Eliding the Noun in Close Apposition, or Greek Polydefinites Revisited

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Abstract

In this paper we propose a treatment of Greek polydefinites as an instance of close apposition, as in *Burns the poet*. We argue that like close appositives, Greek polydefinites consist of two DPs, the only difference being that one of them contains noun ellipsis. We propose that both polydefinites and close appositives involve a process of Referential-role identification, in the spirit of the proposal by Higginbotham (1985) for theta-role identification in cases of adjectival modification. We show that our proposal can shed light on the ordering freedom of polydefinites, their discourse properties, the kind of adjectives that can appear in the construction, as well as the lack of polyindefinites.

1 Introduction

This paper discusses Greek polydefinites, i.e. combinations of an adjective and a noun where each features its own determiner, as in (1).

- (1) a. to spiti to megalo the house the big
 - b. to megalo to spiti the big the house

Polydefinites co-exist in the language with monadics like (2), i.e. modification structures where only one determiner is present—although polydefinites have special semantic and pragmatic properties (see Kolliakou (2004); Campos and Stavrou (2004), and also section 4 of this paper).¹

(2) to megalo spiti the big house

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¹The terms 'polydefinite' and 'monadic', which we use throughout the paper, are both due to Kolliakou (2004).

Our proposal is to treat polydefinites as a case of close apposition, as in (3) from Greek and (4) from English:

- (3) a. o aetos to puli (Stavrou, 1995) the eagle the bird
 - b. to puli o aetos the bird the eagle
- (4) a. Burns the poet
 - b. the poet Burns

The affinity of polydefinites to close appositives has been noted in passing by a number of authors (Stavrou, 1995; Kolliakou, 2004; Panagiotidis, 2005), but it has not been exploited systematically. We propose that they are structurally very similar. What makes the polydefinite, which contains (overtly) one adjective and one noun, parallel to close appositives, which contain two nouns, is the fact that polydefinites contain noun ellipsis (see also Panagiotidis (2005)). We argue that these two key properties of polydefinites—the appositive relationship between their subparts, and the ellipsis site inside one of them—provide the answer to the following questions: (i) what is the structure of the polydefinite construction (ii) why are there no polyindefinites and (iii) what kind of adjectives can partake in the construction.

The paper is structured as follows. In section 2 we discuss the characteristics of close and loose appositives and suggest an analysis for the former in terms of R(eferential)-role identification. In section 3 we show that this analysis also applies to polydefinites in Greek. We discuss how the proposal treats the word order patterns that polydefinites give rise to, and the absence of poly*in*definites. In section 4 we consider what the restriction is on the adjectives that can partake in the construction, and what the pragmatic characteristics of polydefinites are. We show that the focus-like effects of polydefinites need not be taken to motivate a DP-internal focus position, as has been assumed by most authors: they follow straightforwardly from the properties ellipsis is known to have. Section 5 concludes the paper.

2 On apposition

2.1 The distinction between close and loose appositives

The literature on apposition distinguishes between close and loose apposition, exemplified in (5):²

²In the literature we find a variety of terms to refer to close vs. loose apposition, for instance restrictive vs. non-restrictive apposition (particularly in connection to the parallels between nominal appositives and relative clauses), integrated vs. supplementary appositives (Huddleston and Pullum, 2002; Potts, 2005), etc. We retain the terms close and loose apposition. Moreover, a number of different terms have been used to refer to the two sub-parts of appositives. In particular, for many authors 'host' or 'anchor' designates the (linearly) first subpart, and 'appositive', 'apposition' or 'supplement' designates

- (5) a. Burns the poet (close apposition)
 - b. Burns, the poet (loose apposition)

Several differences have been noted in the literature between the two types of apposition in (5) (see among others Burton-Roberts (1975); Espinal (1991); Meyer (1992); McCawley (1998); Acuña–Fariña (1999); Huddleston and Pullum (2002); Keizer (2005); Potts (2005) for English, and Stavrou (1995) for Greek)—although we should point out that much more attention has been paid to loose than to close apposition. We will focus on the differences that seem most relevant.

The most widely-used diagnostic to tell close from loose apposition concerns the intonational properties of the two constructions. The two elements partaking in close apposition belong to a single intonational unit. Loose apposition, by contrast, involves an intonational pause between its two sub-parts. This property is reflected in orthography by means of a comma, as shown in (5), a dash or parentheses. Since loose apposition comprises two separate prosodic units, it is possible for each unit to feature its own stress. By contrast, in close apposition there can only be one stress assigned. (In English close appositives, main stress falls on the rightmost element, which is neutral stress assignment in this language.)

Given the presence of a prosodic boundary, it is not surprising that in loose apposition the two parts can be separated by expressions like *namely*, *that is* (*to say*), *or rather*, *in other words* etc. As expected, this is impossible in the case of close apposition:³

- (6) a. the head of department, namely Prof. Todorov
 - b. * Burns namely the poet

In fact, while nothing can intervene between the two parts in a close appositive, the two parts of a loose appositive need not even be adjacent:

- (7) a. [The two dominical sacraments] stand out from all the rest namely [baptism and Holy Communion]. (Huddleston and Pullum, 2002)
 - b. I met [the new head of department] the other day, [Prof. Todorov].

the second one. Unfortunately these terms have been coined with loose apposition in mind and do not reflect the ways in which the latter is different from close apposition, which is our primary focus here. We therefore refrain from adopting these terms and use the somewhat awkward 'first' and 'second' subpart/unit/nominal constituent/DP.

³To be more precise, Huddleston and Pullum (2002) discuss a distinction between specifying and ascriptive apposition (which incidentally corresponds to *epeksegesis* and *parathesis* of Greek traditional grammars). *Namely* can actually occur in specifying, but not ascriptive loose apposition.

- (i) a. The first constestant, (namely) Lulu, was ushered on stage. (specifiying)
 - b. Kim Jones, (??namely) a quite outstanding student, won a scholaship to MIT. (ascriptive)

We believe that these two kinds of loose apposition should receive the same treatment, however we will for the most part ignore this distinction.

Of particular interest to the syntax of these constructions is the fact that close apposition necessarily involves a relationship between two DPs, whereas any two categories can come together under loose apposition:

- (8) a. He [$_{V}$ ate], or rather [$_{V}$ devoured], the whole pie. (adapted from Stavrou (1995))
 - b. It was [PP at about 7 o'clock], [PP just before sunset], that they left. (Burton-Roberts, 1975)
 - c. When the patient closed his eyes, he had absolutely no [A spatial] (that is, [A third-dimensional]) awareness whatsoever. (Huddleston and Pullum, 2002)
 - d. The goal is to produce individuals who not only [$_{TP}$ possess 'two skills in one skull'], that is, [$_{TP}$ are bicultural], but can also act as human links between their two cultures. (Huddleston and Pullum, 2002)
 - e. [IP John was speechless], I mean, [IP he was really surprised].
- (9) a. * He [$_{V}$ ate] [$_{V}$ devoured] the whole pie.
 - b. * It was [PP at about 7 o'clock] [PP just before sunset] that they left.
 - c. * When the patient closed his eyes, he had absolutely no [A spatial][A third-dimensional] awareness whatsoever.
 - d. * The goal is to produce individuals who not only [$_{TP}$ possess 'two skills in one skull'] [$_{TP}$ are bicultural], but can also act as human links between their two cultures.
 - e. $*[_{IP}$ John was speechless] [$_{IP}$ he was really surprised].

Finally, and most crucially for our purposes, the two constructions differ with regards to their referential properties. In (nominal) loose apposition, the first nominal constituent picks out a unique entity and the second one provides supplementary information about that entity.⁴ In close apposition, on the other hand, reference to a unique entity is determined by the two DPs together. This is the reason that belies the contrast in (10), taken from Potts (2005). We return to this particular difference between close and loose apposition presently.⁵

- (10) a. Armstrong, the Texan, is a cyclist. #Armstrong, the Ohioan, is an astronaut.
 - b. Armstrong the Texan is a cyclist. Armstrong the Ohioan is an astronaut.

⁴This applies to ascriptive loose apposition. The reverse would hold in the case of specifying loose apposition.

⁵The contrast in (10) also relates to the restrictive nature of close apposition. The second subpart of loose appositives can never be restrictive, while the second subpart of close appositives (normally) must be restrictive. We will return to this issue when we discuss the set of admissible adjectives in polydefinites in section 4.

In view of the characteristics of loose apposition reviewed above, it seems that the two sub-parts do not stand in a tight syntactic relationship. There can certainly be no selectional requirement between them, since they can be of any category and since they can be separated from each other. In other words, the second element seems to behave like an adjunct, a parenthetical, or even a non-integrated constituent (see Dehé and Kavalova (2007) for references, and Potts (2005) for a recent analysis). It is thus not surprising that nominal loose appositives like (11a) have been treated on a par with supplements/interpolations/appendages, such as the rest of the examples in (11) (Huddleston and Pullum, 2002):

- (11) a. Pat the life and soul of the party had invited all the neighbours.
 - b. The best solution, it seems to me, would be to readvertise the position.
 - c. Jill sold her internet shares in January a very astute move.
 - d. Jill and I don't blame her left before the meeting had ended.

We follow Dehé and Kavalova (2007) and Ackema and Neeleman (2004) in considering loose apposition a parenthetical structure (contra de Vries (2006))—though ultimately the analysis of loose apposition is immaterial to what we say about polydefinites and close apposition.

If loose appositives are taken to be parentheticals, their intonational properties follow straightforwardly. Furthermore, this kind of approach to loose apposition is consonant with what seems to be its semantic contribution. Doron (1992, 1994) and Potts (2005) provide several arguments for the claim that the second part of a loose appositive is semantically a predicate nominal and not a referential nominal. This claim captures the fact that the second part of a loose appositive does not pick out a referent, but simply provides a supplementary description for the entity referred to. What does pick out a referent in a nominal loose appositive is its first sub-part.⁶

As noted by Kolliakou (2004) and many others, the first NP of a nominal loose appositive has a uniqueness presupposition. Consider, for instance, the sentences in (12). Example (12a), a loose appositive, is appropriate, because the name 'Guillem' picks out a unique individual in the world. By contrast, the close appositive in (12b) is not a felicitous continuation of the sentence in (12).

- (12) Tonight I will speak of a great French artist.
 - a. Guillem, the dancer,
 - b. # Guillem the dancer

Not only do close appositives lack a uniqueness presupposition for their first subpart; what picks out a unique referent is the construction as a whole, i.e. both subparts

⁶Cf. the generalization that Potts (2005: 132) offers:

⁽i) An expression E can appear as the predicate in a predicative copular construction if and only if E can appear in an NA's [non-integrated appositive's, ML & KS] appositive position.

jointly contribute to reference. This means that the close appositive *Guillem the dancer* can only be felicitous in a context where more than one individual in the world bears the name 'Guillem', and only one of them is a dancer. The following example from Kolliakou (2004: 274-275) gives such a context. In this case we observe the exact opposite pattern: the loose appositive is infelicitous because the uniqueness presupposition associated with its first part is not satisfied, whereas the close appositive is fine:

- (13) Tonight I will speak of the Van Gogh brothers, the painter and the critic.
 - a. Van Gogh the painter
 - b. # Van Gogh, the painter,

2.2 Close apposition in terms of R-role identification

Since in close apposition both parts contribute to the determination of reference, neither is a predicate; the two nominal parts are both referential. This means that the predicate-NP analysis that Doron (1992, 1994) pursues for the second subpart of loose appositives does not extend to close apposition. Indeed, we do not believe that close appositives involve a subject-predicate relation (contra for instance Panagiotidis (2005)). Rather, we suggest that both DPs involved in the construction are referential DPs. We take this to mean that both DPs have an R(eferential) role in the sense of Williams (1981, 1989); Higginbotham (1985); Zwarts (1992); Baker (2003). Let us briefly see what function R-roles fulfill in nominals.

In line with the aforementioned authors, nominal elements have, in addition to other thematic roles they discharge, a referential role, the R-role, which is their external theta-role. The R-role is what enables a nominal element to act as a referential argument. In Williams' system, which we adopt, when a nominal occupies an argument position, its R-role is bound by a thematic role of the selecting predicate, whereas when the nominal occurs as a predicate, it assigns the R-role to its subject. We thus follow Williams (1989) and Baker (2003), contra Higginbotham (1985), in assuming that R-roles are not automatically saturated by (definite) determiners. Rather, the R-role survives until the topmost DP-layer of the nominal projection, where it gets bound by one of the theta-roles of the verb (in the case of argument nominals).

We propose that in close apposition an operation takes place which identifies the R-roles of two DPs. This operation can be thought of as complex argument formation. The proposal is schematically illustrated in (14).

⁷In Baker (2003), nouns come with a referential index, which is the syntactic correlate of the semantic fact that only nouns come with identity criteria.

⁸Although the R-role is responsible for the (discourse-)referential properties of nominals, discourse reference is assigned outside the grammar, so that the syntax is independent of the system that ultimately assigns reference to nominal constituents.

(14)
$$DP_{1,2}[\theta_{R1} = \theta_{R2}]$$

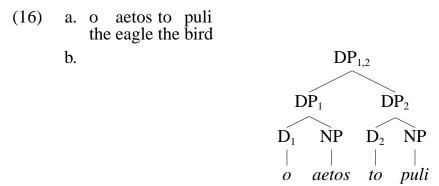
$$DP_{1}[\theta_{R1}] DP_{2}[\theta_{R2}]$$

Theta-identification is not new, and neither is identification that involves the R-role. Higginbotham (1985) proposes that theta-role identification is what happens in adjectival modification, where the R-role of the noun gets identified with a theta role of the adjective, as depicted in (15):

(15)
$$\begin{array}{c|c}
N'[\mathbf{R}] \\
AP & N[\mathbf{R}] \\
 & | \\
 & | \\
 & A[\theta] & butterfly \\
 & | \\
 & red
\end{array}$$

An important aspect of Higginbotham's proposal for theta-identification is that, semantically, it corresponds to the intersection of the set denoted by the noun and the set denoted by the adjective. So 'a big buttefly' is a thing that is big and a butterfly. See also Heim and Kratzer (1998) for predicate modification as set intersection.

Applied to close appositives, theta-identification amounts to identification of two R-roles. This creates a syntactically symmetric structure, as illustrated in (16b):



An interesting characteristic of the structure in (16b) is that it is multi-headed: the highest DP is a member of the projection lines of both DP₁ and DP₂. Multi-headed structures are argued for by Baker and Stewart (1999), who deal with serial verb constructions in terms of multi-headed verbal projections, namely multi-headed VoicePs, vPs and VPs. Moreover, multi-headed structures are employed by Neeleman and van de Koot (2002) for secondary predication. In particular in the framework of Neeleman and van de Koot (2002) (a) categorial features are copied up from daughter nodes to mother nodes in the projection line and (b) any identical features that are copied onto a node get identified (two identical features collapse into one). It

follows then that multi-headed structures like (16b) must involve phrases of the same category, as the categorial features would otherwise clash on the highest node.

Consider the case of secondary predication, as analyzed by Neeleman and van de Koot (2002). The following is an example from Dutch:

(17) dat Jan_i Marie_j naakt ontmoette_{i/j}. that Jan Marie naked met 'that Jan met Marie naked.'

One may reasonably ask why there is no violation of the Theta Criterion in secondary predication, or else, how can it be that two predicates can discharge their theta-roles in the presence of a single DP? If the argument of 'naked' gets identified with either the internal or the external argument of the verb 'meet', both predicates (the verbal and the adjectival one) can discharge their theta-roles in the presence of a single DP. A similar reasoning applies to (14): even though both DP₁ and DP₂ are referential and thus potential arguments, by identification of their R-roles it is the highest DP alone that acts as an argument.

Two welcome predictions are generated within this treatment of close apposition. Since close apposition involves R-role identification, it follows that only nominal phrases can be part of a close appositive, since only nominal elements have an R-role. Recall that indeed only nominal constituents can be brought together under close apposition, in contrast to loose apposition, which can involve any two (identical) categories.

Furthermore, since close apposition involves R-role identification, we predict that close apposition will fail when it involves two DPs which are independently identical in reference (i.e. when the two R-roles are already identical). This is indeed the case, as mentioned in Stavrou (1995). (As expected, loose apposition is not subject to this restriction, cf. (18c) and (19c).)

- (18) a. * i sikaminja i murja the blueberry tree the mulberry tree (Stavrou, 1995)
 - b. i sikaminja to dendro the blueberry tree the tree
 - c. i sikaminja, (diladi) i murja the blueberry tree namely the mulberry tree
- (19) a. * Shakespeare the Bard
 - b. Shakespeare the poet
 - c. Shakespeare, the Bard

⁹ Sikaminja is a dialectal synonym of *murja* (Stavrou 1995:225). The examples are glossed as in the original source, namely Stavrou (1995).

3 Greek polydefinites

We now turn to polydefinites in Greek. We first provide a description of the data and the questions they pose. We then propose an analysis of polydefinites in terms of close apposition, and show how the proposal derives the core properties of the construction.

3.1 The data

Polydefinites are constructions in which a definite DP has two subparts: one is a regular definite DP, the other is an adjective accompanied by an additional definite determiner. (The phenomenon is also referred to as 'determiner spreading', to reflect that there are as many 'extra' determiners as there are adjectives present.) One of the most well-known properties of polydefinites in Greek is the ordering freedom that they exhibit, see (1) repeated below as (20). The fact that in polydefinites the adjective can either precede or follow the nominal DP contrasts with the case of monadic definites, where the adjective necessarily precedes the noun it modifies, as shown in (21).

- (20) a. to spiti to megalo the house the big
 - b. to megalo to spiti the big the house
- (21) a. to megalo spiti the big house
 - b. * to spiti megalo the house big

The ordering freedom of constituents in a polydefinite persists even when more than one adjective is present, as illustrated in (22) (cf. Panagiotidis (2005)).

- (22) a. to megalo to petrino to spiti the big the stone the house
 - b. to megalo to spiti to petrino the big the house the stone
 - c. to spiti to megalo to petrino the house the big the stone
 - d. to spiti to petrino to megalo the house the stone the big
 - e. to petrino to spiti to megalo the stone the house the big
 - f. to petrino to megalo to spiti the stone the big the house

As noted by Panagiotidis (2005), however, there is a restriction on this freedom: an adjective (still) has to precede the noun if it is not preceded by a determiner. The data are given in (23):

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- (23) a. * to spiti megalo to petrino the house big the stone b. * to spiti to megalo petrino the house the big stone

A second property of polydefinites often noted in the literature is that not all adjectives can take part in it. According to Alexiadou and Wilder (1998), Kolliakou (2004) and many others, non-intersective adjectives such as 'alleged' are illicit, see (24).¹⁰

i ipotithemeni (*i) tromokrates the alleged the terrorists

Alexiadou and Wilder (1998) note the deviance of the polydefinite in (25) and propose a more general restriction stated in (26).

- (25) i italiki (*i) isvoli the italian the invasion
- (26) An adjective permits determiner spreading only if it can be used predicatively.

Finally, Kolliakou points out that pragmatically non-restrictive adjectives are inadmissible in the polydefinite construction. In (27), *dilitiriodis* 'poisonous' is non-restrictive when applied to cobras, since as a matter of world knowledge there are no non-poisonous cobras. The polydefinite cannot be used under such circumstances.

- (27) a. Idame tis dilitiriodis kobres. saw.1PL the-PL.ACC poisonous-PL. ACC cobras-PL.ACC 'We saw the poisonous cobras.'
 - b. # Idame tis dilitiriodis tis kobres. saw.1PL the-PL.ACC poisonous-PL.ACC the-PL.ACC cobras-PL.ACC

A final property of polydefinites is that, as the name suggests, they arise with definite determiners. As shown in (28), poly*in*definites do not occur in Greek—the *in*definite determiner cannot spread:

(28) a. ena megalo (*ena) spiti a big a house b. ena spiti (*ena) megalo a house a big

In the next subsection we provide an analysis of polydefinites whose core ingredients are the appositive relationship between the two sub-parts, and the nominal ellipsis contained in the 'adjectival' part. In subsection 3.3 we show how the ordering freedom follows from the proposed analysis. In subsection 3.4 we discuss the

¹⁰The example is starred in Alexiadou (2006). However, as we show in section 4, (at least some) non-intersective adjectives can be felicitously used in polydefinite constructions, in appropriately manipulated discourse contexts. We will therefore contest the ungrammaticality of examples like (24), and also (25).

lack of polyindefinites. The set of admissible adjectives interacts with the pragmatics of the construction; both these issues are taken up in section 4.

3.2 Polydefinites are close appositives

Our proposal is that polydefinites are an instance of close apposition. Polydefinites are only special in that they involve an elided noun in one of their DP-subparts:

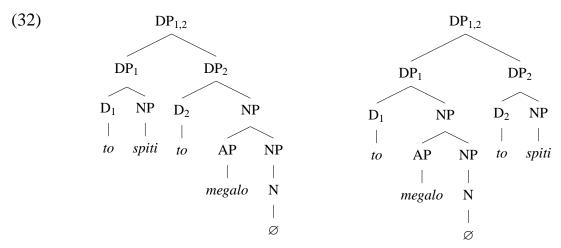
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(29) a. [_{DP} [_{DP} \text{ to megalo } \varnothing] [_{DP} \text{ to spiti}]] the big the house b. [_{DP} [_{DP} \text{ to spiti}] [_{DP} \text{ to megalo } \varnothing]] the house the big
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One piece of syntactic evidence that the two DPs form a DP constituent is that the two DPs share Kase and a selecting Preposition (see (30) and (31)). Nevertheless, the two DPs are semantically and syntactically fully formed and there do not seem to be any arguments (contra Panagiotidis 2005) that what is involved is an asymmetric syntactic structure.¹¹

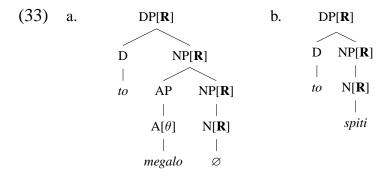
b.
$$*[_{PP}\ P\ me\ [_{KP}\ K[_{DP}\ [_{DP}\ to\ kokino]\ [_{PP}\ P\ me\ [_{DP}\ to\ with\ the-ACC\ podhilato]]]]]$$
 bicycle-ACC

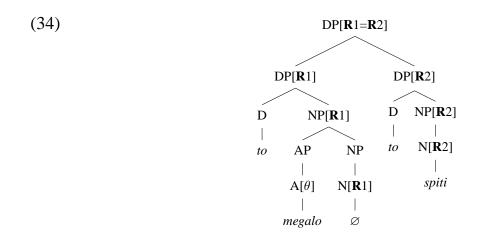
The structure we assign to polydefinites is given in (32):

¹¹Our proposal is similar to Panagiotidis (2005) in two ways: like him, we believe that there is an ellipsis site inside one of the DPs, and like him we believe that polydefinites instantiate a DP whose subparts are also DPs. This allows Panagiotidis too to draw a parallel with close appositives, which however he does not discuss in much detail. The crucial difference relates to the structure he proposes. According to him, close appositives and polydefinites involve a subject-predicate structure inside the DP (which thus resembles a small clause): the leftmost element is in the specifier of the larger DP and the subject of predication, and the rightmost element is the predicate. The 'adjectival' DP and the 'nominal' DP can occupy either position. However, Panagiotidis brings no syntactic arguments to support this structure for polydefinites/close appositives, and we doubt the validity of his semantic arguments.



Let us see the workings of R-role identification in polydefinites in more detail. Higginbotham's theta-identification first takes place between the adjective and the null noun. This is illustrated in (33a). The resulting DP then undergoes R-role identification with the DP which contains the lexically realized noun, i.e. the DP in (33b). The result is (34).





3.3 Deriving the word order pattern

As already mentioned polydefinites display a freedom in word order which is not available in the case of monadic definites:

- (35) a. to spiti to megalo the house the big
 - b. to megalo to spiti the big the house
- (36) a. * to spiti megalo the house big
 - b. to megalo spiti the big house

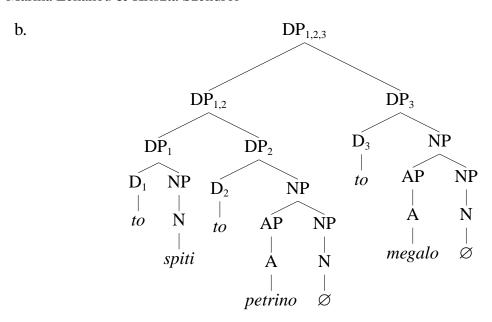
Since we analyze polydefinites as an instance of close apposition, we expect the same ordering freedom in nominal appositives as well. This is indeed the case:

- (37) a. o aetos to puli the eagle the bird
 - b. to puli o aetos the bird the eagle
- (38) a. Burns the poet
 - b. the poet Burns

The symmetric structure we propose for polydefinites/close appositives is perfectly consistent with their ordering freedom. Since the structure we propose is multiheaded, i.e. the two DPs are sisters, they can appear in either order.

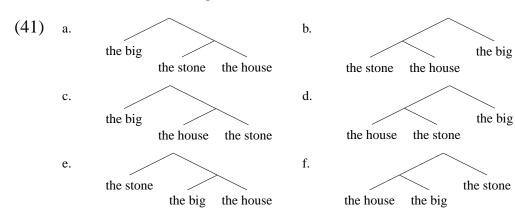
Recall also that the ordering freedom persists when more than one adjective is present, so that the ordering possibilities multiply accordingly. Structurally, this means that we iterate R-role identification. The tree in (39b), for instance, represents the structure of (39a).

(39) a. to spiti to petrino to megalo the house the stone the big



Since the ordering within the appositive/polydefinite is free, we can (a) permute the order of DP_3 with respect to $DP_{1,2}$, (b) permute the order within $DP_{1,2}$ prior to combination with DP_3 , and (c) change the order with which each adjective combines with the noun. The full paradigm is repeated in (40). The corresponding tree structures are given in a more abstract form in (41).

- (40) a. to megalo to petrino to spiti the big the stone the house
 - b. to petrino to spiti to megalo the stone the house the big
 - c. to megalo to spiti to petrino the big the house the stone
 - d. to spiti to petrino to megalo the house the stone the big
 - e. to petrino to megalo to spiti the stone the big the house
 - f. to spiti to megalo to petrino the house the big the stone



As mentioned in the previous subsection the orderings with multiple adjectives obey the following generalization: if the adjectives follow the noun, they have to be preceded by a determiner (Panagiotidis, 2005):

- (42) a. * to spiti megalo to petrino the house big the stone
 - b. to megalo spiti to petrino the big the house the stone
- (43) a. * to spiti to megalo petrino the house the big stone
 b. to megalo petrino to spiti the big stone the house

The explanation we have for these data is similar to the one provided in Panagiotidis (2005). In both the ungrammatical examples (42a) and (43a) we have two DPs, one of which contains an independently illicit structure. As far as (42a) is concerned, recall that in Greek monadic definites the adjective precedes and can never follow the noun:

(44) * to spiti megalo the house big

However, this is not respected in (42a), which contains precisely this illicit DP. As for (43a), the DP containing the noun ellipsis features two adjectives, and that is independently disallowed (Panagiotidis, 2005).¹²

3.4 Why are there no polyindefinites?

One question that has not received a satisfactory answer in previous treatments of polydefinites is the absence of poly*in*definites, cf. the examples in (45) repeated from earlier:¹³

(45) a. ena megalo (*ena) spiti a big a house b. ena spiti (*ena) megalo a house a big

We believe that the present proposal can shed some new light on this issue. In particular, what is interesting from our perspective is that exactly the same (ill-understood)

¹²This cannot explain (43b), which Panagiotidis doesn't discuss. It seems to us to involve some sort of idiomatic, complex adjective. Note that changing the relative order of the two adjectives is not possible:

⁽i) * to petrino megalo to spiti the stone big the house

¹³Ellipsis cannot be the problem with (45), because noun ellipsis is licensed in Greek with indefinite determiners, as well as with no determiner at all (Giannakidou and Stavrou, 1999; Panagiotidis, 2003).

restriction applies in the case of nominal close apposition: close apposition necessarily involves two definite DPs. As noted by Stavrou (1995), it is not possible for either one to be indefinite. (The examples in (46) are fine as loose appositives.)

- (46) a. * o Nikos enas kathijitis the Nikos a professor
 - b. * enas kathijitis o Nikos a professor the Nikos

Since polydefinites are an instance of close apposition, the ban against indefinites is expected here too. On an approach that takes polydefinites to be an instance of close apposition, the lack of polyindefinites follows as a special case of this constraint. The exact nature of this constraint is a matter we leave for future research.¹⁴

4 Polydefinites in context

In this section we discuss the pragmatics of polydefinites and focus in particular on delimiting the set of admissible adjectives and on fleshing out the contribution of noun ellipsis.

4.1 The proper subset requirement

A well known fact about close apposition (see among others Kolliakou (2004: 274) for discussion and for references) is that there is a restrictive relation between the DPs that form its subparts. We refer to this constraint as the proper subset constraint:

(47) *The Proper Subset Constraint*In a close appositive, the denotation of one of the DPs must be a proper subset of the denotation of the other DP.

Recall the following data, which contrast close to loose apposition:

- (48) Tonight I will speak of a great French artist.
 - a. Guillem, the dancer,
 - b. # Guillem the dancer
- (49) Tonight I will speak of the Van Gogh brothers, the painter and the critic.

¹⁴One complicating factor is that it is not clear to us at this stage whether (46) illustrates a universal property of close apposition, or a peculiarity of Greek close apposition. In particular, although Greek disallows indefinites in close apposition, English has been claimed to be more liberal. Keizer (2005) gives the following example as a close appositive with an indefinite part:

⁽i) He has to put up with a soppy elder brother Robert who is forever moaning over some girl or other and a sister Ethel who has all the brisk no-nonsense superiority of a true Wodehouse gel.

- a. Van Gogh the painter
- b. # Van Gogh, the painter,

In (48) our context involves only one person by the name 'Guillem', so 'dancer' cannot be restrictive on 'Guillem'. Therefore the close appositive fails. In (49) we introduce a set of two people, the Van Gogh brothers. One of them is a painter and the other is a critic. 'Painter' can thus act restrictively on 'van Gogh'. We may therefore felicitously use a close appositive to refer to one of them.

Given that we argue that polydefinites involve close apposition, the proper subset restriction should hold for polydefinites as well. That this is in fact the case can be illustrated, for instance, by considering again examples that contain pragmatically non-restrictive adjectives, like (50). (50) is infelicitous because the DP containing the adjective does not determine a proper subset of the denotation of the second DP; as we know, all cobras are poisonous. So, the reasoning behind the deviance of (50) is parallel to the reasoning behind the deviance of (48b).

(50) # i dilitiriodis i kobres the poisonous the cobras

Similarly, Kolliakou (2004: 216-217) provides the following data to show that polydefinites are used in more restricted contexts than monadics. In particular, she shows that the example in (51), which involves a monadic, may be used in all the scenarios listed in (a)–(d), while (52), with a polydefinite, is only consistent with scenarios (a) and (b), i.e. only the situations in which the adjective is interpreted restrictively.

- (51) O Yannis taise ta zoa. I mikres gates itan pinasmenes. the Yannis fed the animals. the young cats were hungry 'Yannis fed the animans. The young cats were hungry.'
 - a. all the animals that Yannis fed were cats, but *there were young and non-young cats*
 - b. Yannis fed cats and non-cats, and there were young and non-young cats
 - c. all the animals that Yannis fed were cats, and there were only young cats
 - d. Yannis fed cats and non-cats, but all the cats were young ones
- (52) O Yannis taise ta zoa. I mikres i gates itan pinasmenes. the Yannis fed the animals. the young the cats were hungry 'Yiannis fed the animals. The young cats were hungry.'
 - a. all the animals that Yannis fed were cats, but there were young and non-young cats
 - b. Yannis fed cats and non-cats, and there were young and non-young cats

This is, of course, consistent with the idea that the adjectival part of the polydefinite must provide a restriction on the nominal part: the set of young cats is a proper subset of the set of cats in both (a) and (b), but not in (c) and (d).

4.2 The set of admissible adjectives

It follows from the proper subset constraint in (47) that only adjectives that can partition the noun-denotation of the non-elliptical DP will be able to appear in the polydefinite. In particular, it follows that the core cases will involve intersective adjectives. Intersective adjectives are those which allow the inference in (53a). An example is the adjective *good*, as seen in (53b):

- (53) a. X is an Adjective Noun \Rightarrow X is Noun
 - b. X is a good pupil \Rightarrow X is a pupil

This property follows from our syntactic analysis of polydefinites involving complex argument formation/R-role identification: syntactically, by the identification of the R-roles, the two DPs form one argument; semantically, the denotation of the new DP will be the intersection of the sets denoted by the two sub-DPs.

But as we already saw in the previous section, the requirements on polydefinites are in fact somewhat stronger. It is not enough that the denotation of the polydefinite is obtained by set-intersection: adjectival modification in the polydefinite construction involves *restrictive* modification. This is stated in (47). We will argue presently that this relates to the ellipsis involved in polydefinites.

What is interesting to note is that manipulating the discourse context in the appropriate way can give us the desired effect even without an intersective adjective. The exceptional behaviour will arise whenever we can tamper with the potential of the noun denotation to be partitioned in disjoint subsets in a pragmatically plausible way. Leu (2007) points out that in some cases non-intersective non-predicative adjectives are acceptable:¹⁵

(54) O proigumenos o prothipurgos pethane. the previous the president died 'The previous president died.

(54) is licit in a context where the speaker corrects another interlocutor who thought she overheard that the current president is dead. In this particular context, the noun denotation comprises two disjoint subsets, one containing the current president and the other the previous one. What makes the polydefinite available is that the mention of the current president in the previous discourse D-links the set of all Greek presidents in a salient way, and thus subsequent reference to the previous president satisfies the proper subset constraint in (47).

Similarly, (55) is possible in a context where the Dutch invasion is only one of the invasions endured.

¹⁵Leu seems to take *proigumenos* to mean 'former', though actually it corresponds to 'previous'. For reasons we do not at this point understand, *proin*, 'former', and *nin*, 'current', seem unable to partake in a polydefinite.

(55) i olandiki i isvoli mas kseklirise. the dutch the invasion us wiped out 'The dutch invasion wiped us out.'

Note that examples such as (54) and (55) above undermine predicative analyses of polydefinites (Alexiadou and Wilder (1998); Campos and Stavrou (2004); Panagiotidis (2005) among others), since they involve non-predicative adjectives. What the examples above—and in particular the contexts that make them felicitous—suggest is that such dimensions as 'predicativity' are irrelevant. What matters is (the effect of the right context on) the potential of the noun denotation to be partitioned along the dimension contribution by the adjective, such that a restrictive interpretation of the adjective is possible.

4.3 Comparison with Kolliakou's Polydefiniteness Constraint

At this point it seems important to evaluate Kolliakou's own account for the unavailability of examples like (50) and the loss of readings in examples like (52). Kolliakou proposes that polydefinites are subject to a pragmatic constraint, her Polydefiniteness constraint, given in (56):

(56) The Polydefiniteness Constraint (Kolliakou, 2004, 273) Greek polydefinites are unambiguously non-monotone anaphoric expressions: the discourse referent Y of a polydefinite is anaphoric to an antecedent discourse referent X, such that $Y \subset X$.

Given (56), a polydefinite is felicitous if: (i) it introduces in the discourse a proper subset of a given set and (ii) that set has been explicitly mentioned (and is highly salient/accessible).

Even though the constraint in (56) accounts for the data (though see the end of this subsection), we believe that Kolliakou's formulation has an important shortcoming. Although both polydefinites and close appositives more generally seem to be subject to the proper subset requirement (i.e. something like (i)), the second restriction (i.e (ii)) only seems to apply to polydefinites and not to close appositives in general. Examples like (57) repeated from above can occur in the absence of previous mention of a set of entities that properly includes eagles in (a) or a set of poets in (b).

- (57) a. o aetos to puli the eagle the bird
 - b. Burns the poet

We believe that the pragmatic restriction in (ii) can be derived from the only difference that we posit between polydefinites and close appositives, namely, that the former involves noun ellipsis. This is because, as Giannakidou and Stavrou (1999) have shown for Greek, noun ellipsis is subject to the recoverability condition of Hankamer and Sag (1976):

(58) An elided subconstituent α must recover its descriptive content by an antecedent γ previously asserted in the discourse. (Giannakidou and Stavrou, 1999, 307)

Given our claim that polydefinites involve nominal ellipsis, it is to be expected that this recoverability constraint also applies to them (which is in fact essentially what Kolliakou proposed).

So, treating the two pragmatic conditions separately allows for a transparent explanation for why they should hold: (i) holds because polydefinites involve close apposition and (ii) holds because they involve noun ellipsis. We will discuss noun ellipsis in particular in the following sections.

A different issue worth drawing attention to is that part (i) of Kolliakou's constraint differs from our own formulation of the proper subset requirement on close appositives. She states that a proper subset relation must hold between the set denoted by the polydefinite and a previously mentioned set, while we propose that a proper subset relation must hold between the set denoted by the polydefinite and the set denoted by the 'nominal' DP. The following subsections will make obvious in more detail how our account, in virtue of involving noun ellipsis, differs from hers.

4.3.1 The distribution of ellipsis and polydefinites

Positing nominal ellipsis in polydefinites does more than provide us with a transparent explanation of the pragmatic constraints of the construction. It also accounts for some interesting empirical facts.

As we would expect, there is considerable overlap between contexts that allow polydefinites and those that allow simple ellipsis. For instance, as Panagiotidis (2005) already noted, and as was mentioned earlier, ellipsis seems to be disallowed with more than one adjective. Crucially, this restriction is operative also in the case of polydefinites; compare (59a) with (59b).

(59) a. * to kenurjo kokino the new red
b. * to kenurjo kokino to podilato the new red the bicycle

But there are also discrepancies between the occurrence of polydefinites and that of simple ellipsis, which seem to us to be revealing. A context where one might expect a discrepancy between ellipsis and polydefinites is when the antecedent is not accessible enough to license simple ellipsis. This could be for instance because there is an intervener. In such cases, examplified in (60), the polydefinite is appropriate. This is not surprising as the nominal part of the polydefinite provides a way to recover the content of the elided noun.

(60) a. A. Boris na dialeksis mia asimena pena, mia xrisi pena ke can-2SG SUBJ choose-2SG a silver pen a golden pen and

ena molivi. Ti dialejis ja ti Maria? a pencil. what choose-2sG for the Maria

- b. B. Dialego to molivi. choose-1SG the pencil
- c. A. Ke ja to Janni? Ti dialejis? and for the Janni what choose-2SG
- d. B. Dialego tin pena tin asimenia. choose-1SG the pen the silver
- e. B.# Dialego tin asimenia. choose-1SG the silver

4.3.2 An asymmetry between polydefinites and close appositives

Recall that in the scenario with the feeding of the animals, repeated as (61) below, 'young' must be restrictive, while the set of cats need not be a proper subset of the set of animals mentioned in the previous discourse.

- (61) O Yannis taise ta zoa. I mikres i gates itan pinasmenes. the Yannis fed the animals. the young the cats were hungry 'Yiannis fed the animals. The young cats were hungry.'
 - a. all the animals that Yannis fed were cats, but there were young and non-young cats
 - b. Yannis fed cats and non-cats, and there were young and non-young cats

In other words, there seems to be an asymmetry in the polydefinite in that the proper subset requirement only applies to the adjectival part, while the set denoted by the nominal part is allowed so long as it is included in the denotation of the previously mentioned set (i.e. the set of animals, in this case), but it does not have to be a proper subset of it.

Note that no such asymmetry presents itself in the case of nominal appositives in general. Keizer (2005) gives examples of close appositives with either the definite DP or the proper name as the 'restrictive' DP:

- (62) a. the actor Orson Welles
 - b. Orson Welles the actor

We believe that the asymmetry in Greek polydefinites follows from the fact that they involve noun ellipsis. We know at least since Williams (1997) (see also Giannakidou and Stavrou (1999) specifically for Greek noun ellipsis), that in the case of ellipsis the remaining non-elided elements must be informative (disanaphoric in Williams' terms). Thus noun ellipsis is licensed in (a), where the adjective is informative (or disanaphoric), but odd in (b), where it is not.

(63) a. I Maria forese to ble fustani ke i Eleni forese to prasino \emptyset . the Maria wore the blue dress and the Eleni wore the green $[\emptyset = \text{fustani}]$

b. #I Maria forese to ble fustani ke i Eleni forese to ble \varnothing . the Maria wore the blue dress and the Eleni wore the blue $[\varnothing = \text{fustani}]$

There are other ways an adjective can be uninformative, for instance, if it is pragmatically or inherently non-restrictive:

- (64) a. # O Janis taise ta mikra zoa. Ta mikra itan pinasmena. the Jannis fed the young animals. the young were hungry.
 - b. #Latrevo ta fronima pedia. Ta fronima ine evlojia theu. adore-1SG the good children. the good are blessing God-GEN.
 - c. #Edo de tha vris kobres. I dilitiriodis zune alu. here NEG FUT find-2sG cobras. the poisonous live elsewhere.
 - d. #I apopira dolofonias ixe stoxo ton proigumeno prothipurgo. O the attempt murder-GEN had target the previous president. the proigumenos den ine dimofilis. previous NEG is popular

Since polydefinites involve noun ellipsis, polydefinites are also inappropriate if their adjectival part is uninformative in the above way. This is shown in (65).

- (65) a. # O Janis taise ta mikra zoa. Ta mikra ta zoa itan the Jannis fed the young animals. the young the animals were pinasmena. hungry.
 - b. # Latrevo ta fronima pedia. Ta fronima ta pedia ine evlojia adore-1SG the good children. the good the children are blessing theu.

 God-GEN.
 - c. # Edo de tha vris kobres. I dilitiriodis i kobres zune here NEG FUT find-2SG cobras. the poisonous the cobras live alu. elsewhere.
 - d. #I apopira dolofonias ixe stoxo ton proigumeno prothipurgo. O the attempt murder-GEN had target the previous president. the proigumenos o prothipurgos den ine dimofilis. previous the president NEG is popular

To sum up what we have discussed so far: in a polydefinite construction, the denotation of one of the nominals must be a proper subset of the denotation of the other—this is because the polydefinite is a close appositive. That this part must be the adjectival part is due to the fact that the adjectival part has an independent requirement to be informative, since it involves noun ellipsis. This accounts for the asymmetry observed in (61).

4.4 Non-anaphoric or focused?

Most authors have argued that the adjectival part of the polydefinite construction is focused (see e.g. Kariaeva (2004), Ntelitheos (2004), Leu (2007) and many others). But we believe that the adjectival part is not obligatorily focused, just non-anaphoric, precisely as the noun ellipsis account we have been pursuing predicts. This is shown by the contrast in (66). In (66a) the polydefinite is licensed even in the absence of constrastive stress and an exhaustive interpretation, since the sentence 'the young cats were hungry' can be felicitously continued with 'as were the old ones'. So, one cannot maintain that the adjectival part is obligatorily focused in a polydefinite, since the effects that are usually associated with focus (e.g. exhaustive interpretation, contrastive stress) are not present. Now consider (66a), where the adjective in the polydefinite is contrastively stressed, and where it is impossible to continue with '... as were the old cats'. In other words, it is stress that provides the effects of focus, and not the polydefinite construction in and of itself.

- (66) a. O Yannis taise ta zoa. I mikres i gates itan pinasmenes, opos the Yannis fed the animals. the young the cats were hungry as episis ke i megales (i gates). also and the old the cats 'Yiannis fed the animals. The young cats were hungry, as were the old ones.'
 - b. O Yannis taise ta zoa. I MIKRES i gates itan pinasmenes, # the Yannis fed the animals. the young the cats were hungry opos episis ke i megales (i gates). as also and the old ones

Another empirical problem with the claim that the adjective is necessarily focused in a polydefinite is noted by Kolliakou (2004:276). Her point is that the whole polydefinite itself can have other discourse functions. For instance in (66a), *i mikres i gates* 'the young the cats' is most likely a contrastive topic.

There are independent problems with analyses that try to derive the word order in the polydefinite construction with the help of a DP-internal designated Focus-position. As Lekakou (2000) argued for Greek and Szendrői (2001) for Hungarian and Italian, it is questionable whether a designated focus position exists even in the main clause projection line. In addition, Szendrői (2006) stresses that it is theoretically impossible to think of a focus-background partitioning DP-internally, as such notions are intrinsically propositional. Contrary to Schwarzschild (1999) and much subsequent work, we do not think that non-anaphoric is the same as focused. Rather, we follow Reinhart (2006) in assuming that givenness and focus are orthogonal notions. The adjectival part in a construction with noun ellipsis cannot be given or anaphoric, but at the same time it need not be focused.

5 Concluding remarks

In this paper we have argued for an approach to polydefinites in Greek on a par with close appositives. For both cases we have posited a mechanism of 'complex argument formation' via R-role identification, whereby the R(eferenctial) roles of two nominals get identified. In the case of polydefinites, one nominal is null, whereas in close appositives both are lexically filled. We have argued that our approach can successfully address the syntactic, semantic and pragmatic questions that polydefinites pose.

Since we capitalize on the affinity between polydefinites and close appositives, our account leads us to ask in a more pronounced way a bigger question: why do we seem to find polydefinites of the Greek type only in Greek, even though appositives are attested elsewhere (cf. Alexiadou (2006))? We do not have the definitive answer at this point; there seem to be several different factors which may prove relevant. For instance, Greek requires definite determiners with proper names, Greek requires spreading of ϕ -features throughout the DP, and so on. Although at this stage we cannot formulate a full answer that would explain the contrast between Greek and the other languages, we do have a direction to point towards as a way to resolve the contrast between English and Greek.

Keizer (2005) provides the following paradigm to illustrate the possible combinations in a close appositive:

- (67) a. the actor Orson Welles
 - b. the word recession
 - c. my friend Orson Welles
 - d. my friend the actor
 - e. Orson Welles the actor
 - f. actor Orson Welles

The point is that, although in English too close appositives need to (or can in any event) be definite, it seems impossible to combine in a close appositive two definite DPs that are both headed by a definite determiner, as in (68).

- (68) a. * the linguist the scholar
 - b. * the scholar the linguist

We believe that the answer to the ungrammaticality of (68) can inform us on why at least English lacks the Greek polydefinite. This direction becomes available only on an approach that treats polydefinites as an instance of close apposition.

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