

DEFINITE REFERENTIAL NULL OBJECTS IN ANCIENT GREEK

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Abstract

It is well known that direct objects of transitive verbs can be omitted in Greek in occurrences in which they refer to definite antecedents (hence the definition of ‘definite referential Null Objects'). Under what conditions omission can occur has never been the topic of any detailed study. Based on previous research on Latin, and on extensive analysis of Greek texts, I try to describe these conditions. It turns out that there are constructions where omission is the rule (e.g. with conjunct participles), and thus must be regarded as syntactically conditioned. Other occurrences are best explained as a matter of high topicality and low communicative dynamism of the omitted objects.

0. Introduction.

The purpose of the present paper is to describe the conditions under which definite referential N(null direct) O(bjects) can occur in Ancient Greek. In order to define the topic of this article, let's start by comparing the following two examples:

- (1) *toī ſī de\deciōn h̄en ēwdiōn ēggūj ōdoī b̄ P a l l a j̄ A qhna īj̄: tōid' oūk īd̄on
Øī ōfqa l mō ſī nūkta di' ōfna ījn, a)l a k̄l a ḡcantoj̄ a k̄ousan Øī*
“Athena sent them a **heron** to the right of their route: they could not see **it** in the dark night, but heard **it** screaming”, *Il.* 10.274-276;
- (2) *P ro\to u-a Āa a Āa s qa i h̄ra-j̄ ōfa n kaīa koūe in kaīita Āl a aīs qa nes qa i
tux eīh ēlei pou eīl hf ōla j̄ ēpis th̄hn aūjoūtoūf̄a oūn ēāt in*
“Then before we began to see or hear or use the other senses we must somewhere have gained a knowledge of abstract or absolute equality”, *Pl. Phaedo* 75b.

In example (1) we find three clauses with transitive verbs, all sharing the same direct object. The direct object, *ēwdiōn*, ‘a heron’, is phonologically realized only in the first of the three clauses, with the verb *h̄en*, ‘she sent’. In the second and third clauses, with the verbs *īd̄on*, ‘they saw’, and *a k̄ousan*, ‘they heard’, we find occurrences of definite referential NO's. In English, a language which does not allow NO's under these conditions, one must add pronominal objects to make the translation grammatical. Note that the omitted constituents play a syntactic role, similar to phonologically realized ones, as shown by agreement of the predicative participle *k̄l a ḡcantoj̄*, ‘screaming’, with the omitted direct object.¹

¹ Note that the participle is inflected in the genitive, because the verb *a k̄oūe in*, ‘to hear’, is a transitive verb that takes the genitive; see below, § 1.2.

In example (2), forms of the same two verbs occur, but they are used in a different way. As we can see from the English translation, no pronominal objects need to be supplied. In fact, there is a semantic difference between the two couples of verbs, both in Greek and in English: these are verbs that have two different predicate frames, a bivalent (transitive) and a monovalent (intransitive) one. In the terminology of Mittwoch (1982), they can denote either an achievement ('to see/hear something'), or an activity ('to see/hear'). In traditional grammars, monovalent use of transitive verbs is often referred to as 'absolute'.

Note that in cases where I speak of intransitive (or absolute) use of transitive verbs, one may prefer to speak, following Fillmore (1986), of 'indefinite null objects'. In any case, it must be kept in mind that not all transitive verbs can be used intransitively, or, to put it differently, not all transitive verbs allow indefinite objects. The possibility of being used in two different ways really appears to be connected with the existence of two groups of transitive verbs. Of these two groups, one has both a bivalent and a monovalent predicate frame, while the other only has the bivalent one (i.e. the latter group is constituted of transitive verbs which can only denote achievements).

The topic of the present paper is constituted uniquely by definite referential NO's (hence simply NO's), such as those demonstrated by means of example (1). While valency change is a semantic property of groups of verbs, possible occurrence of NO's appears to be connected with the type of pronominal system of a specific language, and the occurrence of other null arguments, notably of Null Subjects, as I will argue below.

Although NO's have been the topic of a fairly rich number of recent publications, little attention has been paid to their occurrence in the classical languages;² in particular, to my knowledge, no research has been specifically devoted to Ancient Greek.³ The present paper intends to offer a preliminary survey of the problem: more research is needed in order to clarify all constraints on syntactically conditioned NO's, especially in cases where their antecedent is not itself a NO.⁴ Since the primary purpose of my investigation is expository, I will not be using any formal theoretical framework, although I will refer to studies from different backgrounds.

Some Greek data have been discussed in van der Wurf (1997), in an attempt to assess the status of NO in Proto-Indo-European. However, since the aim of the paper was to establish whether NO's can be reconstructed for PIE, there is no thorough discussion of their conditions of occurrence, neither in Greek nor in the other Indo-European languages.

²On NO's in Latin, see Luraghi (1997), where I have surveyed the existing literature. See also Luraghi (1998c).

³For a typological evaluation of the Greek data, see Luraghi (forthcoming a).

⁴My examples (of which only a part is quoted in this article) are drawn from the following *corpus*: Homer: *Iliad*, *Odyssey*; Herodotus: *Histories*, books 1, 2, 3; Plato: *Symposium*, *Apology of Socrates*, *Crito*, *Phaedo*, *Protogoras*; Demostenes: speeches 4, 6, 9, 10 (*Philipics*); Lysias: speeches 1, 2, 3, 4, 5, 6, 7; Isocrates: *Helena* and *Panegyricon*; New Testament: the four Gospels.

Before going further into this discussion, I will briefly summarize a number of problems raised by Ancient Greek (§ 1). Section 2 is devoted to syntactically conditioned occurrences, i. e. cases where the occurrence of a NO is obligatory. In § 3 I will survey discourse conditioned occurrences of NO, and will show the difference, in pragmatic terms, between NO's and other types of anaphora.

Section 4 contains a discussion of the data analyzed in § 2 and 3, and § contains the conclusions.

1. Some properties of anaphora in Ancient Greek

1.1. Types of antecedent

NO's, as other anaphoras, must refer back to a recoverable antecedent; the latter need not be a direct object, as shown in the following examples:

- (3) *s u\de\\$\uggene\\$qa i me\\$ moi i ka i idida\\$ca i Øi e\\$Augej ka i ou\\$ h\\$e\\$hs a j , deu\\$o de\\$ei \\$a \\$gei j Øi, oi a\\$no\\$moy e\\$t i n ei\\$a \\$gei n tou\\$kol a\\$ewj deomenouj a\\$l 'ou) ma qh\\$ewj*

“but you avoided associating with **me** and instructing **me**, and were unwilling to do so, but you hale **me** in here, where it is the law to hale in those who need punishment, not instruction”, Pl. *Apol.* 26a;

- (4) *o(de\\$)pi impl a\\$ a\\$pa\\$ntwn i th\\$ gnw\\$rh\\$n a\\$pe\\$empe Øi*

“having satisfied the expectations of **all**, he dismissed **them**”, Xen. *An.* 1.7.8;

- (5) *ou)ga\\$koi a\\$ma i qemi to\\$ ei\\$aa i a\\$mei\\$goni a\\$ndri\\$u\\$po\\$xei\\$gonoj bl a\\$ptes qa i . a\\$poktei\\$gei e\\$ Øi menta\\$i\\$awj h\\$e\\$cel a\\$eien Øi h\\$a\\$ti\\$mw\\$sei en Øi*

“for I believe it's not God's will that a better **man** be injured by a worse. He might however perhaps kill **him**, or banish **him**, or disfranchise **him**”, Pl. *Apol.* 30d.

In (3) two transitive verbs, *di da\\$kein*, ‘to instruct’, and *ei\\$a \\$gei n*, ‘to sue’, have NO's; the antecedent is the dative pronominal form *moi*, governed by the intransitive verb *s uggene\\$qa i*, ‘to associate with’. In (4) the NO of *a\\$pe\\$empe*, ‘he dismissed’, has as its antecedent the genitive *a\\$pa\\$ntwn*, ‘of all’. Finally, in (5) we find three occurrences of NO's, with the verbs *a\\$poktei\\$nei n*, ‘to kill’, *e\\$cel a\\$u\\$nei n*, ‘to banish’, *a\\$ti\\$ma\\$a*, ‘to dishonor’; the antecedent of all three is the dative *a\\$mei\\$goni a\\$ndri* ‘for a better man’, which occurs with the expression *qemi to\\$ ei\\$aa i*, ‘to be legal’.

Another interesting example is

- (6) *a u\\$ak e\\$Awge s peus\\$oma i ej\\$ Axil ha\\$ i\\$a' o\\$truw\\$ Øi pol emigein*

“but I will hasten to **Achilles**, that I may urge **him** on to do battle”, *Il.* 15.401-402.

where the antecedent of the NO is a complement of a preposition.

In example (7), we find a NO which refers back to a direct object in the genitive:⁵

- (7) αὐτοὶ γατὰ θεάουσα τε θεάεις εἶδεν ὅτι αἴθην
“I myself heard the goddess and saw her before me”, *Il.* 24.223.

The verb *eī ſ dēkoma ī*, ‘to see’, ‘to look at’, is found two more times in Homer (*Od.* 9.146 and 19.476), with an accusative object; here, *aīθēn* is an adverb.

1.2. Non-accusative direct objects

Another question raised by Ancient Greek concerns the morphological case of the omittable constituents. Note that I am still speaking of direct objects only, and not of other possible second arguments. As a matter of fact, in Ancient Greek one finds a number of non-accusative second arguments that behave syntactically as direct objects, in the sense that they can be made the subject of passive verbs, as shown in the following examples:

- (8) οἵ αἱτινεῖς δοῦλοι ων εποίησαν εἰς εὐφερουμένους Περσαῖς εἰπαί, αἱτινεῖς οὖτε πάντων.
“for you have made the Persians free men instead of slaves and rulers of all instead of subjects of any”, Hdt. 1.210.2;

- (9) οἱ (δε) Περσαῖς ταῦτα δέδησαν καὶ αὐτοὺς Κροῖσον εἷσαν, αἵ τε ανταγόνες τεσσερες καὶ δέκα καὶ τεσσερες καὶ δέκα ἡμέρας πολιορκήθησαν.
“The Persians gained Sardis and took Croesus prisoner. Croesus had ruled fourteen years and been besieged fourteen days”, Hdt. 1.86.1.

In example (8) the verb *αīxēin*, ‘to rule’, occurs twice, once as a passive, with an agent phrase, *up' aīl wn*, ‘by others’, and the second time as active with a direct object, *aīpāntwn*, ‘everyone’. The possibility of being passivized shows that non-accusative complements of such verbs are in fact direct objects.⁶ Example (9) contains an occurrence of *αīxēin* used intransitively.

Apparently verbs with genitive objects behave in the same way as verbs with accusative objects with respect of omission, too. Omission of a genitive object is found in example (2), with

⁵ See the next section on non-accusative direct objects.

⁶ On the passive of verbs that take non-accusative objects, see Conti Jiménez (1998).

a) *κούσαν*; note further that in (1) the participle *κλαγκάντοι*, which refers to the omitted object is inflected in the genitive (cf. example (37) below, with predicative participles in the accusative). An example with no predicative participle is

- (10) *thi-polēwj i d' oūwj a(ou\$ h̄j ai\$ xrwj= kai\kakw̄j= oi (mē aγxousi Ø; kai\ turannousi Ø;*

“But since that base and shameful capture of **the city**, the latter have been its rulers and tyrants”, Dem. 9.62.

Note that here the antecedent of the NO is in the genitive because it occurs in a genitive absolute construction. Interestingly, the NO is shared by two coordinated verbs, of which not only *aγxousi*, but also *turannousi*, ‘they are the tyrants’, usually take the genitive.

The extent to which all verbs with non-accusative objects should be considered transitive verbs is discussed. While possible passivization dates back at least to Homer for verbs which govern the genitive, verbs with dative objects are found in the passive only from Herodotus onward.⁷ This is the case of the verb *xraðmai*, ‘to use’. Note that this verb allows omission, as shown in

- (11) *f a ner w̄j de\peri\pa\ktwn dia\l el umenon a)neisqa i ta\peri\thi= a nqrw̄pou-*

i, m̄koi nh?hma=j xrhsqa i Ø; sugxwrhsa i

“he denies, in face of the settlement clearly made on every point, that we agreed to share the woman between us”, Lys. 4.1.

1.3. *Types of pronominal objects*

In Ancient Greek personal pronouns display an opposition between full forms, which are stressed and can occur in any position in the sentence, and reduced forms, which do not bear independent accent. Unaccented forms are enclitic, so they cannot occur in sentence initial position. In grammatical descriptions of Greek, such pronouns, as well as other words and particles that never occur sentence initial, are called ‘postpositives’.⁸ As the enclitics of most ancient Indo-European languages, these unaccented forms follow Wackernagel’s law, albeit not rigidly, i.e. they are placed after the first accented word in the sentence.⁹ Wackernagel’s clitics are also called P2 clitics.

In all literary dialects of Ancient Greek, we find for first person singular a distinction between accented forms (*eme*/acc., *emou*=gen., *emoi*=dat.) and clitic forms (*me*, *mou*, *moi*), the latter also following Wackernagel’s Law. Second person singular pronouns have P2 clitic forms that are

⁷ Conti Jiménez (1998: 23).

⁸ See Dover (1970: 12-13).

homophonous to the accented ones, but they are consistently written without accent¹⁰ also follow Wackernagel's Law.¹¹ In Homer and partly in Herodotus (Ionic) there are a number of enclitic forms for third person that do not occur in Attic prose, which constitutes the bulk of Greek sources. Both Homer and Herodotus make extensive use of the enclitic form *min* for third person singular in all three genders (in Herodotus *a ūton* is also regularly found);¹² furthermore, in Homer an unaccented form of the reflexive pronoun *eis* is sometimes used as anaphoric pronoun for third person. The normal anaphoric third person pronoun in Attic-Ionic prose is *a ūton*, which may well have had unstressed variants, but is virtually always written as accented.¹³ The anaphoric function of *a ūton* developed out of its demonstrative function in preclassical time already; so *a ūton* is sometimes found as anaphoric pronoun in Homer, too. Finally, in Homer P2 clitic forms of reflexive pronouns are found in the plural, too, and they function as anaphoric third person pronouns, just as in the singular. De-emphatic forms of *a ūton* does not consistently follow Wackernagel's Law, but they share with other de-emphatic pronouns the constraint that they never occur in sentence initial position.¹⁴

An interesting question is whether these pronouns constitute instances of 'special' clitics. In the terminology of Zwicky (1977), special clitics are pronominal clitics which have special placement rules, and do not share the distribution with the corresponding accented pronouns. Special clitics are highly grammaticalized forms of pronouns, that share part of the properties of pronominal affixes, and the anaphoric functions of free pronouns, i.e. they have some features of free forms, and some of bound forms. Special clitics have no freedom of placement and occur in fixed order, much in the same way as affixes. This is the case in the Romance languages, where clitics meet the conditions for being considered 'special' clitics:

- a) they have special placement rules, being obligatorily hosted by the verb, from which they cannot be separated;
- b) they do not share the distribution of free forms, for example because left dislocated constituents trigger clitic doublement, as in¹⁵

⁹ On Wackernagel's Law in Ancient Greek see Luraghi (1990) and (1998a).

¹⁰ Of course, diacritics have been added relatively late in Greek spelling conventions.

¹¹ On the accentuation of plural forms, see Schwyzer (1950).

¹² This form is found as an archaism in later poetry, where the corresponding Doric form *nin* also occurs.

¹³ On the accentuation of this pronoun, see Schwyzer (1950: 191). According to Schwyzer (1950: 190), the nominative *autós* is never used as anaphoric pronoun in Classical Greek; such use is only attested starting with the late *koiné*.

¹⁴ Wackernagel (1892: 366) only mentions possible placement of the genitive in second position; given the prosodic difference of *autón* from the other clitics, and also its later origin as third person anaphoric pronoun, its occurrence early in the sentence must rather be viewed as a consequence of its conveying old information.

¹⁵ See Bossong (1998) for an assessment of the status (clitics or affixes?) of the Romance clitics.

- (12) *Le lait je l'ai acheté hier,*

where the occurrence of *l(e)* is obligatory with normal intonation and the clitic could not be replaced by an accented pronominal form.

It must be mentioned that in Greek Wackernagel's Law, although well attested, was not very strict: enclitic pronouns in particular could be placed in different positions after several accented words/constituents, where they created prosodic breaks in the sentence that were exploited for stylistic and pragmatic purposes (see Luraghi, 1990). This tendency became increasingly widespread after Homer. Most important, Ancient Greek pronominal clitics do not appear to have a different distribution with respect to accented pronouns. In other words, their function is the same as the function of free pronouns; they are not grammaticalized to such an extent that they should be considered partly affixes. Greek clitic and accented pronouns differ only in the degree of communicative dynamism; the fact that clitics cannot occur in sentence initial position, while accented pronouns can, is a consequence of their low communicative dynamism, by which they cannot be emphatic or bear contrastive focus. It follows that Greek pronominal clitics cannot be considered 'special' clitics, as those of the Romance languages.¹⁶

2. Syntactically conditioned cases of omission

Although it is commonly believed that omission of the direct object is not syntactically determined in the classical languages,¹⁷ there are contexts where omission is the rule. One such context in Ancient Greek is constituted by the extremely frequent occurrences of a conjunct participle that shares the same direct object with its governing verb, which I will analyze in § 2.1.

In Luraghi (1997) I have shown that the occurrence of a NO is virtually obligatory in Latin in coordinated sentences that share the same direct object. Coordination is a context that triggers omission in Greek, too, as I will show in § 2.2.

Finally, as a third case of syntactically conditioned NO's we find the question and answer pattern already examined in van der Wurff (1997); I will briefly comment on such occurrences in § 2.3.

2.1. *Conjunct participles*

¹⁶ Languages with special clitics usually do not allow NO's, as I have shown in Luraghi (forthcoming a).

¹⁷ As for example in Mulder (1991).

The conjunct participle is a very frequent construction in Ancient Greek. It consists of one or more participles that depend on another verb form which has the same subject.¹⁸ It has been noted that the conjunct participle occurs where an adverbial or a paratactic construction could also occur (Pompei, 2000). English equivalents of such constructions are coordinated sentences or gerunds: in fact, it can be argued that the high frequency of conjunct participles in Ancient Greek is a way to put up with the absence of an adverbial verb form (gerunds, or ‘converbs’, see Pompei, 2000, and Luraghi, forthcoming b).

A well known fact about conjunct participles is that the subject, shared by the governing verb and the participle, if expressed, can only occur once, much in the same way as the subject of coverbs, when it is coreferential with the subject of the main verb.¹⁹ A less known but nevertheless equally regular feature is that, in the case that both the conjunct participle and the governing verb are transitive and share the same direct object, the direct object, too, can only be expressed once. The difference between the syntax of subjects and of direct objects of conjunct participles lies in the fact that the subject of the conjunct participle must be coreferential with the subject of the governing verb (in fact this is the condition that allows the occurrence of the construction), while the direct object of a conjunct participle may be coreferential with the direct object of the governing verb, but this is not a necessary condition.

Example (13) contains a series of conjunct participles; of these, the first shares the direct object (**th_η pol_{in}**, ‘the city’) with the governing verb, which implies a NO. The second and third participles, **a_πok tei_ŋaj**, ‘having killed’, and **e_çel a_šaj**, ‘having banished’, are governed by **e_çxe**, ‘he got hold’. The three verb forms have different direct objects, all overtly expressed:

- (13) ta \mēn prwta trixv̄ das a\menoj **th_η pol_{in}** tois i a\del feo\si P a nta gnwt% kai i
 Sul os w̄ti di e\nei me Ø, meta \de\to\ mēn a u\wta **a_πok tei_ŋaj**, to\ de\newter on
 Sul os w̄ta e\çel a_šaj e_çxe pa\san Sa\ron
 “(Cambises) divided **the town** into three parts, and he shared **it** with his brothers P. and S..
 Later, he killed one of them, banished the younger one, and got hold of the whole Samos”,
 Hdt. 3.39.

Other examples of NO’s with conjunct participles are the following:

- (14) o\k\w j **to\swta**; tou=a\del feou=katal u\sa j komie i Ø
 “so that he would untie his brother’s **body** and would take **it** away”, Hdt. 2.121γ;

¹⁸ Conjunct participles can also refer to a non-subject constituent, but such occurrences do not concern the present discussion.

¹⁹ See below, example (17). English gerunds and their governing verbs can, albeit infrequently, have different subjects; this does not hold in general for conversbs in all languages, see Nedjalkov (1995) on ‘same subject conversbs’.

- (15) *touλ meλ paιdaj i dia s wλ a j toij goneus in a pedwke Ø_i*
 “and having rescued the **children**, he restored **them** to their parents”, Isocr. *Hel.* 28.1;
- (16) *ui 6λi meλ dh/toi l eλ utai ger on wj eλ eλ ueej , kei t a i d'ej l ex ēs j ': a 7ma d'hjpi = f a i n o m e n h f i n oj ea i Ø_i a uj oj a 7ywn Ø_i*
 “your **son**, old man, is given back according to your wish, and lies upon a bier; at the break of day you shall yourself behold **him** as you bear **him** hence”, *Il.* 24.599-601.

Note that in the last example the antecedent of the NO of the participle *a 7ywn* is also a NO, that refers back to the subject of the preceding sentence.

Omission in such contexts is a phenomenon known as ‘argument sharing’. Two highly bound verb forms that share the same arguments have the shared argument(s) only expressed once.

Obligatory omission is most common in the case of shared subjects, as for the English gerund:

- (17) *saying this, John went out / John went out saying this / *John_i went out, he_i saying this / *John_i saying this, he_i went out.*

Non-specification of common elements is one of the syntactic features of ‘interlacing’, one of the parameters that define subordinations in the terms of Lehmann (1988: 168).

A different occurrence of a NO with a conjunct participle is in example (4), quoted in § 1.2, which is also discussed in van der Wurff (1997: 343). In this type of construction, the object of the main verb is coreferential with part of the direct object of the conjunct participle (with the modifier). Another partly similar example is

- (18) *wλ te kuri 7 genomeh tos ou7ywn a 7ya qwa_i ouk e7qorhs en Ø_i toij al l oij*
 “that, having been endowed with these great blessings, she did not begrudge them to the rest of the world”, Isocr. *Pan.* 29.

In (18) the antecedent of the NO is again a modifier, but this time a modifier of the NP which functions as subject for both the main verb and the conjunct participle.

In the case that the subject of the participle is not the same as the subject of the main verb, we find the construction commonly called ‘genitive absolute’. When a genitive absolute shares the same direct object with the governing verb, the object may be omitted, as shown in

- (19) *kai 7meh dh/w7oul h/faner on ei aa i <pas in> h7gouma i oAi, ei 1Nikoma x*

ou e^gca itou^atoj touj a^gqrw^{po}ouj i m^h\paredi^goun Ø_i, e^glokoun a^A e^gma ut%¹ unei de^{na}i:

“in truth, gentlemen, I think it is manifest to all that, had I refused to deliver **the men** while Nicomachus was asking for **them**, I should be considered conscious of my guilt”, Lys. 7.36.

It must be stressed that, although I have found a number of omissions in contexts such as those of examples (4), (18), and (19), these occurrences must not be confused with conjunct participles as those shown earlier in this section. The syntactic conditions that hold between the antecedent and the NO are different; on the other hand, the number of occurrences that I could find is not big enough and it is certainly possible that more research will show that pronominal objects can also occur in similar examples. In fact, that constructions that do not conform to those shown in (13)-(16) must not be taken to have the same pattern in the occurrence of NO’s is shown by the following example:

(20)

ei¹pol I ouj e^gwn tw²e^gpi thdei³vn ejw⁴ a^gpanth⁵aj Si⁶gnwi⁷ e^gmaxor⁸hn au⁹%¹⁰kai¹¹ e^gupton a^gujon¹² kai¹³ ejly¹⁴kon Ø_i

“if I, with a number of my associates had gone to meet **Simon**, fought with **him**, and beaten **him**”, Lys. 3.38

In (20) we find a conjunct participle, a^gpanth⁵aj , ‘having met’, governed by the verb e^gmaxor⁸hn, ‘I fought’; both verb forms share the same second argument and they both take the dative, but the second argument, realized by the NP Si⁶gnwi with the first verb form is repeated with an overt anaphora, a^gujon¹² with the second. Since this example is also interesting for the syntax of NO’s in coordinated clauses I will discuss it again in the next section; another example of overt anaphora with different cases in a conjunct participle construction is (33), also discussed in § 2.2.

2.2. Coordination

In Ancient Greek omission of the direct object is normally found in cases of coordination: when two or more coordinated clauses share the direct object, all those that follow the first and are linked by means of the coordinating conjunction kai¹ have NO’s. Some of the examples are better regarded as cases of VP coordination, where a part of the VP is reduced, as in the English translation of (21). In this example, the only difference between Greek and English appears to lie in word order:

- (21) αἰλα/pou αὐτοῖς qumῷ εἴποτρυνει καὶ λαγωγει Ø
 “certainly his heart moves and forces **him**”, *Il.* 15.43.

See also:

- (22) μὴ γά τινις οἶνος ζετεῖ εἰκείνων τα παρόντα περιγένεται πρᾶγματ' αὐταντα,
 αἰλακαὶ λιμεῖτι εἰκείνων καὶ δεδιέν Ø, ωλαχδρει Ἀρχναιοι, καὶ λιγόνει =Ø
 “do not believe that his present power is fixed and unchangeable like that of a god. No, men
 of Athens; someone hates **him**, and fears **him**, and envies **him**” (or: “hates, fears, and envies
him”), *Dem.* 4. 8.

Other occurrences really contain two different coordinated clauses, and omission of the object would be impossible in English:

- (23) καὶ μηδὲν Ἀρχναιοι δημοσιήτε εγαγαναυτουθόπερ εἶπε καὶ Ø εἰκένθαν
 μεγάλων
 “the Athenians buried him at public expense on the spot where he fell and gave him much
 honor”, *Hdt.* 1.30.5

Note that the same constraint holds in Latin, where NO's normally occur in coordinated sentences, such as

- (24) *Caesar exercitum*i* reduxit et ... in hibernis Ø*i* conlocavit.*
 “Caesar led his army back and lodged **it** in the winter camp”, *BG* 3.29.3.

In Classical Latin overt pronominal objects in coordinated sentences occur if they are needed for disambiguation or for pragmatic purposes. In (25) the repeated object (*eos*) is emphatic, as shown by its initial position, which implies strong accent, and the fact that it hosts the enclitic conjunction *-que*:

- (25) *accepta oratione eorum Caesar obsides*i* imperat eosque*i* ad certam diem adduci iubet;*
 “having heard their talk, Caesar asks for hostages and orders to bring **them** on an
 established date”, *BG* 5.1.9.1.

Similarly in Greek overt pronouns can be found in coordination when they bear special pragmatic functions, as in (26), where the pronoun εἰκείνη, coreferential with the NP τὴν γυναῖκα τὴν
 εἰρήνη, ‘my wife’, is also contrastive with respect with the direct objects of the clauses that follow
 (τοὺς παιδαj τοὺς εἵμουj, ‘my children’, and εἰμέλαυτοj, ‘myself’):

- (26) *wj ēmoi x̄euen Eratosq̄eūhj th̄ gunaika, th̄ ēm̄h̄ kai \ekēirhn; te diēf q̄eire kai \touj pa īdaj touj ēmouj h̄xune kai \em̄la ūjōh ūbris en ei) th̄ oikian th̄ ēm̄h̄ eīsiw̄*

“that Eratosthenes had an intrigue with my wife, and not only corrupted her but inflicted disgrace upon my children and an outrage on myself by entering my house”, Lys. 1.4.

In (27) the clause introduced by the coordinating conjunction has an overtly expressed object, *ta ūzhn*; note that backward reference to the direct object of the preceding clause need to be clearly indicated by the syntactic nature of the object (the accusative NP *th̄ āmorfes tāzhn*, ‘the least attractive’, and the indefinite subject of the conditional clause that follows it):

- (27)

W̄ ga k̄ dh̄di ece\l̄ qoi o(kh̄euc pwl ēvn ta\j eūides ta\taj tw̄par q̄er̄wn , ān̄ḡ th̄ āth̄ āmorfes tāzhn; h̄eīatij; aūte\l̄ ēaphroj h̄A, kaīta ūzhn; āne k̄h̄usse

“for when the crier had sold all the most attractive, he would put up the one that was least beautiful, or crippled”, Hdt. 1.196.3

In both (26) and (27) the overtly expressed pronominals, given their special pragmatic or referential function, are not forms of the anaphoric pronoun *ājōh*, usually de-emphatic, but forms of strongly deictic demonstratives. Reduplication of coreferential direct objects in coordinated clauses with the use of *ājōh* apparently starts in the *New Testament*, as shown in (28), which also shows that Latin was undergoing a similar change:²⁰

- (28) *kai \prosh̄enka ājōh̄ toi\=ma q̄htai\=s ou kai \ouk̄ h̄dune\hs an ājōh̄ q̄era peusai
et obtuli eum discipulis tuis et non potuerunt curare eum*
“I took **him** to your pupils, and they could not heal **him**”, Mt. 17.16;

The above remarks on coordination hold for clauses in which the conjunction *kaī* occurs (for Latin, *et* or *atque*). As is well known, however, Greek also made frequent use of other means of interclause linkage in paratactically conjoined clauses, in the first place of the particles *mén ... dé*. NO’s are frequently found with the other conjunctions as well, at least in non-emphatic contexts, as shown in

²⁰ Example (28) may cause the wrong impression that the occurrence of an overt anaphora in Latin depends on its occurrence in Greek: however, this is not the case, as I have shown in Luraghi (1998b).

(29) and (30); example (31) contains the adversative conjunction *allá*:

- (29) o(de)X eir i \$ of oj **a u t o n**; e)ais en, e)hs e Ø_i d' ou)
“Cheirisophus stuck him, but neglected to bind **him**”, Xen. *An.* 4.6.2.

- (30) i \$ t i a_i mēn s tei V a n t o, qe\$ a n Ø_i d' e) n h i V m e l a i n h?
“they furled the **sail**, and stowed **it** in the black ship”, *Il.* 1.433.

- (31) ou)parieñai touñ oñij_i a) l a V k a t a k t e i ñ e i n Ø_i
“(that) they do not allow **snakes** to acces (the area) but kill **them**”, Hdt. 2.75.3;

As argued in Gaeta & Luraghi (2000), the occurrence of NO's in coordinated clauses is an effect of coordination reduction,²¹ a cohesion strategy frequently found for subjects. If we have a cursory look to subject-drop and coordination, it appears that Null Subject languages normally do not allow repetition of the same subject in coordinated clauses, unless the second occurrence bears particular emphasis. This holds, for example, for Spanish and for Italian, as shown by the fact that example (32) is ungrammatical with normal (non-emphatic) intonation:

- (32) *Giovanni_i è uscito di casa e lui_i si è avviato verso la scuola
“John went out and he set out for school”.

On the other hand, the English translation of (32) appears to be acceptable in case of coreference, too, although the variants with omission of the subject in the second clause is also allowed.²² The same would hold for German counterparts of the same examples. Note that neither English nor German are pro-drop languages: therefore, there appears to exist some sort of correlation between ‘habitual’ pro-drop and pro-drop in coordinated clauses.²³

When coordination holds between clauses which share a second argument, but this argument is not an accusative object in both clauses, omission is possible, but not obligatory, as shown in (20), partly discussed in § 2.1, and repeated below for convenience:

- (20) ei 1pol I ouñ eñwn twñepi thdei yñ eñw a ñpanthšaj Si gwni eñrax orñh a
u)ñ%1ka i ñeñupton a u t o n kai ñeñdij yñk on

²¹ Cf. Harris Delisle (1978). Some remarks on coordination reduction in Homer can be found in Aitchison (1979).

²² On the interpretation of third person pronouns or NS's in coordinated sentences in English, see Chao (1986).

²³ More in general, there appears to be an implication between the occurrence of Null Subjects and the possible occurrence of NO's, whereby the latter implies the former, see Luraghi (forthcoming a).

“if I, with a number of my associates had gone to meet Simon, fought with him, and beaten him”, Lys. 3.38.

In this example, the verb *ēma xor̄hn*, ‘I fought’, takes the dative *a ū%*; the following coordinated clause with the transitive verb *ēupton*, ‘I beatened’, does not have a NO, but it is followed by the pronominal object *a ūjoh*.

Another interesting example in this respect is

(33)

Kl ēarxoj i Lakedaimoniōj fugaj h̄ā: toū% i suggenorenoj o(K ūoj h̄y
a s̄qh te a ūjoh kaīdigwsin a ū% muriquj dareikouj
“Clearachus was a Lacedaemonian exile; Cyrus, making his acquaintance, came to admire him, and gave him ten thousand darics”, Xen. *An.* 1.1.9

Here the NP *Kl ēarxoj* refers to a newly introduced participant, which is the subject of its sentence will be the topic of the paragraph following example (33). The subject of the next sentence is the NP *o(K ūoj*; Clearachus is referred to three times, the first by the demonstrative *toūw*, often used for recently introduced topics, and then by forms of the anaphoric pronoun *a ūjor̄*. Note that the demonstrative is in the dative and it is the complement of the participle *suggenorenoj*, ‘having met’; the governing verb *h̄ya s̄qh*, ‘he admired’, is transitive and takes the accusative: the accusative object, though coreferential with the preceding dative, is overtly expressed. In the coordinated clause that follows another form of the anaphoric pronoun, still coreferential with the preceding one and with the demonstrative, is the third argument of the verb *digwsin*, ‘he gave’.

2.3. Yes-no questions

In yes-no questions the direct object is omitted in the answer, when it is coreferential with the direct object contained in the question, and the verb alone serves as an answer:

(34) qwm̄en oūb boū ei , ējh, dū eījh i twa ōtwn, tōmen of a ton, tōdēlādej; qwm̄en,
ējh
“now,..., shall we assume two kinds of existence, one visible, the other invisible?” ‘Let us assume **them**’”, Pl. *Phaedo* 79a.

The above occurrence is quoted from Dressler (1971). Van der Wurff (1997: 341) mentions the fact that this pattern is also found elsewhere in the ancient Indo-European languages, and writes

that what we find here “is not so much that an object is omitted, as that an entire verb phrase or predicate is ellipted under identity with a predicate in the preceding context, with the verb being retained merely to carry the inflectional features”. He compares the above answer with English answers consisting of the auxiliary only, as in

- (35) ‘did you go to school yesterday?’ ‘I did’,

and concludes that such occurrences do not contain real NO’s. However, from a wider analysis of possible answers to yes-no questions, one can see that often they contain a constituent only, or a part of it, which has the highest communicative dynamism in the question, and conveys the most relevant part of the information questioned. Often, this constituent is the verb, but this is not necessarily so, as shown by the first answer in example (36), where the answer consists of the subject *kākeīnoi*, ‘they too’ (NO’s in this passage are analyzed in detail in § 3):

- (36) a) I ' āya , w̄Mēhte, mh̄oi (e)̄ th̄ekl hsiā?oi (ekl hsiastai / diafqeirousi
touj newterouj ; h̄kākeīnoi bel tīouj Ø; poioūsin āpantej ; kākeīnoi . pāntej
āya , w̄ ēpiken, A qhna īoi kal ouj kāya ouj Ø; poioūsi pl h̄nēmoū=ēgw̄dē
m̄ojoj diafqeirw Ø; oūwl ēgeij ; pānū s̄fodra tāutāl ēḡ.

“but, Meletus, those in the assembly don’t corrupt the youth, do they? or do they also all make **them** better?” ‘They also.’ ‘All the Athenians, then, as it seems, make **them** excellent, except myself and I alone corrupt **them**’. ‘That’s exactly what I am saying” Pl. *Apol.* 25a.

In the answer to the second question (*oūwl ēgeij*; ‘are you saying this?’) the direct object is emphatically repeated together with the verb. This shows that there are no particular constraints on the possible occurrence of the direct object in the answer: simply, overt objects are not used in such contexts, unless they are particularly emphatic.

In this connection, one can still quote the following question and answer:

- (37) taūta h̄Atījēoumen; Taūta nh̄ Dīg , w̄OSw̄kratej

“Shall we say that, or what?” ‘That is what we shall say, by Zeus, Socrates”, *Crito* 50c.

The above example is slightly different from the preceding ones, because it contains a disjunctive question, but it can still demonstrate that any part of the VP can be omitted, either the direct object, as in (34), or the verb itself, as in (37).

This type of omission is only in part syntactically conditioned; more relevantly, omission owes to the tendency to reduce the answer and, if a part of the question is repeated, to limit it to the most

relevant information. We can view this type of reduction as a consequence of a relevance principle. So NO's in answers to yes-no questions should be regarded as being located in between syntactically conditioned and discourse conditioned NO's, as I will argue below.

2.4. *Degrees of obligatoriness of NO's*

The three types of construction that trigger NO's, discussed in the above sections, have different syntactic properties, among other things because the degree of syntactic binding found between the verb forms involved in each of them is different.

On the highest level of syntactic binding we find conjunct participles: these verb forms are non-finite and strictly bound to the governing verb, as shown by obligatoriness of subject sharing. When the direct object is shared, too, the occurrence of a NO is obligatory, with no exceptions and it remained so also in late Greek, as shown by the *New Testament*.

Coordinated clauses are syntactically on the same level as the clause to which they are linked by the coordinating conjunction. From the point of view of anaphoric processes, however, a clause coordinated to a preceding one depends on it, since anaphoric reference can only work backwards. In fact, there are many similarities between coordinated clauses and conjunct participles, at least in narratives, as I have already remarked in § 2.1. Conjunct participles behave in a similar way to adverbial verb forms; they are frequently found in narrative texts in passages where one could also find coordinated clauses: often they convey the same type of information as main verbs (i.e. focal and chronologically ordered); apparently, they are used in the place of parataxis because, as remarked in Thompson (1987: 451), “a strictly linearly organized written narrative text would be not only boring, but hard to attend to”.²⁴ So argument sharing and coordination reduction appear to be closely related phenomena: they are the equivalent of each other with subordinated and coordinated verb forms. The lesser degree of dependency which holds in coordination has as a consequence that obligatoriness of NO's is not complete, because there can be pragmatic reasons that cause the repetition of the shared direct object by means of an overt pronoun.

On a scale of binding, answers to yes-no questions rank the lowest: questions do require answers, but the latter are only loosely linked to the former, since they do not even belong to the same sentence. Also the degree of obligatoriness of NO's appear to be the lowest in this last construction.

3. Discourse conditioned cases of omission

²⁴ Lonzi (1991: 588-589), discussing the Italian gerund, remarks that, in spite of its being a subordinated verb form, it shares many

In context of high topic continuity, a direct object can be omitted where it is immediately and unambiguously recoverable from the context. An example is given in (38):

- (38) e^ñep^l hs qende/oi (a) ^ñfwai^ña toj of qal moi / to^d a ^ñha \s torna kai\kata \r(ñaj
 prh^{se} x a nwr: qa na ^ñou de^ñmel\ a n ne^ñoj Ø_i a ^ñfeka \uy en
 “both his eyes were filled with blood; and up through mouth and nostrils he spurted blood as
 he gaped, and a black cloud of death enfolded him”, *Il.* 16.348-350.

Here the antecedent of the NO of the verb a ^ñfeka \uy en, ‘enfolded’, is another null argument, i.e. the Null Subject of the preceding verb prh^{se}, ‘blow’. The antecedent of the latter is the dative clitic oi (In this example we do not find any of the syntactic conditions described in sec. 2 for omission. The NO here occurs because of the high topicality of its referent, which makes it readily recoverable from the immediate context (note, among other things, that the NO does not have any other possible antecedent, a fact which obviously helps its recoverability).

More examples of discourse conditioned NO’s are given below:

- (39) e^ñhs e to^ñ i^ñpon_i e^ñ tou-r^ñptrou tou-i^ñerou=w^j a^ñpodidouj/ Ø_i, tv=d' e^ñpi o
 u^ñv nuk t^ñi u^ñfei^ñ eto Ø_i.
 “..he tied up the horse to the ring on the temple door, as though he were handing it back; but
 on the following night he contrived to take it away”, Lys. 6.1

Here, the NP to^ñ i^ñpon, ‘the horse’, the direct object of the verb e^ñhs e, ‘he tied’, in the first clause, is the object of the participle a^ñpodidouj/, ‘leaving’, predicate of a subordinate clause introduced by w^j, and of the verb u^ñfei^ñ eto, ‘he stole’. The participle is subordinated to the first clause, while the other verb occurs in a clause which is conjoined paratactically to the preceding part of the sentence. The direct object of the three verbs is also the topic of the whole passage, so it need not be repeated.

- (36) a) I ' a^ñya, w^ñMe^ñ hte, m^ñvoi (e) n th^ñekl hsi^ñ?oi (e) k l hsi a s tai / dia f qei rous i
 tou^ñ newter ouj ; h^ñka k ei no^ñ bel ti^ñouj Ø_i poi ou^ñs in a^ñantej ; ka k ei no^ñ . pa^ñtej
 a^ñya, w^ñ e^ñiken, A qhna i e^ñ kal ou^ñ ka^ñga qou^ñ Ø_i poi ou^ñs i pl h^ñ e^ñmou=e^ñgw^ñde\
 mo^ñoj dia f qei r^w Ø_i ou^ñw^l e^ñgeij ; pa^ñnu s f odra ta u^ña I e^ñgw.
 ““but, Meletus, those in the assembly don’t corrupt the youth, do they? or do they also all
 make **them** better?” ‘They also.’ ‘All the Athenians, then, as it seems, make **them** excellent,
 except myself and I alone corrupt **them**’. ‘That’s exactly what I am saying” Pl. *Apol.* 25a.

of the features of coordinated main verbs, especially in narratives.

In this passage Socrates is discussing the effects of his education on the Athenian youth. The NP *touj̄ newterouj*, ‘the youth’, occurs as direct object in the first sentence, and functions as antecedent of the NO’s that follow. The first and second NO’s are made recoverable not only by their high degree of topicality, but also by the occurrence of the predicative constituents *bel tiðuj*, ‘better’, and *kal ouj kayaqouj*, ‘good’, which bear agreement with the omitted object; for the third NO, governed by the verb *di a f qei w*, ‘I corrupt’, there is no such hint and the context alone suffices for its recoverability. Note that the occurrence of a predicative constituent is not by itself enough to trigger the occurrence of a NO, as shown by example (40), taken from the same text:

- (40) *h̄kai iþperi n̄þpouj i oufws oi dok ei eþein; oi (m̄n bel tiðuj poiountej auþouj;*
paþtej aþqrwpoi ei þai, ei ðeþtij o(di a f qei w)n Ø;
 “does it seem to you to be so in the case of horses, that those who make **them** better are all mankind, and he who injures **them** some one person?”, Pl. *Apol.* 25b.

Here, for the sake of his argument, Socrates has moved the discussion from the education of the youth to the instruction of horses. The NP *iþpouj*, ‘horses’, which occurs within a PP in the first sentence, is resumed by means of an overt anaphora, *auþouj*, ‘them’, in the second, because it is a new topic, recently introduced, and it is not going to last much longer (in the next paragraph Socrates switches back to his main argument). Only the last reference is made through a NO.

It has been remarked in § 1.4 that in Ionic one also finds a clitic, *m̄n*, for third person. As shown in example (41) its behavior with respect to omission and predicative constituents appears to be the similar to the behavior of *auþon*:

- (41) *kai metatauta auþika parhñkai h(gunh, / eþ el qous andekai t̄i qesi santa \ ei ðata Ø; eþhei to o(Guþhj k. wj dekata nwou eþereto iþus hj thj guna ikoj e) thñ koi þhn, uþekduj eþw/ee eþw, kai h(gunh eþpor a ?m̄n k eþi onta*
 “Immediately the woman came in, too: Gyges saw her coming in and undressing. As he found himself behind her back, because the woman was going to bed, he stood up and went out. And the woman saw him going out”; Hdt. 1.10.1-2.

In this passage both participants referred to, the woman (Candaules’ wife) and Gyges are topical; however, in the first part of the example we find a NO referring to *h(gunh*, ‘the woman’, while in the second part *o(Guþhj*, ‘Gyges’, is resumed by the clitic *m̄n*. Note that in both sentences predicative constituents referring to the direct object also occur. The difference lies in the

pragmatic conditions: while the first event is expected (Candaules, who claimed that his wife was the most beautiful of all women, wanted Gyges to see her naked), the second is unexpected (Gyges was hiding, and both he and Candaules thought that the woman would not see him), and brings about the facts narrated in the rest of the chapter (the woman forces Gyges to kill Candaules and marry her).

A further demonstration of the different pragmatic conditions under which overt anaphoras and NO's occur can be found in the following example:

- (42) Ἄ dei de/ge, f a meν, pro\tou\thn th\ tou=ā ou **epi\st\h\n**; ei\ hf e\h\ai; Na iς
 Pr\in gene\sh q a i a\Aa, w\j e\Aiken, a\ha\gk\h h\ri\h a\ut\h\h; ei\ hf e\h\ai. Ἅ oiken.
 Ou\koun ei\im\h l a bo\ntej a\ut\h\h; pro\tou=gen\sh q a i e\Aontej \O;
 e\geno\neq a, h\p i s t a \neq a kai\ipri\h gene\sh q a i ...
 to\ga\k ei\de\h\ai tou\k e\A tin, l abo\nta tou **epi\st\h\n**; e\Ae\h\ai kai\im\h\l a\pol w\ ek
 e\h\ai
 \O;: h\h\ou) tou\k l h\h\hn l e\gomen, w\OSimmi\g, **epi\st\h\n**; a\pobol h\h; Pa\ntw\ dh\p
 ou, e\A h, w\OSw\kratej. Ei\im\h de/ge o i\ma i l abo\ntej
 \O; pri\h gene\sh q a i gi gnor\h enoi a\pwl e\sh a men \O;, u\Ateron de\taij a i\sh q\h es i xrw\h
 meno i per\ia u\Aek e\gaj a\hal a mba\homen ta\j **epi\st\h\n** a\A pote kai\ipri\h e
 i\sh omen, ...

“‘But, we say, we must have acquired a knowledge of equality before we had these senses?’ ‘Yes’. ‘Then it appears that we must have acquired it before we were born’. ‘It does’. ‘Now if we had acquired that knowledge before we were born, and were born with it, we knew before we were born ...

'... for to know is to have acquired knowledge and to have retained it without losing it, and the loss of knowledge is just what we mean when we speak of forgetting, is it not, Simmias?' 'Certainly Socrates', said he. 'But, I suppose, if we acquired knowledge before we were born and lost it at birth, but afterwards by the use of our senses regained the knowledge which we had previously possessed...', "Pl. *Phaedo* 75c, 75 d-e

In this passage Socrates is putting forth his theory of ideas and of knowledge as recollection. The direct object of the first sentence, *thū tou-iāou epis thūn*, ‘the knowledge of sameness’, is referred back with the anaphora *aúthū*, also an accusative direct object, in the following two sentences.²⁵ In spite of its topicality, which could make it easily recoverable, the referent is also highly focal, because Socrates is trying to explain the necessity of its existence. A little bit further in the discussion, the NP *epis thūn*, ‘knowledge’, occurs, this time referred back by two NO’s in the following context.²⁶ The second NO, in particular, occurs under similar syntactic conditions as

²⁵ The second sentence also contains a reference to *epis tříhn* in the form of NO, because it contains two coordinated verb forms (so the NO is syntactically conditioned).

²⁶ The third NO (with a bWL *eg a men*) again is syntactically conditioned by the occurrence of a conjunct participle construction.

the second occurrence of a *uʒhʌ* in the first part of the example (compare

Oukouν ei 'mēl I a bor̄tej a uʒhʌ pro\to\u=genes̄qa i with *Ei 'de/ge oiāa i I a bor̄tej*

Øi pri\u=genes̄qa i). The referent of *epis th̄hn* is still topical, but no longer focal: Socrates has convinced his ... of the existence of a previous knowledge of abstract concepts, and is now trying to demonstrate something new (i.e. that what we perceive as new knowledge is recollection).

Given their high degree of context dependency, and the fact that they are used as cohesive device in contexts of topic continuity, NO's are particularly frequent in procedural texts, as shown in the following example from²⁷

- (43) *e\u=peita th̄n nhdu\u=s mu\u=nhj a\u=khra\u=tou tetrimmenhj kai\u=kasi\u=kj kai\u=twa\u=yi wn qum hma\u=twn, pl h̄n l iba nwtou=pl h\u=antej surrapousi opisw. tau\u=t\u=a de\u poi h\u=antej tarixeu\u=usi Øi li\u=t\u=rw\u=kru\u=y antej h\u=meraj e\u=domhKonta: pl eu\u=a j de\u=toute\u=wn ou\u=k e\u=ces ti tarixeu\u=ein*

“After doing this, they conceal the body for seventy days, embalmed in saltpetre; no longer time is allowed for the embalming; and when the seventy days have passed, they wash the body and wrap the whole of it in bandages of fine linen cloth, anointed with gum, which the Egyptians mostly use instead of glue”, Hdt. 2.86;

- (44)

Ei \u=si\u=de\u=au\u=twi\u=patria\u=treij ai\u=ou\u=de\u=a \u=Al o site\u=onta i ei 'mh\u=v\xqu\u=mou= non, tou\u=k e\u=peite a\u=qhreus\u=antej au\u=h\u=ws i Øi pro\u=j h\u=ion, poi eusi ta\u=de: e\u=ba\u=I ousi Øi e\u=o\u=mon kai\u=l eh\u=antej Øi uper\u=o i s w\u=\u= Øi dia \u=sindor\u=oj

“Furthermore, there are three tribes in the country that eat nothing but fish, which they catch and dry in the sun; then, after throwing it into a mortar, they pound it with pestles and strain everything through linen”, Hdt. 1.200.

4. Discussion

From the data discussed in § 1 and in the examples quoted in § 2 and 3, we can set up the following scale of phonological heaviness for anaphoras functioning as direct objects:

accented pronoun (anaphoric, deictic) > de-emphatic pronoun or clitic (anaphoric) > Ø

²⁷ Procedural texts, such as recipes, or other types of instructions, often contain NO's even in languages, such as English, that do not normally allow them, see Massam & Roberge (1989).

which is reminiscent of the scale of phonological size for more or less topical elements in Givón (1983: 18):

<i>Scale of phonological size</i>
more continuous/accessible topic
zero anaphora
unstressed/bound pronouns (agreement)
stressed/independent pronouns
full NP's
more discontinuous/inaccessible topic

The iconicity principle underlying this scale must be simple: “the more disruptive, surprising, discontinuous or hard to process a topic is, the more *coding material* must be assigned to it”.

From the point of view of a language like English, which has no NO's, it is interestingly to explain the difference between the latter and de-emphatic pronouns: for English de-emphatic pronouns fulfil the functions of Greek clitics and NO's.

In the first place, the distribution of NO's in a language which does not mark the direct object on the verb is necessarily limited, because their interpretation requires an unambiguous context and a uniquely recoverable antecedent. Under this respect, the occurrence of NO's is much more limited than the occurrence of Null Subjects, the subject being mostly indicated by verbal agreement in Greek.

Besides, examples such as (41) and (42) show that de-emphatic pronouns rank in fact higher in a scale of topic discontinuity, as predicted by Givón's schema. Consequently, de-emphatic forms or clitics can be used to refer back to focal information, provided it is not emphatic or contrastive. In case of emphasis or contrast, accented pronouns are used.

Grammatically conditioned NO's can be viewed as special, grammaticalized cases of discourse conditioned ones. Note that syntactically conditioned NO's, being shared by two or more strictly connected verb forms, have highly predictable antecedents. A demonstration of this lies in the degrees of obligatoriness discussed in § 2.4, whereby NO's are increasingly obligatory according to the degree of binding that holds in the specific construction that triggers them. In answers to yes-no questions, in which the linkage between question and answer is not grammaticalized, NO's are habitually found as a consequence of a relevance principle, rather than of syntactic constraints. In coordinated clauses NO's are the rule, but overt anaphoras can occur, in the case they are contrastive or emphatic. Finally, with conjunct participles NO's are obligatory; conjunct participle also display the higher degree of grammaticalization in the linkage of the verb forms or clauses

involved (the participle is marked as dependent verb form, which does not happen in coordination, where the verb forms involved are of the same type).

One can conclude that the higher the degree of grammaticalization of the linkage between two verb forms, the more obligatory the NO: to say it differently, omission of shared direct objects is a manifestation of the degree of grammaticalization of linkage.

5. Summary and conclusions

In the preceding sections I have shown some of the conditions that partly trigger, or allow, the omission of a direct object in Ancient Greek. I have argued that occurrences of NO's can be divided into two types, i.e. syntactically conditioned and discourse conditioned. The data show that the difference between these two types is partly scalar: in fact, NO's are completely obligatory only with conjunct participles, a construction which displays a highly grammaticalized linkage to the main clause. In coordinated clauses NO's are the rule, but overt anaphoras can be found under special pragmatic conditions. Finally, answers to yes-no questions provide a border case between syntactically conditioned and discourse conditioned NO's. So we can set up the following scale:

Degrees of obligatoriness of NO's:

conjunct participles (object sharing)

syntactically conditioned coordinated clauses (coordination reduction)

answers to yes-no questions

discourse conditioned

high topicality and low focus

I have also argued that de-emphatic forms differ from NO's essentially because they are used to encode material which is topical and at the same time carries focus.

As I have shown in § 1, NO's can have a variety of different antecedents, not only direct objects. However, syntactic conditions appear to hold only between a NO and its antecedent when the latter is a direct object. More research is needed on syntactic conditions holding between NO's and other types of antecedents, as well as on genitive absolutes and other types of participial constructions, as those in examples (4) and (18).

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