), is linked to both  $\delta i \delta \dot{\alpha} \xi \omega$  and  $\delta i \delta \dot{\alpha} \xi \circ \mu \alpha i$ :

(8) γαμβρούς διδάξω καὶ διδάξομαι
son-in-law:ACC.PL teach:FUT.ACT.ISG and teach:FUT.MEDIOPASS.ISG
λόγους
reason:ACC.PL
'I shall teach my son-in-law and be instructed' (lit. I shall teach my son-in-law reasons and be taught reasons [by him]) (E. Andr. 738 ff.)<sup>7</sup>

Further examples, with R as the passive subject but no T expressed, can be found in our texts (S. *oT* 357; Thgn. 1.565; Ar. *Nub.* 786; Hdt. 3.53.20; 3.134.1).<sup>8</sup> We found only one example, in our corpus, which might suggest T-promotion:

 (9) καὶ ταῦτα δỳ διδάσκοντες ἄλλους ἡγοῦνται and DEM:ACC.PL PTC teach:PTCP.NOM.PL other:ACC.PL believe:3PL σφίσιν τελέως ῥητορικὴν δεδιδάχθαι they:DAT completely rhetoric:ACC teach:PF.INF.MEDIOPASS 'and they believe that by teaching these preliminaries to others they have taught them rhetoric completely' (Pl. Phaedr. 269c2)

Here again we have an *Accusative and infinitive* clause; but, unlike what we saw in (5), only T is expressed ( $\dot{\rho}\eta\tau\sigma\rho\iota\kappa\dot{\eta}\nu$  'rhetoric'). So  $\dot{\rho}\eta\tau\sigma\rho\iota\kappa\dot{\eta}\nu$  might be taken as the passive subject (in the accusative case, according to the usual *Accusative and infinitive* pattern). However, this is not the only possible reading: alternatively, one might suppose the infinitival clause to have a null subject, coreferential with the preceding  $\ddot{\alpha}\lambda\lambda\omega\iota\varsigma$  (the object of  $\delta\iota\dot{\delta}\dot{\alpha}\sigma\kappa\iota\nu\tau\epsilon\varsigma$ ): 'and teaching these things to others ( $\ddot{\alpha}\lambda\lambda\omega\iota\varsigma$ ), they believe that those (= the others) have been taught rhetoric completely by them' (as we may observe, the Loeb edition opts for an active traslation). The quantitative data on passivization extracted from our corpus are summarized in Table 1.<sup>9</sup>

9 The question mark refers to the passage in (9), for the reasons given above. We class as a

<sup>7</sup> The passive agent is here unexpressed (as is often the case in Ancient Greek texts) and the middle verb form  $\delta_1\delta_2(\omega_1)$  might in principle be assigned a reflexive reading ('I shall teach myself'). However, this hypothesis is to be excluded in the specific context: the situation described clearly involves a mutual exchange between the two participants, Menelaos and Neoptolemos, each one exposing his reasons and listening to the reasons of his interlocutor.

<sup>8</sup> In all these cases the passive aorist stem διδαχθη- occurs (excluding a reflexive reading).

R-promotion		T-promotion		Undecidable
T expressed	T unexpressed	R expressed	R unexpressed	
3	5	0	?1	3
Total: 8		Total: ?1		

As we may see, the overwhelming majority of passive structures undoubtedly involves the promotion of R to subject. Moreover, R-promotion is also attested under co-occurrence of T, whereas the reverse does not hold. This fact is probably significant: the acceptability of T as the passive subject might actually be related to the absence of a better candidate for subjecthood, namely R. This would be in line with what has been observed in other languages, including Modern Greek: here "passivization of the theme across a goal [= Recipient: MB] in the double accusative construction is impossible" (Anagnostopoulou 2001; cf. also Efstathopoulou 2007).<sup>10</sup>

# 4 Beyond the state of the art: the Theme "argument" and infinitival complements

The data we have been discussing so far fit into the general pattern outlined both by traditional historical grammars and by recent research. In what follows, we shall try to go a step beyond this, and suggest a new approach.

Let us take into account a different construction that is widely attested since the earliest documents up to later times. Here,  $\delta_1 \delta_2 \delta_3 \kappa_{\rm EV}$  takes an infinitival complement clause, besides a R in the accusative, as in (10)–(12):

non liquet example (5) above and two passages in which a reflexive reading is not excluded (Sol. fr. 18 and Ar. *Nub*. 127; in both  $\delta i \delta \dot{\alpha} \sigma \kappa \omega$ , in the present, has mediopassive morphology, which allows both a passive and a reflexive reading).

<sup>10</sup> More generally, in the literature on ditransitives it has been observed that "R-passivization is generally preferred over T-passivization" (Malchukov, Haspelmath & Comrie 2010: 30). For similar data concerning Lat. *docere*, see Pinkster (2015: 165); Napoli (2016); Giusti & Iovino (2016).

- (10) Μοῦσαι γάρ μ' ἐδίδαξαν ἀθέσφατον ὕμνον
   Muse:NOM.PL PTC me:ACC teach:AOR.3PL ineffable:ACC hymn:ACC ἀείδειν
   sing:INF
   'the Muses taught me to sing an ineffable hymn' (Hes. Op. 662)
- (11) [δμφαί] τὰς μέν τ' ἔργα διδάξαμεν
   [servant:NOM.PL] REL:ACC.PL PTC and work:ACC.PL teach:AOR.1PL
   ἐργάζεσθαι, εἴριά τε ξαίνειν καὶ δουλοσύνην ἀνέχεσθαι
   do:INF wool:ACC.PL and card:INF and slavery:ACC bear:INF
   '[servants] that we have taught to do their work, to card the wool and bear the lot of slaves' (Hom. Od. 22.422 ff.)
- (12) η νύν τις αὐτὰς σωφρονεῖν
  either PTC someone:NOM they:ACC be-moderate:INF
  διδαξάτω η κἄμ' ἐάτω ταῖσδ'
  teach:AOR.IMP.3SG or also=me:ACC let:IMP.3SG DEM:DAT.PL
  ἐπεμβαίνειν ἀεί
  tread upon:INF forever
  'Let a man accordingly either teach them to be chaste or allow me to tread
  upon them forever!' (E. *Hipp.* 666–667)

We can say that T is a distributional alternative to an infinitival complement. This can immediately be illustrated by comparing cases showing lexical identity between the predicate of the complement clause and the nominal complement T.

For example, the passage in (10) above can be compared with (13):

(13) αί νύ ποθ' Ήσίοδον καλήν ἐδίδαξαν
 DEM:NOM.PL PTC once Hesiod:ACC beautiful:ACC teach:AOR3PL ἀοιδήν
 song:ACC
 'One time, they taught Hesiod beautiful song' (Hes. Th. 22)

The pair (10)-(13) is noteworthy because of the close thematic affinity, an affinity which has been repeatedly observed in the literature; see Arrighetti (1992); González (2013); Stern-Gillet (2014); Semenzato (2019). In both, Hesiod describes the poetical training he received from the Muses, which inspired the composition of his poems, respectively the *Works and days* and the *Theogony*.

In (10), the expression Μοῦσαι [...] με ἐδίδαξαν 'the Muses taught me' (με, accusative, = Hesiod) takes an infinitive complement clause, ἀθέσφατον ὕμνον ἀείδειν 'to sing an ineffable hymn'. In (13) the complement to αι [...] 'Ησίοδον [...] ἐδίδαξαν 'they taught Hesiod' (here the poet refers to himself in the third person) is the accusative καλὴν ἀοιδήν 'beautiful song' (referring to the *Theogony*, whose proem contains this line).<sup>11</sup> Here, καλὴν ἀοιδήν 'beautiful song' might be replaced by an infinitive construction such as καλῶς ἀείδειν 'to sing well' (as explicitly observed by González 2013) or καλὴν ἀοιδήν ἀείδειν 'to sing a beautiful song'<sup>12</sup> without any dramatic interpretive disruption (of course, this is just a possible paraphrase: καλὴν ἀοιδήν ἀείδειν would not fit into the hexameter).

In epic poetry, a further nice example is offered by (14), which should be compared with (12) above:

(14) η δέ τε παρθενικὰς ἀπαλόχροας ἐν μεγάροισιν
 DEM PTC and girl:ACC.PL tender-skinned:ACC.PL in house:DAT.PL
 ἀγλαὰ ἔργ' ἐδίδαξεν
 splendid:ACC.PL work:ACC.PL teach:AOR.3SG
 'she taught fine workmanship to tender-skinned girls in their houses' (h. Ven. 14 ff.)

As we may see, as a complement to [διδάσκω σε] 'I teach you', the accusative  $\mathring{e}$ ργα 'works' (T) offers an alternative to the infinitival clause  $\mathring{e}$ ργα  $\mathring{e}$ ργάζεσθαι 'to do works' (with a *figura etymologica*).

Finally, let us observe the passage in (15), to be compared with (12) above:

(15) διδάσκουσι δέ τοὺς παΐδας καὶ σωφροσύνην μέγα teach:3PL PTC ART:ACC.PL boy:ACC.PL also self-control:ACC much δὲ συμβάλλεται εἰς τὸ μανθάνειν σωφρονεῖν PTC contribute:3SG to ART:ACC learn:INF be-moderate:INF

<sup>11</sup> Cf. Stern-Gillet (2014).

<sup>12</sup> The *figura etymologica* ἀοιδὴν ἀείδειν is attested, e.g., in Aes. 268.2, 10; E. *Tr.* 514; X. *An.* 4.3.27.3. Needless to say, when one works with corpus languages, any inference on possible (but not attested) forms and on their interpretation is highly hypothetical. Nevertheless, any linguistic analysis inevitably runs the risk of surpassing the limits of documentary evidence in order to create an experimental domain and formulate hypotheses on general patterns. The data "constructed" here are based on a careful investigation of the documentary evidence (which, in the case of Ancient Greek, is actually rich) and are—in our view—the result of reasonable hypotheses.

αὐτοὺς ὅτι καὶ τοὺς πρεσβυτέρους ὁρῶσιν ἀνὰ πᾶσαν they:ACC that also ART:ACC.PL elder:ACC.PL see:3PL for each:ACC ἡμέραν σωφρόνως διάγοντας

day:ACC temperately live:PTCP.ACC.PL

'They **teach** the boys **moderation** also; and it greatly conduces to their **learning to exert moderation** that they see their elders also living temperately day by day' (X. *Cyr.* 1.2.8.1 ss.)

As a complement to  $[\delta i\delta \dot{\alpha} \tau \omega \sigma \epsilon]$  'I teach you', the accusative  $\sigma \omega \varphi \rho \sigma \sigma \dot{\nu} \eta \nu$  'moderation' offers an alternative to  $\sigma \omega \varphi \rho \rho \nu \epsilon \hat{\nu}$  'to exert moderation'. This emerges not only from the comparison with (12) but also from the wider context of (15): the effect of *teaching the boys moderation* ( $\sigma \omega \varphi \rho \sigma \sigma \dot{\nu} \eta \nu$ ) is described as *their learning to exert moderation* ( $\mu \alpha \nu \theta \dot{\alpha} \nu \epsilon \nu \sigma \omega \varphi \rho \sigma \nu \epsilon \hat{\nu}$ ). Given the close semantic and syntactic affinity between  $\mu \alpha \nu \theta \dot{\alpha} \nu \epsilon \nu \sigma \omega \varphi \rho \sigma \nu \epsilon \hat{\nu}$  (to) learn to exert moderation' constitute a very close pair, with the noun and the infinitive alternating in a sort of stylistic *variatio*.

In the examples selected above (to which others might be added) we see that there is lexical identity between the nominal complement (i.e. the theme T) and the clausal complement. Similar cases immediately suggest a comparison between the two types, thus inviting us to further inquire into a far broader phenomenon, which goes far beyond the instances of lexically related pairs in paradigmatic alternation (*in absentia*) such as  $\delta i \delta \dot{\alpha} \sigma \kappa \omega \sigma \rho \sigma \sigma \dot{\nu} \eta \nu \sim \sigma \omega \phi \rho \sigma \nu \epsilon \hat{\nu} \nu$ .

Evidence at the syntagmatic level (*in praesentia*) shows that the two complement types may cooccur within a compact textual unit and may even be coordinated (cf. (16) and (17) respectively).

If we go back to the passage in (15), which describes the education of Persian boys, and we look at a wider portion of this text, we may observe three occurrences of διδάσκειν (here conventionally identified as *a*, *b* and *c*):

(16) a. Διδάσκουσι δὲ τοὺς παίδας καὶ σωφροσύνην [...] teach:3PL PTC ART:ACC.PL boy:ACC.PL also moderation:ACC
b. διδάσκουσι δὲ αὐτοὺς καὶ πείθεσθαι τοῖς teach:3PL PTC they:ACC also obey:INF ART:DAT.PL ἄργουσι [...]

rule:PTCP.DAT.PL

c. διδάσκουσι δέ καὶ ἐγκράτειαν γαστρός καὶ ποτοῦ teach:3PL PTC also self-control:ACC belly:GEN. and drink:GEN 'They teach the boys moderation also [...]. And they teach them likewise to obey the officers [...]. And besides, they teach them self-restraint in eating and drinking' (X. Cyr. 1.2.8.1 ss.)

In a sequence of strictly parallel sentences introduced by διδάσχουσι δέ 'and (they) teach' (one may also notice the gradient in the sequence referring to R, i.e. to the person taught: a full NP in *a*; an anaphoric pronoun in *b*; zero in *c*), nominal and clausal complements alternate: σωφροσύνην 'moderation', έγχράτειαν γαστρός καὶ ποτοῦ 'self-restraint in eating and drinking' and, inserted between them, πείθεσθαι τοῖς ἄρχουσι 'to obey the officers' in *b*.

Very interestingly, Xenophon's passage is quoted in Stobaeus' Anthology with a variation: the accusative NP ἐγκράτειαν γαστρὸς καὶ ποτοῦ 'self-restraint in eating and drinking', is replaced by the infinitival complement ἐγκρατεῖς εἶναι καὶ γαστρὸς καὶ ποτοῦ 'to be self-restrained in eating and drinking'. One would hardly expect to find a better proof of the possible equivalence between these constructions.

Furthermore, in a stylistically dense passage of Sophocles' Antigone, in which the Chorus praises the extraordinary progresses of human beings, accusative Themes and clausal complements occur side by side: we find three accusative NPs ( $\varphi\theta \xi\gamma\mu\alpha$  'speech',  $\dot{\alpha}\nu\epsilon\mu\delta\epsilon\nu$ ,  $\varphi\rho\delta\nu\eta\mu\alpha$  'wind-swift thought',  $\dot{\alpha}\sigma\tau\nu\nu\delta\mu\sigma\nu\varsigma$  ' $\dot{\delta}\rho\gamma\dot{\alpha}\varsigma$  'temper that rules cities') depending on  $\dot{\epsilon}\delta\imath\delta\dot{\alpha}\xi\alpha\tau\sigma$  ('[mankind] taught himself', hence 'learned') and—after a break induced by the insertion of the verb form  $\dot{\epsilon}\delta\imath\delta\dot{\alpha}\xi\alpha\tau\sigma$ —an infinitival clause ( $\varphi\epsilon\dot{\nu}\gamma\epsilon\nu$  'to escape' etc.):

(17) καὶ φθέγμα καὶ ἀνεμόεν φρόνημα καὶ and speech:ACC and wind-swift:ACC thought:ACC and ἀστυνόμους έδιδάξατο όργὰς καì ruling-cities:ACC.PL temperACC.PL teach:AOR.MID.3SG and ύπαίθρεια δυσαύλων πάγων καὶ inhospitable:GEN.PL frost:GEN.PL open-space:ACC.PL and δύσομβρα φεύγειν βέλη παντοπόρος stormy:ACC.PL escape:INF arrow:ACC.PL all-resourceful:NOM 'And he has learned **speech** and wind-swift **thought** and the **temper** that rules cities, and *how to escape* the exposure of the inhospitable hills and the sharp arrows of the rain, all-resourceful' (S. Ant. 355 s.)

These facts, which can hardly be irrelevant for our understanding of the nature of T, are not usually observed in the literature, nor are they easily accounted for in traditional approaches.

Traditionally, the double accusative construction is dealt with in chapters on nominal cases, and the infinitival construction in chapters on infinitives, where no mention is made of the construction with the noun, and vice versa. This attitude clearly reflects the role which long-lasting categorial distinctions (nouns, verbs etc.) continue to play in grammatical and linguistic analysis.

Completely denying the merits of a purely categorial approach would not be fair, but nevertheless we cannot ignore its limits: such an approach is not apt to describe correlations which go beyond categorial boundaries, like the ones we have been establishing here.

In the specific case under analysis, we believe that a comparison with the infinitival construction opens new paths for considering the double accusative in a new perspective.

Of course, the fact that nouns may alternate with infinitives is not surprising, in principle. The nominal nature of infinitives is widely acknowledged, and is confirmed not only by synchronic alternations (like the ones we have been discussing here) but also by diachronic developments (such as the increase of productivity of verbal nouns to compensate the decline of the infinitive in the history of Greek; for which, see Joseph 1983: 44–46).

What we wish to stress here is that the alternation between noun complements and infinitival complements is not possible in all contexts. Rather, it is found in specific contexts, mostly related to specific verb classes (on this cf. Cristofaro 2008); verbs for 'teaching' (at least judging from the behaviour of Ancient Greek  $\delta_1\delta_d\sigma_{XEIV}$ )<sup>13</sup> belong here.

Obviously, the point here is not simply the fact that [διδάσκω σε] 'I teach you' may take nominal as well as clausal complements. The point is that we are dealing with cases in which "the meaning of the sentence [*scil*. with NP complements/MB] is similar to that obtained with infinitival complements" (Cristofaro 2008: 578). For example, διδάσκω σε σωφροσύνην 'I teach you moderation' is essentially equivalent to διδάσκω σε σωφροσύνην 'I teach you to exert moderation'. Or, as we have seen above, διδάσκω σε ἐγκράτειαν γαστρὸς καὶ ποτοῦ 'I teach you self-restraint in eating and drinking', can be replaced by διδάσκω σε ἐγκρατῆ εἶναι καὶ γαστρὸς καὶ ποτοῦ 'I teach you to be self-restrained in eating and drinking' without any significant change in the interpretation. These facts

<sup>13</sup> As a matter of fact, the phenomenon highlighted here on the basis of Ancient Greek data is cross-linguistically widespread (as immediately emerges from possible paraphrases in other languages). We believe that this finding, and the analysis suggested in the next paragraph, can be fruitfully tested on a much wider scale.

are revealing of the affinity between the two complement types, thus raising the issue of a possible syntactic correlate of their semantic affinity.<sup>14</sup>

### 5 Control into clauses and control into nominals

The infinitival construction under analysis is syntactically more transparent than that with the double accusative. It is commonly ascribed to the so-called "control" type: this means that the construction imposes obligatory co-reference between an argument of the matrix clause—here, specifically, the direct object—and the (null) subject of the complement clause.<sup>15</sup> Semantics can easily account for this property: the sense of  $\delta i \delta \acute{\alpha} \sigma \kappa \epsilon i v$  which is relevant here<sup>16</sup> involves a semantic component "ability", which—as argued by Jackendoff & Culicover (2003: 538)—identifies a class of control predicates:

Another basic semantic predicate that selects an actional argument is 'be able'—a relation between an entity and an action. One cannot have an ability with respect to someone else's performance of an action; that is,

<sup>14</sup>This semantic affinity may be stated in terms of identity of the semantic roles assigned<br/>by the nominal and the verbal predicate respectively. This does not imply a complete<br/>semantic identity. A thorough investigation of the different properties of nominal and<br/>verbal predicates (radically differing in the inflectional categories involved) lies beyond<br/>the scope of this paper. For important remarks on data from Greek and Latin, see Porzig<br/>1942 and Rosén 1981. In principle, a further alternative complement to [διδάσκω σε] 'I teach<br/>you' would be a finite clause, e.g. 'I teach you how you should/could exert moderation'. This<br/>pattern—which does not seem to occur in Classical Greek, at least to our knowledge—<br/>shows up in Modern Greek, where, as is well known, infinitives have totally disappeared<br/>(see also n. 16).

As is well known, the notion of "control" represents a highly debated issue in linguistic theory, which we need not raise here. For the aim of this paper, the informal definition given above will suffice. On control infinitives in Ancient Greek, see Joseph (1983, 1992, 2002); Sevdali (2013); Horrocks (2010, *passim*). On the controversial issue of the existence of PRO in Ancient Greek, see the discussion in Joseph (1992); on Modern Greek, Philippaki-Warburton & Catsimali (1999).

<sup>16</sup> Διδάσχειν may denote transmission of an ability ('teach how to', as in the cases we are dealing with here) or transmission of knowledge ('teach that'). The two meanings are clearly distinguished, being associated with different complement types: infinitive on the one hand, finite clauses introduced by a complementizer (e.g. ώς, as in T. 3.71.2.3) on the other. The two types never formally merge; the contrast survives into Modern Greek under renewed formal expressions, opposing two different types of finite clause, respectively introduced by the modal particle vá ('teach how to') and by the conjunction ότι ('teach that'); cf. Holton, et al. (2012: 547). On the diachronic development leading to the loss of the infinitive and its replacement by finite clauses, cf. Joseph (1983).

the person with the ability must be bound to the actor position in the action. [...] This predicate is a component of the adjective *able*, the noun *ability*, and the root modal *can*. It is also a component of one sense of *learn to VP*, roughly 'come to be able to VP' and *teach NP to VP*, roughly 'cause to come to be able to VP'. Thus *learn* is a subject control verb and *teach* is an object control verb.

In Ancient Greek,  $\delta i \delta \dot{\alpha} \sigma \varkappa \epsilon i \nu + inf.$  denotes the transmission of an ability, and the person taught coincides with the one who has to perform that ability.<sup>17</sup> It is the kind of infinitival clause which is replaced by a finite v $\alpha$ -clause in Modern Greek (cf. n. 16): here, the co-reference between the subject of the dependent clause and the R(ecipient) argument of  $\delta i \delta \dot{\alpha} \sigma \varkappa \epsilon i \nu$  is explicit through verbal agreement.

What about the corresponding double accusative construction? Here too  $\delta\iota\delta\dot{\alpha}\sigma\kappa\epsilon\iota\nu$  refers to the transmission of the ability to perform a given action. And here too the teaching is directed to the person (R) who shall perform that action (T).

As we have seen, in the infinitival construction the co-reference between the null subject of the infinitive and the object of διδάσχειν is commonly captured by the notion of control. It would be interesting to see whether the notion of control—which is usually adopted for verbal complements—could be extended into non-verbal (i.e. nominal) complements as well.

A preliminary issue concerns the ability of nouns to perform predicative function, which includes the ability to license arguments. Of course, it is commonly assumed that nouns can project arguments within the internal syntax of their NP, e.g. in the form of a dependent genitive or of a possessive adjective, as in *Socrates' moderation* or *your moderation*.<sup>18</sup> Besides this, there is strong evidence supporting the idea that, in appropriate contexts, nouns may project their arguments onto clausal syntax. This is the case, for example, with predicative possession constructions, like *Socrates has moderation*.<sup>19</sup> Here, *Socrates*, the clause subject, is licensed by the noun predicate *moderation* (and *have* is a

We have here an instance of the infinitive variously labelled as 'prospective' or 'dynamic' (as opposed to 'declarative') or 'virtual' (as opposed to 'factual'): it refers to a state of affairs which exists potentially (δυνάμει), and whose realization depends on a prior event described by the matrix verb (hence it cannot express an independent time reference). The presence of some "modal" nuance is confirmed by the fact that this infinitival clause consistently takes the negation μή. See Jannaris (1897: 484); Kurzova (1968); Rijksbaron (2006: 104); Cristofaro (2012); Bentein (2017).

<sup>18</sup> For σωφροσύνη with a subjective genitive, see e.g. Isocr. *De pace* 119.4; with a possessive adjective, see e.g. Isocr. *Ad Nicoclem* 31.2.

<sup>19</sup> For ἔχειν σωφροσύνην, see e.g. Pl. *Chrm*. 171.d.7.

supplementary, auxiliary predicate).<sup>20</sup> This syntactic condition implies restrictions on the combinatory possibilities of the noun itself, e.g. on its ability of taking a subjective genitive or a possessive adjective (which would conflict with the clause subject), as in Socrates has Triphon's moderation. As a matter of fact, an expression such as Socrates has Triphon's moderation is not ruled out. The relevant point is that this expression entails a peculiar interpretative effect: the moderation would be both Socrates' and Triphon's (thus producing readings such as 'Socrates has the same moderation that Triphon also has' or 'which is typical of Triphon', or similar). This effect is the semantic correlate of a syntactic condition, namely, the cooccurrence of two distinct subjects of moderation, at two distinct syntactic levels. It is evident that this does not happen in cases where the clause arguments are licensed by a verbal predicate, as in Socrates praises / criticizes Triphon's moderation. In the framework adopted here (see n. 20), all nouns (not only verbal ones) potentially perform a predicative function and may, in the appropriate context, license an argument with the syntactic function subject, commonly associated with the semantic role Possessor, as in Achilles has a spear, or Achille's spear.<sup>21</sup>

Turning now to the type διδάσκω σε σωφροσύνην, we observe that here σωφροσύνη displays the kind of combinatory restriction mentioned above: it does not admit a subjective genitive or a possessive adjective. A hypothetical expression such as διδάσκω σε τὴν ἐμὴν σωφροσύνην 'I teach you my moderation' could possibly mean 'I teach you to have (after my training) *the same* moderation that I have'. As a matter of fact, cases like this do not occur in our corpus: the noun filling the T slot is never combined with a subjective genitive or with a possessive adjective. This restriction does not depend on the nature of the noun itself (cf. n. 18); it depends on the specific context, and therefore one should further investigate the function of T.

The real nature of T, in our construction, is not satisfactorily captured by labels such as 'inanimate'. Of course, it is not wrong to claim that T does not

More precisely, here *moderation* has both a predicative and an argumental function; as a predicate, it licenses a subject, which finally surfaces as the clause subject. On this type of constructions in Ancient Greek, see Benedetti & Bruno (2012). We follow here some basic assumptions on the relationship between nouns and predicativity developed by Rosen (1987); Mirto (1990); La Fauci & Loporcaro (1997); Pieroni (2015). In the framework of La Fauci (2000), argument and predicate are not absolute notions, but functional features, [± argument], [± predicate]; the corresponding positive values may relate to different elements of the clause or also combine in one and the same element. Nouns, in particular, can perform jointly predicative and argumental functions in the clause.

<sup>21</sup> This clarification is necessary in view of some issues which shall be dealt with in Section 6.

refer to animate entities, but—on closer inspection—this is not the relevant feature. In the context under investigation, in fact, T does not denote an entity at all, but rather a predicative process. This fact is more immediately evident with some lexemes than with others; in any case, it can be made clearer through a verbal paraphrase. This holds even for a noun like  $\varphi \dot{\alpha} \rho \mu \alpha \varkappa \alpha$  'healing remedies', 'medicines', which may have a concrete referent (in principle, a first-order entity in the sense of Lyons 1977, II: 438 ff.), as in (18), which describes a scene in which Paeëon spreads healing herbs on Ares' wound:

(18) τŵ δ' ἐπὶ Παιήων ὀδυνήφατα
 DEM:DAT PTC upon Paeëon:NOM slaying-pain:ACC.PL
 φάρμαχα πάσσων ἠχέσατ(ο)
 medicament:ACC.PL spread:PTCP.NOM heal:AOR.3SG
 'and Paeëon spread on it herbs that slay pain, and healed him' (Hom. *Il.* 5. 900 ff.)

But in the passage (5) above, in context with  $\delta i \delta \delta \sigma x \epsilon iv$ , the noun  $\varphi \delta \rho \mu \alpha x \alpha$  does not denote a concrete entity: what Chiron teaches Achilles is *how to deal with drugs* (on Chiron instructing Achilles on medicine, see e.g. Craik 2010).<sup>22</sup>

This is, in our view, the relevant property of T in the construction with  $\delta i \delta \dot{\alpha} - \sigma \varkappa \epsilon_{1} v$ : independently of its possible use in other contexts, the nominal filling the T-slot here describes a predicative process with an unexpressed subject; this unexpressed subject, in turn, is bound to R, the object of  $\delta i \delta \dot{\alpha} \sigma \varkappa \epsilon_{1} v$ . So  $\delta i \delta \dot{\alpha} \sigma \varkappa \omega$   $\sigma \varepsilon \sigma \omega \varphi \rho \sigma \sigma \dot{\nu} \eta \nu / \sigma \sigma \varphi (\alpha \nu / \dot{\alpha} \sigma i \delta \eta \nu / \ddot{\epsilon} \rho \gamma \alpha / \dot{\epsilon} \gamma \varkappa \rho \dot{\alpha} \tau \epsilon_{1} \alpha \nu \gamma \alpha \sigma \tau \rho \dot{\delta} \varsigma / \phi \dot{\alpha} \rho \mu \alpha \varkappa \alpha$  etc. can be paraphrased 'I teach you (your) moderation-to-be / (your) wisdom-to-be / (your) song-to-be / (your) works-to-be / (your) medical practices-to-be' (where the meaning component "to-be" is imposed by  $\delta i \delta \dot{\alpha} \sigma \varkappa \omega$ , as we have seen above).

The assumption that R and T are merely two distinct arguments licensed by the verb διδάσχειν, on the same syntactic level, does not easily account for their mutual relationship.

Its understanding requires a shift of the focus from categorial notions such as *noun* and *verb* to functional notions such as argument and predicate (where the latter is not exclusive of verbs, see n. 20). This allows the construction under investigation to decompose into two distinct predicative levels, centered, respectively, on a verbal predicate ( $\delta t \delta \Delta \sigma x \epsilon v$ ) and on a nominal one (T), with

<sup>22</sup> This is not an unusual phenomenon. Any noun can, in the appropriate context, describe a process, as clearly stated by Pieroni (2015: 357 ff.): "a nominal which *may* refer to an entity is not *per se* a nominal which denotes a first-order entity: the ontological reference to an entity is, obviously, nothing more than a possible circumstance".

R as their shared argument. In other words, we have a verbal predicate licensing a subject (A), an object (R) plus a complement containing a noun predicate (T), which binds its (null) subject to R (we may recall that the condition of a necessarily null subject, coreferent with R, is a shared feature of both T and the infinitival complement).<sup>23</sup>

Phenomena of this kind can be described by reference to the notion of control into nominals, as developed in e.g. Jackendoff & Culicover (2003) and Alba Salas (2006). These studies have focused on cases in which a verb's subject controls the (null) subject of an event noun in complement position; in the simple formalism adopted by these authors, this is represented as in (19):

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(19) Kathy<sub>i</sub> promised Ted [a<sub>i</sub>hug]<sup>24</sup>
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The type we are dealing with here offers an instance of object control, which could be represented as in (20):

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(20) διδάσκω σε<sub>i</sub> [{}_{i}σωφροσύνην]^{25}
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### 6 Conclusions and further issues

The identification of the predicative nature of T finds interesting echoes in some remarks emerging in traditional historical handbooks. Kühner & Gehrt's (1898) grammar notes that διδάσχω τὴν μουσικήν σε may be paraphrased as 'ich musiklehre dich' ('I teach you music'), thus intuitively capturing the predicative nature of both διδάσχω and μουσικήν and the status of σε as their shared argument.<sup>26</sup>

<sup>23</sup> We may observe that also in *Cambridge Grammar of Classical Greek* the two accusatives are distinguished as "direct object" and "complement" respectively; see. van Emde Boas, et al. (2019: 363).

<sup>24</sup> Example from Jackendoff & Culicover (2003: 553). Co-reference is notated by subscripts: the postposed subscript represents the controller and the preposed subscript represents the null controlled subject of the complement.

<sup>25</sup> The object of διδάσχειν may occasionally be left unexpressed, thus receiving a generic reading. As observed above (n. 13), our hypothesis arose within the investigation of Ancient Greek data, but it can be fruitfully tested on a much wider scale, as comparable data (*mutatis mutandis*) may be observed in many other languages.

<sup>26</sup> We are aware that the paraphrasis with *musiklehren* may evoke the idea of some sort of noun incorporation. This would be misleading as our proposal does not involve any sort of incorporation. It can nevertheless be added that, in the *exemplum fictum* proposed by Kühner & Gehrt (1898), διδάσκω τὴν μουσικήν could be emended into διδάσκω μουσικήν: as

The presence of double predication, one overtly manifested in the verb form  $\delta i \delta \dot{\alpha} \sigma \varkappa \varepsilon \imath \nu$  and one, less patent, in nominal form (T), is more evident in cases in which the noun predicate has a verbal alternative, as in  $\delta i \delta \dot{\alpha} \sigma \varkappa \sigma \sigma \omega \phi \rho \sigma \sigma \dot{\nu} \eta \nu \sim \sigma \omega \phi \rho \sigma \upsilon \varepsilon \imath \nu$  (hence the comparison with the infinitival construction offered our starting point). But our analysis is independent of the lexical nature of the noun filling the T-slot: as we saw in the discussion on  $\phi \dot{\alpha} \rho \mu \alpha \varkappa \alpha$  above, the context of  $\delta i \delta \dot{\alpha} \sigma \varkappa \varepsilon \imath \nu$  activates the potential predicative nature of any noun.

The focus on a single verb,  $\delta t \delta \dot{\alpha} \sigma \varkappa \epsilon \iota v$ , has allowed to deeply investigate some crucial aspects which have not emerged in previous, more extensive, studies. Our hypothesis accounts for some empirical properties which are not easily explained under the traditional analysis, such as the scarce propensity of T to surface as subject (repeatedly highlighted in the literature, as we have seen above, Sections 1 and 3).<sup>27</sup> Moreover, it accounts for restrictions—which were not noticed in the previous literature—within the internal syntax of T (concerning the combination with subjective genitives and possessive adjectives). These data are an inescapable starting point for any possible analysis of the double accusative construction of  $\delta t \delta \dot{\alpha} \sigma \varkappa \iota v$ . Hence, the hypothesis presented here has a validity for the specific case examined. Furthermore, it may provide refreshing insights into a wider domain, and invite to further pursue the investigation of the peculiar status of (a class of) Ancient Greek double accusatives.

Beyond the specific case of  $\delta i \delta d \sigma x \epsilon iv$ , a major innovative contribution of our analysis is that it invites to focus not only on the relationship between the verbal predicate on the one hand and the two accusatives on the other, but also—or even primarily—on the relationship between the two accusatives. As we saw above, previous studies have stressed the asymmetry between them. Conversely, the present analysis, based on both empirical evidence and theoretical considerations, has gone a step beyond, reveling their mutual semantic and syntactic correlation (which is, in fact, a facet of this asymmetry). This has been accounted for within an approach which, based on the functional notions argument / predicate, highlights the predicative potentiality of nouns.

This idea offers a promising challenge for further research. It may offer a clue for understanding what lies behind phenomena that have repeatedly been observed in the literature on double accusatives. For example, in many cases a peculiar relationship exists between two accusatives, which is usually

emerges also from the examples quoted in this paper, T usually occurs without a definite determiner (and this confirms its predicative nature).

<sup>27</sup> On the general incompatibility between predicativity and subjecthood, see La Fauci & Loporcaro (1997).

described in terms of possession.<sup>28</sup> This is illustrated e.g. by verbs of 'depriving', such as  $d\phi \alpha i\rho \epsilon (\sigma \theta \alpha i)$ : this takes two accusatives, one denoting the person who is deprived and the other one denoting the possession which is taken away (cf. Jacquinod 1989: 215 ff.).<sup>29</sup> In a structure such as  $d\phi \alpha i\rho \epsilon (\pi \pi \sigma \sigma ) c$  'I deprive you<sub>acc</sub> horses<sub>acc</sub> = I deprive you of your horses' (here artificially created on the basis of Hom. *Il.* 8. 107) a possessive relationship (hence a predicative one; see Section 5) is implied between  $\sigma \epsilon$  and  $(\pi \pi \sigma \sigma ) c$  (remarkably, we observe, in this context, a *non-occasional, but necessary* possessive relationship).<sup>30</sup>

Furthermore, a double accusative construction which imposes a (non-occasional but necessary) possessive relationship between the two accusatives—usually ascribed to the type of inalienable possession—is the famous  $\sigma\chi\eta\mu\alpha$  x $\alpha\theta'$  ő $\lambda$ ov x $\alpha$ i µέρος "whole and part schema", a transitive construction in which, besides an accusative Patient licensed by the verbal predicate, a further accusative occurs denoting the part of the body on which the action is localized, as  $\beta \alpha\lambda\lambda\omega$   $\sigma\varepsilon$   $\dot{\omega}\mu\omegav$  'I hit you<sub>acc</sub> shoulder<sub>acc</sub> = I hit your shoulder; I hit you on the shoulder'.<sup>31</sup> In the "whole and part schema", as usually observed in the literature,<sup>32</sup> only one of the accusatives, namely that denoting the Patient, may alternate with the passive subject, thus determining a similar asymmetry to that observed in the case of  $\delta\iota\delta\alpha\sigma\kappa\epsilon\iotav$ . The relationship between the two accusatives is not determined by the verbal predicate,<sup>33</sup> but rather arises in the combination of the two nominals, as if a compressed possessive relationship—a

<sup>28</sup> We may recall that the hypothesis of a possessive relationship involved in double object constructions repeatedly shows up in recent theories; see, among others, Harley (2002) and Efstathopoulou (2007), who applies this notion to Modern Greek double object constructions.

<sup>29</sup> As far as I can see from the rich collection of examples in Jacquinod (1989), the person deprived is always the possessor of the thing which is taken away. Interestingly, an alternative to the double accusative is offered, in some authors, by a construction in which the noun denoting the person appears in the genitive, thus confirming the possessive interpretation; see Jacquinod (1989: 222 and *passim*).

<sup>30</sup> The inquiry can be extended to other verbs, though a unitarian description of the composite domain of double accusatives is not *a priori* to be expected. On the composite nature of this class, see Jacquinod (1995), Luraghi & Zanchi (2018).

<sup>31</sup> Based on real examples; see Hom. Od. 19.356 and Il. 5.188.

See, among others, Delbrück (1893: 385); Schwyzer & Debrunner (1950: 84 ff.); Hahn (1954);
 Jacquinod (1989); Lavidas (2013); Luraghi & Zanchi (2018); Romagno (2020), with further references.

<sup>33</sup> Though it has to be compatible with it, in the sense that the verbal predicate must describe an action which may affect the Patient in one of its parts. This property identifies a class of verbal predicates; see Mirto (1998).

<sup>34</sup> Actually, as argued by Mirto & Rosen (1994) and Mirto (1998), we have here a specific

"meronymic" one (cf. Mirto & Rosen 1994)<sup>35</sup>—involves, once again, a predicateargument relationship between the "meronym" (i.e. the name of the part) and the "holonym" (i.e. the name of the whole).

What does the construction of  $\delta i \delta \dot{\alpha} \pi \epsilon i \nu$  have in common with these seemingly heterogeneous types? For the sake of simplicity, in order to highlight the relevant issue, we can take up again and extend the kind of notation applied above (cf. (20)):

(21) διδάσκω σε<sub>i</sub> [ισωφροσύνην] ἀφαιρέομαι σε<sub>i</sub> [ι<sup>ï</sup>ππους] βάλλω σε<sub>i</sub> [ιώμον]

The notation in (21) represents the fact that  $\sigma\epsilon$  'you', the object licensed by the verbal predicate (hence the candidate to promotion to clause subject) corefers with the (null) subject of the nominal predicate (variously interpreted as the performer of an action, as the possessor of an object, or as the holonym with respect to its meronym). This analysis is confirmed by empirical data. In fact, the same restriction observed above uniformly holds in all cases: in this context,  $\sigma\omega\varphi\rho\sigma\sigma\nu\eta\nu$ ,  $\ddot{n}\pi\sigma\nu\varsigma$  etc. cannot have an independently expressed subject (e.g. in the form of a subjective genitive or a possessive adjective); in fact, their (null) subject is syntactically bound to  $\sigma\epsilon$ , the clausal object.

Despite non-negligible differences, the constructions in (21) appear to reflect a more general common compositional pattern: the relevant property is the presence of predicative relationship between the two accusatives, with different interpretative effects depending on the semantics of the nominal predicate and on the interaction with the semantics of the verbal predicate.

These findings may have considerable research fallouts. They point to a possible reduction of the gap between double accusatives related to some specific verbs (such as  $\delta i \delta \dot{\alpha} \pi \epsilon i \nu$ ) and double accusatives related to specific construction types (such as "whole and part schema"), thus opening new paths for a more general understanding of Ancient Greek morphosyntax.<sup>36</sup>

instance of predicative relationship, a meronymic one; in several languages it presents specific features within the general domain of inalienable possession.

<sup>35</sup> We refer to this study also for an unitarian account embracing both the "whole and part schema" and the "accusative of respect" (which are merely diathetic variants of the same pattern).

<sup>36</sup> A major issue concerns the kind of process assigning the accusative case to the noun predicate. In principle, it is not the same process assigning the accusative to the other noun, i.e. the object argument licensed by the verbal predicate (see  $\sigma\epsilon$  in example 21, which would be classed as a "structural" case). All we can say for the time being is that when a predica-

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